

Exploring 3D through Objects and Space

ASSESSMENT TASK 2

Design Workbook

Due week: 8

Student name:

Student number:

Email address:

COURSE TITLE

CUA30720 Certificate III in Design Fundamentals

SUBJECT TITLE

A10156 Exploring 3D through Objects and Space

TRAINING UNITS

A: CUAACD311 Produce drawings to communicate ideas

B: CUADES303 Explore and apply the creative design process to 3D forms

C: CUAACD312 Produce computer-aided drawings



AUSTRALIAN
PACIFIC COLLEGE

Instructions for completing this workbook

This workbook is made up of a series of activities to be completed for Assessment Task 1.

Use the lectures and templates provided in the online classroom, your own research, and the supplied resources to complete the activities.

You must complete all activities in this workbook.

Include supporting documentation as an appendix with submission of this workbook.

Supporting documentation includes but is not limited to:

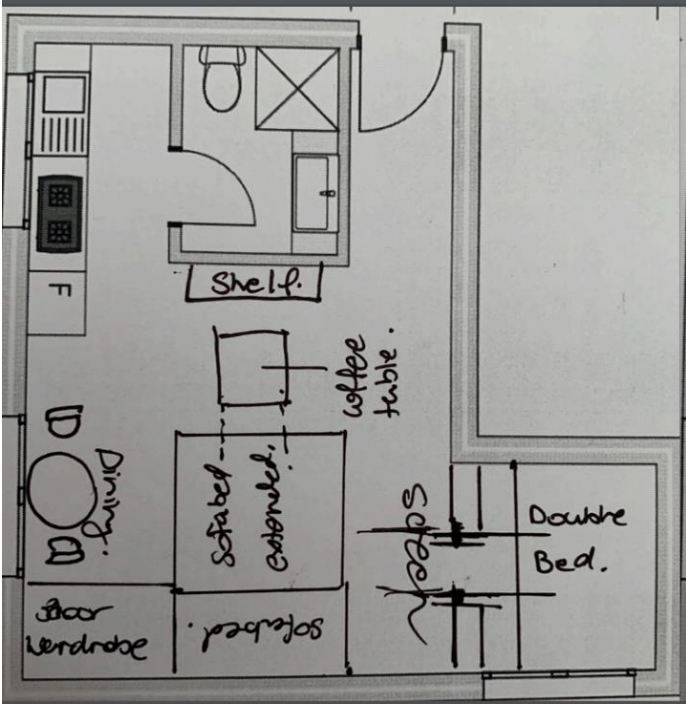
- Case studies
- Photographs
- References of sources of information (books/websites)
- Any additional pages added due to lack of space in workbook

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- 8. Additional pages**

1. Client Feedback

For this task, your Trainer is your simulated client. Gather the feedback received from Assessment Task 1.

<p>1 Which floor plan option did the client prefer?</p>	<p>The client preferred the following option, but with the Sofa and shelf switching places.</p> 
<p>2 Did they give you feedback, recommendations or suggest changes? What were they?</p>	<p>Besides the switching of the sofa and shelf, they didn't particularly appreciate my colour choices. They wondered how I came to use those colours and I said I picked them from the colour picker. The client suggested that I make everything white and black and to change the type of wood I was using to a lighter colour. They asked me to remove the carpet. They then commented that "the space is now liveable". They then told me the sofa looked like crap. I gave them 4 choices. They decided not to go with the little cute stool. However, I included this later and then they realised that it was really cute and decided to keep it there, along with the new sofa design.</p>

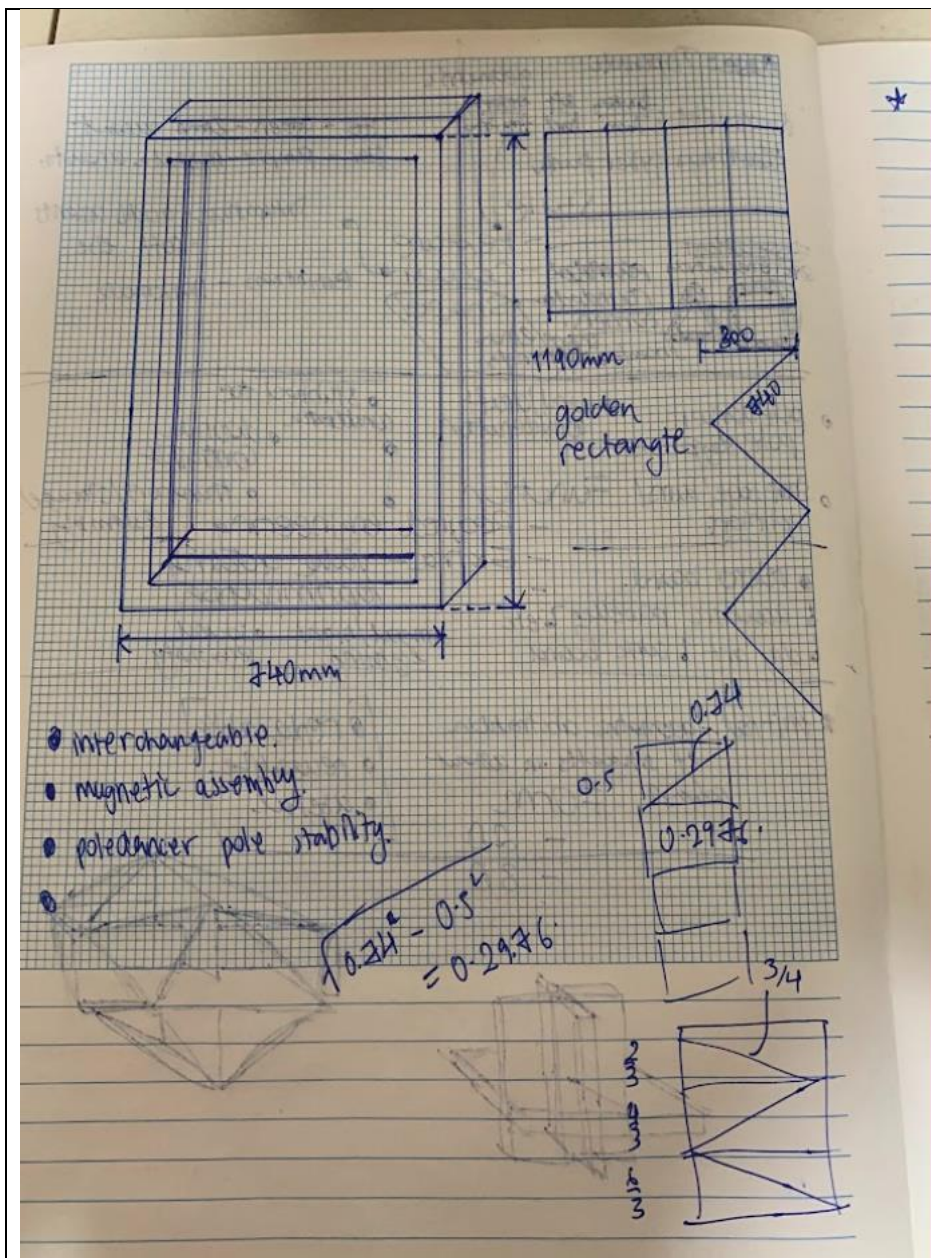
<p>3 What feedback did you receive on your screen design?</p>	<p>For the final screen design, the client really excited at first. They really like the innovative way geometry was used, being made of simple components yet displaying visually elegant complexity that very much fulfilled the 3D aspect of the specifications. The design incorporated both form and function seamlessly and simultaneously which the client very much appreciated. And after a few weeks, they seemed to not be that excited when they saw it again, which is understandable. They also told me to fix my camera angles to try capture the distilled essence of this amazing screen in all of its magnificent glory.</p>
<p>4 Based on this feedback, how will you change/develop your designs?</p>	<p>You know what, like, I changed a lot of things. And I will put them in the next section. However, here are some things that I changed along the way:</p> <ul style="list-style-type: none"> - The client questioned the use of pole dancer poles. I argued they were necessary. They were confused why they were needed. I explained that they were getting distracted by the fact that I'm calling it a pole dancer pole and that it is a non-permanent solution and essential element for the structural integrity of the screen. I just wanted to document this and the pole dancer pole remains a fundamental and integral component of my screen design. - There were many suggestions to how I could make my design become a little better, and there were many questions about why I decided to change my design several times. I perceived many of the suggestions to be too complex for me to implement. However, I realised that I simply misunderstood most of the suggestions. Anyways, I ended up not using any suggestions, besides the ones saying the screen maybe wasn't quite there yet. And then one day, while being asked if I wanted a demonstration of the construction of anything in SketchUp, I decided to want a water dragon. From this random urge, I realised the limitations of SketchUp web version. I like a challenge, and I ended up building the water dragon without the conventional tools available in the full version. A few days later, I had an epiphany. The water dragon I made, which received the harsh feedback that it was fugly through the client's subliminal face scrunch, was core to the fruition of this new idea. Playing with 3D structures this way primed my mind for new possibilities in that I gained the skill of thinking more effectively in 3D. (I think)

<p>5 How does individual interpretation affect the drawing and feedback process?</p>	<ul style="list-style-type: none"> - Misunderstandings may arise if the designer's intent isn't clearly communicated or if the feedback isn't precise. This can lead to revisions that may not align with the original concept. - Misunderstandings may still arise if the client's request isn't fully understood by the designer. This can also lead to revision that may not align with the original specification. - Poor work may arise if the designer believes that all the feedback is non-negotiable, which may cause the designer to try very hard to produce something that they do not understand and do not really like. - Poor work may arise if the designer doesn't want to deal with the client or has issues with processing the feedback received. - No satisfactory work may be completed if the designer decides that they do not believe in the project brief and do not want to learn and attempts to produce work in only the formats they are familiar with. - Poor work may arise if the designer lacks the ability to incorporate the ideas of others as a result of poor design skill or lacking the ability to adapt and instead, implementing feedback as instructions instead of attempting to explore for solutions. - Every individual has their own preferences and affinities to particular styles, which affects the process. - Every individual most likely grew up in some cultural setting which forms a unique perspective, which may affect the process - An designer may want approval to request a change to the technical specifications. Often, the specifications have unnecessary restrictions because of the client not differentiating between hard requirements and soft requirements usually because they think they're trying to be helpful or they have been conditioned to by either habit or poor perspective.
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2. Design Development

Examine the feedback carefully and use handwritten notes and sketches to document design development. Include notes on measurements, materials, and 3D forms that you will use in your final design.

Document your design development work below:



This was my next idea, taking a function first approach.

The construction is simple and acts as a sort of pin board/Velcro board/ whiteboard (for planning and problem solve). The construction is 2 rectangular frames joined by magnets. The idea is for this frame to be able to hold anything not too heavy that will sit in the groove between the two frames. There is a small slot machined out from the frame visible as the darkened line between the two frames. A better way to visualise this is how a manhole works, the way that there is a groove for the lid in the ground.

Ideas for inserts:

- -Velcro board
- -art frame and display
- -clothesline
- -acoustic insulation (for music and ambient noise isolation)
- -temperature insulation (more efficient heating within a smaller area)

There was also the idea that the divider didn't need to be 2000mm in width and can in fact be more such that the divider is not intended to be fully stretched out and operates in a semi folded state even when covering the 2000mm nook. So I did a little calculation to see how much room this would take (bottom right, yes that's Pythagoras). For the particular dimensions I was so fond of, it would have covered around 300 mm, not having yet included the depth of the divider.

Finally, I get to fulfil one of my engineering bucket list items to use a pole dancer pole in a project. I first saw one of these at the Airbnb I was staying at in Copenhagen. I assessed the structural rigidity and integrity of this pole and deemed it a worth item to add to my mental lists of unconventional things to engineer solutions with.



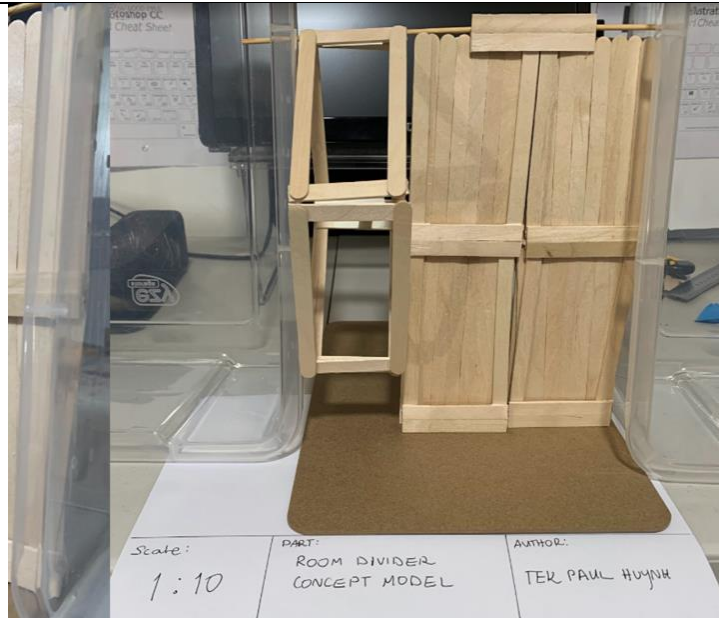
I then thought that perhaps I should make the previous design a bit smaller and more modular, potentially using wooden crates which serve the function of both screen divider, shelf storage, and as general use crates for moving items.

However, I don't remember the actual feedback, but remember that this progression did not impress the trainer and they questioned why I changed my idea.

I don't really think I changed my idea, but it is an iteration of the previous concept. For this iteration, we were talking about recycling and reuse in the other class, and it became a source of inspiration for new ideas. However, I feel as if the trainer felt that the solution to stack boxes as shelves was too unoriginal, and they secretly wanted me to go back to my engineering centric solution to see that original concept be developed further.

I don't think this was a waste of time. For me, iteration happens much faster in my mind than can happen on paper or software. But most of the time, it's just me solving many small problems like how components will join which creates the seed for new ideas. I guess pretty much with anything I do, I try to explore the possibilities by iterating on simple questions. This allows me the efficiency of reusing my efforts for other ideas. I believe it allows me to innovate form through iterating on the different expressions of a single function. This concept is encapsulated in the hexagon picture I showed in assessment 1.

I find that in my study of nature, there is a tendency for things to repeat, except not necessarily in the exact same way and through different modes such as time, scale and context. Elegant complexity emerges out many simple concepts working together. As I continue my journey into design, I find it to be complementary to my study of numbers and the numbers complement my design process. (picture 2 next to the hexagon picture in assessment 1)



https://en.wikipedia.org/wiki/G%C3%B6del,_Escher,_Bach

Reminds me of the works of Escher, from which I only recently discovered from this book, from which I only recently discovered from my friend, from which I realised that I was at the same lecture as him when it was mentioned by my respected Lecturer, Richard Buckland, who is a highly decorated educator, evident not only by his numerous awards, but his ephemeral nature which had the unexpected cause and effect of getting students so desperate for more lectures and interaction, with at least 1 student turning up at his house desperate for his attention and wisdom (not me, he told me the story). I am privileged to have given him the face where he replied, "Do that again, that was funny! I've never seen that. Your face looked like I said the dumbest thing in the world! Do that again!". What an amazing way to handle that situation. I'm glad he commanded me to come in once more, to continue on this cisco cryptography pilot test that I prematurely deemed as a hopeless cause. The math I currently explore is a result of the hope and belief in myself I gained during our collaboration.

I thought it'd be a shame to not use the pole dancer pole in my design. The trainer said I worked so hard to convince them that the use of the pole was a innovative yet necessary component of the design when providing feedback for my last idea.

I had a think about it after the session and concluded that they were right.

Stud finders and Pole dancing poles are the structurally sound foundations of my artistic identity.

Cain: And I'll make sure you never forget it tekypoo.

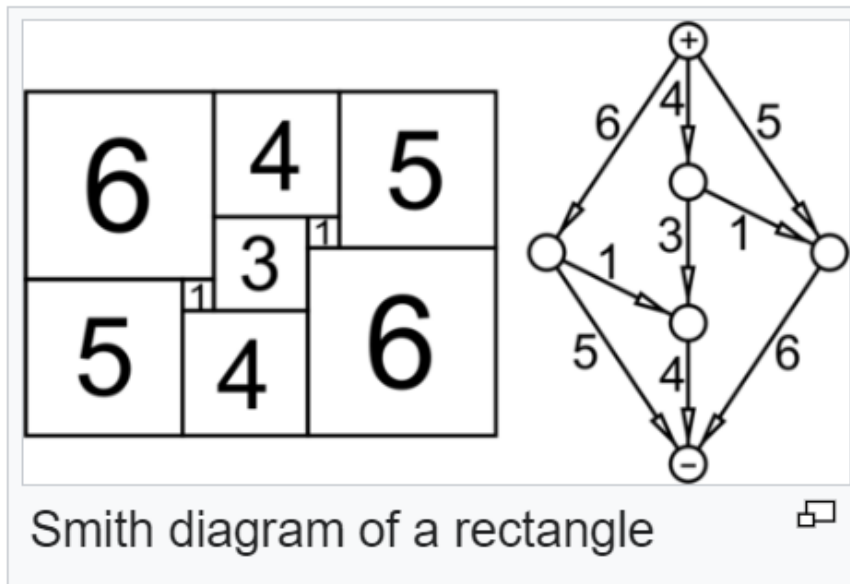
During this time, we began to explore folding and repetition in structures and symbolic representation of ideas such as trees into structures. The sentiment was that many of the designs were yet to satisfy the 3D form aspect of the design. One of the ideas was the accordion concept. That's the one I remember, because the trainer got very excited about it and yea.

So first I thought, folding is so unoriginal, I don't want to do what the other guy did. However, it is so easy to look like I copied him if I design something of that specific form of flexibility. I always struggle with this originality thing, but I think I need to because I need to realise again and again that while the concept is not original, my interpretation and my uniqueness is what makes my version of the concept original. I have to merge my identity with the concept.

I had a pole dancing pole and a rather undeveloped door concept. These are the constraints I supplied myself in preparation for the thinking process. I began to let these ideas and forms marinate at the back of my mind. I then began researching the different forms of folding structures in order to help prime the environment within my mind for copulation of the accordion/folding concept with my intellectual identity. I'd compare it be as challenging as getting pandas to breed in captivity.

A few days later, the folding door was born.

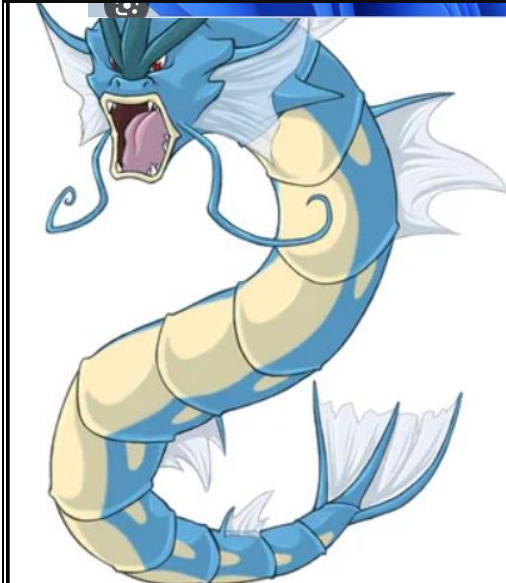
https://en.wikipedia.org/wiki/Squaring_the_square



For some time, I went back to the crate concept. It would have served as a replacement for the modular frames. I found this diagram and was like, cool, I don't have to learn any math to derive the arrangement of the boxes. I feel empowered.

I got feedback, but not for this design in particular. Actually, I don't think I ever showed it. It was a backup plan for producing more visual appeal.

I guess one of the things I can learn from this is, nah. I don't think there's anything new to say. This is just part of the iteration process. I just remember beginning to panic at this point for some reason. I didn't feel as if my design was up to my personal standard and goal of merging concepts with my identity.



For my water dragon concept, the trainer expressed behaviourally their disapproval. The concept seemed random and didn't particularly pique their interest after giving it an opportunity. I had the impression that they thought the end result model thing is super gross. But most of all, I think they were thinking about it and did not understand why I would want to do something like this that is seemingly unrelated and which probably would not achieve any net positive effect on my end product and thus pretty much waste of time.

Me too.

I have the same opinion in that I think its irrelevant, and despite trying to fix its aesthetics, I guess it still looks pretty fugly. However, I have learnt to follow my intuition and to stop trying to be so efficient and optimal all the time about everything. To chill the F out so to speak and go with the flow. To go with the flow, I did. To learn to do what I felt like doing, I did. The scenario is, the trainer asked if there was anything in particular we wanted them to recreate in 3D. In this particular moment, I wanted to build this. My fugly water dragon which I am now so fond of.

The trainer failed to build the core structure as a result of the limitations imposed on the free web version of SketchUp.

I ended up trying to see if I could find another way. This became my first experience with and introduction to sketch up which I was planning to avoid for the whole course and instead use free options which are used more ubiquitously across industry and integrates with the real-time renderer, TwinMotion.

Anyways, I found sketch up extremely easy to use, and then extremely limiting. But I felt like I needed to embrace these limits and find a way to build the water dragon anyway. So I did just that. I spent the next 6 hours or so just playing around with sketch up. Several times, I managed to zoom in or out of something and couldn't find my way back to the model inside the 3d space. I still don't have a solution for this. And I just end up starting again.

Anyways, this geometric model is a rotation of a shape along a circular path while rotating the rotated shape simultaneously. While it was random, it seemed it was a

	<p>necessary and serendipitous detour to realise my final design. Doing this exercise primed the environment in my mind for passive and active idea integration in the same way as the previous door design. This is only theory, I don't really know for sure. There seems to be the pattern here.....</p> <p>Oh I remember now. I was trying to describe the geometry as a chorizo instead of a churro.</p>
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3. Prepare for 3D Modelling

You will need to prepare any materials and equipment you will need to create the 3D design solution.

1.List 2 pieces of hardware you will use for creating 3D computer-aided designs.	Computer , Ram, Storage, Processor
2.List 2 pieces of software you will use for creating 3D computer-aided designs.	<p>SketchUp. Realistically, 1 was used by most students. I used ArchiCAD, blender and TwinMotion in addition to SketchUp.</p> <p>Chrome and other browsers are so ubiquitous, I personally forget that its actually software. Actually nowadays, web browsers almost act like a universal application platform (what Java tried to do but with WASM, the final nails are on the coffin)</p>
3.List 2 tools you will use for creating 3D computer-aided designs.	<p>Knife. Fire. Definitely NOT using them in conjunction with my cybersecurity knowledge to hunt down the person who wrote these questions. I will then NOT use these essential tools traditionally used for sustaining life as a means to take it threaten and torture instead. No. The fire is to light the cigarette to deal with my immense frustrations. The knife is used to score and cut my paddle pop sticks so that I may build stick models. The fire additionally is used to texture/colour the wood with a carbonised soot finish or burnt wood look. These tools help me create 3D physical models which I can then use to create the 3D CAD Models</p>
4.List 2 pieces of equipment you will use for creating 3D computer-aided designs.	<p>Mouse, Keyboard, Monitor</p> <p>software, peripheral equipment and tools used for CADD</p> <p>Now, what would be classified as hardware that isn't peripheral and is reasonable for students to learn about? Ram, Storage, Processor. I guess that's pretty much what's customisable when ordering apple products.</p>
5.In what ways do interior designers use SketchUp? How is this software useful for designers in the workplace?	I heard from the grapevine that Revit is used most for interior design projects in Australian industry. Once you begin to understand how to use Revit, Sketchup

	<p>becomes a toy. It becomes a means to quickly create 3D Models without all the administrative considerations baked into software like Revit. I therefore conclude that SketchUp is useful for rapid prototyping and possibly collaboration and presentation with its web features.</p>
<p>6.How effective are 3D models in communicating an idea to a client?</p>	<p>Hyperphantasia synaesthesia aphantasia. From the perspective of some, communication to the other may be a difficult task, especially without the right anthropomorphic analogy. 3D models represent the designers vision in the form that it is to be realised and constructed. However still, not all clients may understand.</p> <p>“Center for Ants” https://youtu.be/LQc8NDKcnpM?t=60</p>
<p>7.Refer to the SketchUp quick reference guide. Keep it handy as you start using SketchUp and you’ll learn to model quickly and efficiently. From the SketchUp reference card:</p>	
<p>a. List and describe the features of the following drawing tools to draw in 3D.</p> <p>Lines:</p> <p>Lines are the basic building blocks in CAD software, used to create the edges of shapes and forms. They define the boundaries of objects and are essential for outlining components in both 2D and 3D drawings.</p> <p>Lines help in creating precise and accurate designs, which are critical for ensuring that parts fit together correctly and function as intended. Different line types, such as thick, thin, dashed, and chain lines, serve various purposes like indicating hidden details, centre lines, or cutting planes.</p>	

Polylines:

Polylines are continuous lines composed of one or more line segments. They can be used to create complex shapes and paths without breaking the line into individual segments.

Polylines allow for greater flexibility and control in design, making it easier to create and edit complex shapes. They also ensure geometric continuity in the drawing.

Arcs:

Arcs are segments of a circle used to create smooth, curved shapes in designs.

Arcs are essential for creating rounded edges and smooth transitions between lines, which are often required in both mechanical and architectural drawings.

Dimensions:

Dimensions are used to annotate the size and scale of objects within a CAD drawing.

They ensure that all parts of a design are accurately measured and can be manufactured or constructed to the correct specifications. Accurate dimensions are crucial for the functionality and fit of the final product.

Text:

Text annotations add written information to CAD drawings, such as labels, notes, or descriptions.

Text is necessary for communicating additional details that are not easily represented visually, such as part numbers, instructions, or specifications.

b. How many different model views can you display on SketchUp? (e.g., front, top etc.)

I counted 7. Yay I can count. One for each face of a cube. And 1 extra for the isometric (Which I like to call, the hexagonal view (which as usual I just made up on the spot))

the different views provides designers a means to be able to completely describe the 3D concept in a flat 2D format. with the addition of dimensional measurements and tolerances, the designer is able to produce specifications for manufacture or construction of their concept. the views provide a mathematically rigorous and logically sound way to communicate their ideas to a technical audience while the isometric view is better suited for non-technical audiences as well as acting as a design summary for the technical people.

c. What is a component in SketchUp? Why is it necessary to create them?

A component is synonymous with group in Adobe Illustrator

A component is a grouping of simpler components which may continue to be groupings of simpler components all the way down eventually reaching base components. The base components are the basic lines and objects which are supplied by the application to build a final product and described in part a. The underlying concept for having components is to give a means for the designer to effectively manage, update and optimise the construction of repeating elements, while also providing a system to allow effective and efficient collaboration. Despite being a simple concept, grouping of elements is a fundamental concept ensuring effective and efficient management of models within a team environment. Just as important is the art of coming up with an appropriate label for the component. It is possible for complex models to be created without components. However, the final product will probably have little value (potentially negative value) due to the poor ability to support collaboration and efficient implementation of updates. The concept of components is similar to the concept of abstracting repeating code as functions in computer programming. At some point, deciding how to organise components comes down to personal judgement and this is developed through practice and application over the course of... I guess life since its about how to organise things. There are no rule books for such concepts, but there are general guidelines that can be followed at different contextual levels.

d. How do you edit a component?

Double click I think

e. What is the purpose of working with layers/tags?

layers/tags and components are very similar concepts in that they group together components allowing components to be more easily managed, accessed, identified and associated. They essentially do the same thing by acting as containers for smaller containers. In my opinion, the general differences between the two features would be that components should be used to encapsulate a unit or entity to maintain its modularity and reusability, while layers encapsulate a composition or association to construct and configure contexts by acting as a container of components. Put more simply, layer is a top down component, while components are bottom up. component would be chair legs, chair cushion, chair backrest, chair seating area, chair screws, which together would just make a chair component. A layer would be a composition of components, the chair, the dining table, the window, the light which

together would make a dining room layer composed of both dining specific components as well as general components. The thing is that sometimes, the use case can be unclear and this is where personal judgement comes into play.

f. List the steps you need to take to print a 3D model.

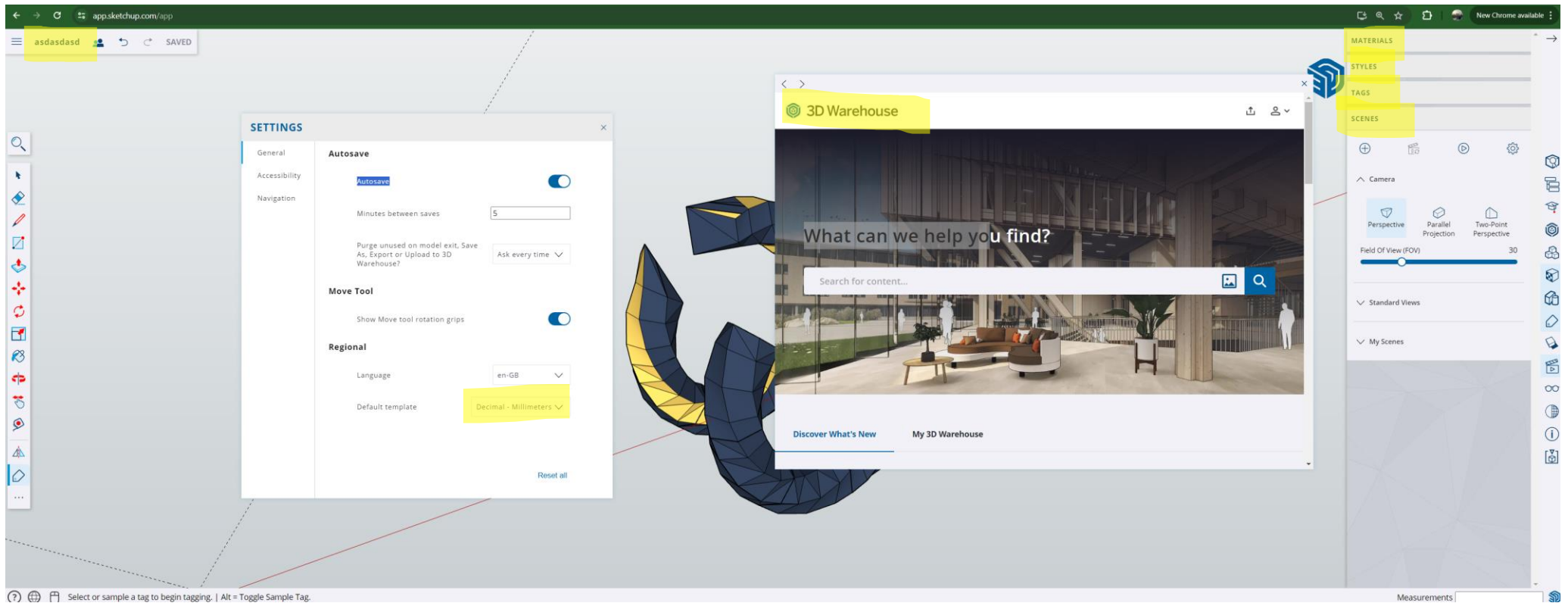
Well,

1. Setup the view
2. Menu in the top left and press print, which is the last item
3. Press the button on the bottom right, which saves to pdf.
4. Operating incorrectly configured printers are a whole other story and much more technical expertise is required to operate them. It is beyond my knowledge.

4. Model in SketchUp

Follow the below steps to produce a 3D model of your design proposal, using your developed design sketches as reference. Capture one screenshot of the tools and features used in each of the steps. Save the screenshots for submission below.

1. Open SketchUp Software.
2. Create a New Model by selecting the template with the correct unit of measurement in **Millimeters (mm)**.
3. Name and save your 3D model as a .skp file called: **3D Sketch Up Model_Your Name_AT 2**
4. Start to model by drawing the external walls of the apartment as per the measurements on the supplied Floor Plan
5. Use the **3D warehouse** to insert existing furniture items
6. Model the 4-panel folding screen.
7. Add the Screen to a **“Layer”** called Folding Screen, by using the Tag feature.
8. Apply materials to your 3D Model. In the **“Materials”** panel, select and apply colours from the drop-down menu. Experiment with different texture, colour and pattern options.
9. Select a ‘Style’ to create a sketch effect. In the **“Styles”** panel, select a drawing style from the drop-down menu. Experiment with different style options. Select one style.
10. Create and save perspective views as **‘Scenes’**. Save 4 x views of the Screen and 4 x views of the Studio space. Save your final images as .jpg files named perspective Images 1, 2, 3 etc.
11. You will now produce a **Floor Plan** of the final design of the Studio space.
12. The plan drawing should be rendered. Include dimensions and room names. Save your rendered plan as a .jpg image named Floor Plan.
13. Save your final 3D model and show your saved views to one other person in your class or at home.
What feedback did they give you? How **you will** use this feedback to make necessary changes to the model prior to presenting to the client.



Section 4 – Modelling in SketchUp

After reading the requirements of CUAACD312, I have come to the conclusion that this section is attempting to address the evidence requirement for a students understanding of CAD software and their ability to use the software and as well as identifying opportunities and appropriateness of apply that ability in different situations.

https://training.gov.au/TrainingComponentFiles/CUA/CUAACD312_AssessmentRequirements_R1.pdf

Evidence of Competency using CAD Software

CAD design is an essential component of engineering degrees.
The conceptual understanding of CAD features and associated component

	catalogues are further understood through the completion of a computer science degree. The following links provide evidence that the degrees have been completed.
Bachelors of Engineering – Mechatronics	https://graduaterregister.unsw.edu.au/?form%5BlastName%5D=Huynh&form%5BfirstName%5D=Tek&form%5Bdegree%5D=Bachelor+of+Engineering&form%5B_token%5D=552e.Qx-cmY_332vQ9OZzZD6PLfnFtMGbRg9_7ogduneSMQI.Nyn_tP-xui3iw7EaU0bWZY2T54evfjoYmNJ6gjjYU3NzL6rM9qi5UuSmvw
Bachelors of Science – Computer Science	https://graduaterregister.unsw.edu.au/?form%5BlastName%5D=Huynh&form%5BfirstName%5D=Tek&form%5Bdegree%5D=Bachelor+of+Science&form%5B_token%5D=4d13bbd7a19f38bd758fb497547d.u69lkg7JXMH0dcnnCFN34vOxx87LqTyHpInAXIsdE-8.3YI851m5DoOEGJiWQhIwIYPg_7jm8Ej_cXzCS5tXoeJ2AOhbKts9L8shA
Show 3D model to someone for feedback Person shown to: Trainer	<p>Feedback:</p> <p>The trainer was initially speechless resulting from the real time render using TwinMotion instead of SketchUp to present my work. After recovery from this initial reaction, they were then able to realise the terrible colour scheme within the studio apartment model. We then made real-time changes to the interior design to address these poor colour choices. After these changes, no further amendments were required for the colours, and decorations. As mentioned in the first question, the trainer said:</p> <p style="text-align: center;"><i>The space is now liveable</i></p> <p>I appreciate honest feedback, and I still yearn for the real criticism regarding my initial colour choices.</p>
Further Comments	<p>If the provided evidence is unsatisfactory in addressing the core outcomes and evidence required for completion of this subject, please return my assessment and I will do the screenshots.</p> <p>However, please consult my trainer first if you are not my trainer.</p>

5. Prepare and Present views.

For assessment Task 1, submit the following:

1. Complete Assessment Task 2 Workbook
2. From the 3D model images and the Floor plan you have saved, you are to produce a creative and professional presentation your final design concept. You can choose a creative presentation option, for example, animation, digital boards, slide show, etc., but your presentation must include:
 - title page,
 - floor plan (scaled and rendered) - a title block with your name and project name,
 - six (6) perspective view images of the 3D model (the screen and the studio space) - label each image,
 - a screenshot of your images and files properly organised and stored on your computer or the cloud.

6. Self-Reflection

1. Reflect on your design and 3D drawings. Are they successful in communicating the concept or idea?

Explain how and why.

They are successful because

How: They provide the viewer with a viewing perspective which very closely represent the perspective of key elements when viewed in reality

Why: 3D is the natural way our eyes receive information about the world

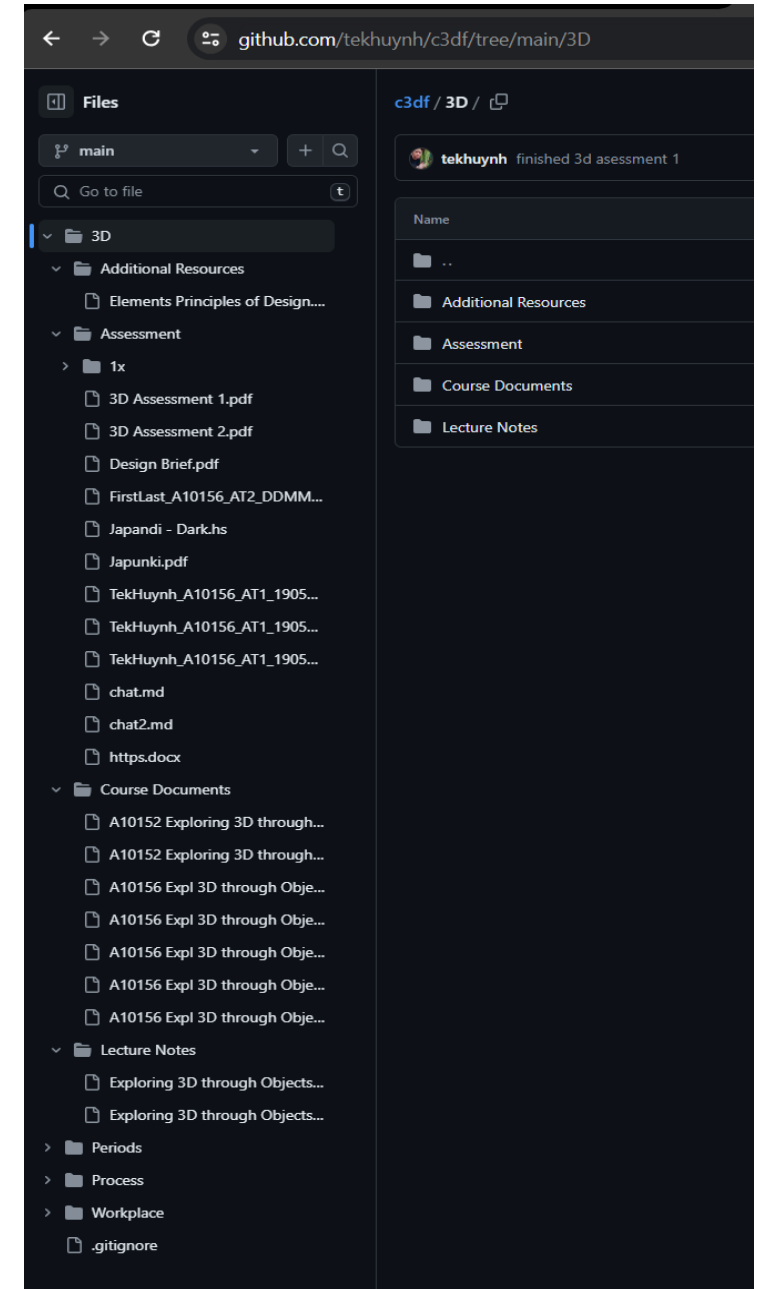
Who: I'm a mfing engineer

2. What challenges and issues did you have in the design of your 3D model?

I did not have enough time to figure out the rigid body constraints in Blender, which would have enabled me to fully represent my concept which was to show that it is both very mechanical and straight (which is represented) , and also able to mould into organic wavy forms (not represented).

3. What could you do differently in the future to improve your drawings?

I think this question is either outdated or out of touch. Unless its really talking about the drawings, then I guess, nothing, because they did their job successfully.



In the case of the design of the screen, I could have done nothing. The design went through multiple iterations and in its final state, encapsulates artistically a fundamental reality of nature. That it is both wave and particle. The concept is complete, however, the textures and colour could be updated, which doesn't exactly do much in the end to improve the concept. Don't challenge me though, my mind just turned on and saw an opportunity to engineer the materials to further refine this concept. I have to tell it no. Maybe after the term finishes. Also, I haven't completely thought out the hinge mechanism to be used.

Ohhhh, I get what this means now. Making drawings to communicate the updated ideas. Geez. Could have been more specific. Anyways, in my case, I evaluated the different modes of delivering information which yielded enough effect and optimised for efficient preparation time. So, to communicate my final idea, I spent the time during the break of one of the class sessions to build my concept out of paddle pop sticks I had left over from building the model, and a bunch of sticky tape. While the concept was not able to be 100% demonstrated through the model, the bulk of the idea was communicated both effectively and efficiently, especially when compared to drawings which fall short when demonstrating motion. In this case, I simply showed the trainer how it moved used a few words to convey the envisioned movement. It was easier for me and for the trainer to communicate, there was no long winded explanation. Actually, the trainer didn't really communicate. They just stared dumbfounded at the model as I played with it in front of the webcam. Oops that almost didn't sound appropriate. However, this sort of thing is not applicable to all situations such as higher complexity designs. I think with the prevalence of video capture and ubiquity of the internet, drawings should no longer be the standard mode of communication. We should be finding ways to be more efficient and effective, especially with the advancements of Machine Learning. Our progression doesn't need to be refined before its presented, it only needs to be recorded in some way and communicated successfully.

Actually, for this to happen, I think we need to make a habit as a community to show the imperfections, realities and mistakes we encounter through our process. We need to celebrate them as a sign of progression, not failure. I think this will foster a more forgiving and well-rounded culture with more balanced expectations and ideas about what it realistically takes to be successful with examples and stories about the detours and obstacles taken i.e. failures. I think it will give permission for others to finally get over their failure by seeing it no longer as their failure, but our failures. And I seem to be a total hypocrite because I don't think I've shown failure yet. Perhaps it's because I have already failed in that way to know better this time. Or maybe I'm scared of how much it hurts. Baby steps I guess.

7. References

You must list all sources of information in the 'references' section of this workbook. Include books, websites, magazines, or any other sources of information you have gathered to complete your assessment task using the *Harvard Referencing Style* (www.citethisforme.com).

See additional resource for referencing requirements.

training.gov.au, training.gov.au, viewed 23 June 2024, <<https://training.gov.au/Training/Details/CUAACD312>>.

Assessment Requirements for CUAACD312 Produce computer-aided drawings n.d., viewed 23 June 2024, <https://training.gov.au/TrainingComponentFiles/CUA/CUAACD312_AssessmentRequirements_R1.pdf>.

CUAACD312 Produce computer-aided drawings Release: 1 n.d., viewed 23 June 2024, <https://training.gov.au/TrainingComponentFiles/CUA/CUAACD312_R1.pdf>.

VETNet: Home n.d., vetnet.gov.au.

8. Additional Pages

You may insert additional pages as evidence at the end of the workbook if necessary.