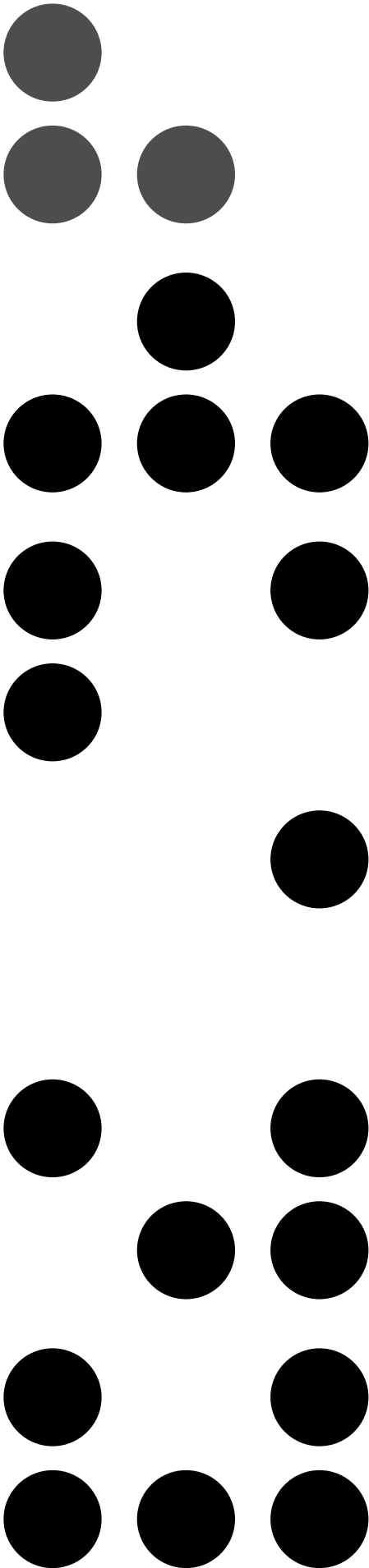


**Introduction to digital
manufacture and fab-
rication**



wuanny

Foreword

In the session “Introduction to digital manufacture and fabrication”, we learned how to use digital devices to produce what we are willing to make or design.

Using Adobe and online 3D programmes, we learned the basic foundations, as the name of the overall course, for creating objects and ideas in our heads into actual productions.

It was an excellent opportunity to learn such skills, and it will significantly support us if there’s a situation in the future that requires that kind of technology.

Edd mentioned that recording is one of the essential elements we should be doing, so this book is written to record every method of learning used through this course.

Logotype

The logo is designed based on looking simple and impactful.
The letters W-U-A-N-N-Y is my original nickname and signature.
The logo was designed with Adobe Illustrator.

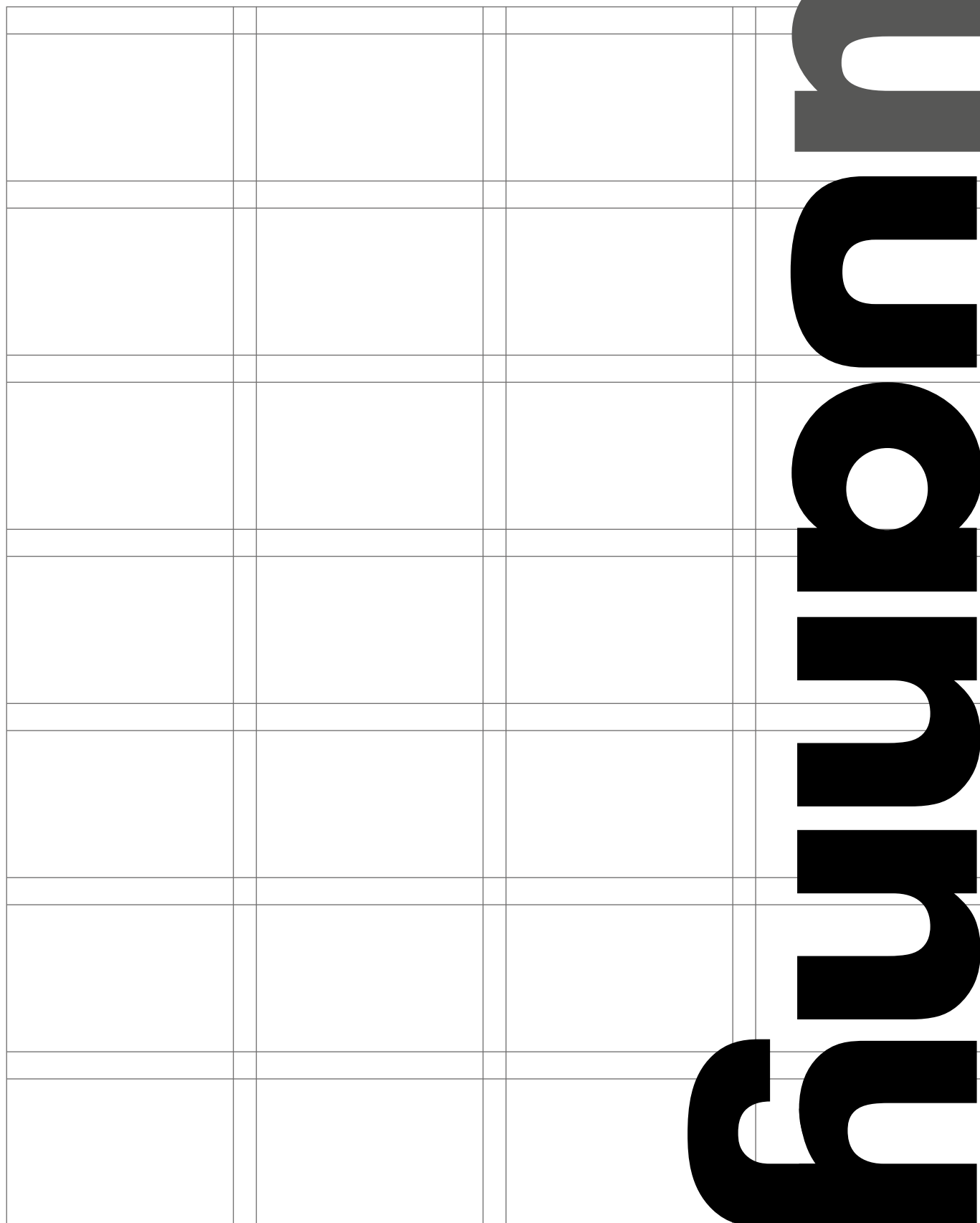
wuanny

wuanny			
wuanny			
wuanny			
			wuanny

Use of logo

The examples on pages 10 and 11 are the basic formats of how the logos should be placed.

These examples are the actual size, and the specific details will be described.



252mm X 54.39mm

Funfair

Logosize



50mm X 10.792mm



25mm X 5.396mm

The logo’s basic format uses 25mm X 5.396mm in all documents; however, the sizes can be in a different form, such as 50mm X 10.792mm up to 252mm X 54.39mm depending on the situation.



WUanny

C=100 M=95 Y=5 K=0

WUanny

C=30 M=50 Y=75 K=10

WUanny

C=90 M=30 Y=95 K=30

WUanny

C=85 M=50 Y=0 K=0

WUanny

C=85 M=50 Y=0 K=0

WUanny

C=15 M=100 Y=90 K=10

WUanny

C=0 M=35 Y=85 K=0

WUanny

C=80 M=10 Y=45 K=0

wuanny

C=0 M=80 Y=95 K=0

wuanny

C=75 M=100 Y=0 K=0

As you can notice, the colours of the Logos are only coloured on the letter Y.

All of the colour profiles are noted next to the Logos.

RGB colour

wuanny
wuanny
wuanny

The RGB colours, which stands for Red, Green and Blue, are the essential colour profile that all digital screens and files use. Therefore, setting the proper format to create a file is vital.

Please note that the colour of the RGB examples is inaccurate because this book is printed in CMYK.

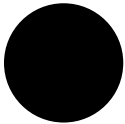
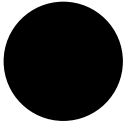
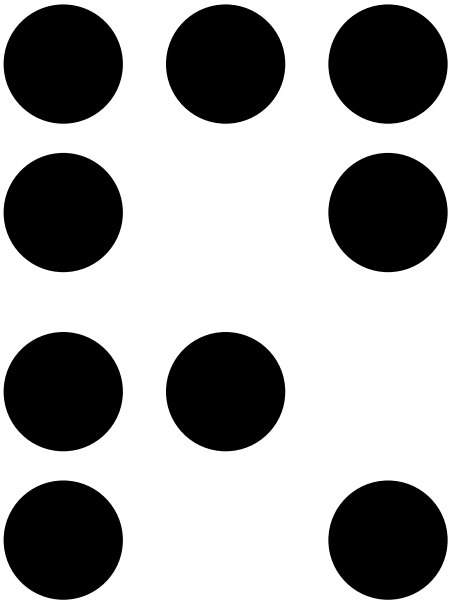
wuanny
wuanny
wuanny
wuanny

The CMYK colours, which stands for Cyan, Magenta, Yellow and black, are the colours that printers use.

All of the printed-out documents are printed in CMYK-coloured dots.

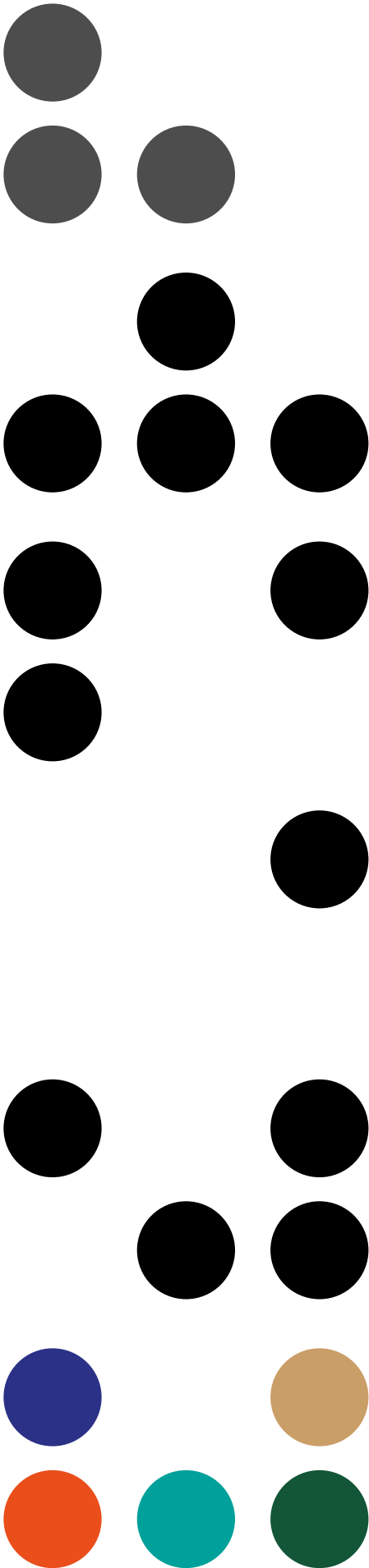
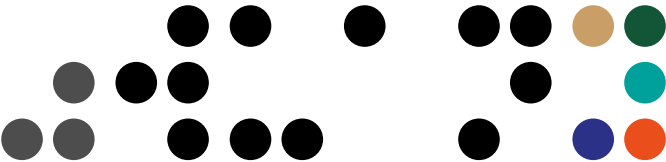
Book

In the session “book”, we will go through the designs of the cover page and what points were used in this book.



Cover

The covers are designed using braille saying "Wuanny". This method was used to try some new perspectives. The colours are the same colours that can be used in the Wuanny logo.



Manufacture and

24pt

Fabrication

12pt

This writing is an example of the contents text.

9pt

This writing is an example of a simple description for an image.

8pt

November 9, 2001

7pt

Page number

6pt

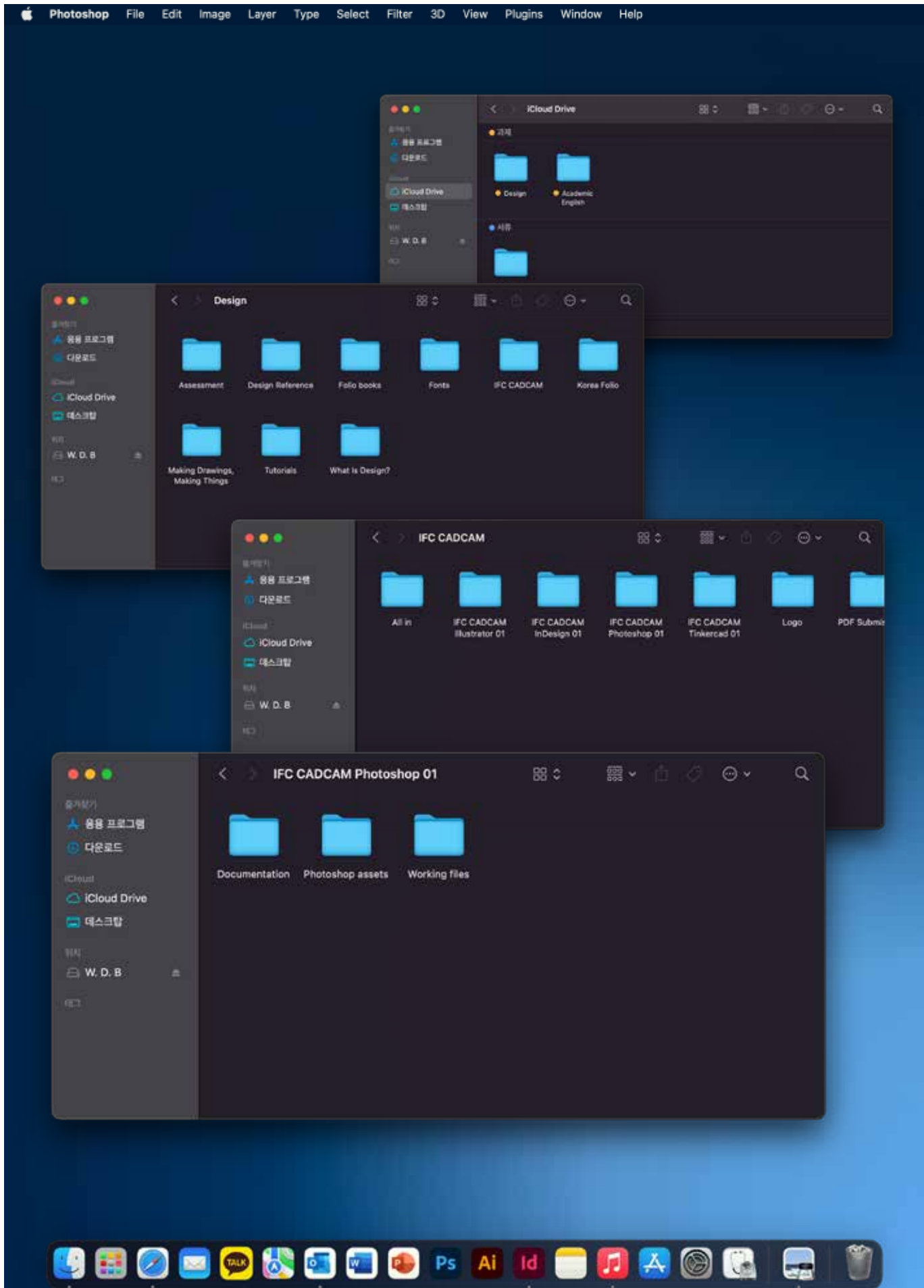
Points

7pt, 8pt, 9pt, 12pt is used in this book. 7pt is used in dates, 8pts are used in short descriptions, 9pt is used in contents texts, and 12pt is used in titles.

The font used in this book is the Futura font for the texts, and Helvetica bold for the titles, which I found sophisticated.

Using digital

In the session “Using digital”, we are going to look through ways of handling digital files and formats as well as knowing the definition of shortened words.



Organising files

January 24, 2023

Naming files and systematising them in order is essential to a project. Organising and making directories to the files makes it possible to save minutes to hours. It also helps to find files more quickly and recognise them more

accessible for the person who might be getting the work afterwards.

I have organised this CAD/CAM project file as the photos on the right side. As the names are given by the tutor in class, the files name

might change as I move on to the following lecture of the CAD/CAM to make me understand it more manageable in my own way.

◀ Examples of the file organising.



Searching images online

January 24, 2023

Searching images online is an essential process in researching a project. However, using any pictures from the internet has a chance of using a photo with a copyright. And using an image with copyright without

authorisation is illegal. Therefore, knowing which photography is okay is essential.

Searching for non-copyright photos on Google is simple. Clicking on "Tools" from images and selecting "Creative Commons

Licenses" makes it possible to see pictures without any copyrights. Another example is using "Wikimedia". Wikimedia is a platform which offers many photos without any copyrights.

- ◀ Using creative common licenses from Google and Wikimedia's copyright free images.

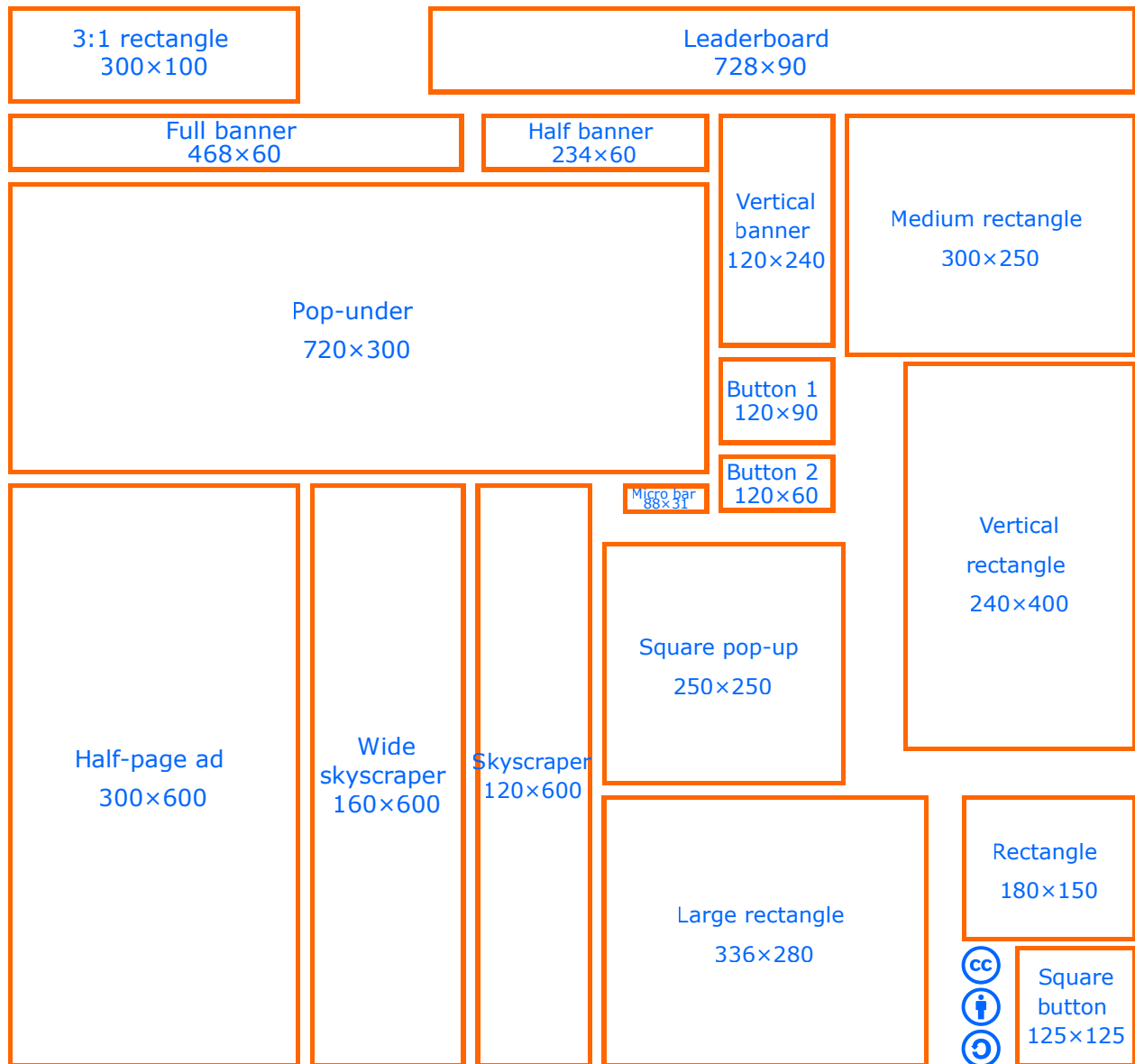


Image size and resolution

January 24, 2023

Image size and resolution is also a significant part of a project. Usually, digital images are formed with "Pixels", and printed images are created as "Dots". So PPI means Pixel per inch, and DPI means Dots per inch. It is essential

to control the image size to preserve time and quality. If the image size is unnecessarily too big, the computer will spend unnecessary time loading the large image.

- ◀ Examples of basic image formats.
Please note that this book wasn't designed based on these formats.

Adobe Photoshop

In the session
“Adobe Photoshop” we are going
to look at the ways of using the
tools in Photoshop and play with
some art works.

The given brief. ►

IFC 2022-2023

Introduction to CAD CAM

(Extra Design Credit Course) Session 01

IFC2022 2023 CADCAM_01_Photoshop

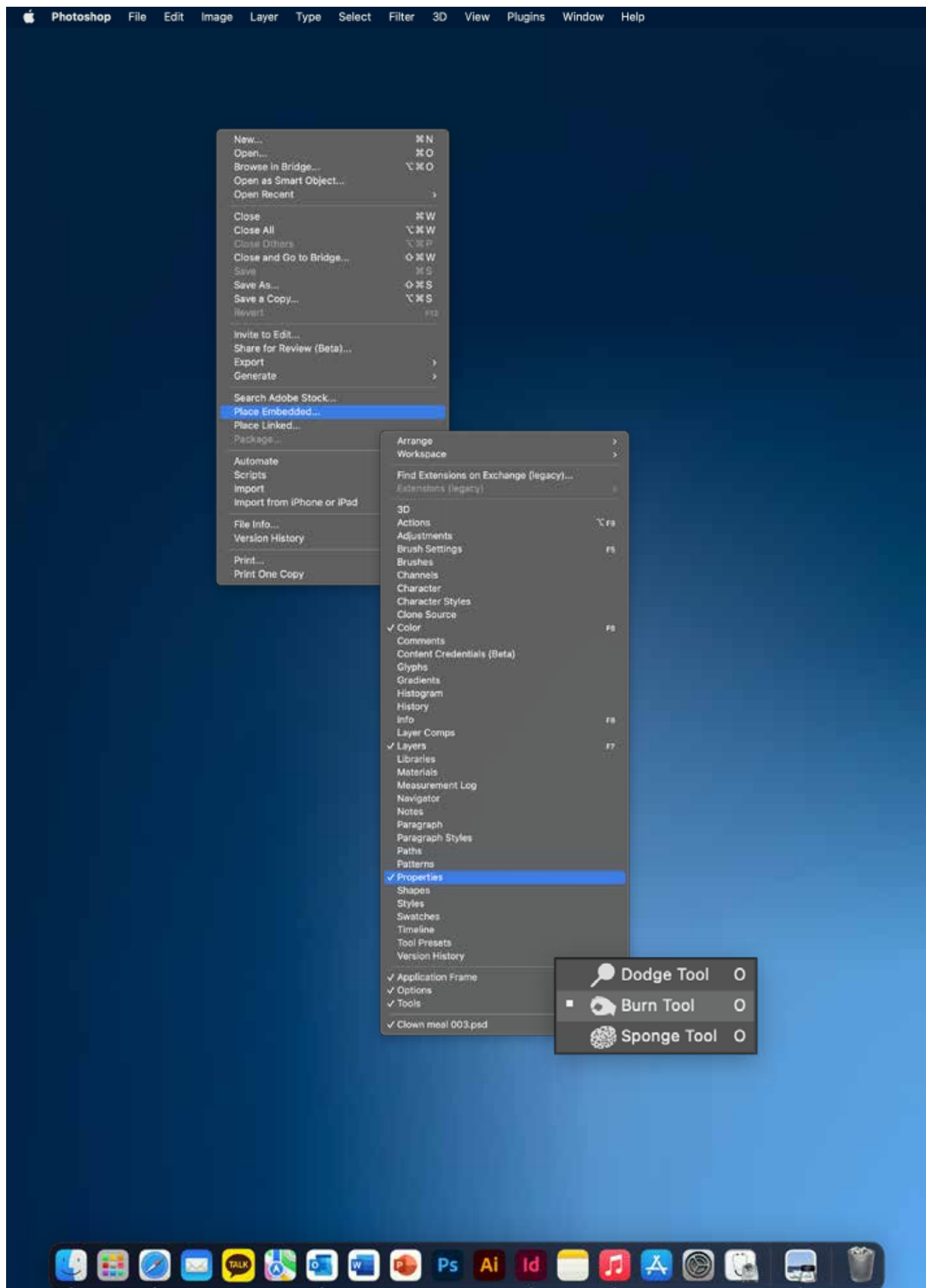
Firstly, Open Photoshop. Now create a new document using 'file:new document'. Name this and save it in a new folder on your USB drive. Now find or take 2 photos that you will combine in photoshop. Use a copyright-free filter on your image searches. Go to 'window: layers'. Create 2 new layers. Highlighting one of these layers in the layers list, go to 'file:place' and import one of the photos. Now select the other layer and do the same, this time with the second photo. Click and drag the layers, so that the photo layer you would like to be 'on top' is at the foreground. In the layer window, at the top, adjust the 'opacity'. You will see that the photo becomes semi-transparent. Experiment with moving, adjusting and editing the top photo with tools from the left hand 'tool pallette' window. Take screenshots throughout and document your creation.

Save all work to your USB, in well organise named folders, for ease of retrieval later. Critically appraise these with the group to assess which work best and why. Take screen shots of your work for all these tasks and write at least 200 words reflecting on your learning, challenges, successes and progress.

Notes

Images resolution for print and screen guidance reference:

<https://www.creativebloq.com/graphic-design/what-is-dpi-image-resolution-71515673/2>



Images and tools

January 24, 2023

In Photoshop, the first thing we should do is place an image on the screen. The way is to drag the image to Photoshop or go to files and click "Place Embedded".

Moving the location of the image is very easy. You can move the

site by dragging the image or by selecting Properties. It is helpful to move a specific object from a photo after cutting the thing out with a Lasso.

Clicking tools is a significant step in using Photoshop. The toolbar is

on the left side, and the tools offer more options when connecting it longer or clicking with two fingers.

◀ The locations to find the buttons and Lasso.



Selecting objects with Lasso

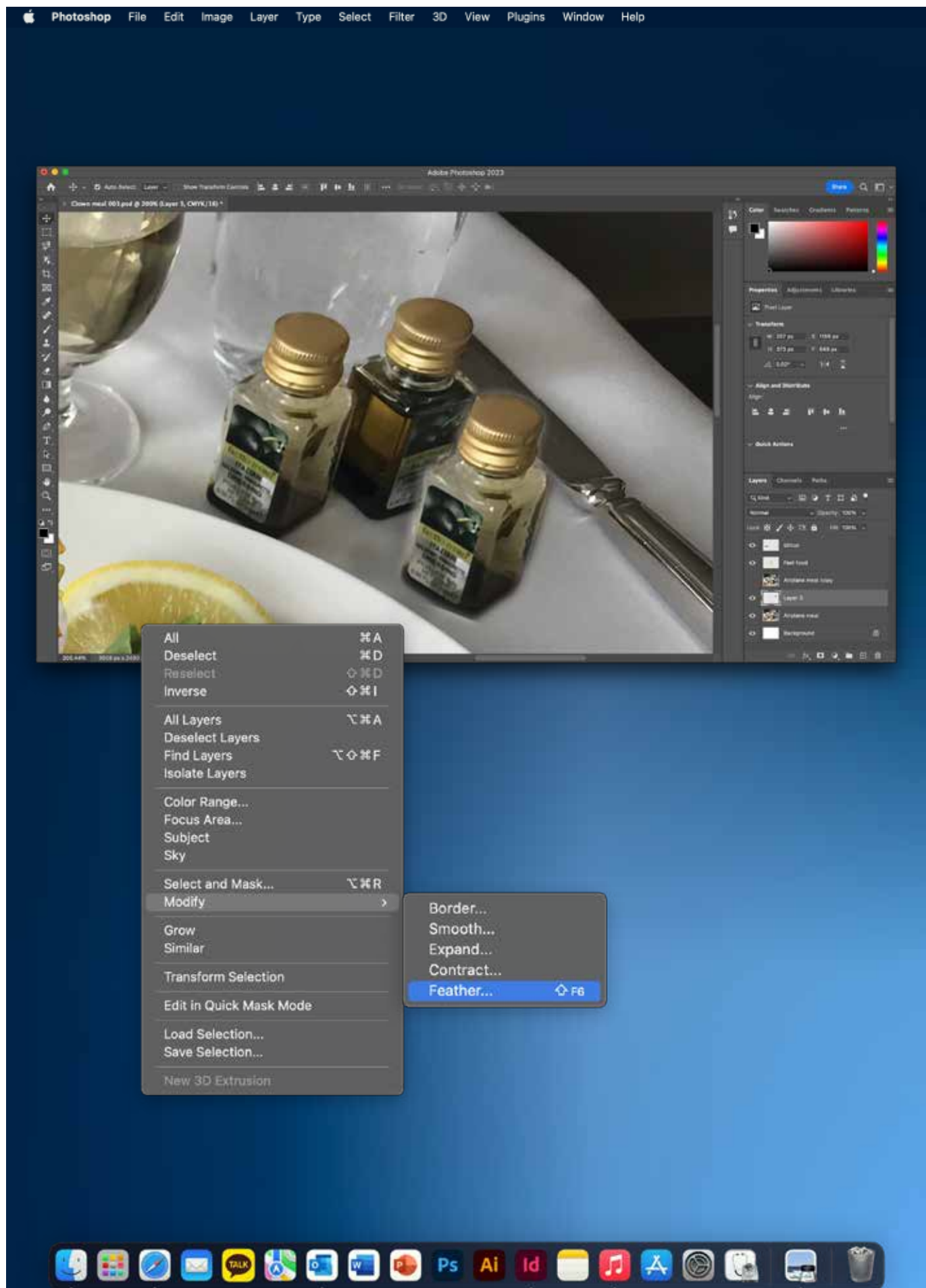
January 24, 2023

Selecting objects with Lasso allows us to split things inside an image into an independent entity, enabling us to combine different objects with other pictures or copy and paste the object and make hundreds of them.

This tool gives tons of possibilities. Especially the Magnet Lasso is the most accessible tool to use.

The Magnet Lasso automatically follows the object's line and creates a neat finished line around the selected object.

◀ Example of using the Lasso tool.



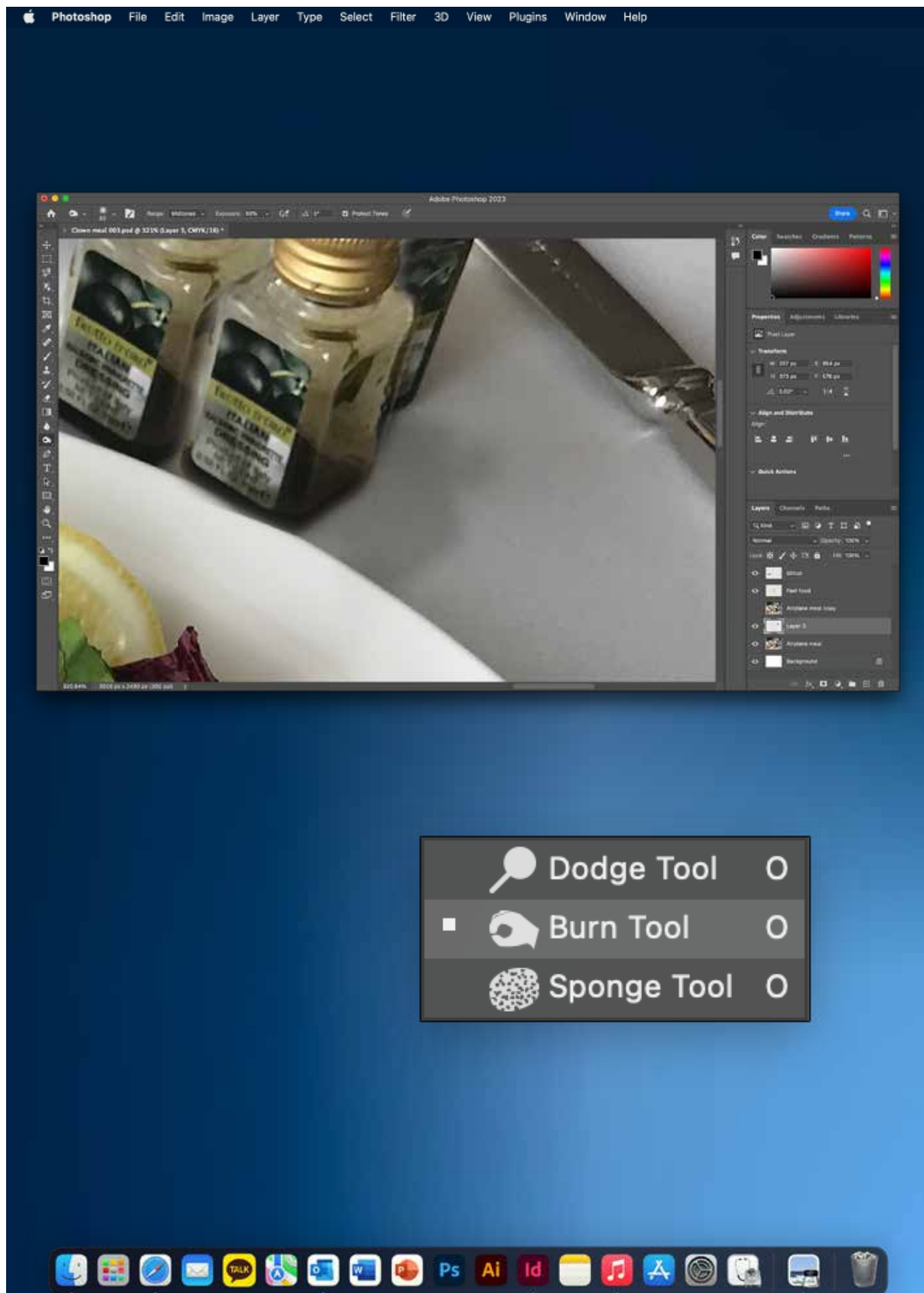
Expand, contract, and feather

January 24, 2023

By going into select and modify, it is possible to give five different effects to the Lasso-cutting object. These tools are used to make the thing placed more realistic and smooth. The tool that I use the most is the feather.

The feather tool gives the object a greasy look by feathering out the edges.

- ◀ Example of using the feather tool. It made the edge of the third object smooth.

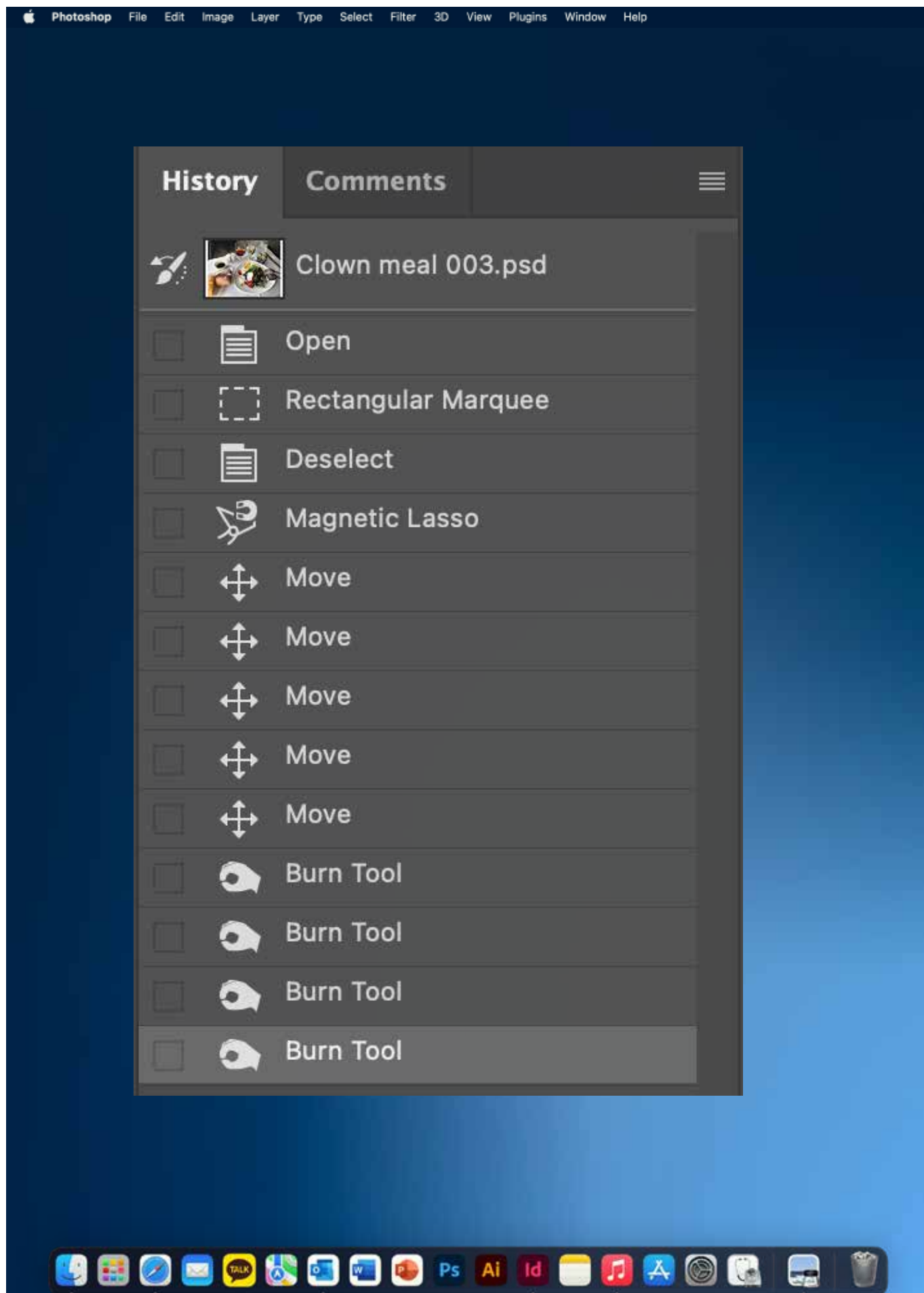


Burn

January 24, 2023

The burn tool is another tool for the object to look more realistic. The Burn tool is used to make shadows of the thing by making the selected part darker.

- ◀ Example of using the burn tool and making a shadow.



Magic command Z

January 24, 2023

Using command Z is a way of returning to the stage before I make a mistake or want to change my decision.

History is another method of going back to the location before. However, using history is more

advanced because history allows me to go back to the stage I want and return to the future again.

◀ The place of checking the histories and tools I have used.



Experimentation

January 24, 2023

Using all of the tools I have learned from class, I came up with the picture on the right side. It is an aeroplane meal with a circus man lying on the bread and one more olive oil added. This guy also added a McFry to his meal.

The task was to combine pictures related to our "What Is Design?" session. My topic was "Clown", and so that's why everything is not in order. It is the same mind as the clown.

◀ The final result of the first try of using the tools from Photoshop.

Introduction to DIGITAL MANUFACTURE AND CAD/CAM

24th JAN.

FABRICATION.

CAD - Computer Aided Design.

CAM - Computer Aided Manufacture.

↳ Using 'Directories'; Files ~~to~~ naming conventions & 'versions'.

↳ ~~Searching~~ Searching for images online with copyright free use rights.

↳ Creative Commons, public domain

↳ Wikimedia Commons, plat

↳ Flickr.

Print - CMYK (cyan, magenta, yellow, black)

Screen - RGB (Red, green, blue).

PPI - Screen

DPI - print.

- Placing images: 'Place Embedded' (in the ps document)

- Moving the images Location window: properties.

- Rasterize the image.

- 'Undoing' using command 'Z' keys (Shift + Command + Z = redo) or using - Window: History.

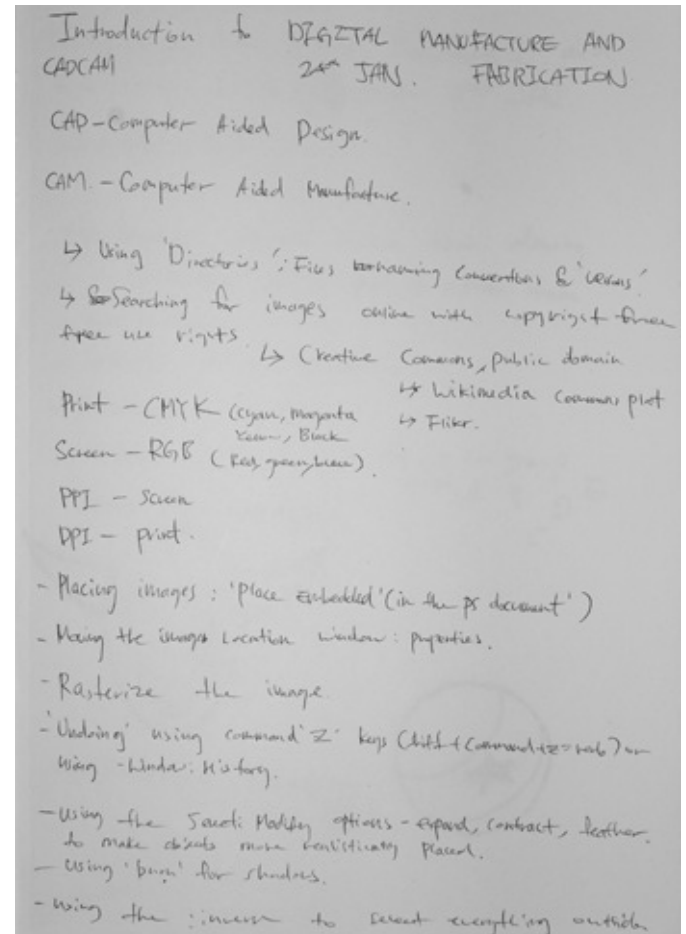
- Using the Select Modify options - expand, contract, feather. to make objects more realistically placed.

- Using 'burn' for shadows.

- Using the :inverse to select everything outside

Taking notes

January 24, 2023



The photo above is the note I took from the class. It does contain every step that Edd has told me; however, it will be great to include some notes that I use for my work.

Edd also mentioned that nobody in the world could remember the step at once, so it is essential to go through the steps repeatedly to memorise the tools and measures.

Therefore, I must keep trying the steps and discovering how to use the tools myself in my own time.

Using Photoshop on photos

In the session "Using Photoshop on photos", we are going to go through the results and ways that I have used to create my own work.

Please note that the dates will not be included because these

projects were not made during the foundation course.



Oh Jonghwa

Please note that this book only contains pictures authorised by the person involved.

The first example is an image of my friend Oh Jonghwa from South Korea. My mission is to make the photograph of my friend on the left side of this page into a beautifully edited image. Here, I think the definition of a beautifully edited photo is to edit the photo with no unseen part and have an outstanding balance between the dark and light.

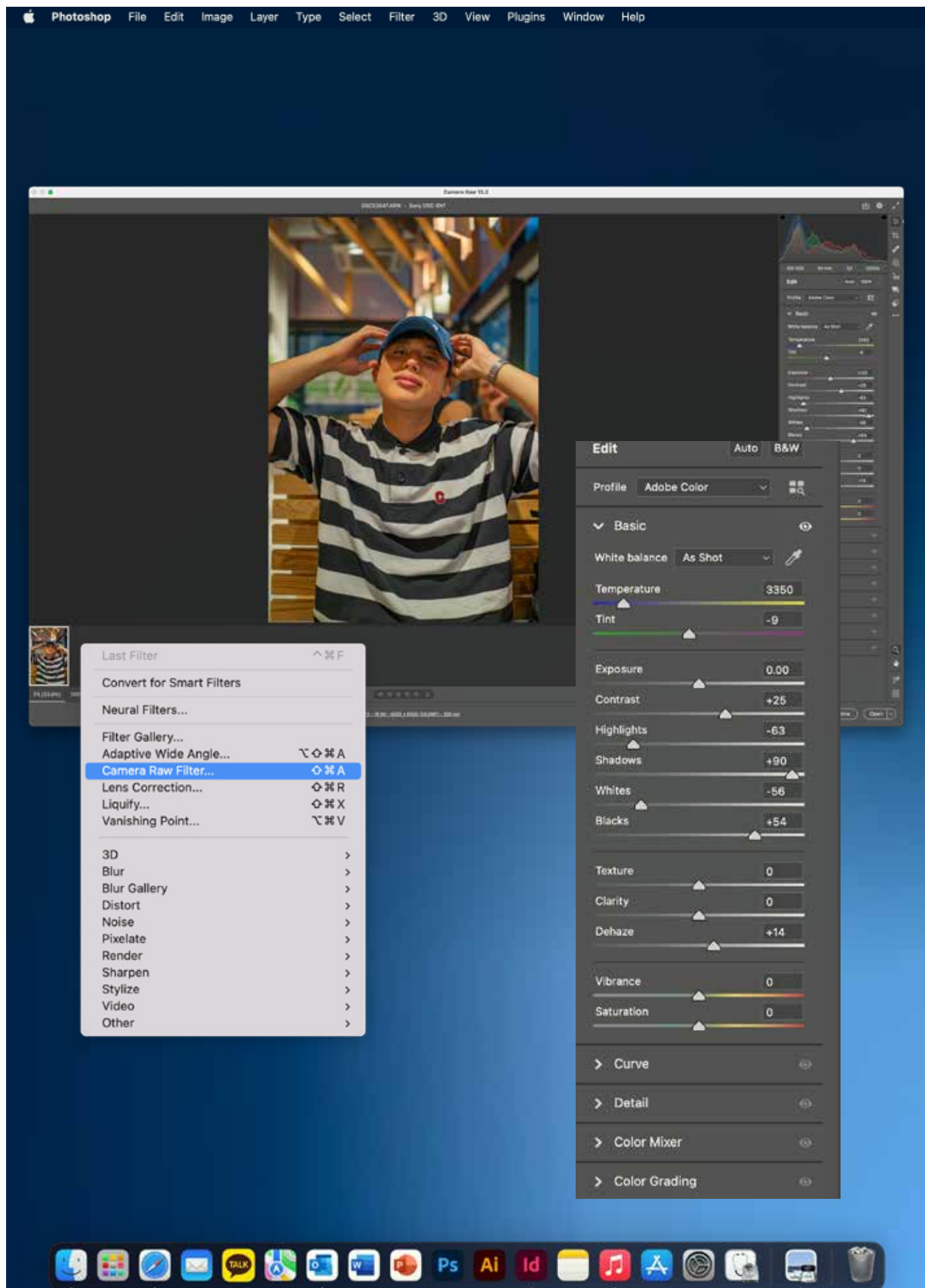
So, adjusting the exposure balance with a filter of the image will be the first step in making a photo into a neat picture.

Then, as this picture is a picture of a person, it is essential to take care of the **blemishes** on his face, which will be the second step of making a photo neat.

Finally, the last step will be **cropping** the image, which can ruin or complete image editing with a single millimetre.

Beyond all these steps, I believe taking the photo in RAW format is the most crucial part of the process. It's because taking pictures in RAW form keeps all of the colour data with the image; it makes it possible to edit the colours or resolutions of a photo with Photoshop more widely and accurately. This way, I can get closer to delivering the desired results.

◀ 35mm, f2, 1/200s, ISO 500, DSC-RX1.
4000 X 6000 Pixel, RAW.
Shake Shack Gangnam,
August 15, 2022.



RAW Jonghwa filter

As the original photo has a lot of dark spots and doesn't give a clear view, it needs some adjustments. Using the Camera Raw Filter is very useful for filtering the image with more accurate colour options.

To open the Camera Raw Filter, I have to press filter from the option bar and press Camera Raw Filter. However, if the photo is taken in a RAW format, the Camera Raw Filter will open automatically in the first place as I open the image through Photoshop.

Once the Camera Raw Filter is opened, the filter functions with the toggles located at the right side of the display. These toggles include exposure levels, highlights, shadows, blacks, whites, optical camera profiles and more.

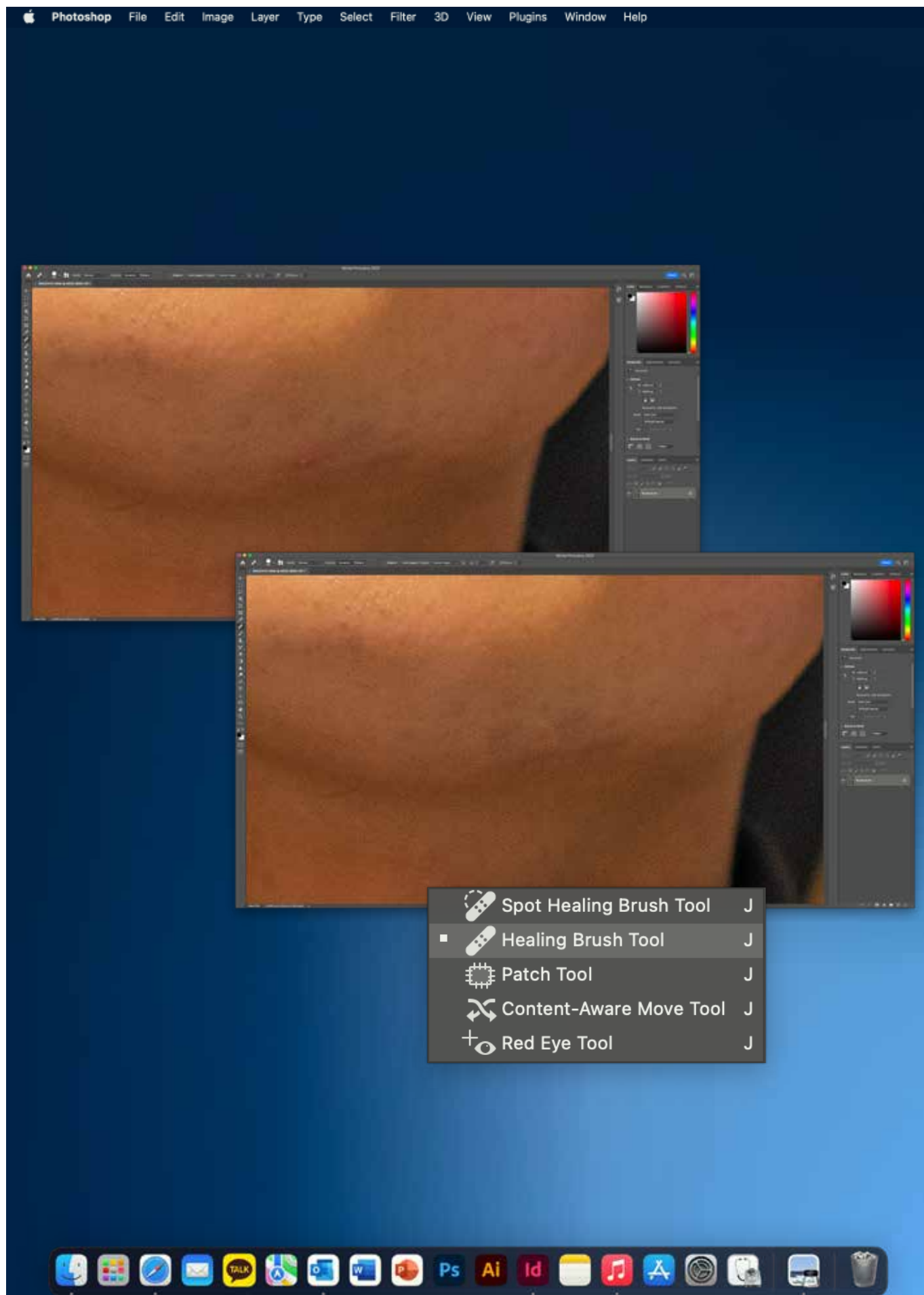
The first thing I have touched on in this photo is its exposure levels. I have increased the overall exposure level of this picture to bring up the darks of the image.

For the next step, I tried to adjust the detailed exposure by using the highlight and dark and white settings. Using these toggles, I could bring up the dark spots and reduce the over-exposed areas.

For the last step, I increased the Dehaze of this image to add a sense of liveliness and colours to the picture.

For this picture, I haven't used any of the optical profile which modifies the image to the right distortion degree according to the camera lens. Instead, I included the element of the German lens's distortion vignetting, which makes the photo more focused.

◀ Using the Camera Raw Filter.



Blemish

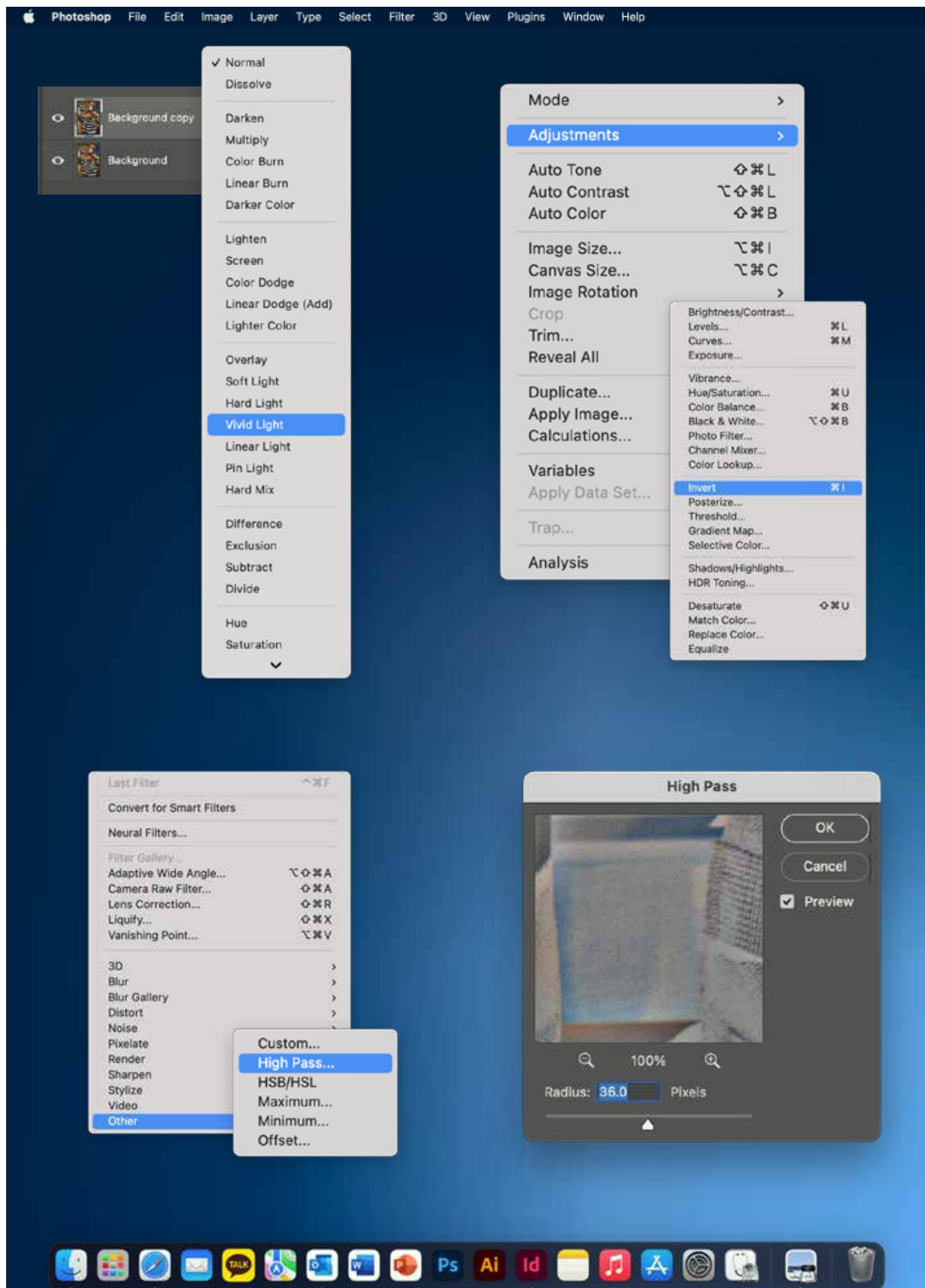
The next step of editing the photo is to erase all the blemishes as much as possible. This step is to make the face of the person in the image look clean and neat. This step is necessary because several photos last a lifetime, and it's better to look nice for all that time.

To move on to the erasing step, I first used the Healing Brush tool, which removes the flaw inside the circle pointer. With this tool, it is possible to remove acne or wounds with it.

The difference between Spot Healing Brush and Just Healing Brush is that Spot Healing Brush removes the spot in the circle automatically, and the standard Healing Brush removes the place in the ring based on the selected area that I have set up.

I prefer using the standard Healing Brush because it lets me erase the site more in the way I want.

◀ Using the Healing Brush tool to erase blemishes.



High Pass and Blur

Using the High Pass tool is one of my favourite tools in Photoshop. It is effortless to use when set for the first time and gives a very high-quality result.

I generally use this tool to make the skin smooth and matt-glossy. The way to set the High Pass tool is easy.

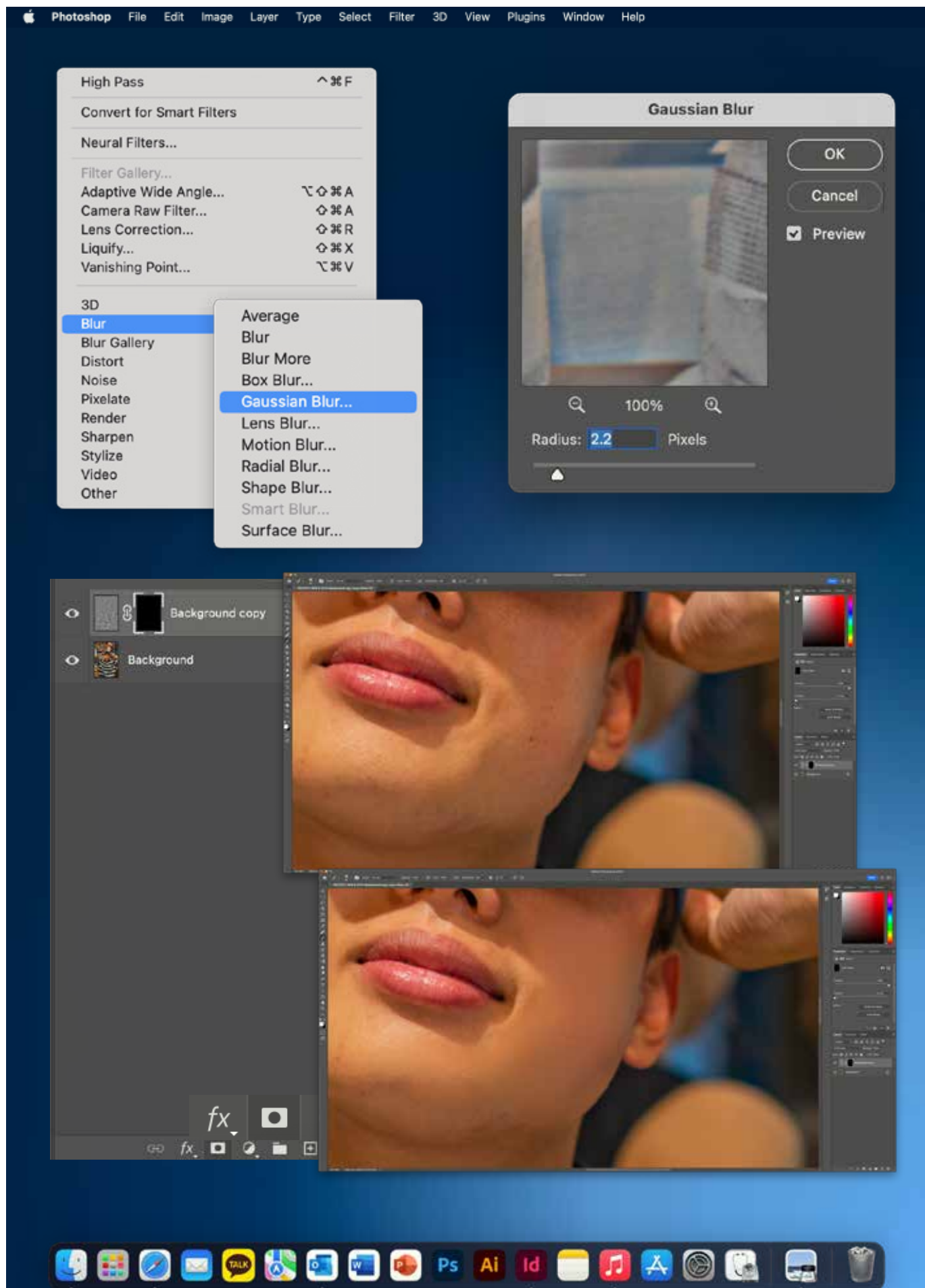
The first step is to copy the current layer and select the Vivid Light filter for the duplicated layer.

The second step is to choose adjustments and press invert from the image from the top toolbar.

The third step is to select the filter from the top toolbar, select Other, and choose High Pass.
Here, the average radius pixel level is 30 to 40.

The following steps will be explained on the next page.

◀ The first three steps of using the High Pass tool.



The next step is to select the filter again, choose blur, and press Gaussian blur. Here, the general level of Gaussian blur is 2 pixels to 5 pixels.

The fifth step is to press the “Add a mask” button below the layers window. However, it is essential to press the button with pressing Option simultaneously.

The last step is to select a brush tool and draw it on the area which is wished to be smoothed.

◀ The last three steps of finishing the High Pass tool.

Cropping

The very last step of editing an image is cropping. Choosing the appropriate format for the image impacts the image's overall vibe and defines the focus area of the human eye where to look first.

The result of my friend's picture is originally in 6x7 format simply because I prefer to follow the analogue camera's setups, and it's also the format that analogue photo studios used. However, the image next is in a different format suited for this book and is not in a 6x7 format.

A medium format analogue camera's film formats are usually 6x4.5, 6x6, 6x7, 6x9, 6x12, and 6x17.

6x6 and 6x7 are generally known to be studio formats, and the 6x9 setup is known to be a bigger version of the 2x3 35mm format; however, if a medium format film is taken with a 6x9 configuration, it only can take eight pictures, so, the solution was the 6x4.5 format which has similar ratio and has the double capacity of images. The 6x12 and 6x17 formats are panorama formats.

I prefer using studio formats because it gives more focus to the person in the photo than other formats. I believe that even a single millimetre is important in cropping an image because it might provide a very different picture than I intended.

The final result of my friend Oh Jonghwa. ►



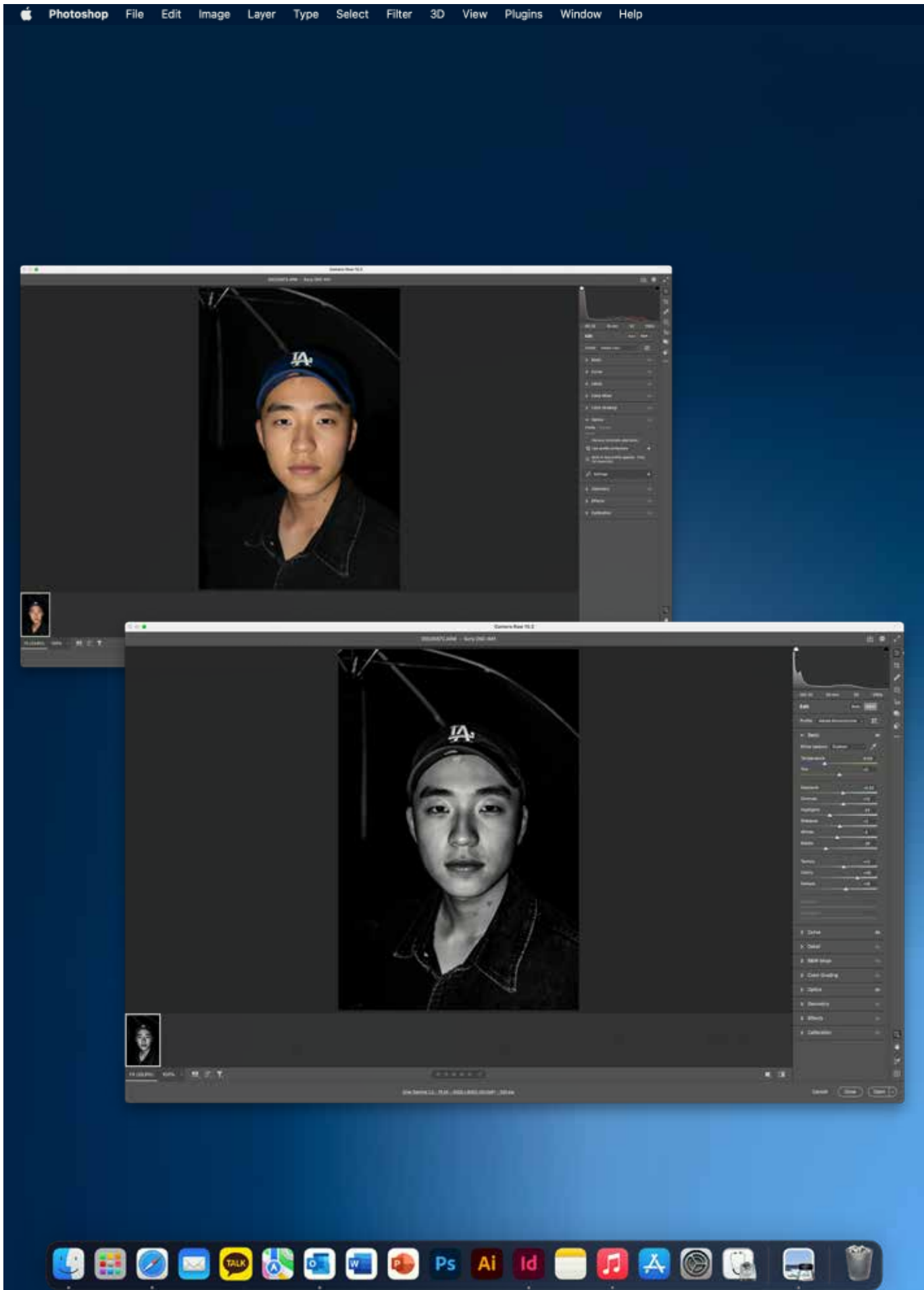


Yeon Juha

The next friend I have used to edit with my Photoshop tools is Yeon Juha. This time, I have tried to use some Black and White filters. Unlike editing coloured images, Black and White images require more focus, details, and exposure levels because only two colours can be seen; it takes more emphasis on those two colours.

When I edit Black and White pictures, I try not to touch the face or the lens profile as much as I can. I do that because, for me, a Black and White photo is for expressing the person or the place who and where it is as it is.

◀ 35mm, f2, 1/60s, ISO 50, Strobe,
DSC-RX1.
4000 X 6000 Pixel, RAW.
Naksan Park,
September 6, 2022.



B/W

My Black and White photo editing skill requires a single detailed step. The first and last step of editing the photo is using the Camera Raw Filter's B/W button and adjusting the exposure levels.

It is vital to focus on the details revealed by adjusting the levels; adjustments are made to make the face elements more visible. The most crucial adjustment here is using Texture, Clarity and Dehaze. These levels make the photo more depth and live.

In this photo, I do not erase any of the blemishes on the face to express the person as he is.

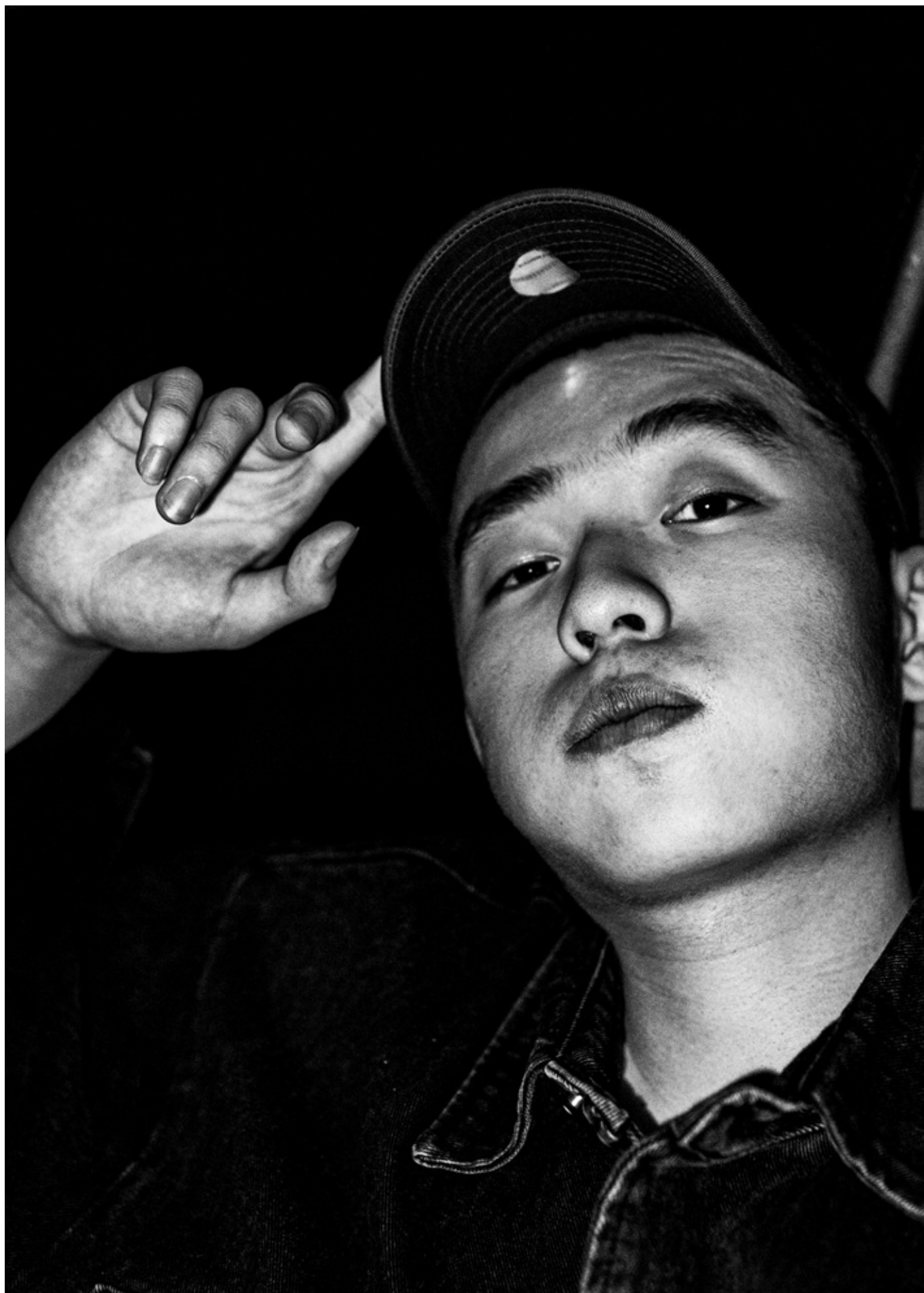
- ◀ Adjusting the exposure levels with Camera Raw Filter.

The picture on the right side is the final result of the Black and White edited image. The original photo was cropped in 6x7 format; however, the image on this book was adjusted right for the A4 page. A few more examples of photos are listed on the next page.

Final result of Yeon Juha in Black and White. ►







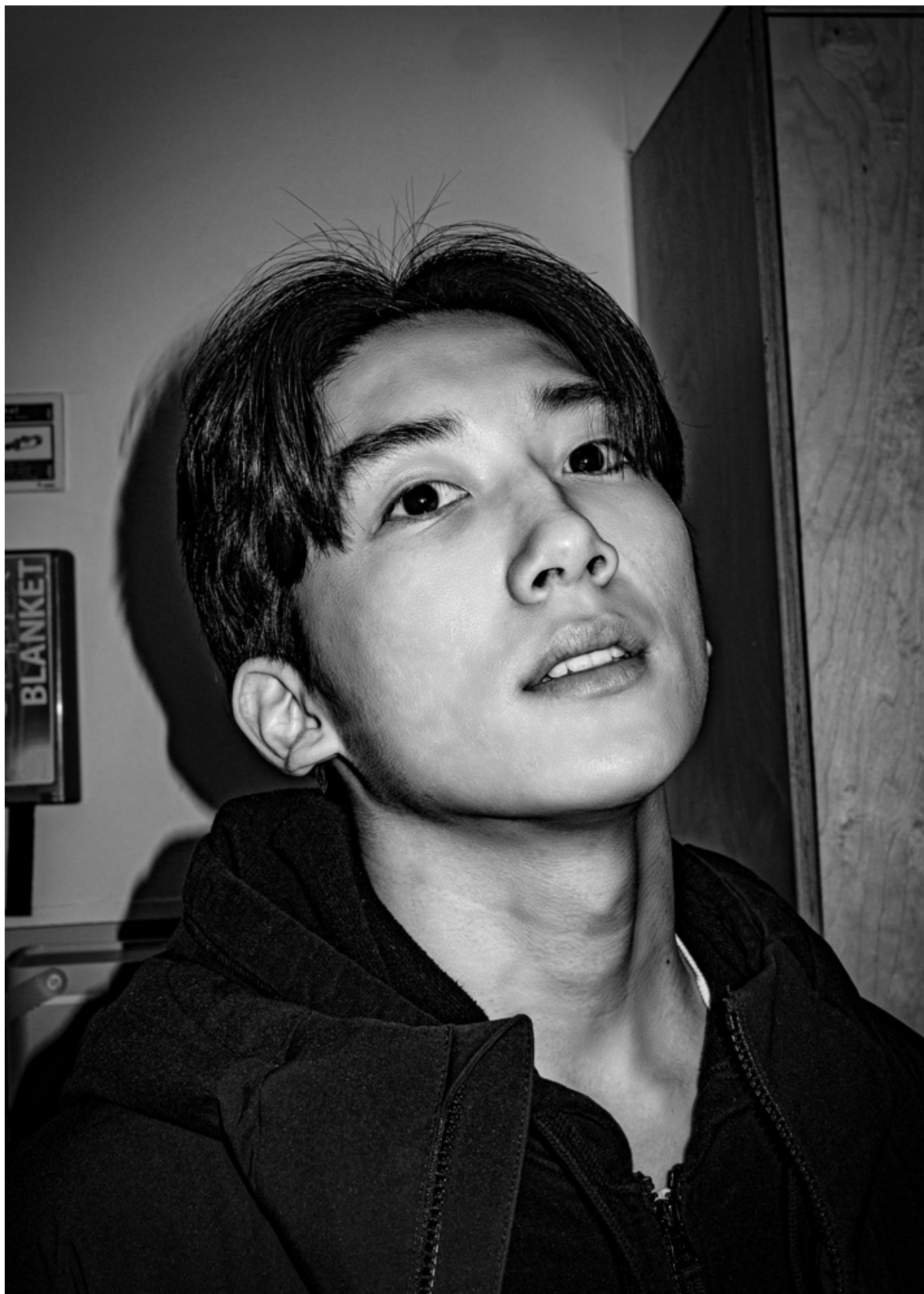
Choi Myeongjae







Kim Youngdam



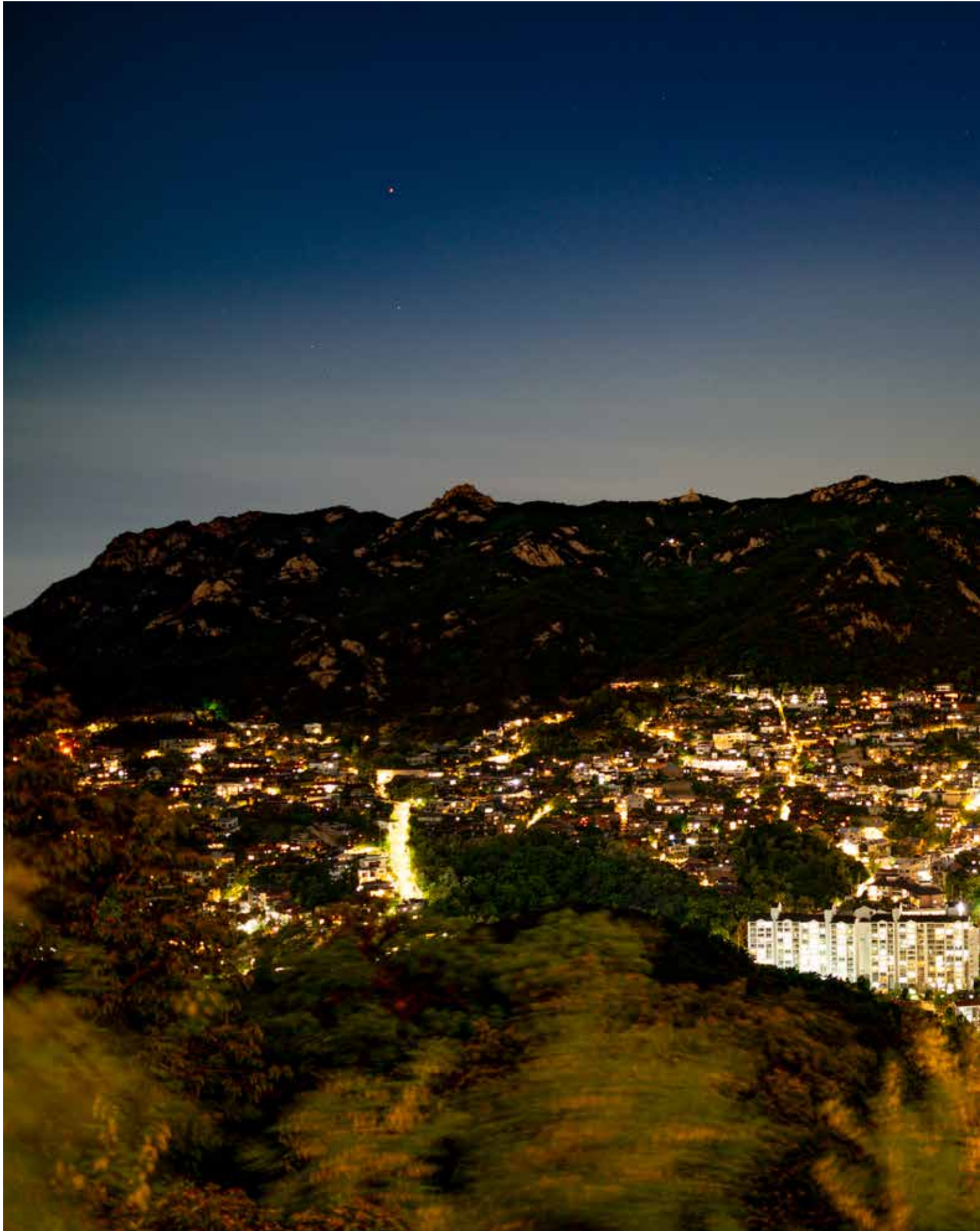




Landscapes

The same techniques can be used in landscape photos.





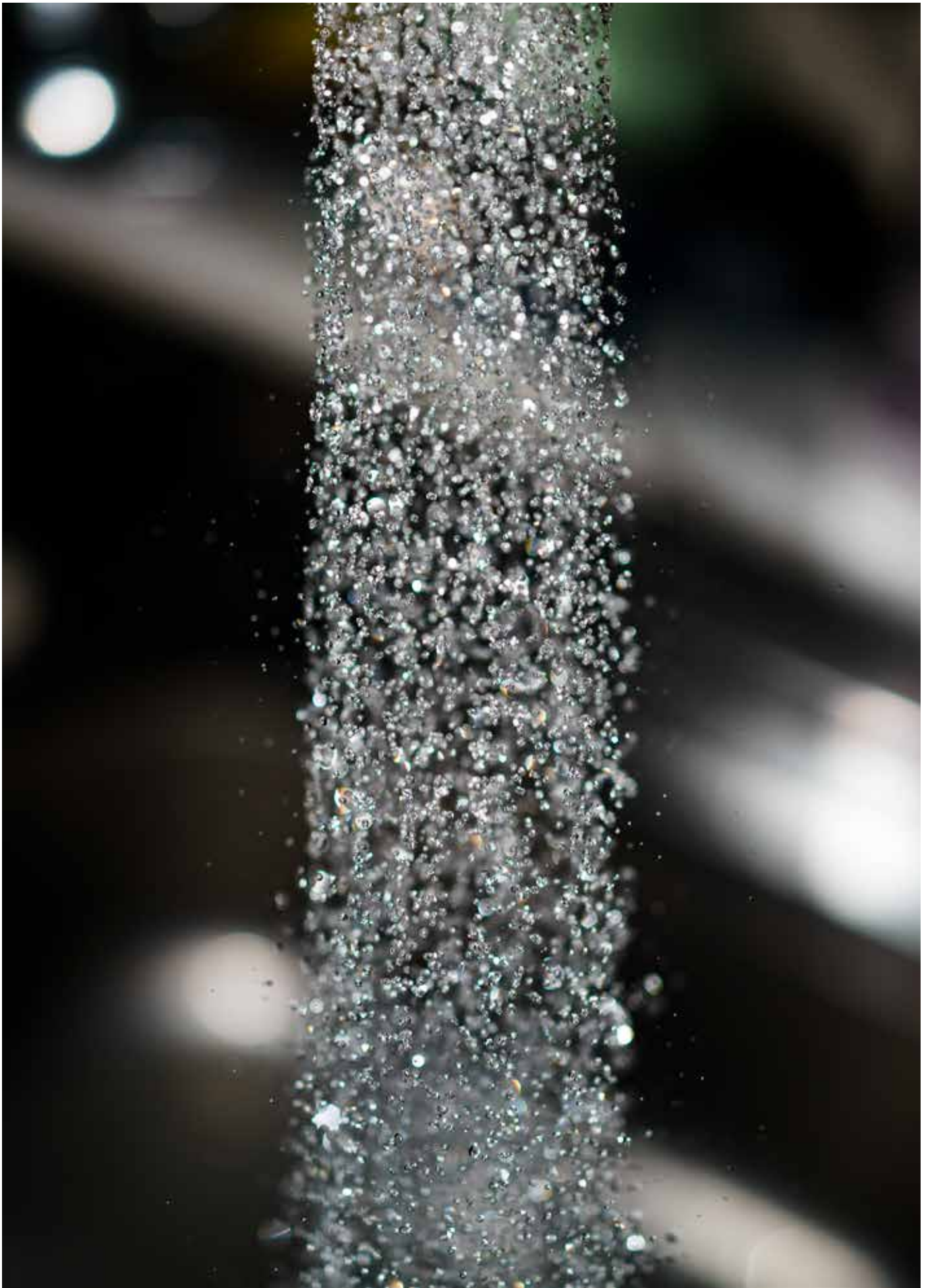






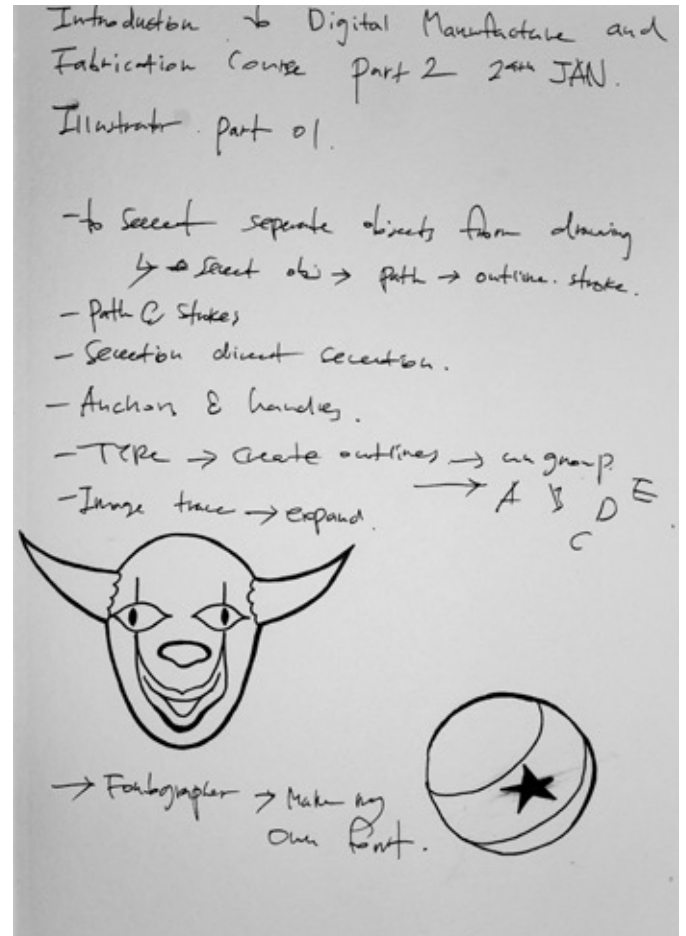






Adobe Illustrator

January 24, 2023



The photo above is a photo of my note during the class. Learning Illustrator has opened my possibilities and made me an open path to making my logos and fonts(everything related to my design).

Making my fonts with "Fontographer" will be immensely enjoyable too.

Understanding these features and elements was very useful and enjoyable. It will be essential for me to try these at home not to forget what I have learned.

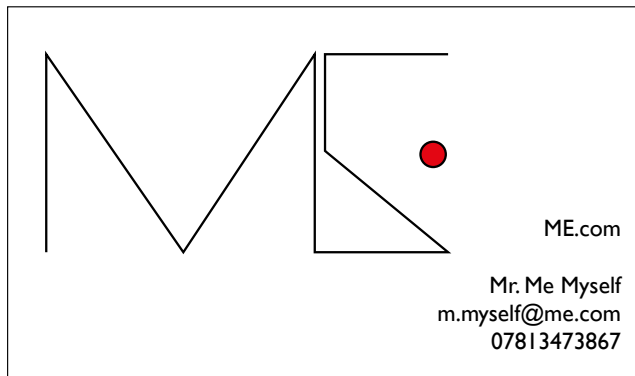
I will be enjoying at home trying my designs.

The given brief. ►

IFC 2022-2023__

CAD CAM / Making Things

Illustrator_part_01



Lego Logotype Evolution. Design Museum, London

References;
Edward Bagenal e.bagenal@gold.ac.uk 02079197809
Goldsmiths Computer Aided Design website:
<https://sites.google.com/site/goldsmithscad/>

IFC CAD CAM

2D- Illustrator: Line and Fill

Firstly, open Illustrator. Now create a new document using 'file:new document'. Name this and save it in a new folder on your USB drive. Now go to 'window: layers'. use the page icon in the bottom of the palette window to create 2 new layers. Highlighting one of these layers start to draw using the pen tool.

Next, having familiarised yourself with the interface, tool palettes, layers window etc. use vector drawing tools to create a logotype or graphic ident for yourself as a design practitioner. Copy and paste as many versions as you like, altering colourways, graphic elements and features to create a selection of versions.

Try to create a business card and a letterhead using your logo and text boxes on separate layers. Try different versions and save each to compare and appraise with your peers in the studio. Critically appraise these with the group to assess which work best and why.

Take screen shots of your work as you make changes, for all tasks in these workshops.

Try to take screenshots as you go, showing the development of the layout, content and design as it evolves.

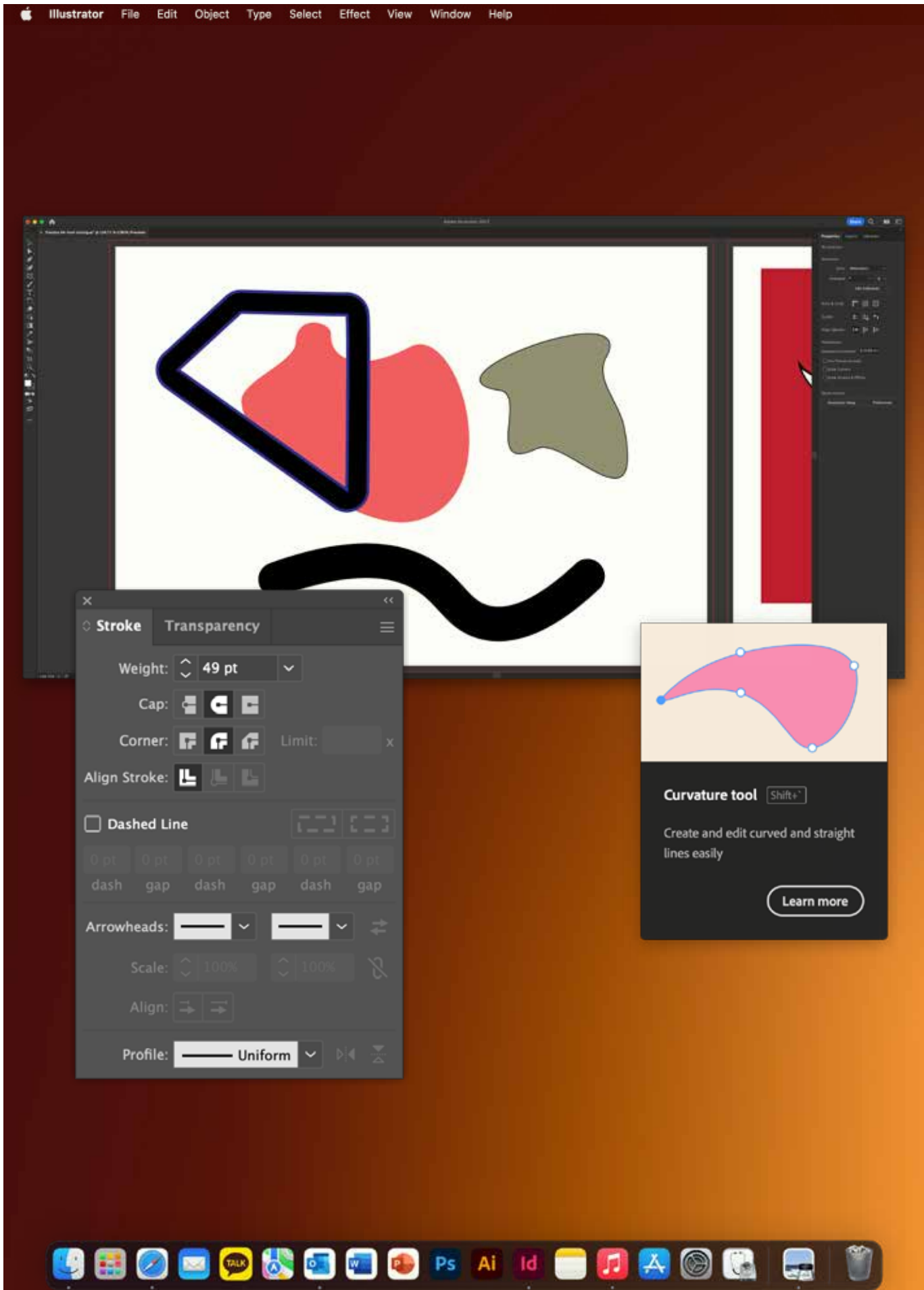
Save everything to a USB drive and upload it to your IFC CAD CAM/Making Things blog. Also write this up in your journals.

Keywords and terms glossary;

Adobe Illustrator, vector paths, outlines, points, handles, fills, groups, layers, gradients, wingdings, glyphs, dingbats, fonts, typefaces, Swiss graphic design, isotypes, grids, guides, snapping, snap-to-grid, templates, bleed, etc.

Books to read;

Joseph muller Brockmann, Grid Systems,
Milton Glaser: Art is Work: Graphic Design, Interiors, Objects and Illustration
(Milton Glaser designed the infamous 'I♥NY' identity)



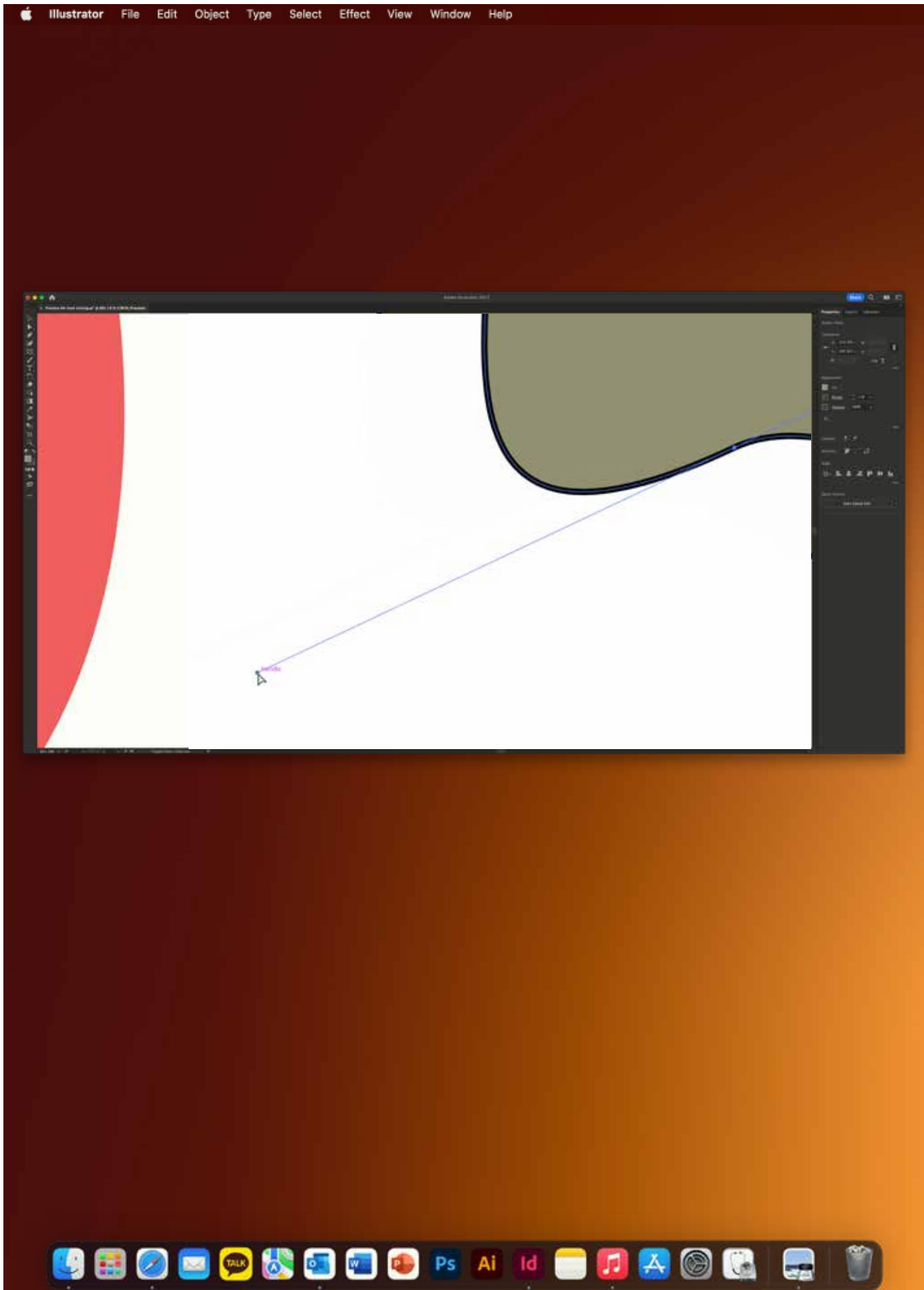
Paths and strokes

January 24, 2023

Using Paths and Strokes is an essential tool in Illustrator. As sketchbooks need pencils, Illustrator requires Paths and Strokes.

Using strokes is the way to make shapes and lines in any form I want. By pressing the Options key from the stroke, it is possible to change the structure of the stroke in any way I like.

◀ Examples of using the Stroke tool.



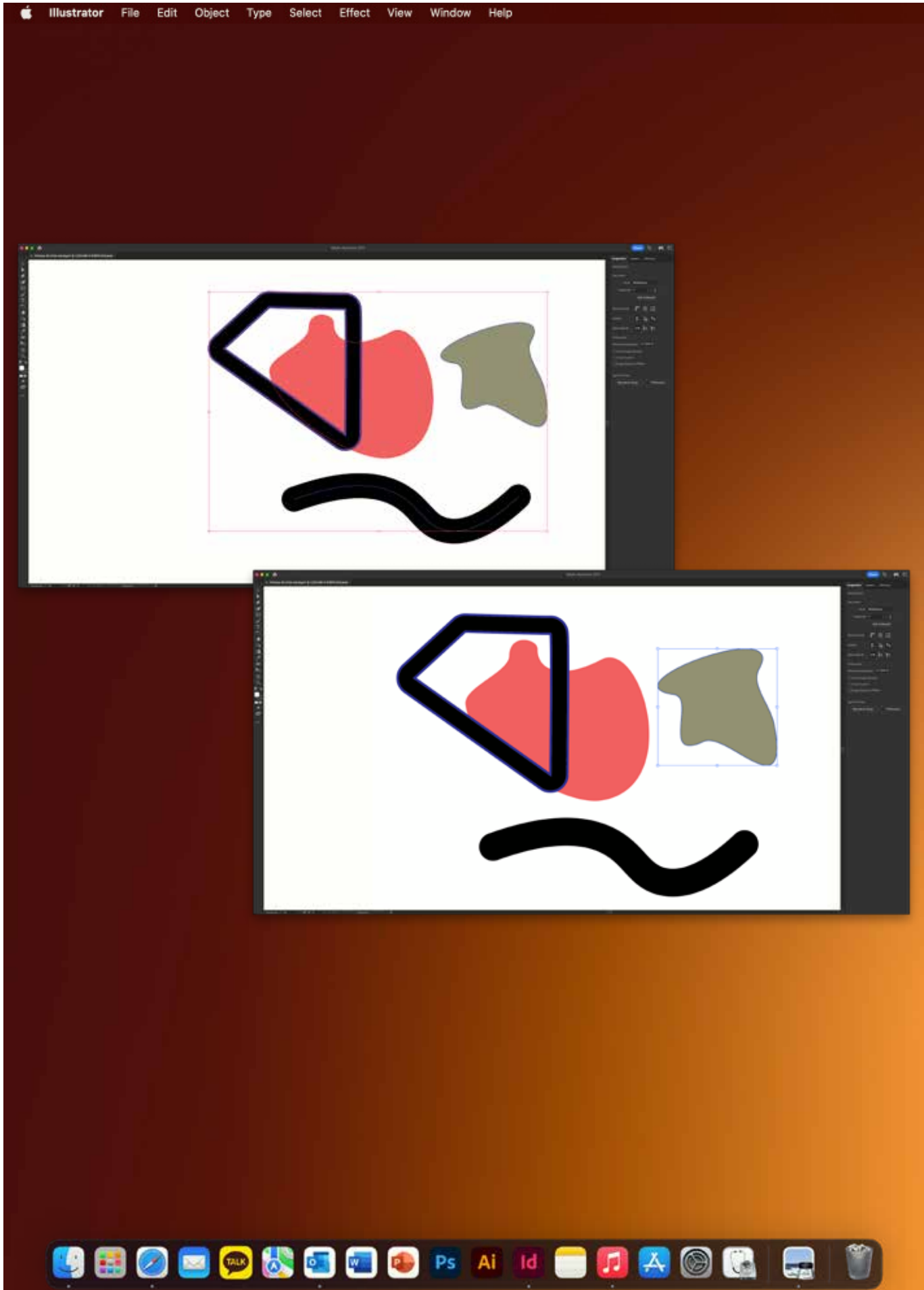
Anchors and handles

January 24, 2023

Anchors and handles are tools to give the ability to adjust the shape I have drawn.

By choosing the white Direct Selection tool, it is possible to spot the Anchor dot and the handle dot on a form. It makes it easy to change the formation of the shape.

◀ Examples of using the handle of a shape.



Grouping and ungrouping objects

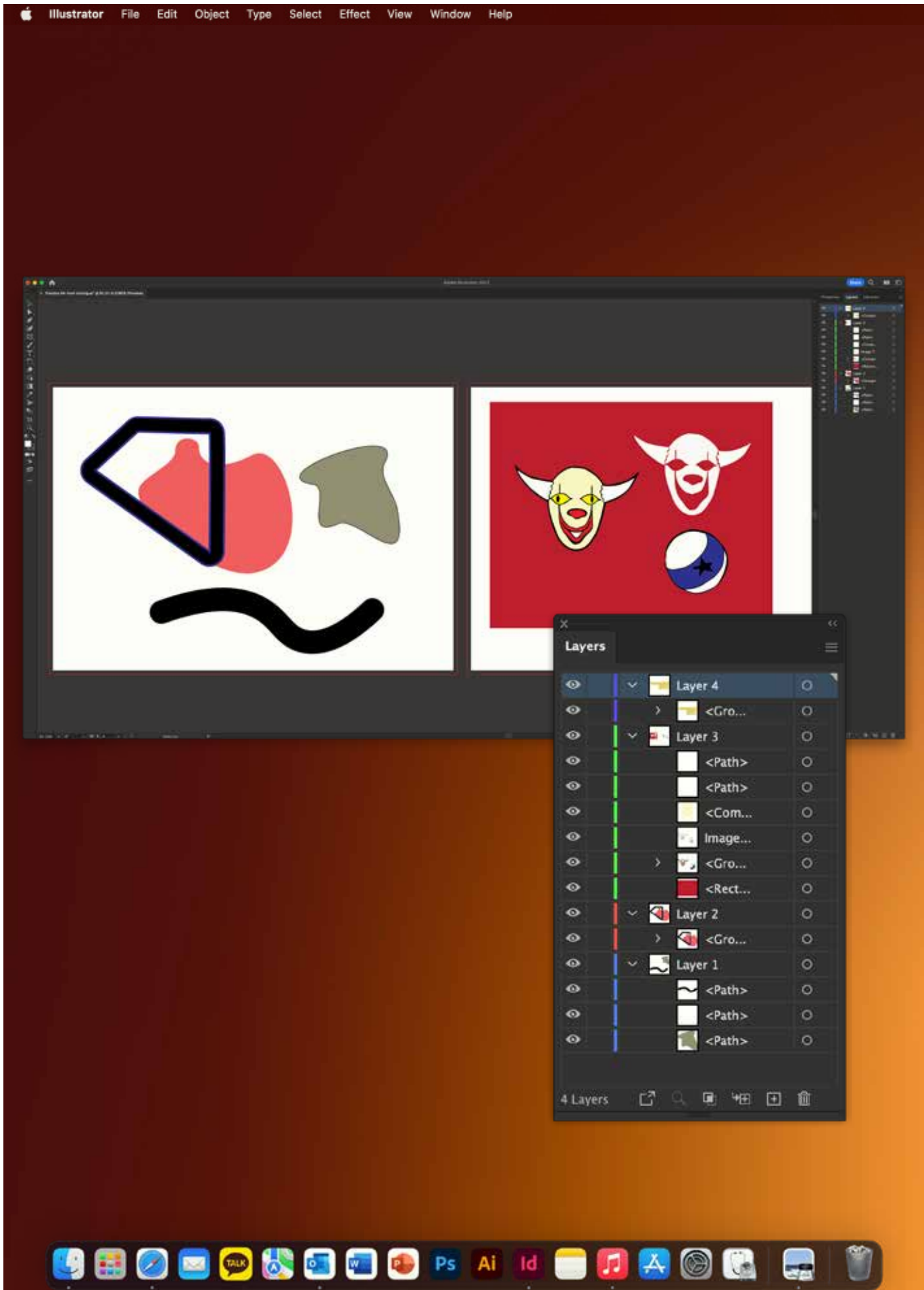
January 24, 2023

Grouping objects and Ungrouping objects make it possible to move many things simultaneously or move a massive object with several pieces inside separately.

Grouping objects is easy. First, select all the objects I want to group by pressing the "Shift" key. Next, press "Command + G" to group all of them.

Now it is possible to move all of the objects around simultaneously. To ungroup the things, "Command + Shift + G" is required.

◀ Examples of using grouping tools.



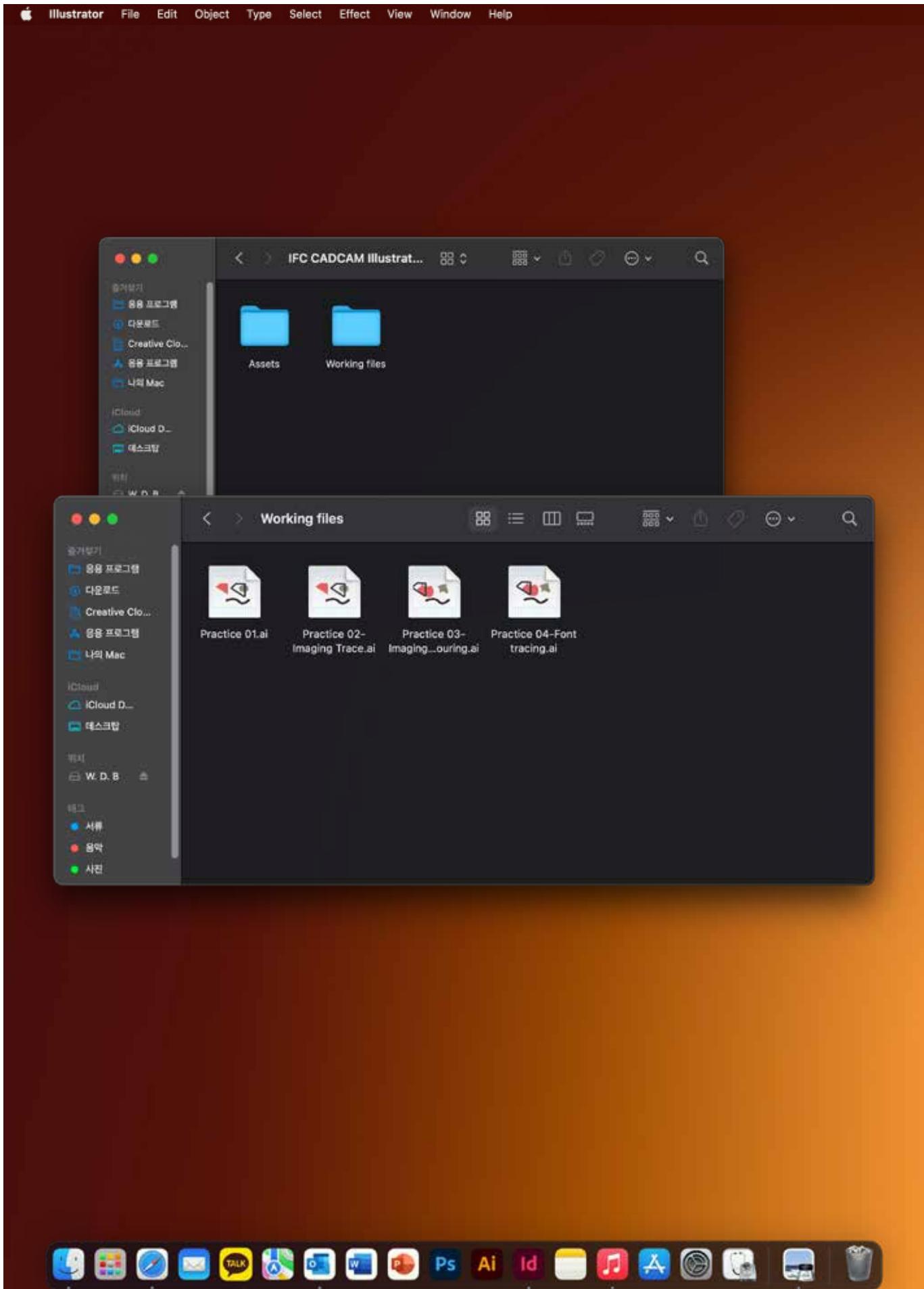
Layers

January 24, 2023

Making Layers is very important as organising the files and naming them. By sorting the layers in the correct order and making different layers by layer as doing the project, it is possible to save time when something happens to save or change something from the past.

It is also helpful to compare my old and new work by pressing the eye logo on the left side of the image. The eye logo makes it possible to see or unsee a specific layer.

◀ Examples of using layers.



Saving versions

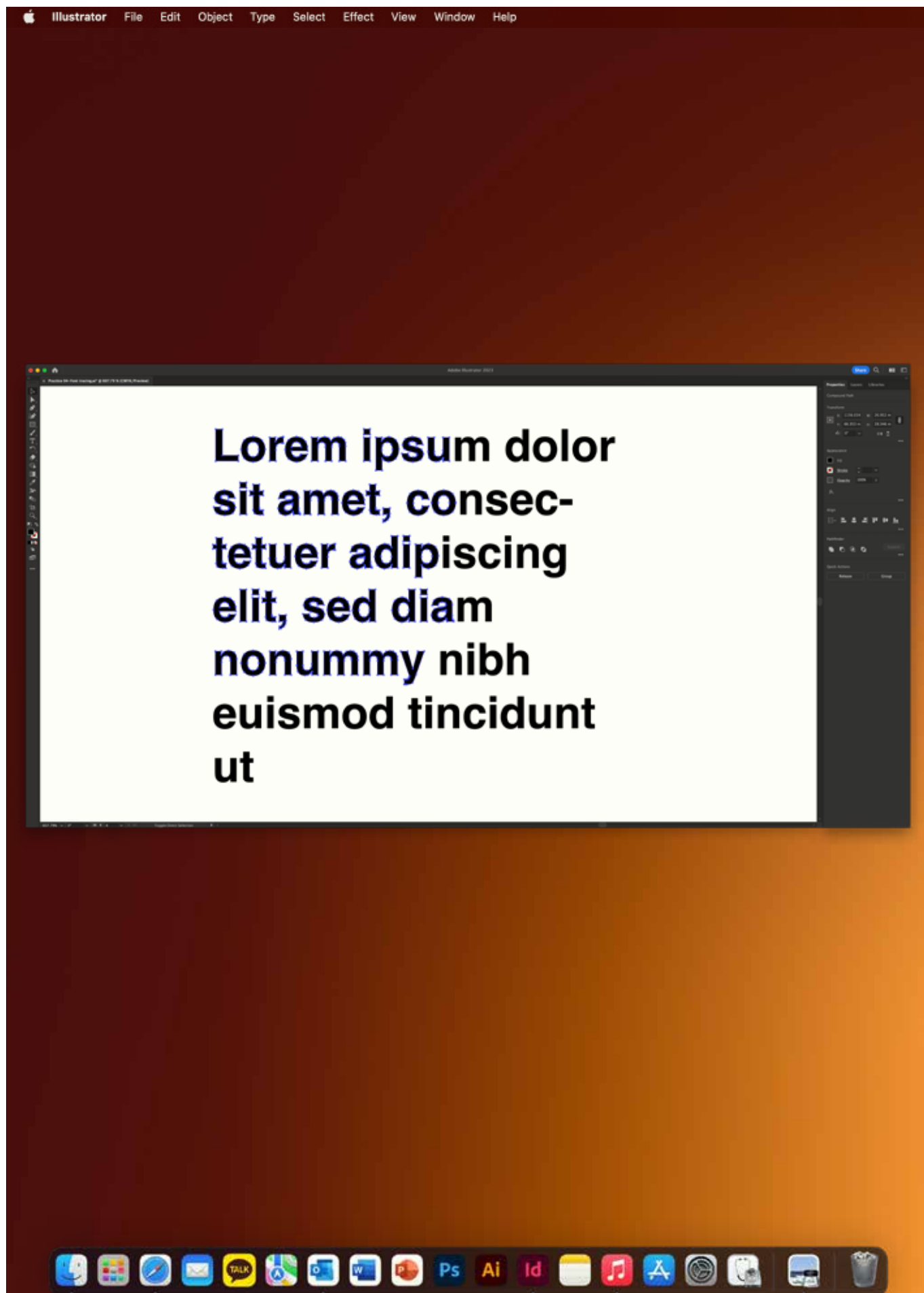
January 24, 2023

Saving versions of documents is a different way of saving things, and it works similarly to the layer's progress. These Layer, Saving versions and File naming are about protecting time and preserving from the saving problem as everybody makes mistakes.

Saving different versions of files make me possible to assess different timelines every time I need to (making a chance to fix from the past to change the future).

So it is essential to prepare for every circumstance.

◀ Saving versions of files.



Texts

January 24, 2023

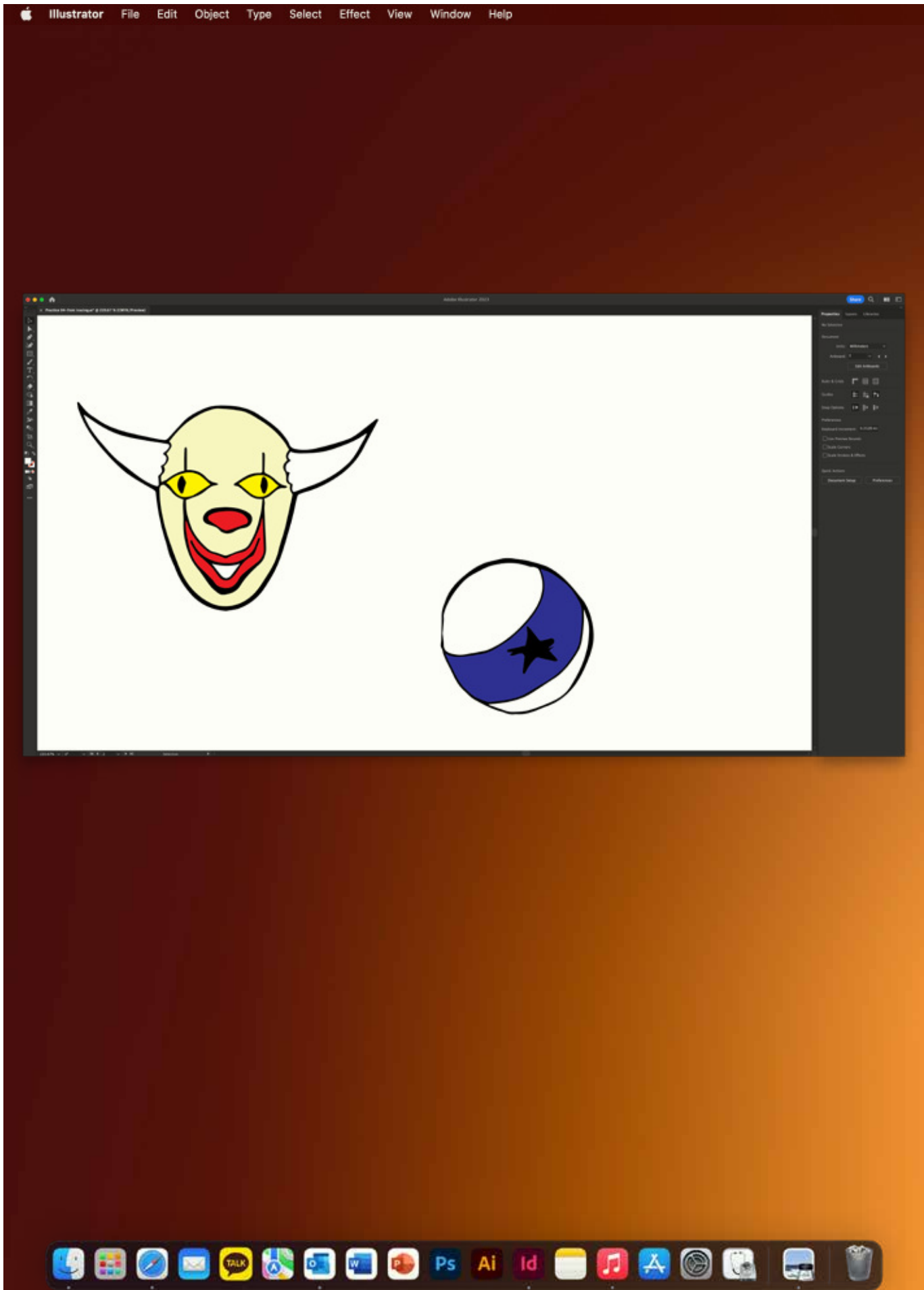
Using texts and fonts in Illustrator is the most basic but the most im- important in the programme.

Even though fonts look very small and don't have any impact, I believe it is one of the most significant elements that change the overall quality.

Therefore, I think it is crucial to find the most suitable font for every programme and font for my one.

My favourite fonts are **Helvetica Bold** and Futura Book.

◀ Using the fonts on Illustrator.



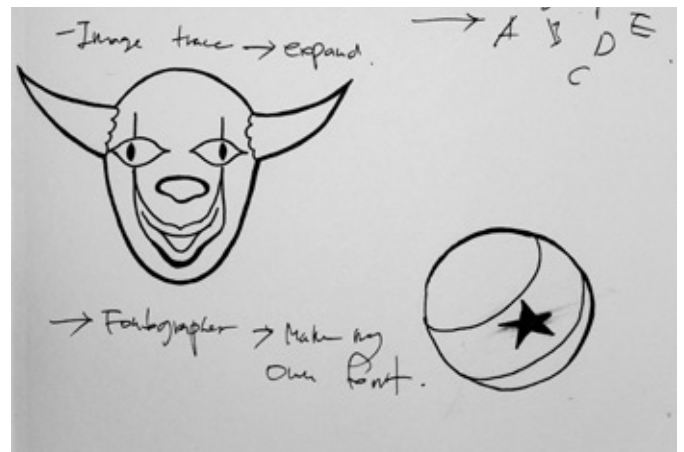
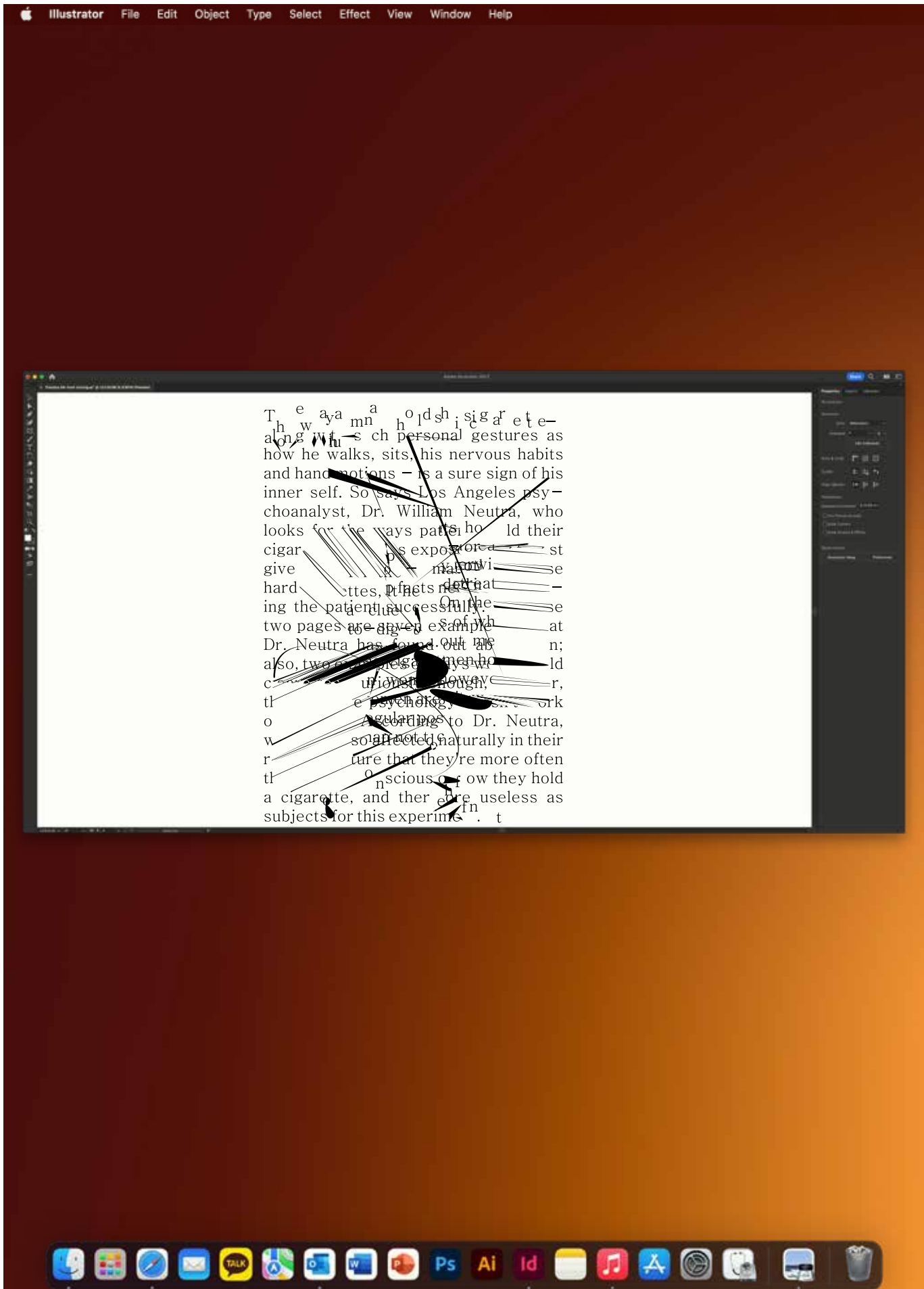


Image trace is a feature that makes my drawing(in sketchbook) into a digital file and makes it possible to colour or make it into a document. To use this feature, First is to bring a photograph of my drawing.

The next move is to select the photo and go to properties. There I can find a button called "Image Trace". After selecting it, I can choose how the image trace will be and how much I want it to be made.

I think this is very useful for making my logos and fonts.

◀ Using Image trace.



Creating outlines

January 24, 2023

By selecting “Type” and “creating Outlines” from a text, It is possible to select each letter and place it at a different location out of the line!

It will be a helpful feature when making logos or illustrations; however, it wouldn't be useful in writing.

◀ Creating outlines from texts.

Using Adobe Illustrator for logos

In the session “Using Adobe Illustrator for logos”, we are going to look through examples of using Illustrator programme and the design processes of making this book.

Making the Wuanny logo

The Wuanny logo comes from my nickname since 2012, which came from my name Wonhee Lee.

I wanted a gentle-feeling logo that could fit anywhere.

My dream is to be an audio designer, and this logo might give some possibilities to that dream.

The complete version of the Wuanny logo ►
that can fit anywhere.

wuanny

wuanny

wuanny

wuanny

wuanny



Comfortable and neat

The process of making the logo starts with writing Wuanny with Futura. Then, for a clean and smooth look, I changed the W with M and turned the M upside down. The last problem with the font was the Y, which has a sharp finish.

I wanted the font of the logo to be consistent and neat; I wanted all of the letters to be round and comfortable to watch. So the solution was to cut the sharp part of the Y and combine it with a round surfaced letter. Next, I combined the Y with the round part of the letter N from Wuanny and completed the round-shaped notes. The last step was to adjust the gaps between the letters and find the most suitable interval to look neat and comfortable.

◀ The process of making the Wuanny logo.



Pein

“Pein” was a concept brand I made during the CAD/CAM All-in project. This project was also related to the final major design project. The meaning of Pein is a different spelling of “pain”. Because people feel pain from annoying sounds from neighbours, the brand name is named after pain. Before moving on to the computer, our staff drew some logos possibilities on their sketchbook.

After the selection, the logo was made by Adobe Illustrator, starting with writing the word Pein in Futura font letters. Adding the notes and tilting it completed the emblem.

◀ Designing Pein.

Using Tinkercad

In the session “Using Tinkercad”, we are going to look through the foundation of making 3D object and explore ways to use them in our projects.

FAIRZCATZON

COFFEE

KITCHEN

COUNTING

JELLY CANDY

> TYPES?

TOMATOES

HUMAN NEEDS

- MANFRED
MAX NEED

- MASLOW ABRAHAM
HAROLD.

DATA COLLECTED: ~~THE~~ NUMBER OF VARIETIES.
IN 8 SHOPS..

~~THE~~ ~~TINKER~~ TINKERCAD - using ^{selling} Tins

003 TINKERCAD 001. 200 x 200

Closed shape vector graphics. - Export ~~to~~ in.
(Tinkercad) STL or OBJ.
import - stl, obj, SVG
(stereo (vector graphic))

- Insert → pathfinder (from window) to punch through.
- Save files as SVG, → No two things on the same Artboard.
press ~~erase~~

Making 3D data

January 31, 2023

The experience of using the 3D programme was inspiring. It allowed me to design products that were only in my imagination and to practice the ability to observe three-dimensional objects.

This programme will be great to use in simple things like stands or hangers to print out in real life for my benefit. It also opened the gate of product designing for my degree. Using Tinkercad to develop or test the base structure of products will be helpful.

◀ Notes that I took from the first lesson.

The given brief. ►

IFC_2022_2023 MAKING 3D DATA

Introduction to Computer Aided Design and Manufacture

IFC CAD CAM 3D TinkerCAD
Sandbox Mapping Data in 3D

Firstly decide on a location in which there are people going about their daily activities. Look again at Manfred Max-Neef's classification of human needs and define a need that you have an interest in. Write notes on several observable actions within a social context that you can see and measure in that location. This could and should be something to do with your major project. Now go to 3 different locations in or around that place and record how many of those actions that you are counting happen in a given time- say, 15 minutes. Make drawings, notes and take photos to add richness to your described context. Record, for each location, the frequency of the behaviour (number of occurrences over time) and save everything for further use in future sessions. Return to the computer.

On a computer visit www.tinkercad.com and click 'Join Now' and then click 'Create A Personal Account' -sign up for an account. NOTE your username and password!!!! Next click 'Learn' at top right and take all the tutorials!

CREATE A NEW FOLDER ON YOUR USB AND SAVE SCREENSHOTS FOR EACH TUTORIAL TO A 'DOCUMENTATION' FOLDER!

Next, create a new Tinkercad design that represents all spaces and the frequency of data represented at each point by a 3D form of your own design.

Take screenshots to accompany your write up of this session as your record of your work. On a USB, save these screenshots for safekeeping and write an entry in your journal about what you have made, learned and describe the images you have taken. Also write how you think this might be used in your design process in the future. Save any digital work to one folder and save it on a USB drive!

Critically appraise these with the group to assess which work best and why. Take screen shots of your work for all these tasks. Try to take screenshots as you go, showing the development of the layout, content and design as it evolves. Save everything to a USB or hard drive- we will use this in future work!

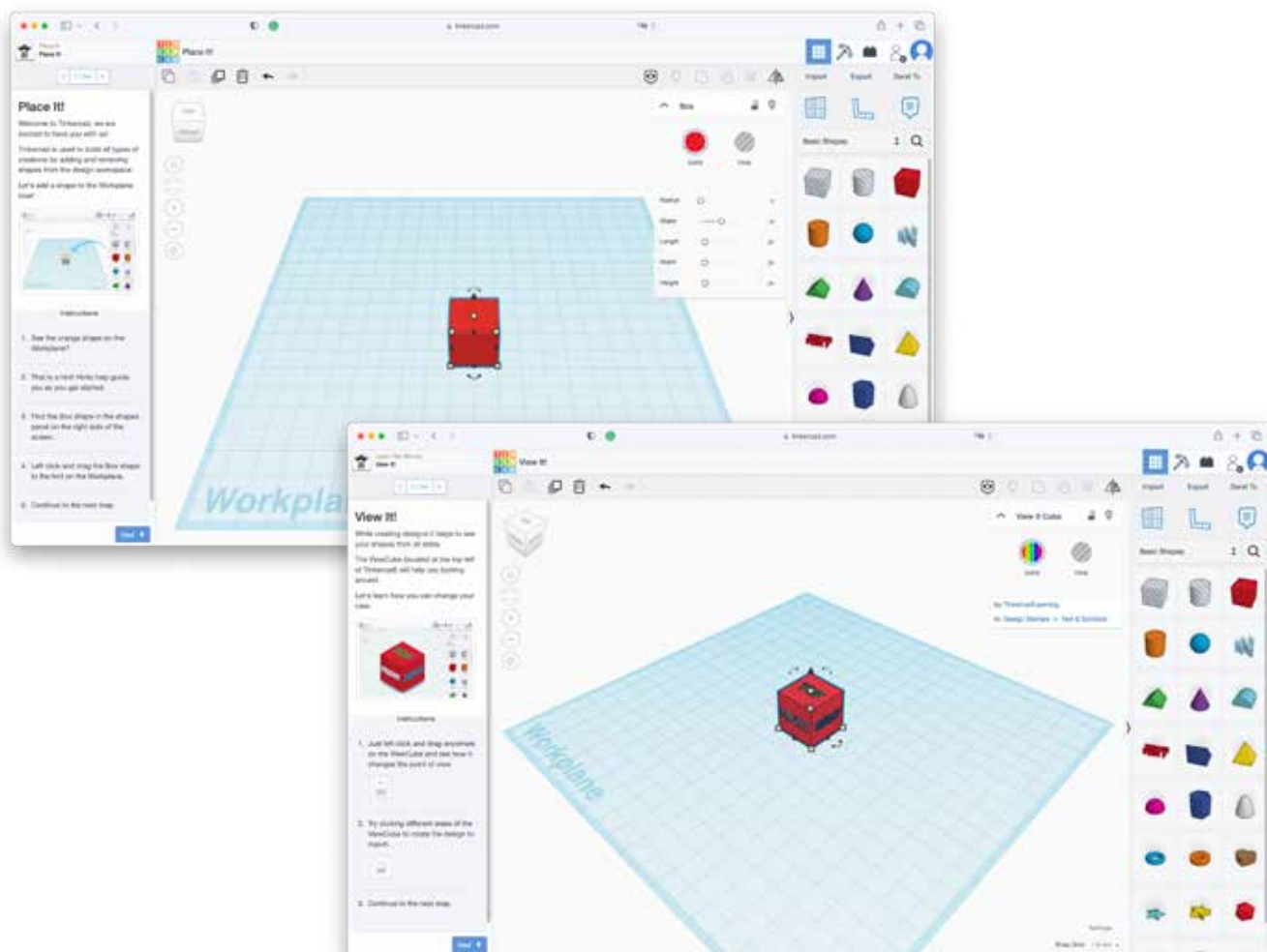
Manfred Max-Neefs 'Needs';

Subsistence, Protection, Affection, Understanding, Participation, Leisure, Creation, Identity, Freedom.

Adjusted from Max-Neef 1991



References; tutor & author e.bagenal@gold.ac.uk 02079197809 <https://tinkercad.com/>
<https://www.consciouscoliving.com/coliving-as-a-tool-to-meet-max-neefs-fundamental-human-needs/>



Tinkorial

January 31, 2023

Before moving into the first task, our mission was to finish the tutorial and learn how to use the "Tinkercad" programme, a free 3D programme online. The programme was easy to use and perfect for beginners. The first step was to learn how to place an object.

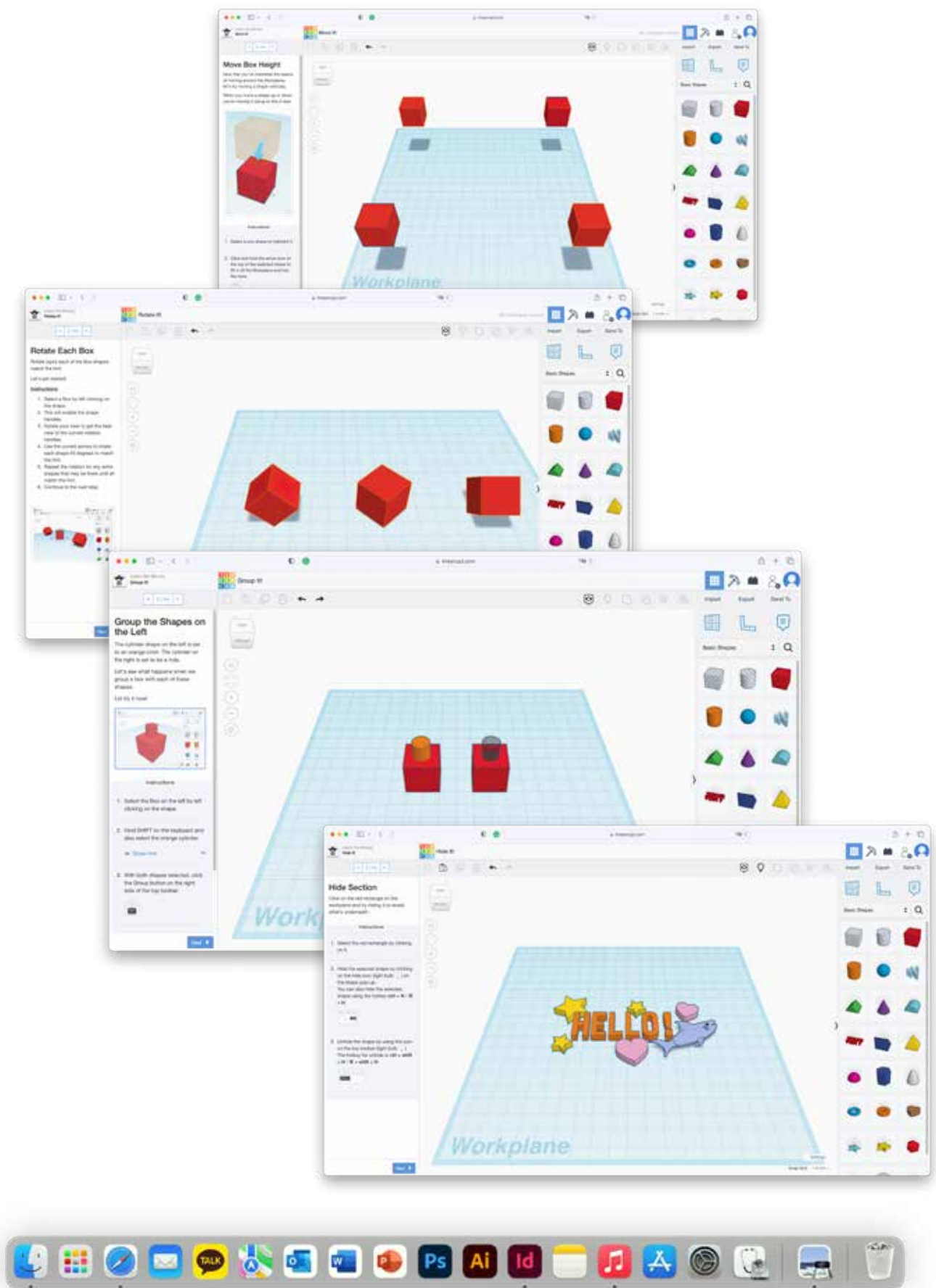
As every programme shares the basic instructions, putting a thing was easy for everyone in the class. Then, we just had to drag a shape we wanted from the toolbar on the right side to the grid.

Viewing objects from the Tinkercad is an essential part of using the programme. Using the mouse or the Trackpad on the computer to move around the camera perspective is easy to use but hard to proceed as I want. Because my favourite tool is the Trackpad, I will explain from the standpoint of using the Trackpad. The fundamental way to move the perspective around is to use two fingers.

Using two fingers allows me to move the camera around the pointer. Using two fingers while pressing the Shift key makes it possible for the camera to move around the whole map.

It is imperative to quickly get used to using the camera because it saves much time just by looking at the object I want fast and precisely.

◀ The first tutorials of the Tinkercad.



Adjusting shapes

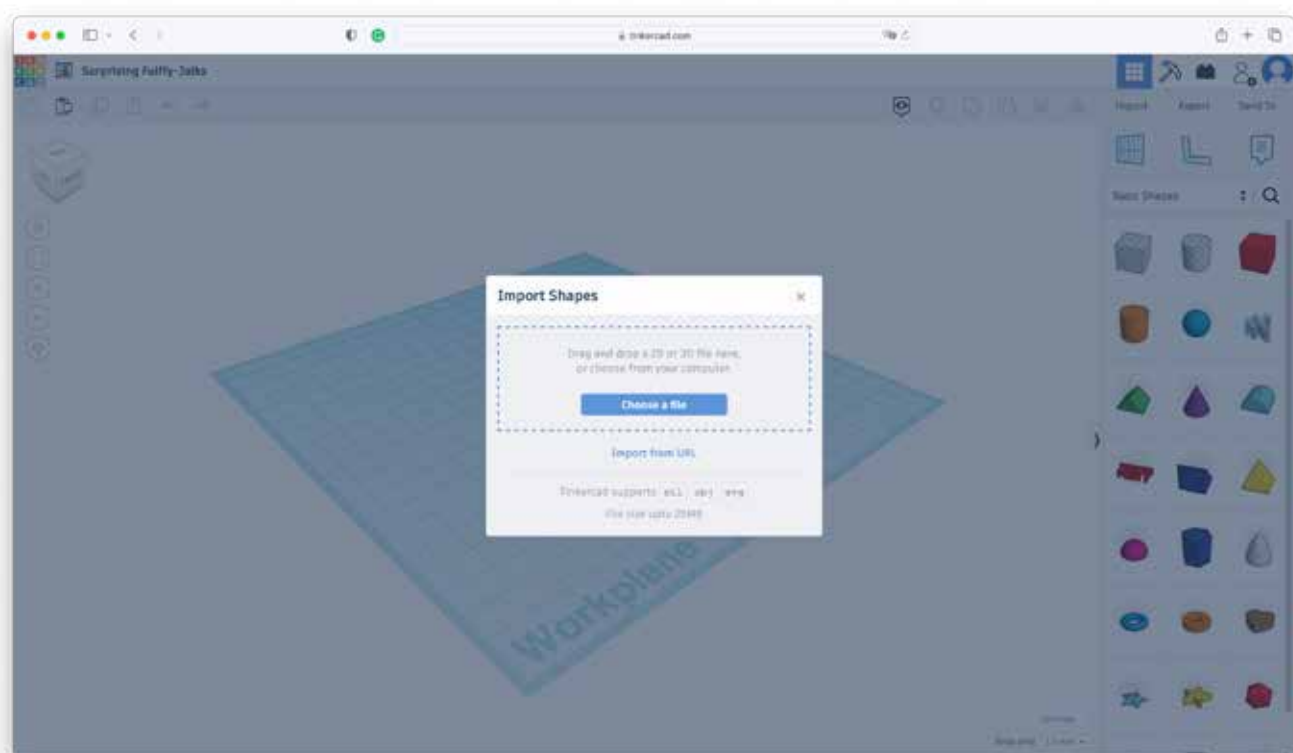
January 31, 2023

Moving the objects inside the grid is also essential to making 3D things in Tinkercad. Adjusting the height and the rotation angle of the object is used widely during the making of an object.

In Tinkercad, moving objects are possible using arrows and squares around the selected object. The indicators change the height or the angle(rotation), and the little squares change the selected object's shape or size.

Making holes and hiding objects(temperately) are features I used often making things inside the programme. For example, making holes makes it much more accessible to make parts like windows or doors. Hiding objects gives temperate access to the thing which is inside.

◀ The last four steps of the tutorials.



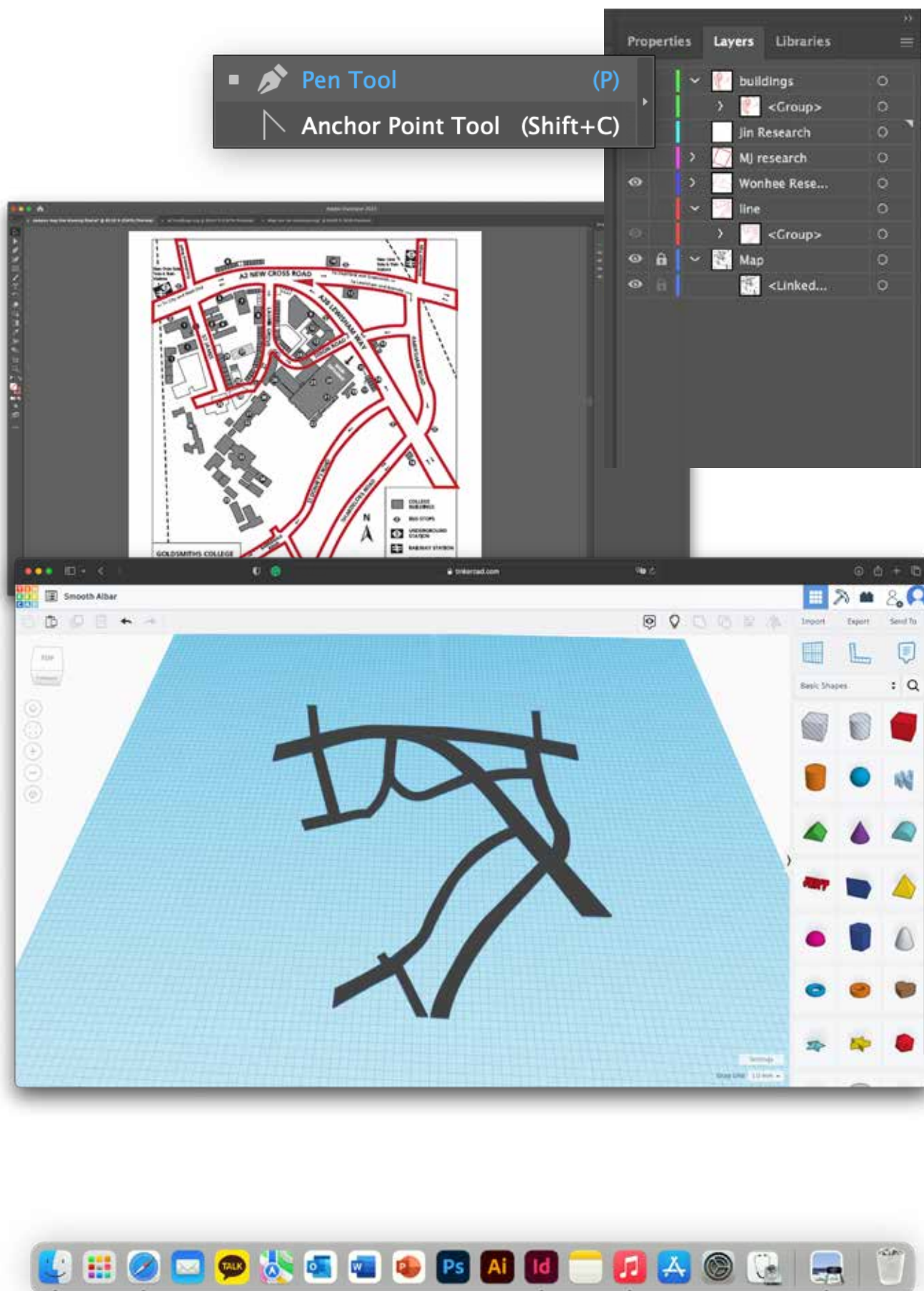
Import Export

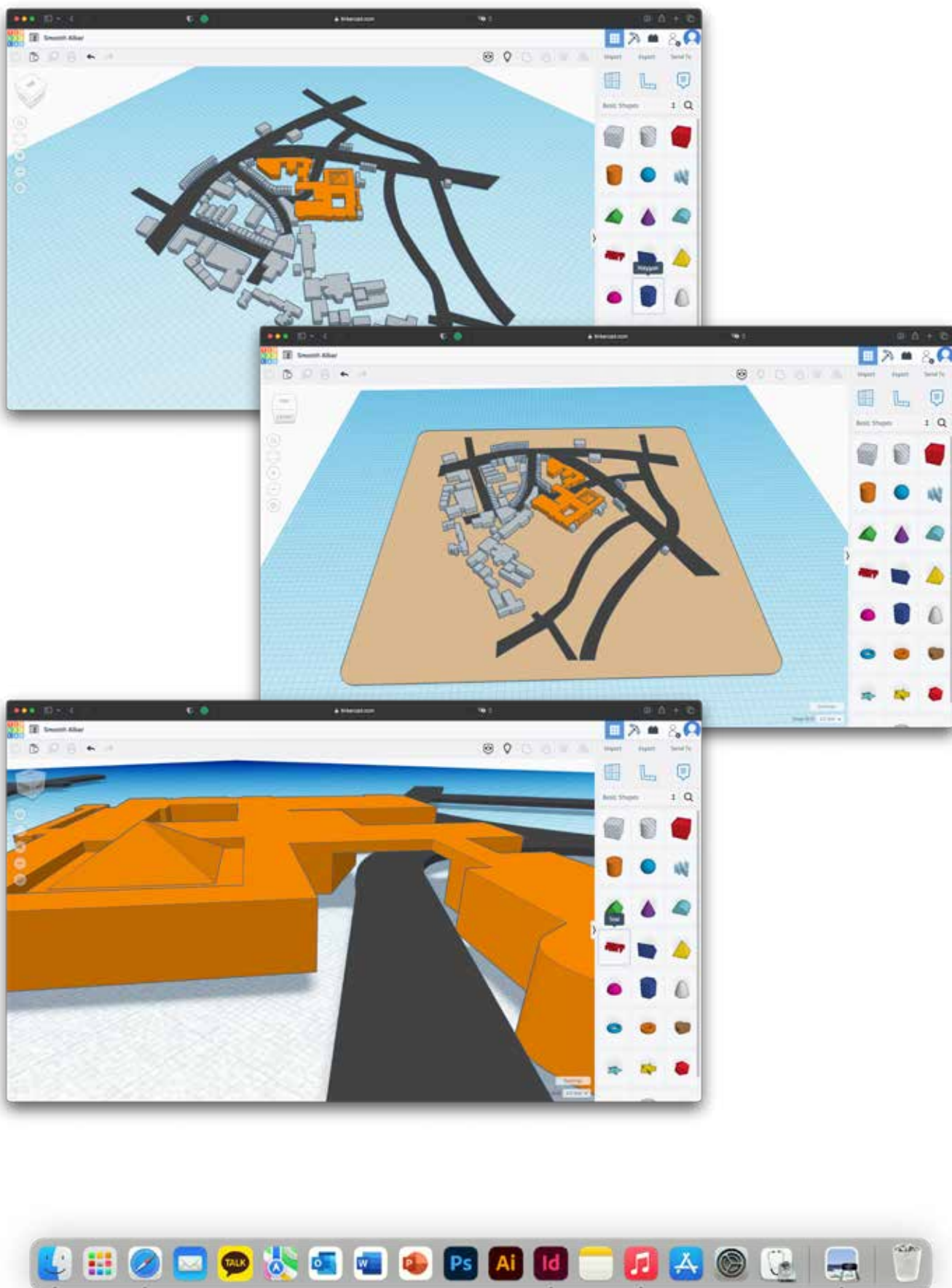
January 31, 2023

Lastly, importing a file from a different programme cannot be ignored while making things. The way we used in class to import files is to draw a line from Illustrator and import them as SVG to the Tinkercad.

SVG is a format used for laser cutting. After making, 3D objects are often saved as OBJ or STL to be printed by a 3D printer.

◀ Importing the files.





Buildings

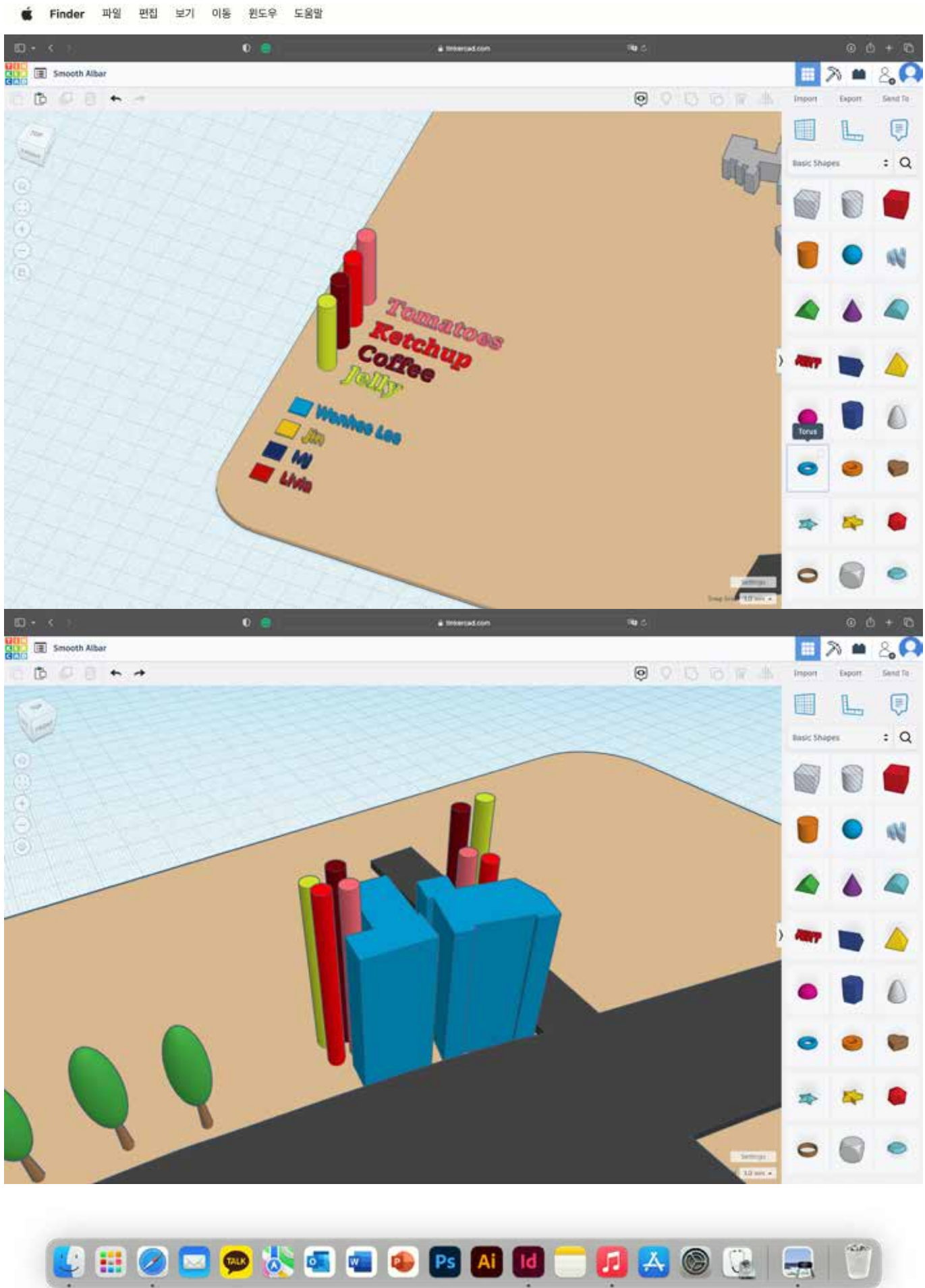
January 31, 2023

The next step was placing the buildings on the map. Again, I used the same way I drew the roads to create the little installations. I also added tiny details to our school's main building's roof.

The town looked too empty without a floormat. So I added a smooth-coloured floormat to the map to look neat and recognisable.

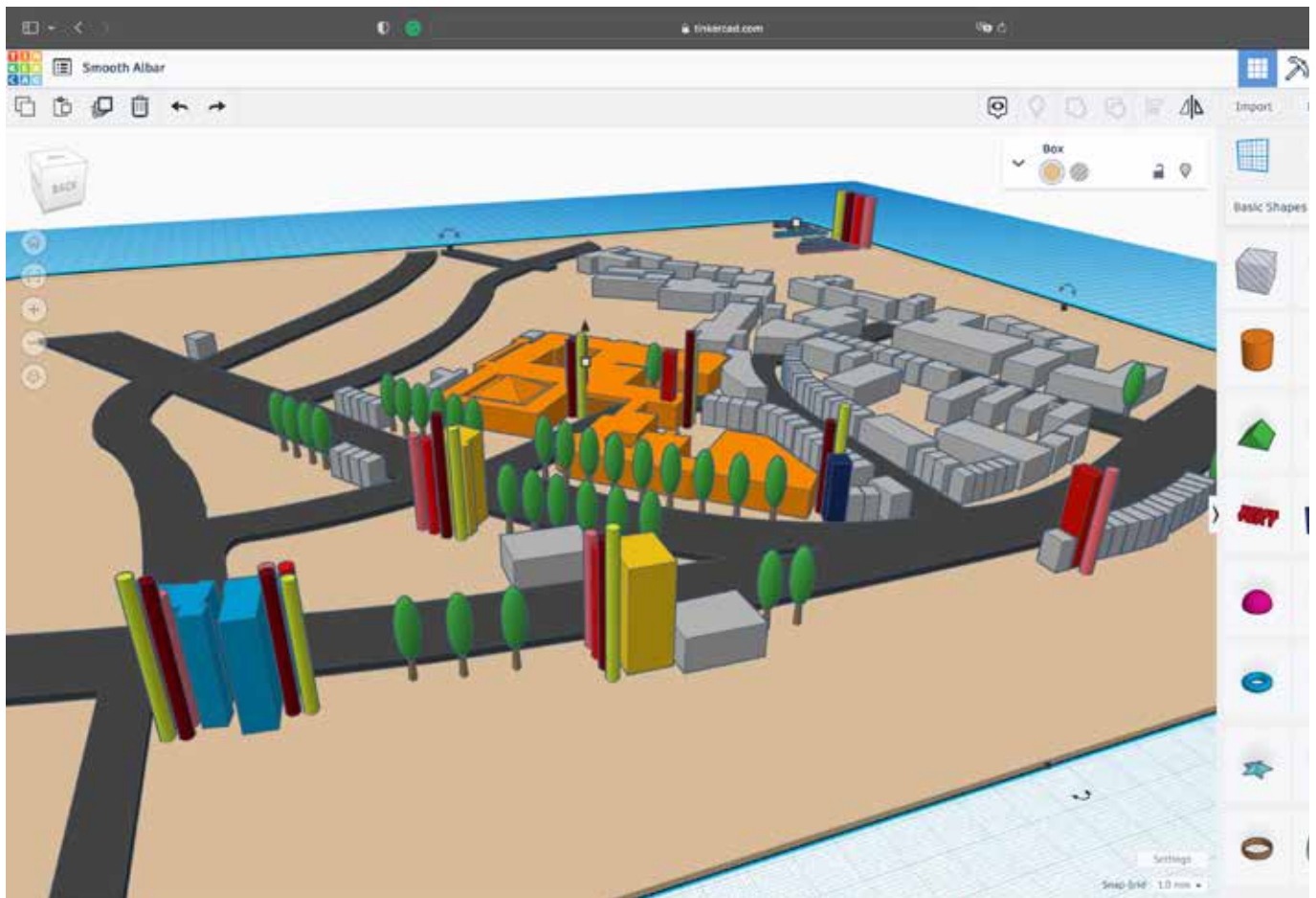
Also, the school building had a road going through. So, I added some details to the building.

◀ Adding buildings and floormat.



Marking

January 31, 2023



I decided to mark the quantities with graphs. To name the diagrams, I made a little sign on the bottom left of the map. It contains names and colours. Each character and food has a fixed colour so everyone who sees the map can recognise it quickly.

Both of these models are the places I went to for my research. Luckily, they all had the food for the analysis.

I made my graphs of quantities behind the building. It is possible to see that the most

thing they had was jellies.

After adding my graphs to my buildings, I started to add everybody else's graphs to their buildings. The photo above is the result of the charts. After charting, I added some trees in the town to make details.

Vectors to 3D

February 6, 2023

This activity allowed me to make and model things in real life through 3D programmes and digitalise them. It will be one of the most crucial abilities to use in the future(for myself), and it helped develop the way of seeing objects in different sizes.

Making a model and viewing the situation above the sky will give me a different perspective on whatever I am thinking. It was worth the time spent making the model of our studio.

3D modelling is always exciting for me, and I will try harder to develop the skills I learn. Tinkercad was the perfect programme to begin 3D modelling.

The given brief. ►

IFC 2022-2023__

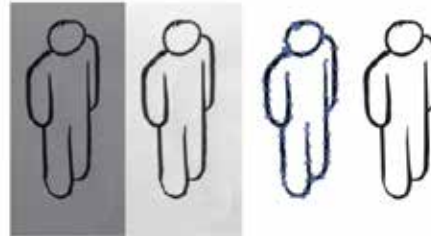
CAD CAM / Vectors to 3D Models

3D workshop: vectors to 3D models - Tinkercad.com

Firstly, on your USB drive, in your 'Making Things Digital' folder make a new folder titled 'Making Things Digital 3D'. Inside that folder create 3 other folders named;

- :: ImageAssets
- :: WorkingFiles
- :: Documentation

This is where you will save your work for this session.

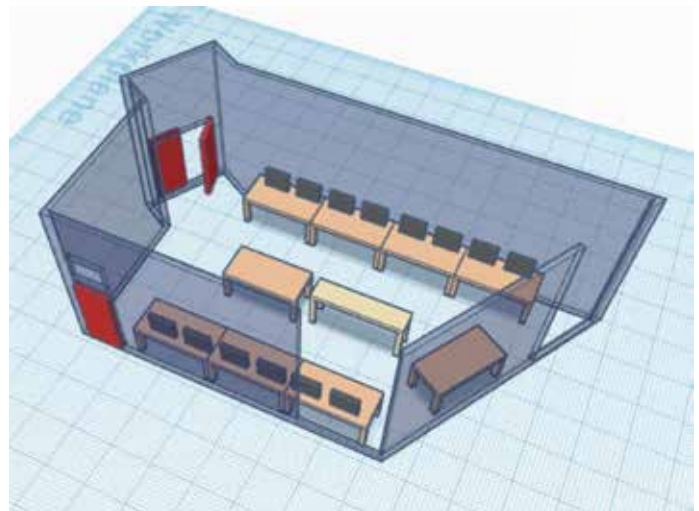
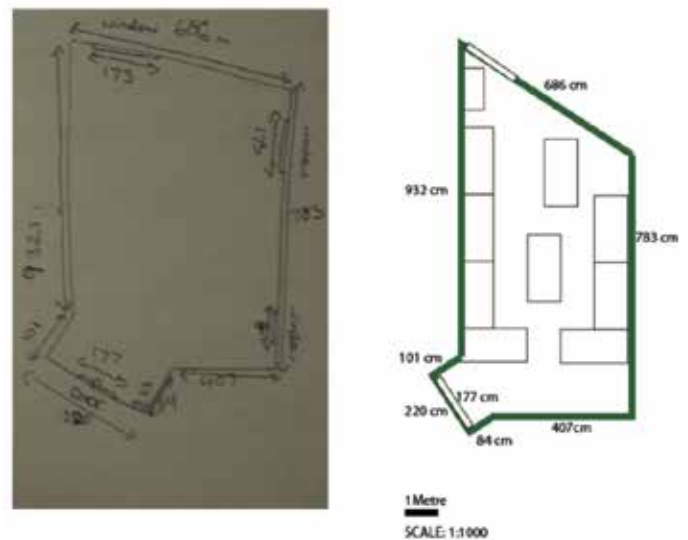


TASK 01 Draw something in your sketchbook. Take a good, well lit photograph of it. Email the image to yourself. Save the image in the 'ImageAssets' folder. Adjust the contrast/brightness levels. Also adjust the size so that the longest measurement is no more than 200mm. Next, open an A4 illustrator file and 'place' the image on the artboard and adjust the size so that it fits within the A4 page. Now, trace the image and 'expand' the paths using the top menu items: 'object/image trace/make and expand'. Save this as a memorable name in your 'WorkingFiles' folder. Repeat this an dplay with the vectors.

TASK 02 As a team, measure any room and all the furniture in it, using a tape measure. One person should write the measurements on a sketch drawing, whilst 2 people measure. You all should then sketch the room and add measurement notes, then draw an accurately measured vector line plan of the room and furniture, including doors, windows, tables, light switches, etc. in place. Save this in your 'Working Files' folder with a memorable name. Now click 'file' then 'save as' and pick 'SVG' format in the drop-down menu at the bottom - save this SVG in your 'WorkingFiles' folder.

TASK 03 go to www.tinkercad.com. Register an account and click 'learn' in the top right of the screen. Take *all* of the lessons- take screenshots as you progress, for process documantation and save these in your 'documentation' folder.

Next, in Tinkercad click 'create a new design' and then in the top right of the interface, click 'Import' and import your SVG file of the room. Play with the model, take screenshots and video the screen as you rotate and zoom into the model, for your report. Upload the video to youtube and ensure you include a link to it in your PDF report for this workshop. Write at least 300 words about what you did.

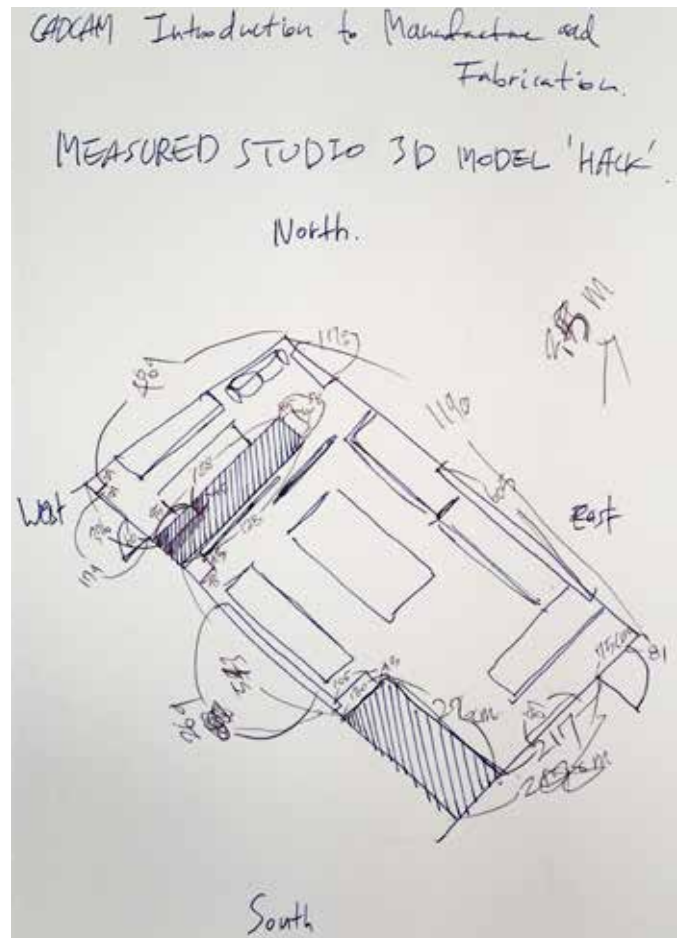


Click to visit
<https://www.tinkercad.com/>



Measurement

February 6, 2023

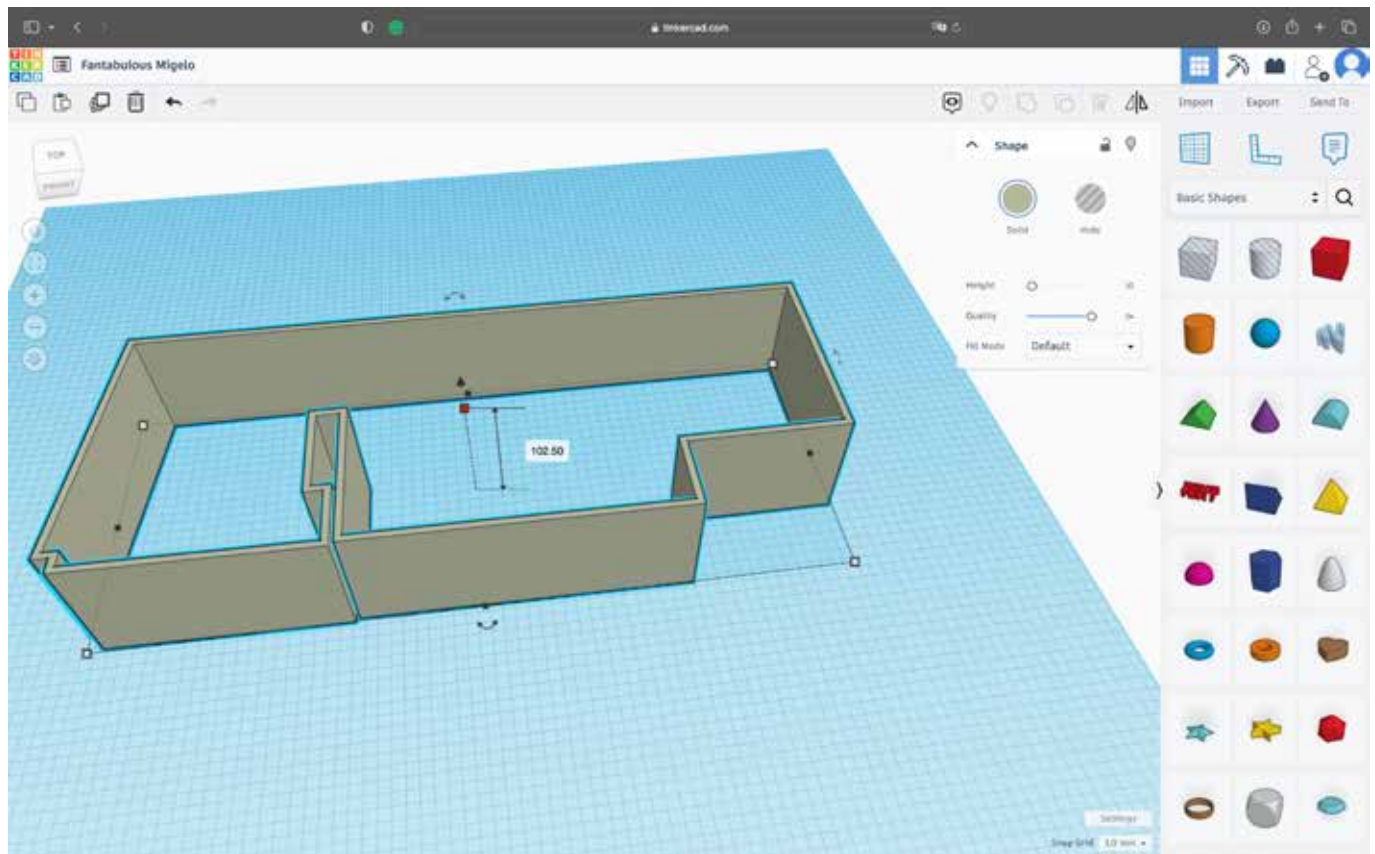


◀ Using Illustrator to draw the outline of the studio.

Our first task was to measure the room size and draw it in our sketchbook. The goal of this task was to measure the room and make the room in 3D with Tinkercad. Unfortunately, the room was big, so it was impossible to measure alone. However, my classmates measured the big room as a team. The photo above is the result of the measuring.

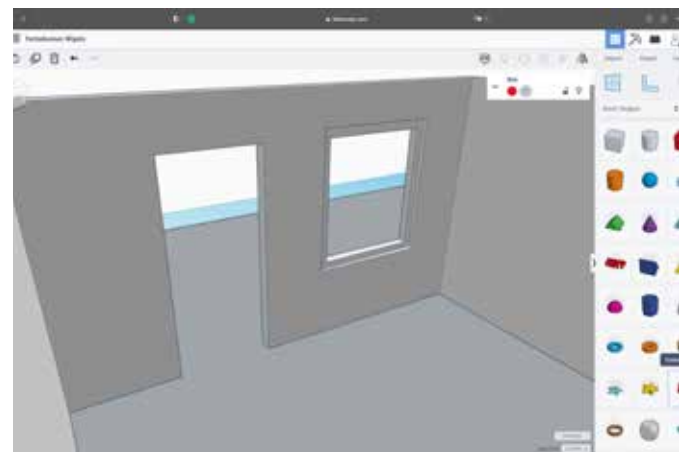
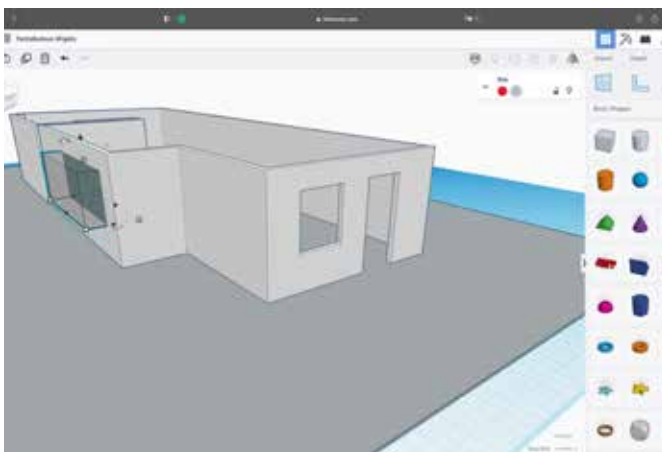
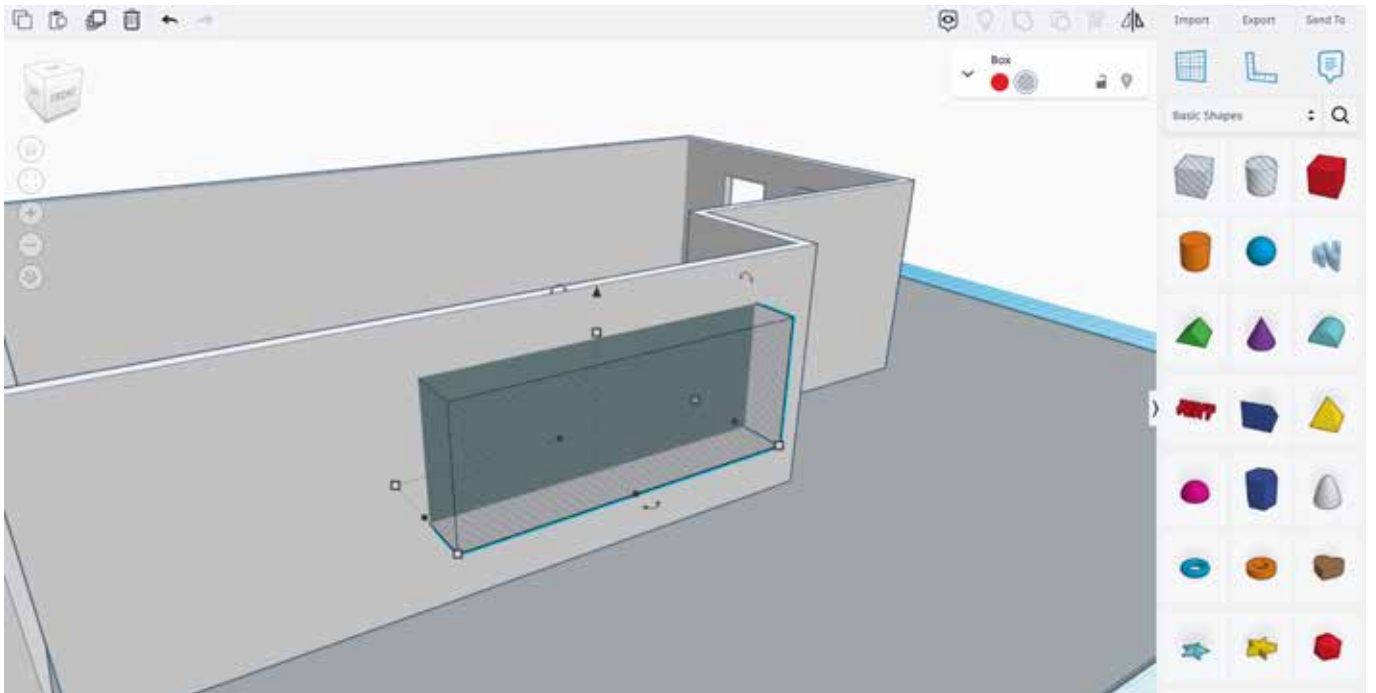
After calculating and drawing the room, it was time to pull the measured room into a digital

format. Thankfully, Edd had the blueprints for the room (it didn't have the measurements), so we used our measurements to determine the size of the room and draw over the blueprint. The photo on the left page is the result of the drawing. Again, selecting the "Outline Stroke" is vital at this stage.



Into Tinkercad

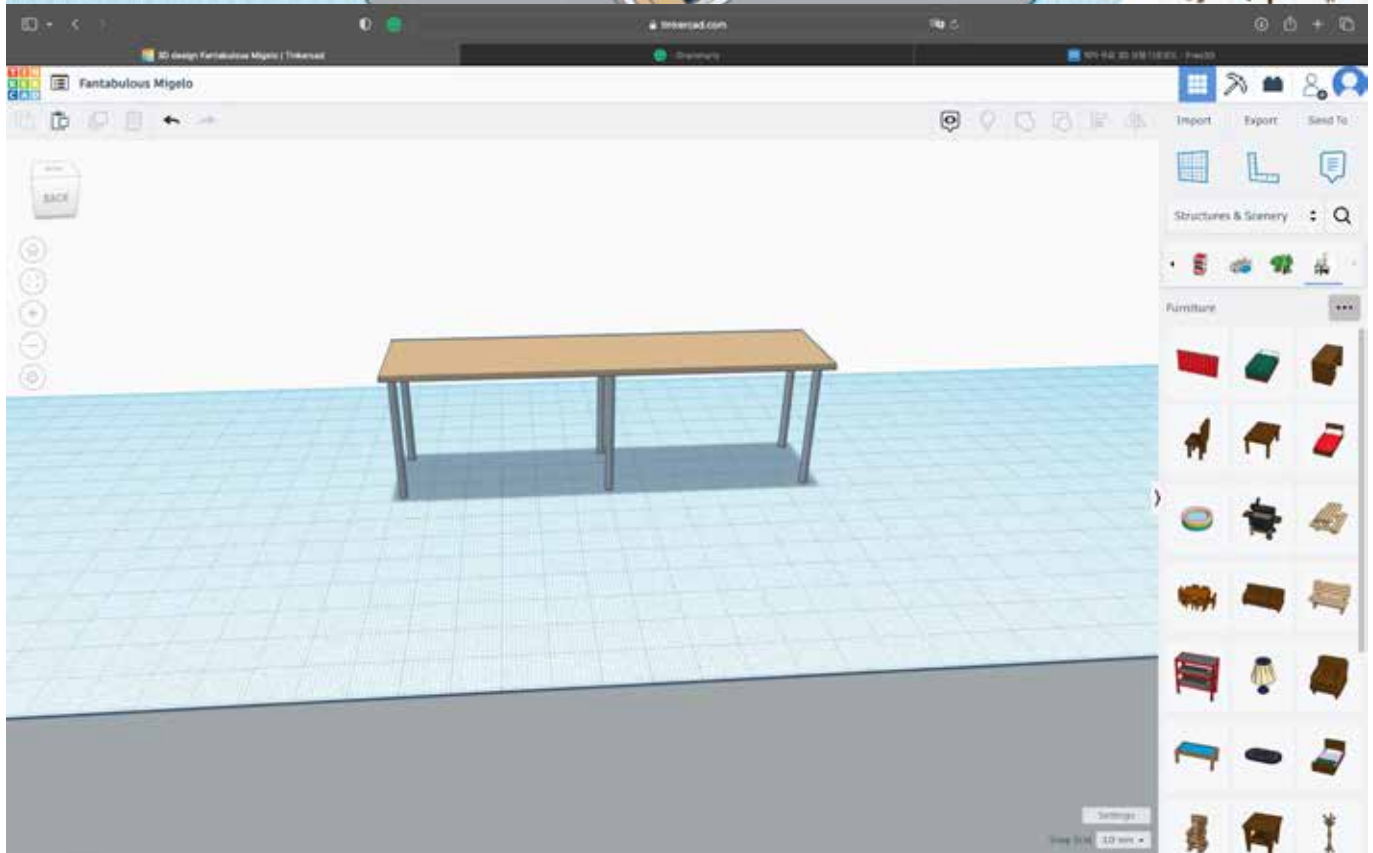
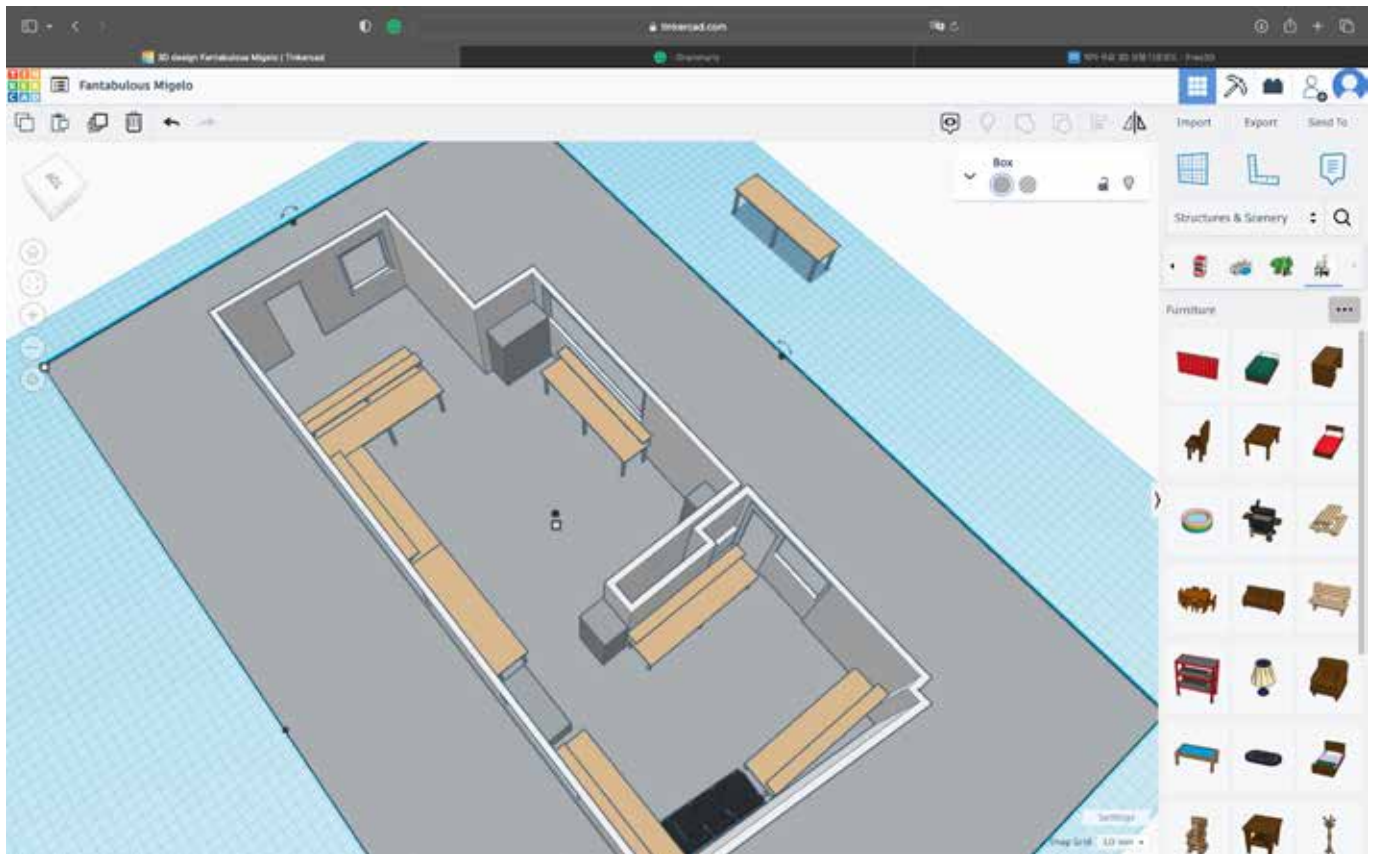
February 6, 2023



The photo on the left page is the result of importing the file into Tinkercad. Unfortunately, making the model into its actual size was impossible, so I made it half the room.

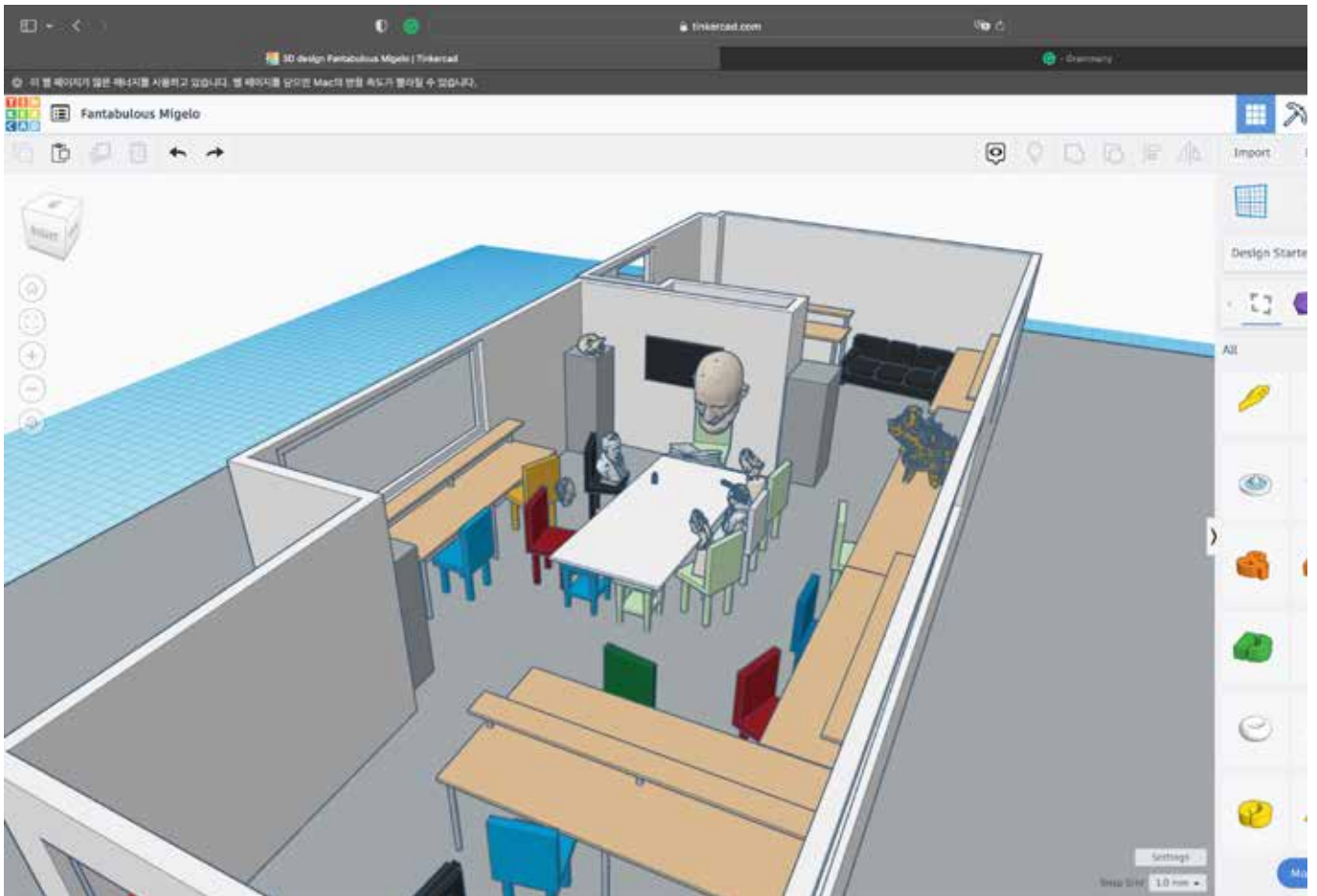
The next step was to integrate

some windows into the walls. Again, I used the method of making holes from Tinkercad. The hole-making was processed twice to express the window rail.



Real-size studio

February 6, 2023



After making the windows, it was time for the furniture turns to enter the room.

I made the exact half size of the tables in the studio and placed them in the same place in the real-size studio.

I added types of furniture beside the tables in the virtual room afterwards. The room became more like the studio we used for the session. I also made the whiteboard table we made quickly after the exhibition we did last term. Lastly, I added some

reflection of us listening to Edd's lesson focusing on his words.

It looks like a philosophical lesson because of the characters used to express my classmates.

2D to 3D Mountainscape

February 7, 2023



This module shows how to produce a model of an actual mountain and make the file work through a laser-cutting machine by changing it into an SVG file format. Before starting this module, organising the names

and directory files was an important step to go through. My tutor Edd noted in our brief, "Firstly, on your USB drive, in your CAD/CAM folder make a new folder titled 2D3D_Mountainscape. Inside

that folder create 3 other folders named;:: ImageAssets :: IllustratorFiles :: Documentation :: This is where you will save your work for this session". As he mentioned, I have organised all the files into a separate directory

on my computer. This programme used Adobe Illustrator, Tinkercad and Adobe Indesign.

The given brief. ►

IFC 2022-2023 Introduction to CAD CAM

(Extra Design Credit Course) _2D_to 3D_Mountainscape

Firstly, on your USB drive, in your CADCAM folder make a new folder titled 2D3D_Mountainscape. Inside that folder create 3 other folders named; :: ImageAssets :: IllustratorFiles :: Documentation :: This is where you will save your work for this session.

TASK 01

Search Google (or other) for 'mountain topology map'. Find a clear black-and-white line image that clearly shows the contours of a mountain top- IT MUST HAVE A DISTANCE KEY SHOWING ITS SCALE. Note the name and location of the mountain. Save it, with a relevant name in the 'ImageAssets' folder. Open a new illustrator document and 'place' the image on the Illustrator artboard. Next, use the pen tool to trace the contours (at least 12), making sure you have 'closed' each path contour you draw (the ends must be truly joined). Type in each measurement between each contour and also type and copy the scale/distance key.

TASK 02

Next, copy each individual contour into a separate Illustrator document and save each contour drawing as an individual SVG file, with a clear system that sequentially names each conour SVG in the right order; 'Contour_01.SVG'; 'Contour_02.SVG' ...etc. Save these in your Assets folder.

Next, opening a new project in Tinkercad.com, import each contour SVG, one by one, maintaining the same scale. Noting the elevation number on your original map, crete a 3D model of the mountain contours by adding exact depth to each contour object and arranging them, like layers of a lasagne, one on top of eah other to create a true landscape model of the mountain you found.

Discuss how to do this accurately with your tutor.

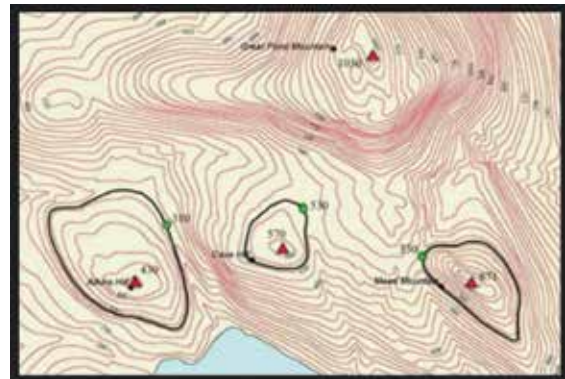
This object can now be laser cut or 3D printed to represent the actual

References;

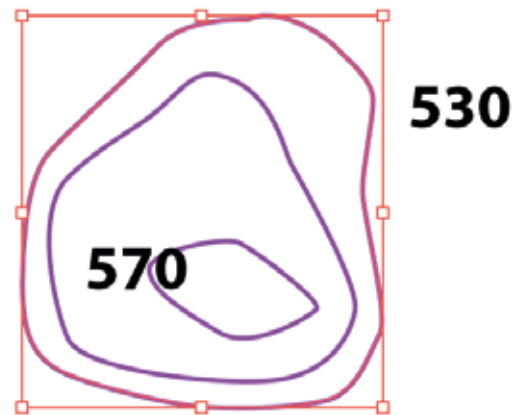
Edward Bagenal e.bagenal@gold.ac.uk 02079197809

Goldsmiths Computer Aided Design website:

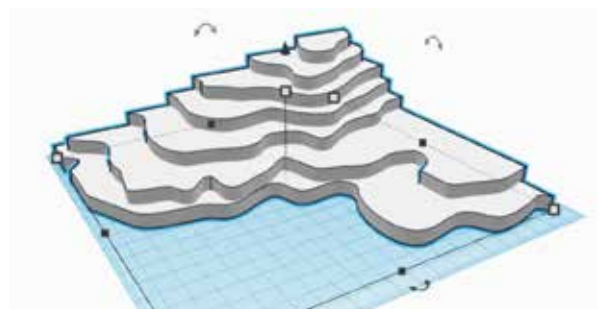
<https://sites.google.com/site/goldsmithscad/>



A mountain topography contour map with elevation numbers showing meters above sea level



Drawing vectors that trace the contours to export



Scaled 3D'slices' that reflect the true elevations



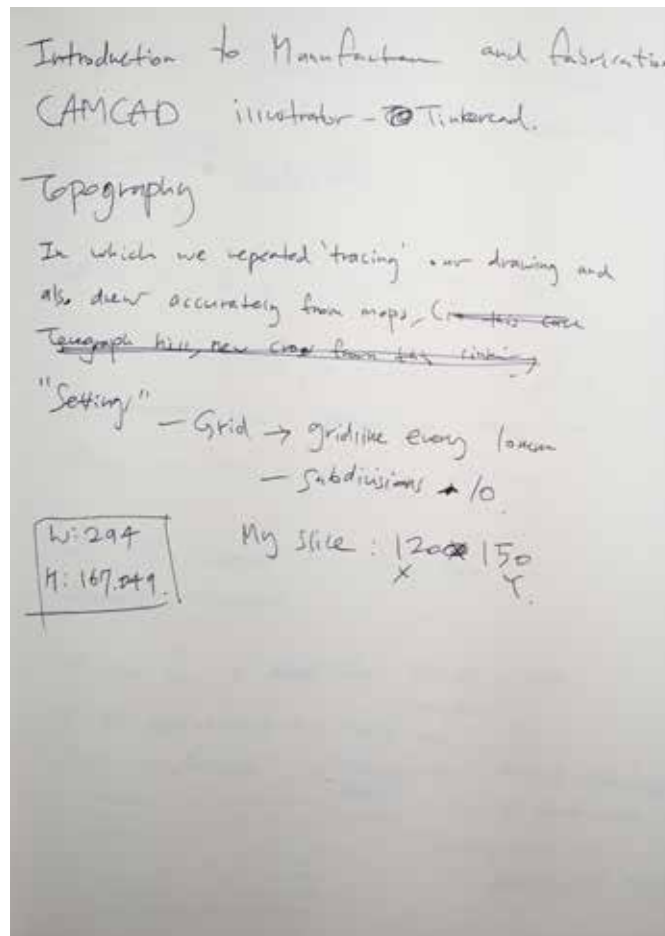
A laser cut model made from the 3D modelled data

Planning the hill

February 7, 2023

The first thing we did in class was to find a location from a map and take a screenshot for our topography project. Our tutor Edd suggested Telegraph Hill Park in London, so we all started searching for information and locations from the map. Next, we planned to find the area from the map and search for the terrain information of the place to draw the outlines height by height of the hill with an Illustration tool. At first, we needed help finding the geographic details on Telegraph Hill; however, I was lucky enough to find a helpful map called TessaDEM from google. The map was a no-copyright map and showed us information about Telegraph hill in different colours. For example, blue areas in the map show the lowest ground whilst red are the highest. Edd also suggested we should divide the map into five different parts for each of the students.

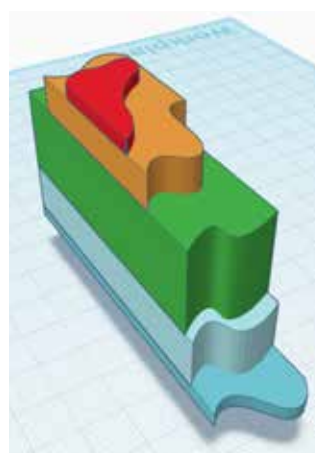
The next step was to bring the selected map area into Illustrator and draw the outlines of Telegraph Hill with a pen tool by height. The lowest ground of my divided site was 8 meters, where I started. All the students drew the terrain layer by layer and saved it separately into an SVG format file.



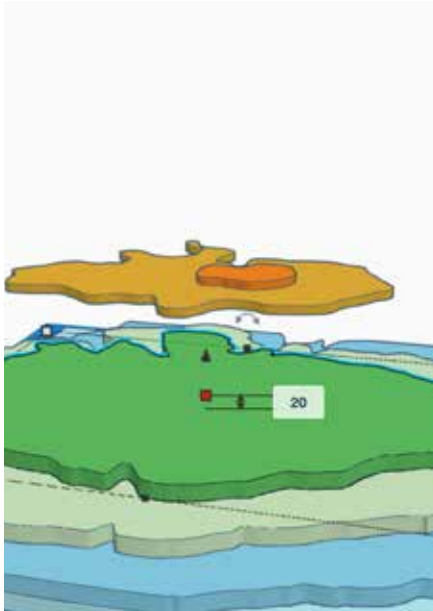
After drawing and saving all the layers, our mission was to go into Tinkercad and bring all the saved layers into Tinkercad. Then, we coloured all of the imported layers into the colour of the map that described Telegraph Hill. The problem with my model was that I didn't make all the layers; for example, the 23m layer comes right after the 8m layer, which caused huge gaps between all the layers. So I had to expand floating layers to make a fully completed shape to fix this. Making every single layer of all the information from the map was necessary. Next was combining all of the made modules

from Tinkercad with all of the students and seeing the result; however, we needed more time to finish the project which meant we didn't have the experience of looking at the completed work.

To start this project independently for the submission, I wanted to try a different location with more complexity and challenge. The selected area was a mountain called Hallasan on Jeju Island, located in South Korea.



I was able to find a topography map from google of mountain Halla. It had clear lines with numbers included, as suggested in the given brief. The map started from a thousand meters, so I started from eight hundred meters for the background.



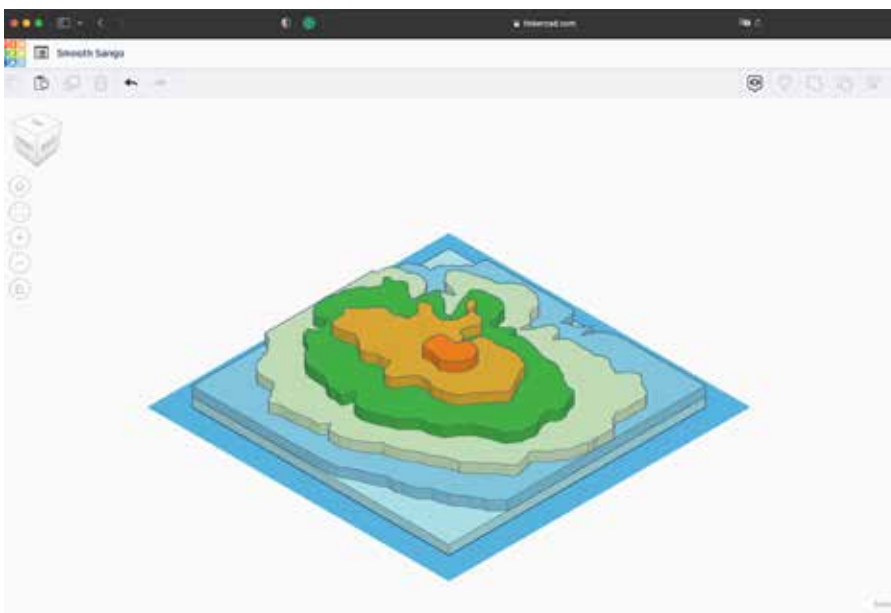
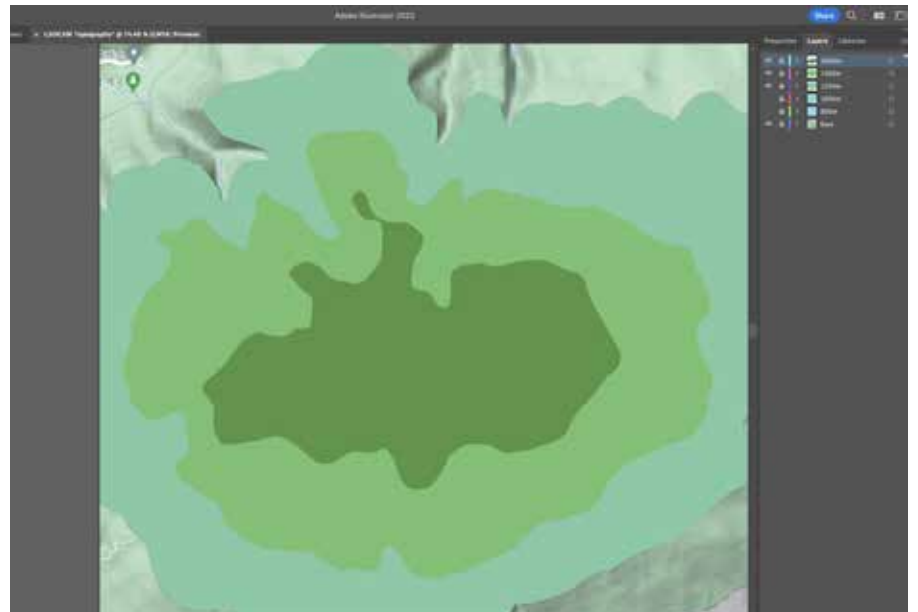
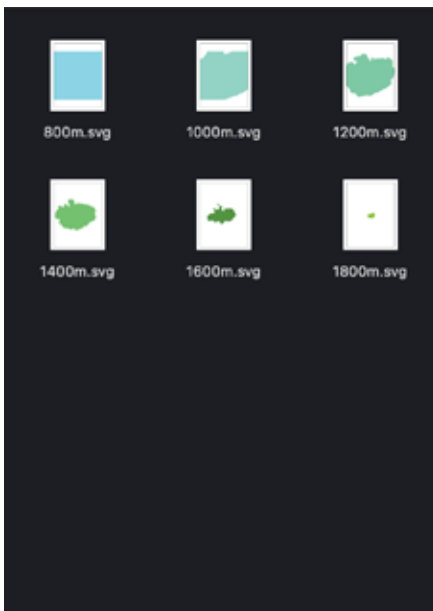
Hallasan

Drawing the lines through the Hallasan was difficult because of its curvy shapes. However, My satisfaction and pleasure increased as I drew out the lines. As I did for the previous Tinkercad model, I saved all the layers in different meters separately, layer by layer. Colouring the layers in different colours helped me recognise the height of the layers; for example, blue starts at eight hundred meters, green is a thousand meters, and orange starts from one thousand and six hundred meters. After drawing the lines, I saved them into SVG files to make it possible to import them to Tinkercad.

After importing every single one of them into Tinkercad, I first adjusted all the heights of shapes to the exact measurements, which were thirty millimetres. And then, I stacked the bodies into layers and completed the work. I designed the model to be three hundred by three hundred; however, I made the mistake of making the shape into a thousand by

thousand format. It was fortunate that making the shape into bigger size didn't occur any problems.

The model is complete and ready to be printed with a laser cutter. Going through this project helped me understand the use of laser cutting formats and how to look into geographic maps. It would be a valuable opportunity to print all the works I have made through Tinkercad someday. It is fortunate for me to enjoy making these models and improve my skills in using Illustrator, Tinkercad and Indesign, which I used to make this file. The only problem is that learning these programmes takes time and is very easy to forget. It is necessary to go through all the steps again and remember to write the information down.

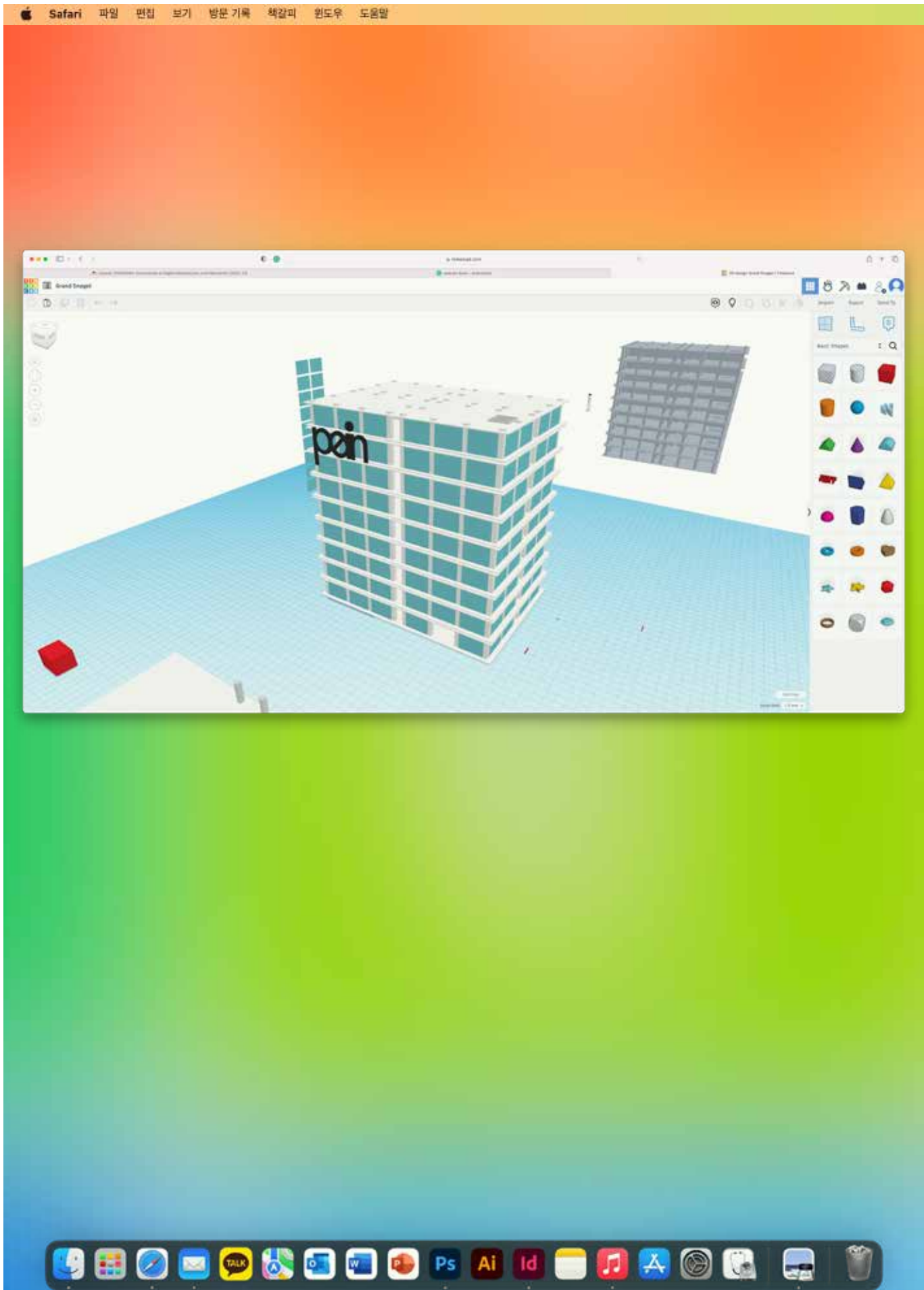


Making buildings with Tinkercad

With Tinkercad, I tried to make some architecture; the first was the Pein building, which was an apartment-style building.

The next building I tried making was a Department Store based on the architectural style of the Japanese castles.

With this project, I learned that Tinkercad was an excellent programme for accessible models and helped improve my imagination.



Pein tower

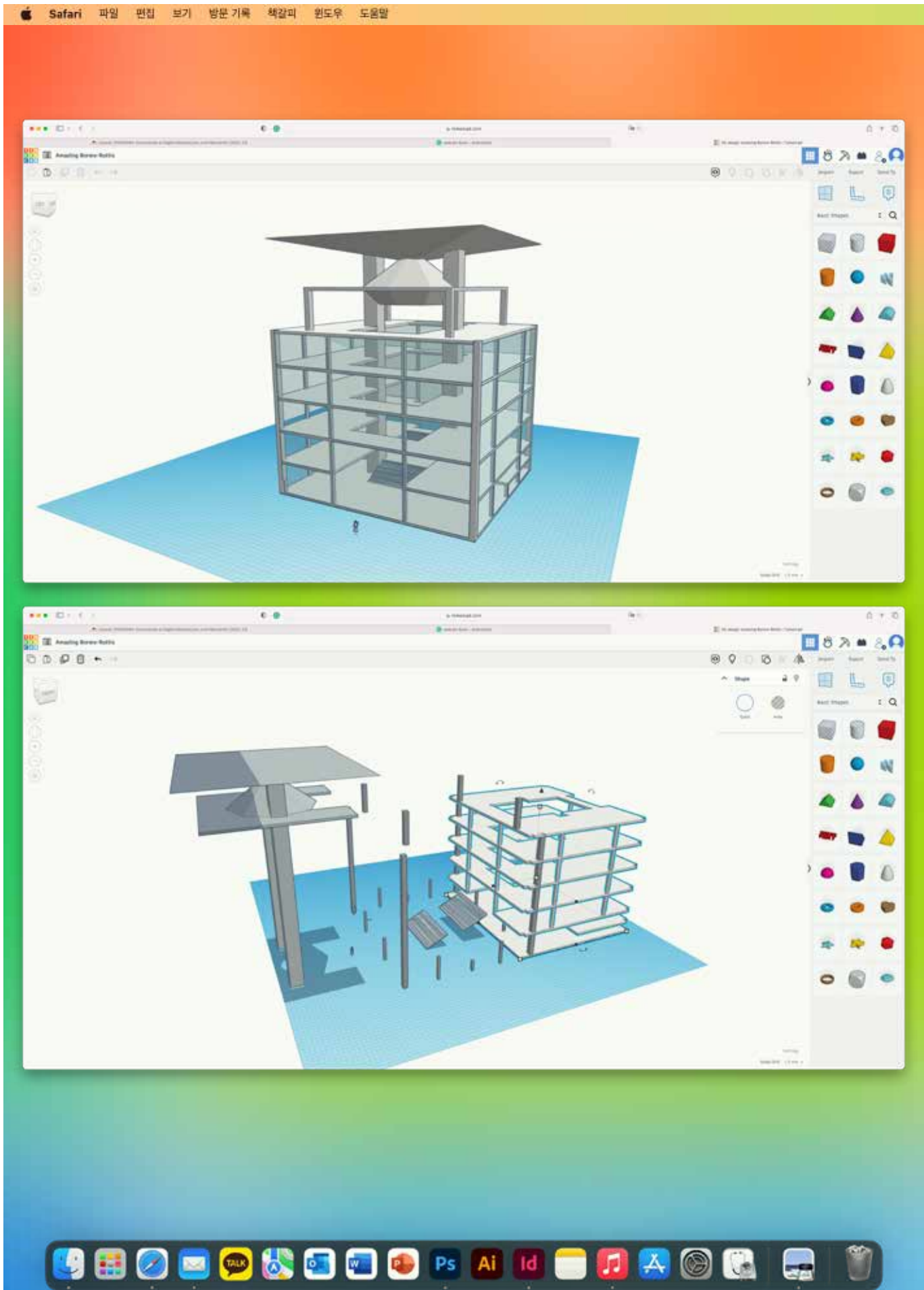
The Pein Tower is the tower for the Pein company that I have come out for the All-in project and the "What is Design" project. Because Pein is a company for residential noise problems, the building is a whole studio for testing out real-time noise problems.

To test out the noise problems, Pein built their tower in an apartment-style and made actual houses inside the building. This way, they can test the noises from homes very accurately and realistically.

The building is made in many layers, and all parts are in a separate layer. The tower contains three houses per flat and a penthouse on the highest floor.

More information about this Pein house will be listed on the chapter "All in".

◀ The Pein building from Tinkercad.

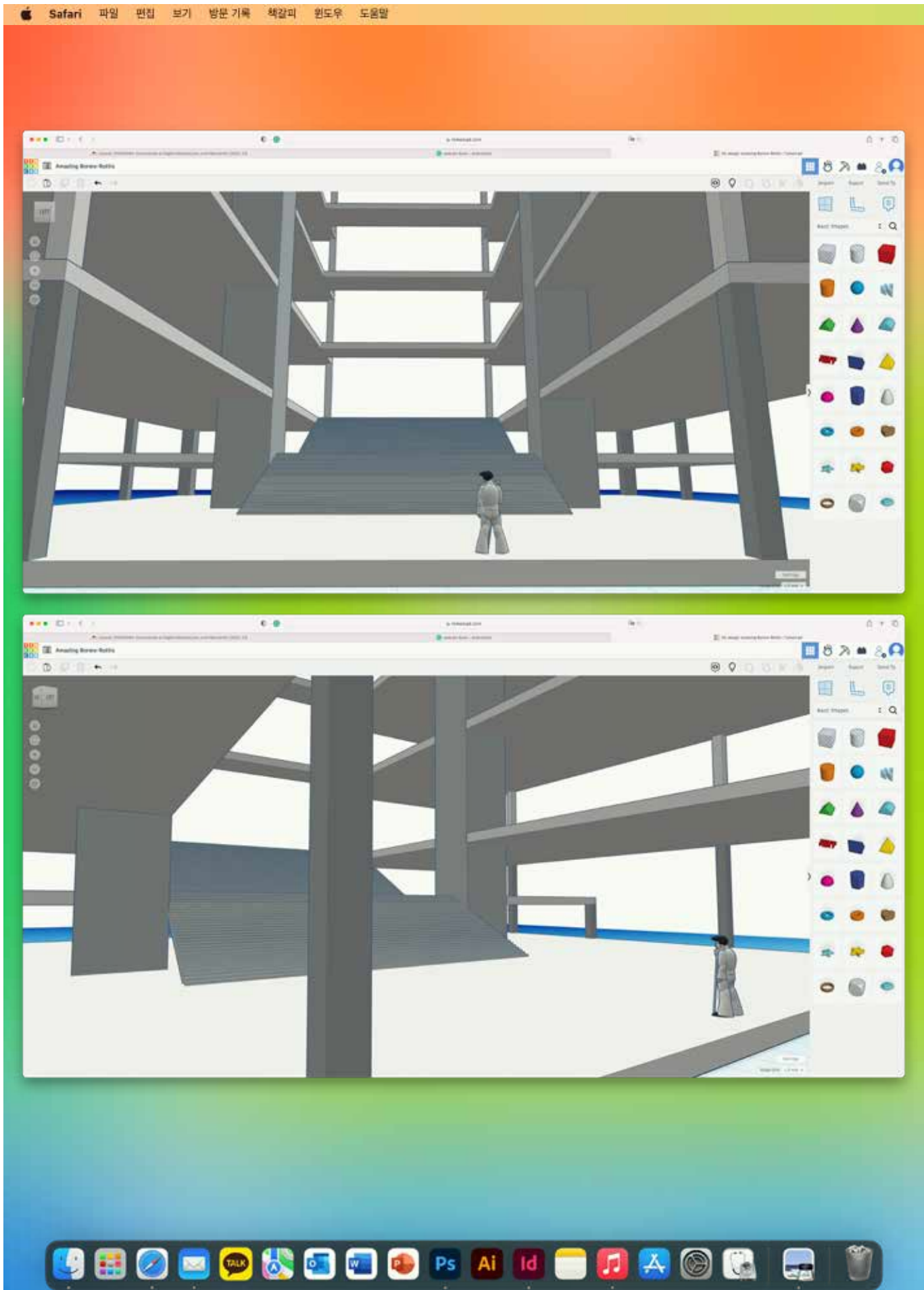


Department Store

The Department Store is made with the inspiration of the Japanese Castle architectural style. They built their castle by stacking wood around a piece of a thick wooden pole. To follow that, I made two thick concrete poles in the middle of the Store and made the possibility of erasing some bars from the window. This was possible because the thick pole in the middle does the job for the thin rods in the window.

Unfortunately, the building is not that high because of the limited height in Tinkercad. On the highest floor, I was planning to make a garden.

◀ Japanese Castle style Department Store.



Stairs

The Japanese Castle style Department Store has a massive hole in the middle of the building's lobby, and there is a large stair towards the first floor. These stairs are there to make an aura.

Also, the back of the building is empty for the lift to come in.

The Elvis model is the height of an actual human size of 180cm.

◀ Compared with the Elvis model.

Virtual moulds

March 7, 2023

With this task, I learned the ability to make moulds for various products and make existing and non-existing moulds from my idea. This project opened a wide gate for creating products and experimenting with ideas.

The given brief. ►

IFC CAD/CAM

DS50004A Introduction To Digital Manufacture And Fabrication

Previously, in the 'Making Things' course, we looked at transformative material processes. One such process is casting. Usually liquid materials that solidify, like plaster of Paris, are cast in hollow forms called molds. For this workshop, you will create several molds that can be printed in 3D, in order to cast materials using a 'transformative' material, like plaster of Paris or resin.

On a computer, create a new folder. Name it appropriately and keep all work for this session within it. You should create separate folders within it for 'Documentation', 'Working_files' and 'Assets', as you have done for other sessions.

Firstly find a simple plastic molded object. Look carefully at it- there will usually be a fine line of material around one or more of its contours. This is called the 'parting line'. These lines occur when 2 halves of a mold are brought together to create a mold to shape an object. Draw the object in your sketchbook, and then see if you can draw the mold base on the mould line you can see on your example.

Next, open Tinkercad and model the object as closely as possible. Once you have a model that resembles the object fairly closely, copy and paste it to create a duplicate and then create a cube shape around it. Select the artefact model and turn it into a 'hole' object, by clicking on the 'hole' button.

Virtual Molds

Tutors Edd Bagenal

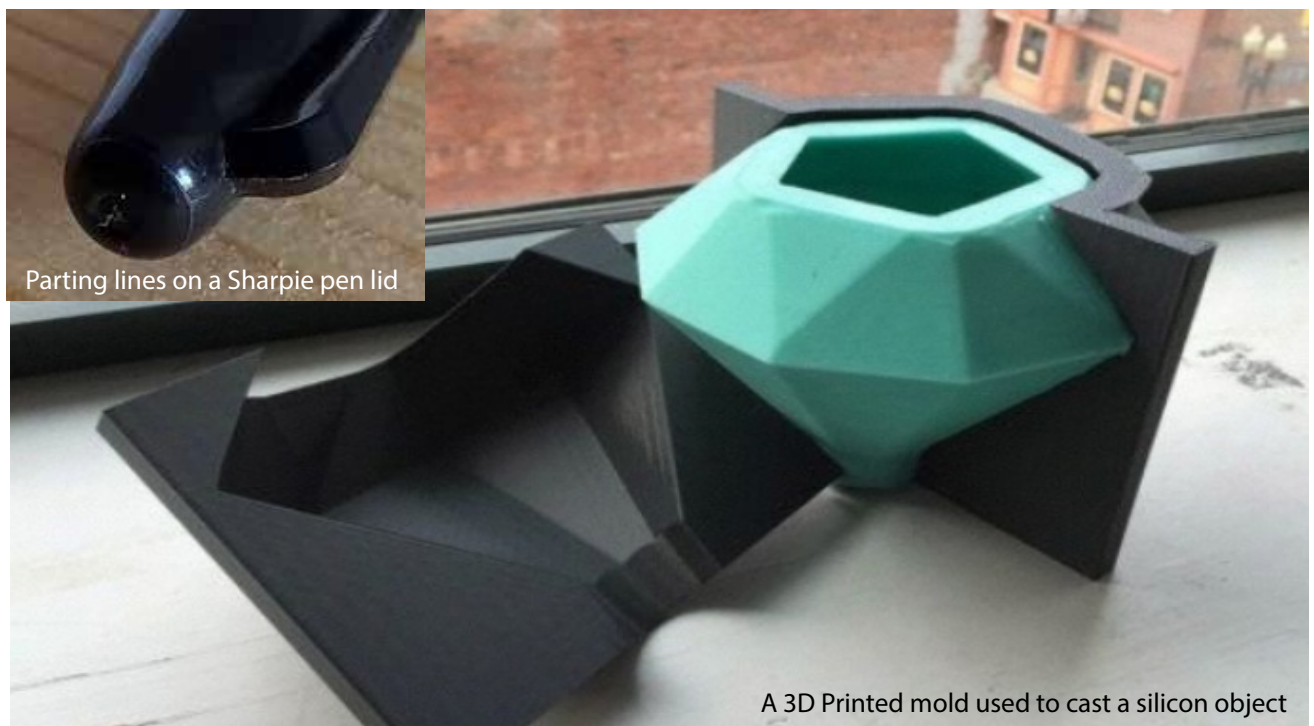
Group this with the cube, so that the artefact becomes a hollow, within the solid cube. Now copy and paste the new cube, with the negative space inside it to create an exact copied duplicate. Use another cube shaped 'hole' object to cut the duplicate in half, in a way that makes a 'half' of a mold. Repeat this with the original cube 'mold', to give you 2 halves of a mold. Arrange these objects together on the work plane to show the positive object model, alongside the 'mold' halves, with the negative spaces visible.

Next, repeat this for several possible objects relating to your project focus, that you think might be useful to reproduce, also.

Take screenshots to accompany your write up of this session as your record of your work. On a USB, save these screenshots for safekeeping and write an entry in your journal about what you have made, learned and describe the images you have taken. Also write how you think this might be used in your design process in the future. Save any digital work to one folder and save it on a USB drive!

Critically appraise these with the group to assess which work best and why. Take screenshots of your work for all these tasks. Try to take screenshots as you go, showing the development of the layout, content and design as it evolves. Save everything to a USB drive.

References; tutor & author
e.bagenal@gold.ac.uk 02079197809
<https://tinkercad.com/>



A 3D Printed mold used to cast a silicon object

Coffee cap

March 7, 2023



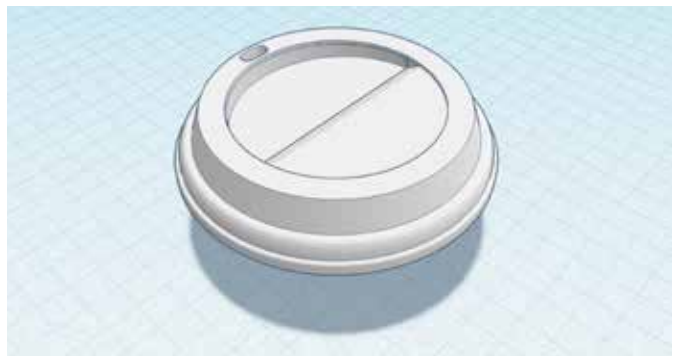
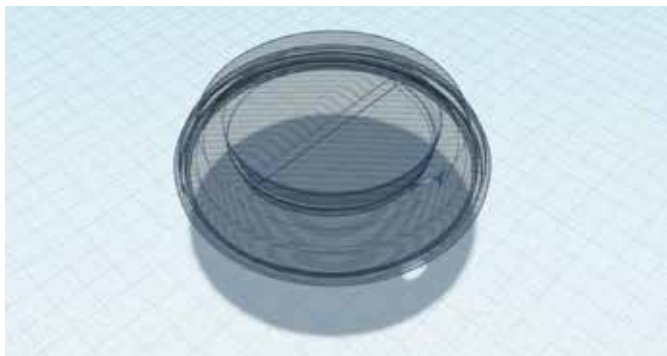
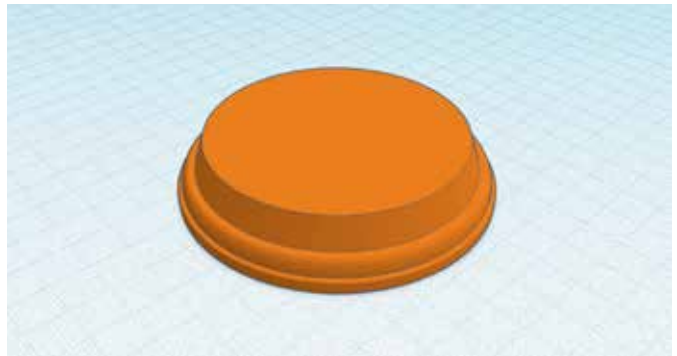
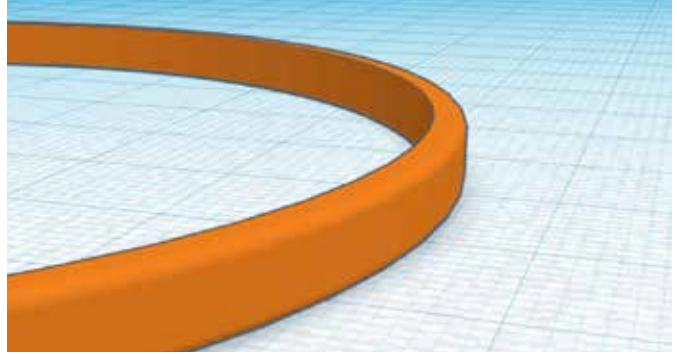
My first task was to find a plastic moulded object and carefully observe the model. My selection was a coffee cup lid. It was a complete plastic moulded product, although it was a little complicated. To make the model in Tinkercad, I measured every line and edge of the cup lid and wrote it down in my sketchbook; however, because the object wasn't a specific product, some

measurements were written by my estimation.

On the Tinkercad, I started with making a circle with the shape tool and gave a bevel setting to round the edges. Next, I added some more rings in different sizes. Making the shape was relatively easy, and I moved on to the next step of making the hollow part which was the most challenging part.

Finally, I completed the hollow part by tilting the hole tool. The last part of making the model was to punch a hole through the whole model to make the model thin and painting the shape in white. I have tried several attempts to make this successful because of the undetailed physical object; it was almost impossible to measure the exact amount.

After completing the model, my task was to make a negative-side mould. By making the

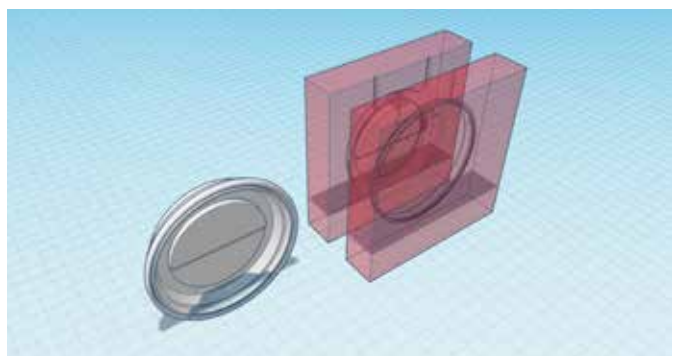


negative-side mould, I can make the same object as many as I want. When making the mould, Edd warned me to make sure that I should include the air vent holes that control the pressure inside the mould. In addition, I should have an intake and an outtake.

The way I made my mould was easy. First, I copied and pasted the model I made and made it into a hole tool. Then I took two

square shapes from the shape tool, added my hole-tooled model into the squares, and grouped it. I placed two cylinder-shaped hole tools for the air vents between the two separate squares and grouped them again.

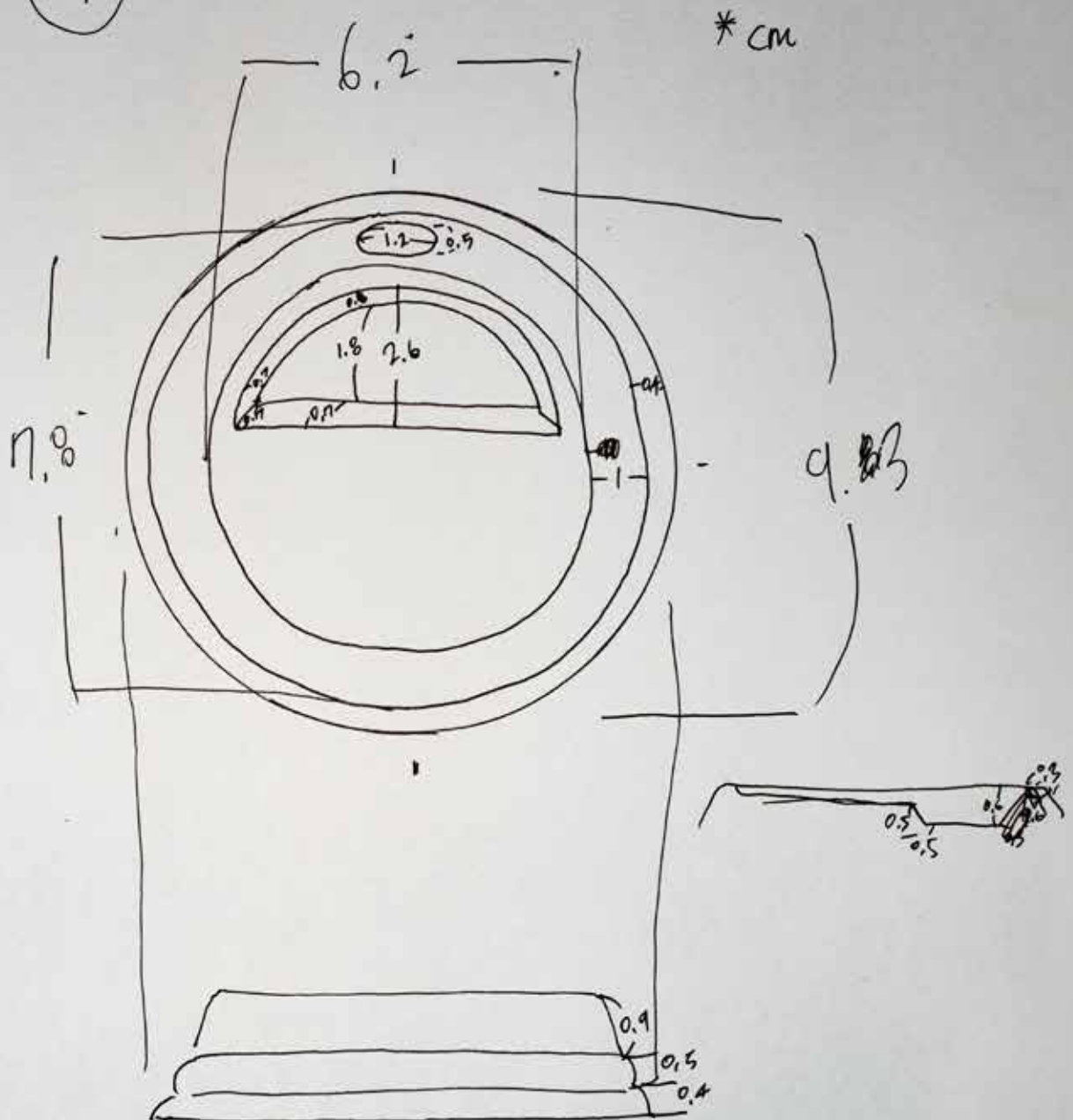
The results were very successful, and I could make a complex object with Tinkercad quickly by practising the Tinkercad tasks at home.



Virtual molds 7th March

7th March

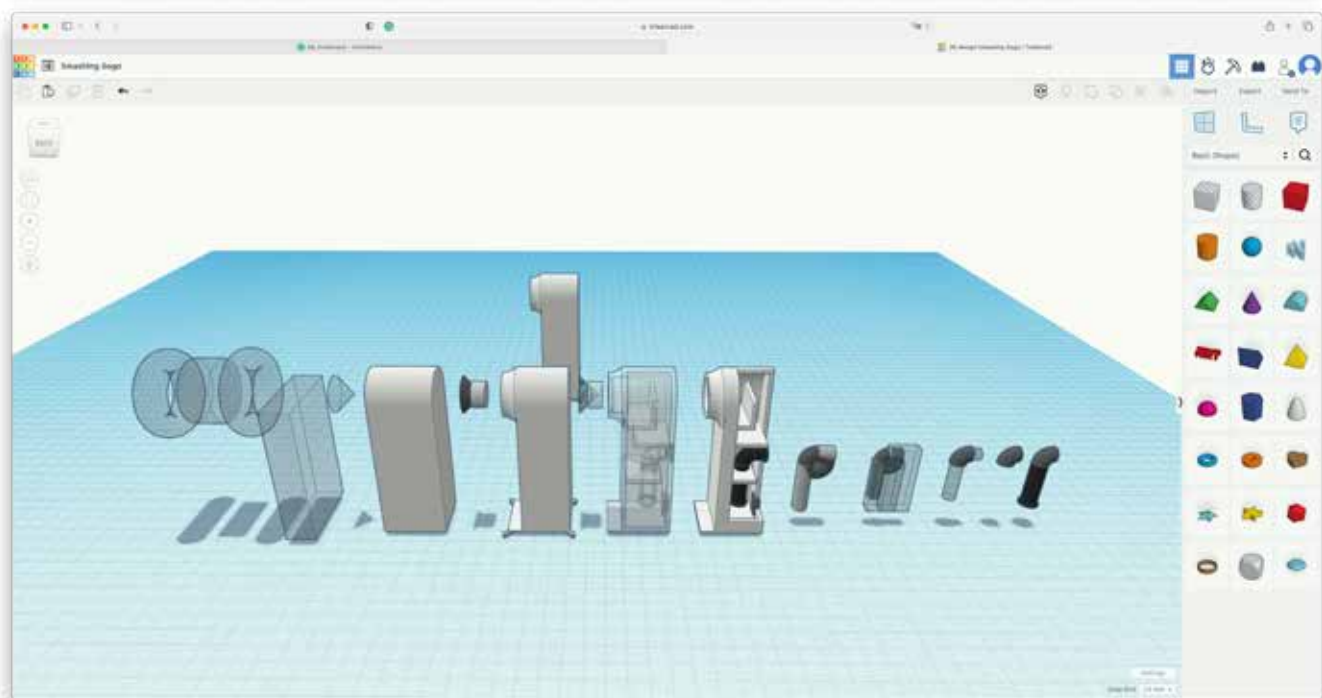
7



Building speakers

My dream is to be a speaker designer. By using the moulding technique, I wanted to make some speaker bodies.

By using Tinkercad, although it can't be particular, I was able to build a simple speaker model.



Concept

The concept of the speaker is milk, and it has to be in a pure white glossy colour. So everything started with white rectangular brick. Next, I used a doughnut shape and another rectangular-shaped hole tool to make the main body of the speaker. I also added speaker shoes for vibration absorption.

The last part of the speaker was the bass port, a vast pipe connected from the outside to the inside of the speaker. This method makes it a bass-reflective speaker, and the speaker is finished with a single driver. Although there might be better suitable mould-made objects, every part of the speaker can be made with a mould-made thing.

◀ The simple model of a speaker that I have made.

Adobe InDesign

February 7, 2023



In this session, our classmates learnt how to deal with the tools in the InDesign programme from Adobe. This programme is usually for making magazines and posters; however, as far as I am concerned, it will be great for making folio books and PDF submissions. My tutor Edd noted in our brief, "Firstly consider a context and focus to investigate. This could be a current project, a social, economic, physical or political context that interests you. Now go and create some photographic images that relate to the subject you are working with. Take at least 2 of your own photographs". In this session, our classmates learnt how to deal with the tools in the InDesign programme from Adobe. This programme is usually for making magazines and posters; however, as far as I am concerned, it will be great for making folio books and

PDF submissions. In this session, our classmates learnt how to deal with the tools in the InDesign programme from Adobe. This programme is usually for making magazines and posters; however, as far as I am concerned, it will be great for making folio books and PDF submissions. My tutor Edd noted in our brief, "Firstly consider a context and focus to investigate. This could be a current project, a social, economic, physical or political context that interests you. Now go and create some photographic images that relate to the subject you are working with. Take at least 2 of your own photographs". As he mentioned, I have used my images but tried to use some of my own words. This programme used Adobe Illustrator, Tinkercad and Adobe Indesign. The specific details are inside the text and descriptions.



The given brief. ►

Introduction to In Design

(MakingExtra Design Credit Course)

IFC ADOBE InDesign workshop 01

Notes

Firstly consider a context and focus to investigate. This could be a current project, a social, economic, physical or political context that interests you. Now go and create some photographic images that relate to the subject you are working with. Take at least 2 of your own photographs.

Secondly research the subject/context online and find some facts, published work and theories that relate to it. Compile an article and collect enough text to create a readable piece around the ideas you are investigating.

Thirdly having saved all your materials in a single directory (folder) open InDesign. Using your sketchbook try a few quick layout designs and then, using the grid, baseline grid, text and image boxes, design a graphic piece with text and image that relates the visual and textual research you have gathered. It could be a poster, a magazine advert, a microsite for web etc. etc.

You can now use Adobe InDesign to design your folios for any IFC module too!

Take screen shots of your work. Keep taking screenshots as you go, showing the development of the layout, content and design as it evolves. Save everything to a USB drive and upload it to your IFC module blog. Also write this up in your journals.

References-

A good online InDesign Tutorial about Baseline Grids in InDesign-
<https://youtu.be/jWH6HDaMkMM>

Adobe guidance and help for InDesign Grids
<https://helpx.adobe.com/uk/indesign/using/grids.html>

Reading;

Book: Grid Systems in Graphic Design
By Josef Müller-Brockmann

**Book: The Elements of
Typographic Style**
Robert Bringhurst (Author)

Columns and Margins

February 7, 2023



The photo above is at Greenwich. The story is that my friend came from South Korea to visit me and went around for a little Greenwich tour to take some pictures. Whilst having a walk, we found some flowers near the river. There may be a sad story behind it.

I took the photo in the round security mirror

with my favourite Linhof Technika camera. It is my only large-format camera, and it used to belong to my father.

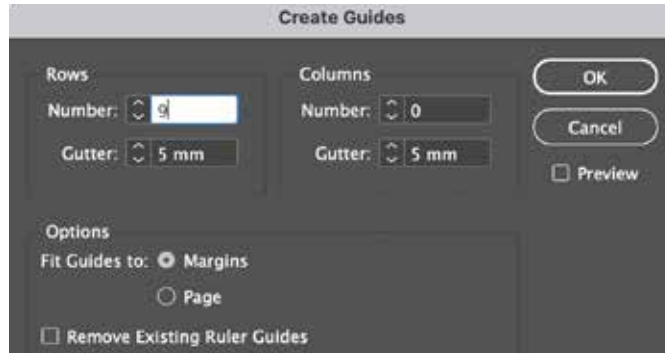
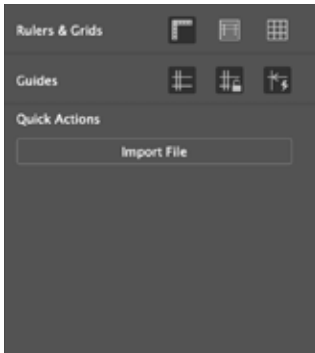
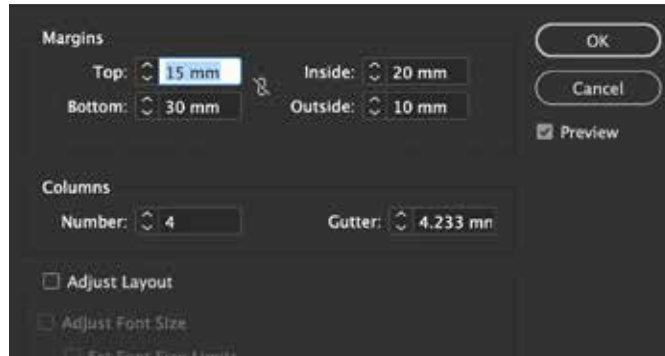
The next page will explain the lesson I learnt about using the InDesign Programme.



The photos on the page are most of the pictures I have taken in England with analogue film cameras. Placing my images was great for practising grid systems and understanding font sizes, how they look when reading it through and what would be better for it to be. I used Helvetica Bold for the title, and for the contents, I used the Futura Book font.

It says on the brief to find some articles about my interests and pictures of them; however, writing my own words will help improve my vocabulary and writing skills.





In InDesign, three elements seemed essential: columns, margins and guidelines. The columns distribute the composition efficiently and organise the page neatly. The margins make a spare space on the page: from my experience, when the page is too full, it makes the person reading very uncomfortable and disturbed. Lastly, the guidelines make it easy to place images and written words into a well-organised grid that makes the page clean and tidy. I referred to the information from the book *Grid Systems in Graphic Design* by Josef Müller-Brockmann(1981) to set the pictures and comments in the best grid.

My favourite proportions are using the 36 grid fields, 32 grid fields, nine grid fields and 20 grid fields. It is excellent to know these grid systems, which look amazing even though I place everything everywhere I want. Before setting the grids, the first step is to set the columns before making a new file. After making the new page, go to layout and select create guidelines.



There will be possible to see the window saying 'row'. It is also necessary to choose fit guides to 'Margins' to make the guidelines that fit the margins I have set in my numbers. My favourite column proportion is 10mm X 15mm X 20mm X 30mm. These numbers are ideal, as Josef Müller says in the book(1981:41), that the exact size of margins creates an impression of indecision and dullness.

From this project, I was lucky to pick up the ability to make every PDF submission and folio book-making abilities. It was amazing to read the suggested book and use the excellent examples Josef Müller introduced in the book. It would be better to come up with my grid proportions and use them in many different ways. It will also be essential to use the keys again and write down the necessary information not to forget the method of using the programme.

In Design - Introduction to Manufacture and Fabrication.

Lorem ipsum
Random text.

Setting → grids → increment every 12pt.

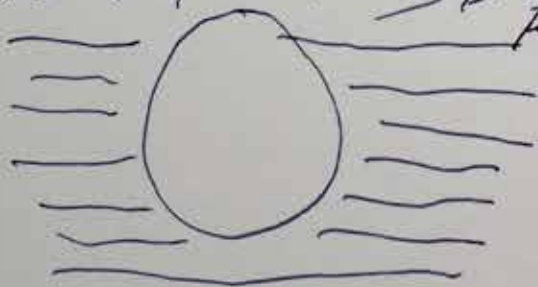
Text → Properties → Body text →  → ~~Paragraph~~ style options → indents and spacing → Align to grid → All lines.

45-75 characters in a single page is ~~regarded~~ regarded.

40-50 for a ~~newspaper~~ Multiple column (newspaper).

75-80 ~~characters~~ characters is hard to read.

Pages → A master — B master for layouts (new page)
parent. Window → text wrap.
(Only when no paragraph style).



All in

March 21, 2023

From this project, learning about how to make a brand and combining different programmes into a single outcome gave the strength to make many possibilities for different outcomes in different situations.

Using InDesign will help to make the folio book which is the next task after this project.

The given brief. ►

Session_All_In_One

Bringing it all together

The aim of this session is to revisit all the software processes we have covered and to use them in conjunction to produce one document.

On a computer, create a new folder. Name it appropriately and keep all work for this session within it. Now decide on a focus that you would like to develop. Make it something to do with your major project's design development.

1. Create a visual identity in Adobe Illustrator. Create a logotype using vector drawings. It can be a logo for the project as a whole, or a brand or identity for the possible outcome of the project. This could take the form of a service, object, event etc.

2. Create a 3D object or environment in Tinkercad. Create a sketch model of a thing or space that develops the concepts that you are now shaping as possible outcomes within the project.

3. Create a concept proposal document in Adobe In Design.

Present these together with written descriptions and context as a designed document. think of the document as something you would send to a funding body to try to secure financing for the project. Describe it clearly and in a way that persuades their reader of it's plausibility.

Take screenshots to accompany your write up of this session as your record of your work. On a USB, save these screenshots for safekeeping and write an entry in your journal about what you have made, learned and describe the images you have taken. Also write how you think this might be used in your design process in the future. Save any digital work to one folder and save it on a USB drive!

Critically appraise these with the group to assess which work best and why. Take screen shots of your work for all these tasks. Try to take screenshots as you go, showing the development of the layout, content and design as it evolves. Save everything to a USB drive.

References; tutor & author e.bagenal@gold.ac.uk 02079197809
<https://tinkercad.com/>

NOTES

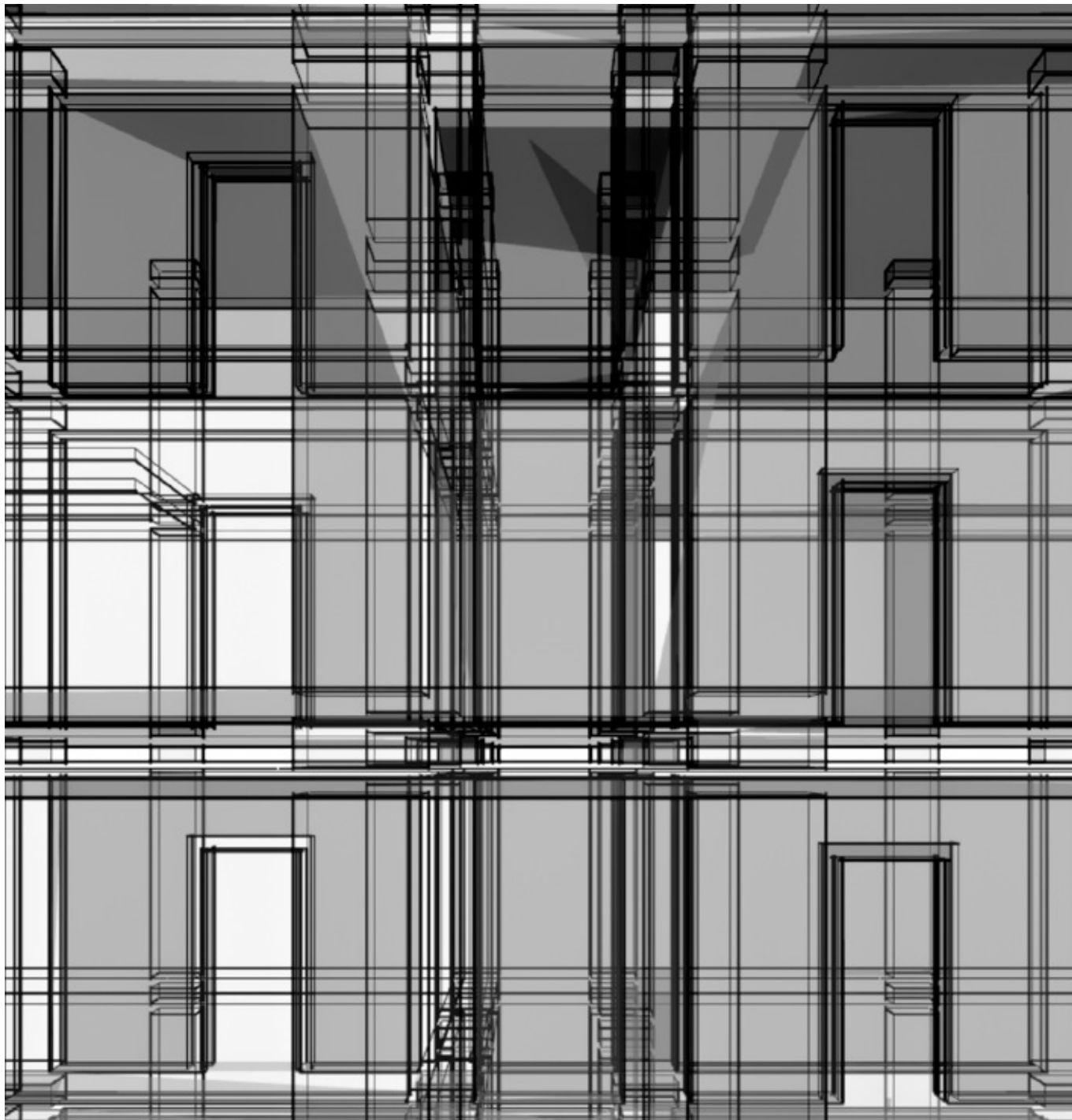
[illegible]

pain

We make silence

Introduction magazine

2023



index

March 21, 2023

Introduction	Index (March 21, 2023)	2
	A Letter about Pein	3
How the logo was made	The meaning of Pein	4
	Idea sketching the logo	4.2
	Using Adobe Illustrator	4.3
Making the cover	Using Adobe Photoshop	5
Making the model	Using Tinkercad	6
	-Bringing the logo	6.6
	-Building an apartment	6.7
	-Demonstrating prototype	6.8
	-Taking screenshots	6.9
Making the magazine	Using Adobe InDesign	7
Brief		8

For the brand-introducing book, I tried a new kind of index page; it looked very professional, which I liked. The index page was designed based on the index page from the NASA design page.

Please note that some pages might be missing because this page was for the PDF submission. I left it this way because it looks great.

pein

wuanny

About pain

March 21, 2023

From the brief of What is Design?

"As cities develop and populations thrive, the area of land people can live on is decreasing. Due to this phenomenon, many people live in apartments to save money and space by letting many people live in one building simultaneously. However, as everybody is different, people getting together and living in one building naturally occur problems, which are primarily about annoying sounds of neighbours and a rude invasion of neighbourhoods.

These problems make the decisive disadvantages of living in apartments which understandably repress the freedom of residents living in flats and sometimes destabilise the mind and body.

To improve the quality of apartment life, **how can design explore the solution for individual people living in apartments from problems that cause inconvenience to each other?**

This project will produce a solution for a situation in which people make inconvenience each other in apartments and focus on reducing anxiety and promoting freedom in apartment life".

We make silence

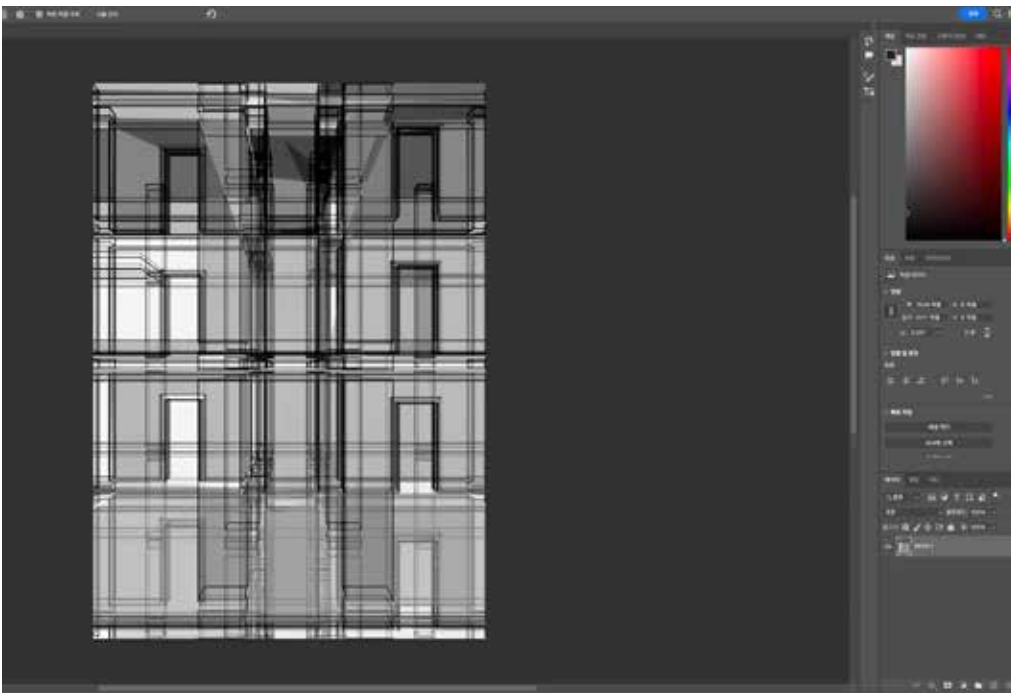
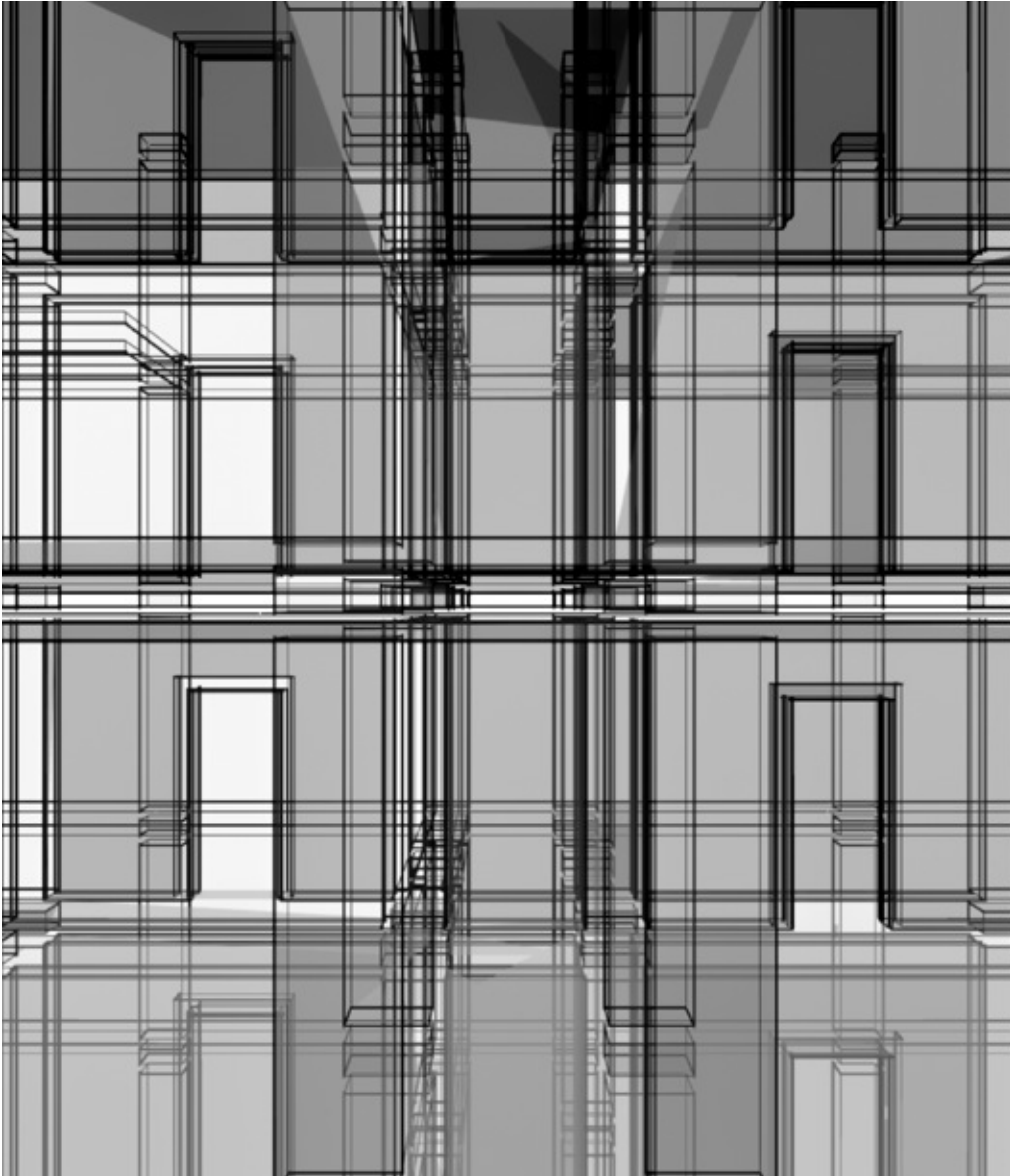
As the world narrows down, more people get to live in apartments.

Living in an apartment is good; however, we must live with the inconvenience of living with others we don't know.

Living with somebody else always occurs problems, even family, and most problems in apartments are due to sound.

Talking to a stranger is always hard and takes a lot of energy. Pain technology provides a solution.

We make silence.



The cover is a screenshot of the model for Pein from Tinkercad and edited with Adobe Photoshop.



making models

As I mentioned earlier, the first model was an apartment. Our company's products are for flats. It is a device to hear noise and alerts people. Building the apartment should be the first step.

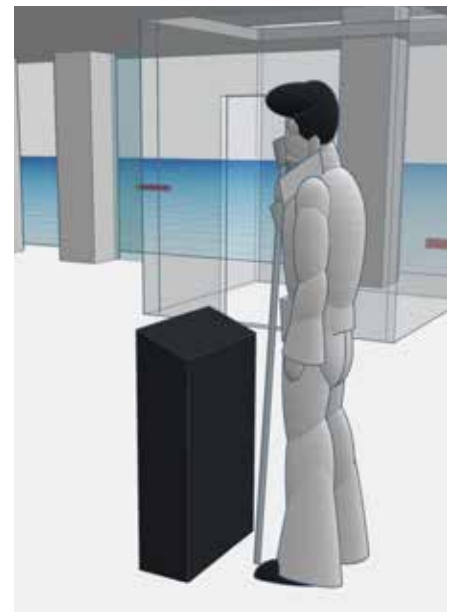
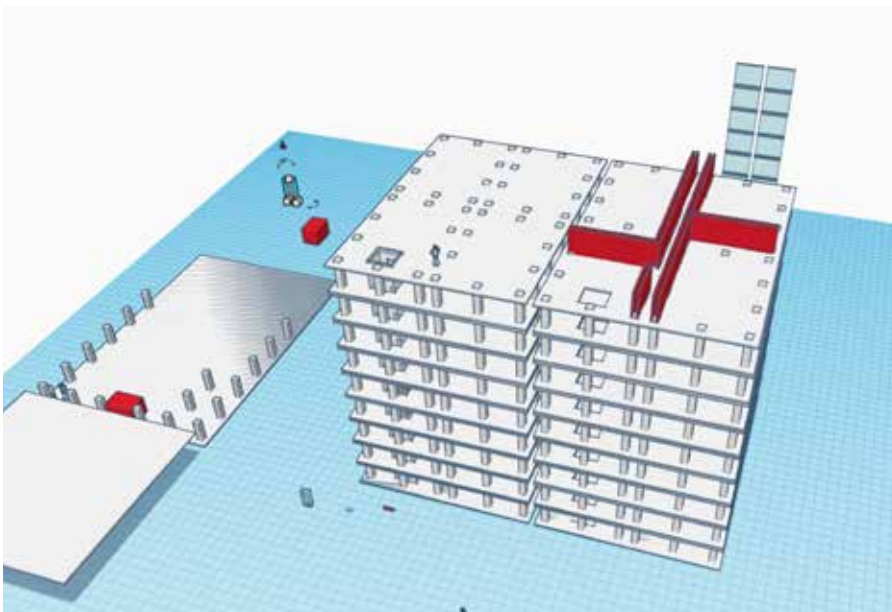
The photography of the wide format is the construction photo. The construction was very detailed and precise. The wall is a Pein-made wall, which is a double-bond wall that absorbs sound.

Twenty-three generations can live in the apartment, and the top floor is a penthouse. A logo of Pein is on top of the building.

The device of Pein technology is placed on the wall inside every house in the apartment. This device lets people know who is making the most noise and also can alert the receptionist which house is making a loud noise.

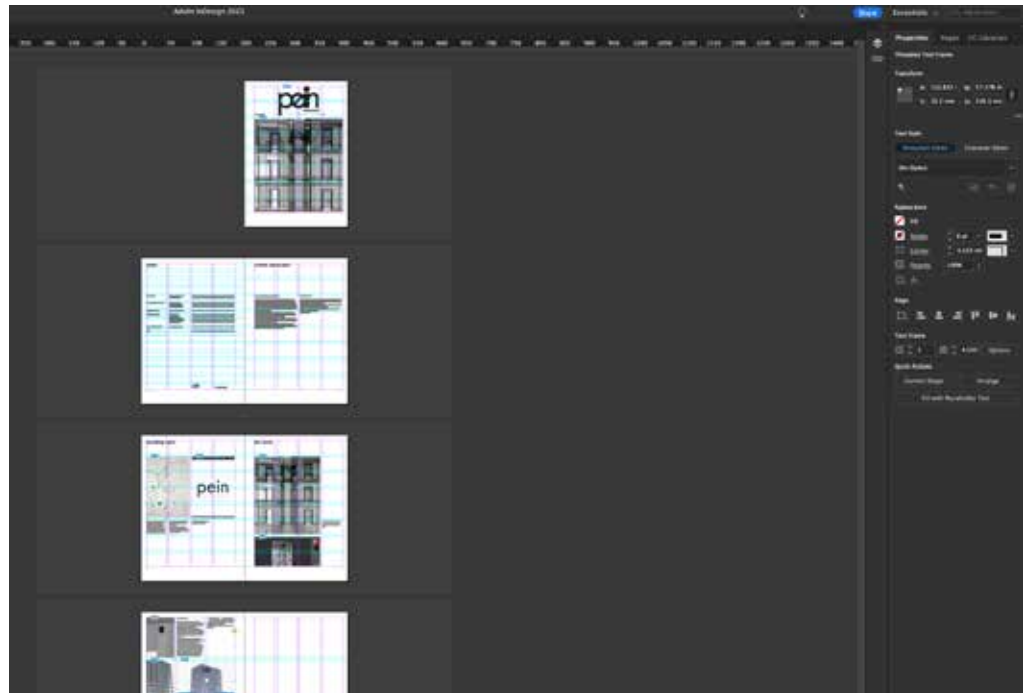
Every home can access the noise system's information and view the DBS. This way, people do not have to face a stranger to say to be quiet and create an awkward situation. The person making the noise cannot know who requested to reduce the noise.

The last photo is the receptionist noticing the noisy house.



Magazine

March 21, 2023



For the magazine, 32 grid system, 64 grid system, and 9 grid system was used to make the grids. The pages was used with Parents - Type - Insert special letters - Markers - Current page number, which is very useful.

From this project, learning about how to make a brand and combining different programmes into a single outcome gave the strength to make many possibilities for different outcomes in different situations.

Using InDesign will help to make the folio book which is the next task after this project.

Conclusion

Making this book allowed me to look through what I have done and fix my defective part. Making folio books will also let me look back whenever, wherever I want, when I have to.

Looking back on what I have done is very important because learning from mistakes is what human beings do.

Looking at this book a few years later will give me a reaction from two selections. The first reaction will be being stunned and motivated about how much I haven't improved. The second chance is to feel confident and be proud of myself for how much I have achieved and got close to making my dream come true.

The given brief. ►

IFC 2022_2023

DS50004A Introduction to Digital Manufacture and Fabrication Course

(Extra Design Credit)

Final Submission Brief

Deadline: The last Monday in May this year: VLE and also:
Hand in: Studio submission- display at your deskpace.

As part of the Introduction to Digital Manufacture and Fabrication course you are required to submit a folio of work and reflections on the weekly tasks and work-shops that you will have taken. -

The Folio will take the same format as the drawing folio you produced for the Making Drawings Course. You are required to include at least 12 spreads (12 x 2 A4 facing pages) bound into a folio. The content should be clearly labelled and there must be a response to each weekly task that was set throughout the course.

The submission is in the form of a portfolio/technical journal, which will also include any course notes, handouts and further research undertaken in relation to the exercises on the course. The main part of the portfolio consists of work produced in class and also might include some documentation of how it has been applied in the studio practice projects. The format of the portfolio can be selected by the student and should also contain a 1000 word reflection on what you have learnt on the course.

In your submission we want to see evidence of:

What you have learnt: skills, ideas and methods
What you have done: course exercises, application of methods + processes in studio projects etc. Your reflections on the course: how will you use skills and knowledge learnt moving forward into the BA Design programme.

Timetable

DS50004A Introduction to Digital Design and Manufacturing Taught session schedule;
Tuesday 24/01/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 31/01/2023 : Self directed practice/research
Tuesday 07/02/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 14/02/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 21/02/2023 : Self directed practice/research
Tuesday 28/02/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 07/03/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 14/03/2023 : 10:00-13:00, 14:00-17:00.
Tuesday 21/03/2023 : 10:00-13:00, 14:00-17:00
Tuesday 28/03/2023 : 10:00-13:00, 14:00-17:00
Also 28/03/2023 will be available for tutorial support and finishing folios.

This course will REPLACE: LS50002A
Speaking and listening for Wonhee Lee ONLY

All taught sessions will be in the Lockwood computer lab- room 212a except the final session which will be in RTHB I03 Mac Lab

The Learn.gold area for this course is;

<https://learn.gold.ac.uk/>

Area name:

DS50004A

Introduction To Digital Manufacture
And Fabrication

References;

Authors; Andrew Weatherhead a.weatherhead@gold.ac.uk 02079197784

Edward Bagenal e.bagenal@gold.ac.uk 02079197809 also Martin Conreen.

Tutor Andrew Weatherhead a.weatherhead@gold.ac.uk 02079197784

Goldsmiths Computer Aided Design website: <https://sites.google.com/site/goldsmithscad/>

