



Bryn Williams

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Assessment 2: Creative and Iterative Development

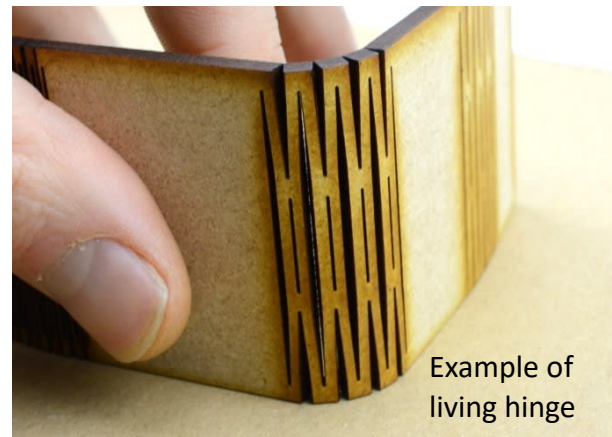
Digital Form and Fabrication

Background Research

I think this could be a more stable version of the plywood and living hinge combined and I like the way its joined to the frame – definitely something for the future



I Love the way this folds up into a carriable box



Example of living hinge



I like the way this living hinge goes all the way across the plywood



I like the fact the living hinge goes all the way through the work but is supported by the full bars



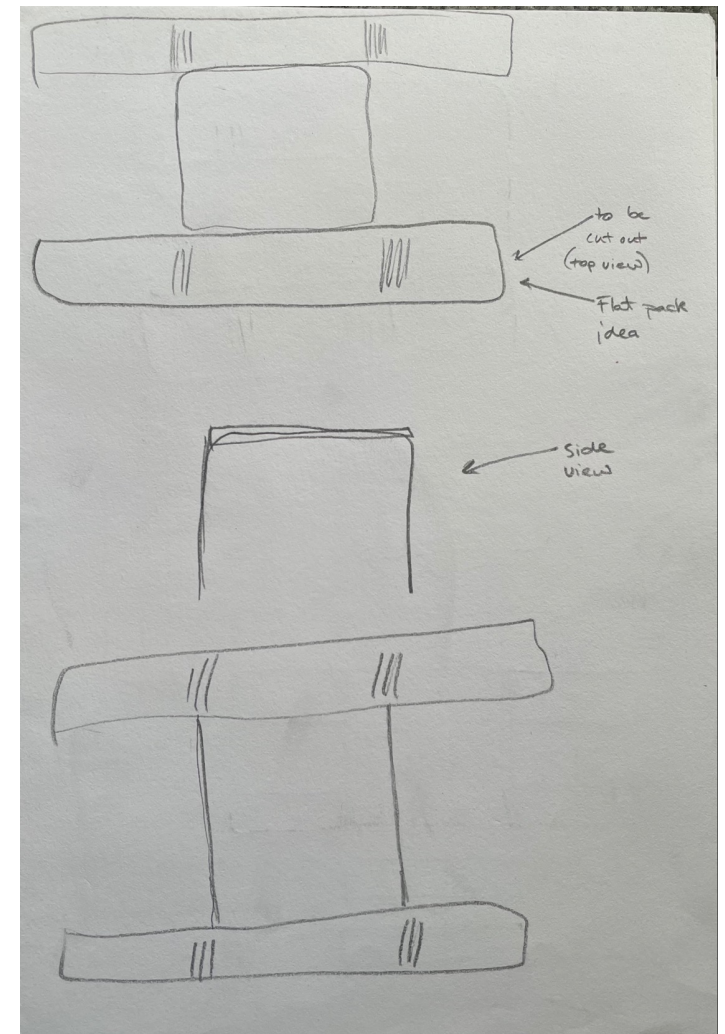
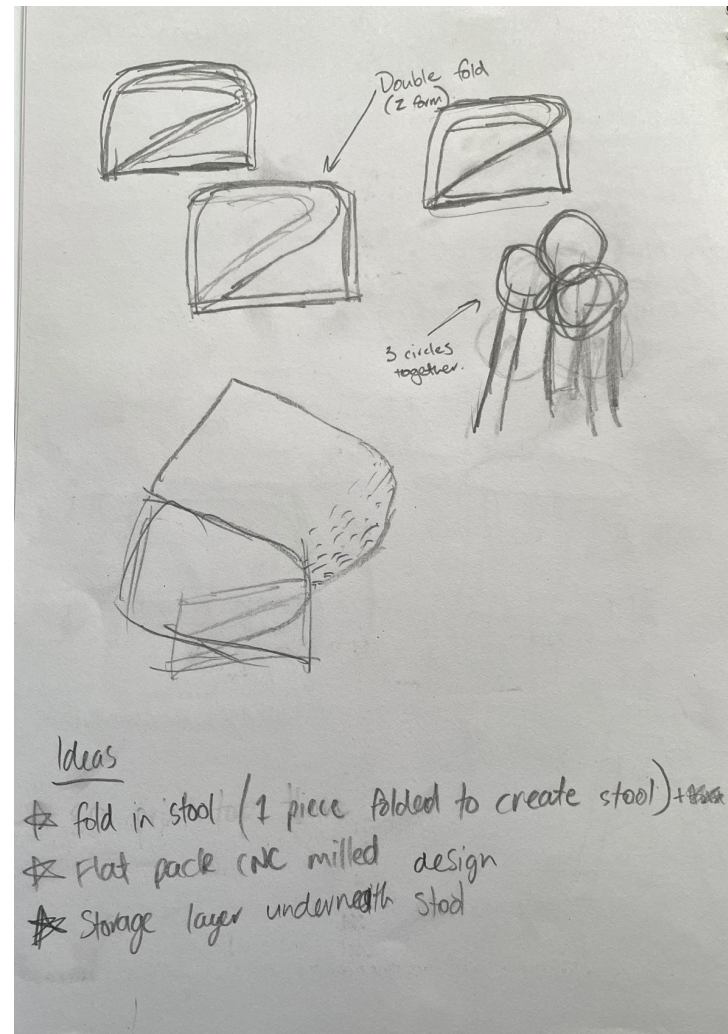
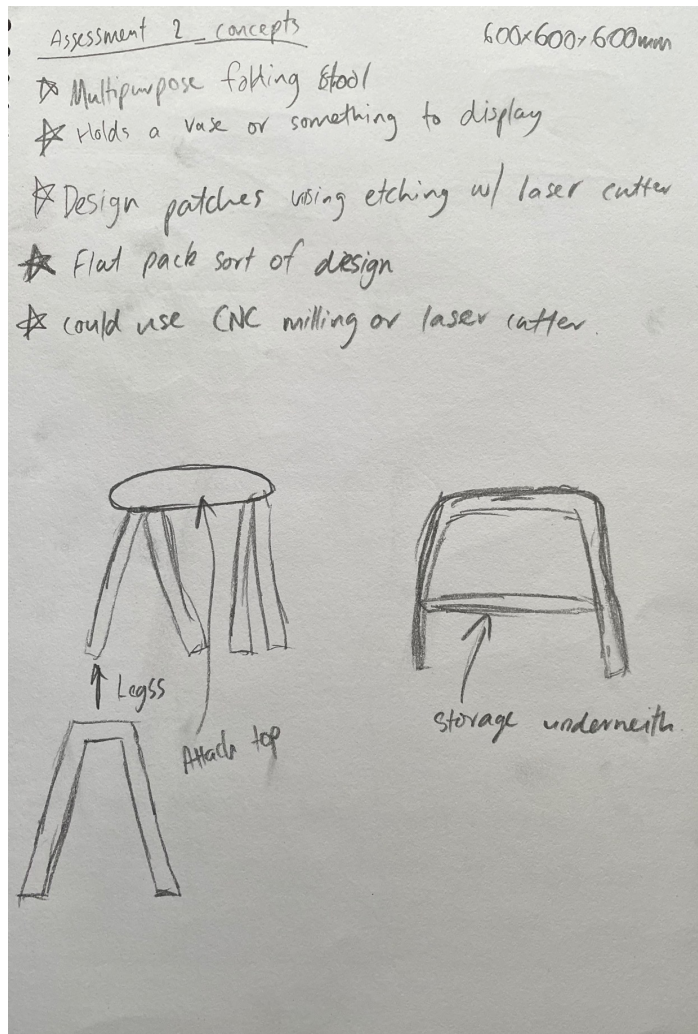
The use of the living hinge on these corners interested me quite a bit



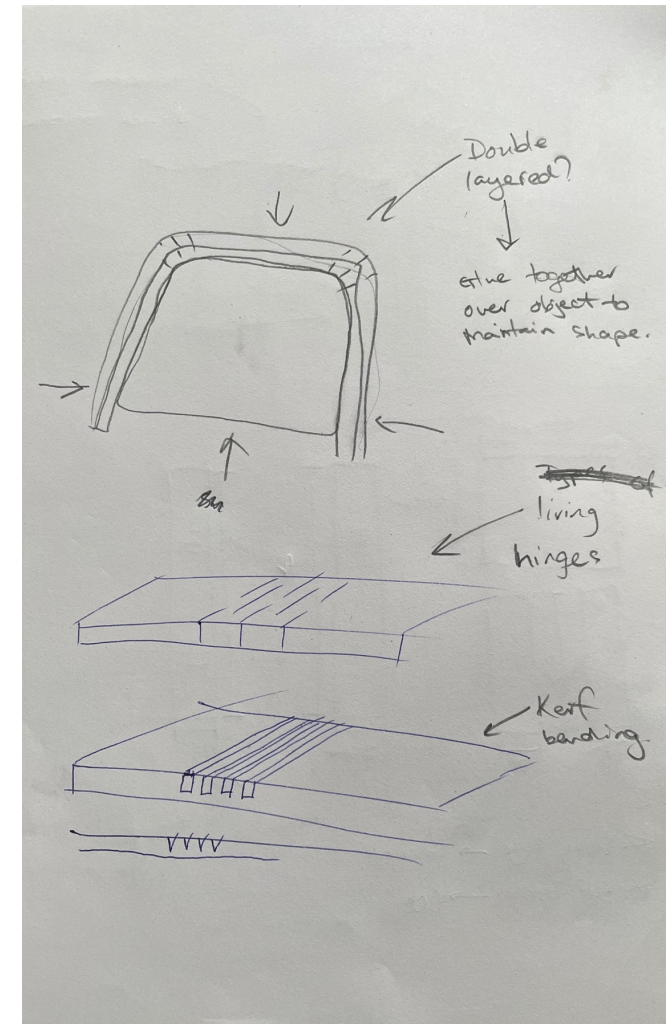
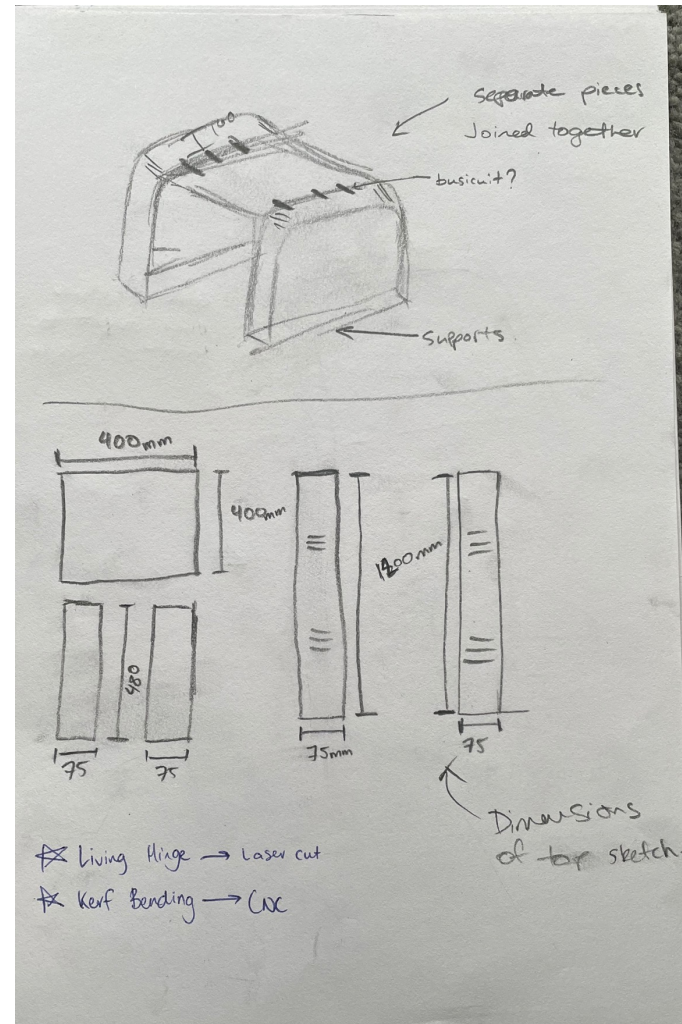
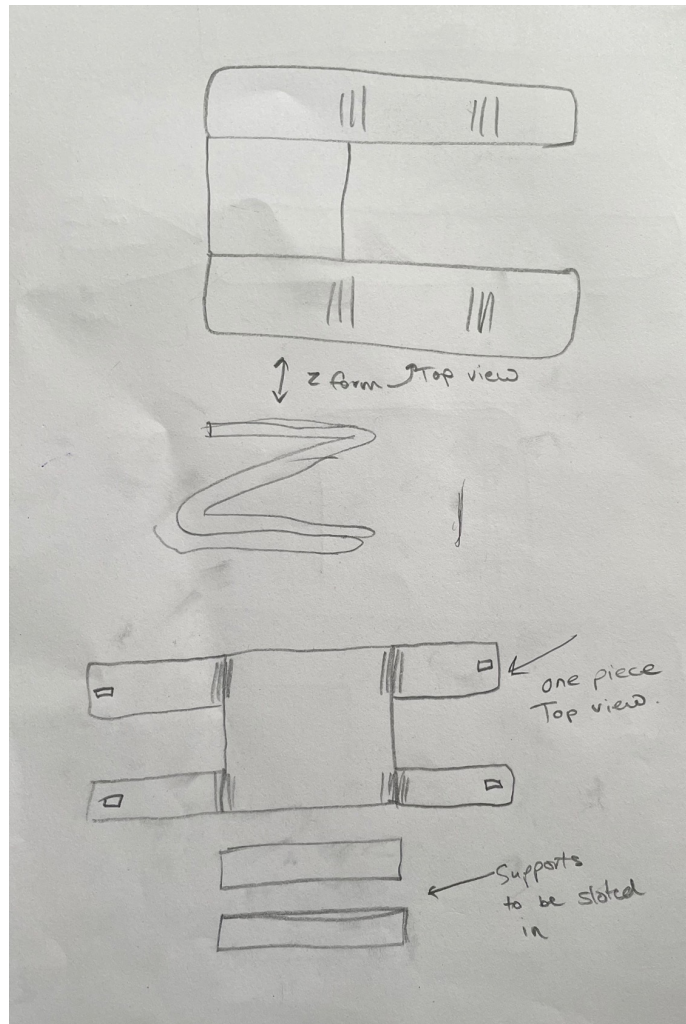
Design/Idea Development

- As you will see, I had a few designs that I liked, the one that stuck with me most though was the idea of the living hinge. Personally, I think it is a very smart way to create more flexibility in materials that would otherwise break under the stress.
 - I ended up going using living hinges and created a prototypes based on sketches that are shown
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Design/Idea Development



Design/Idea Development



Iterative and Creative Development

3mm

4mm

5mm

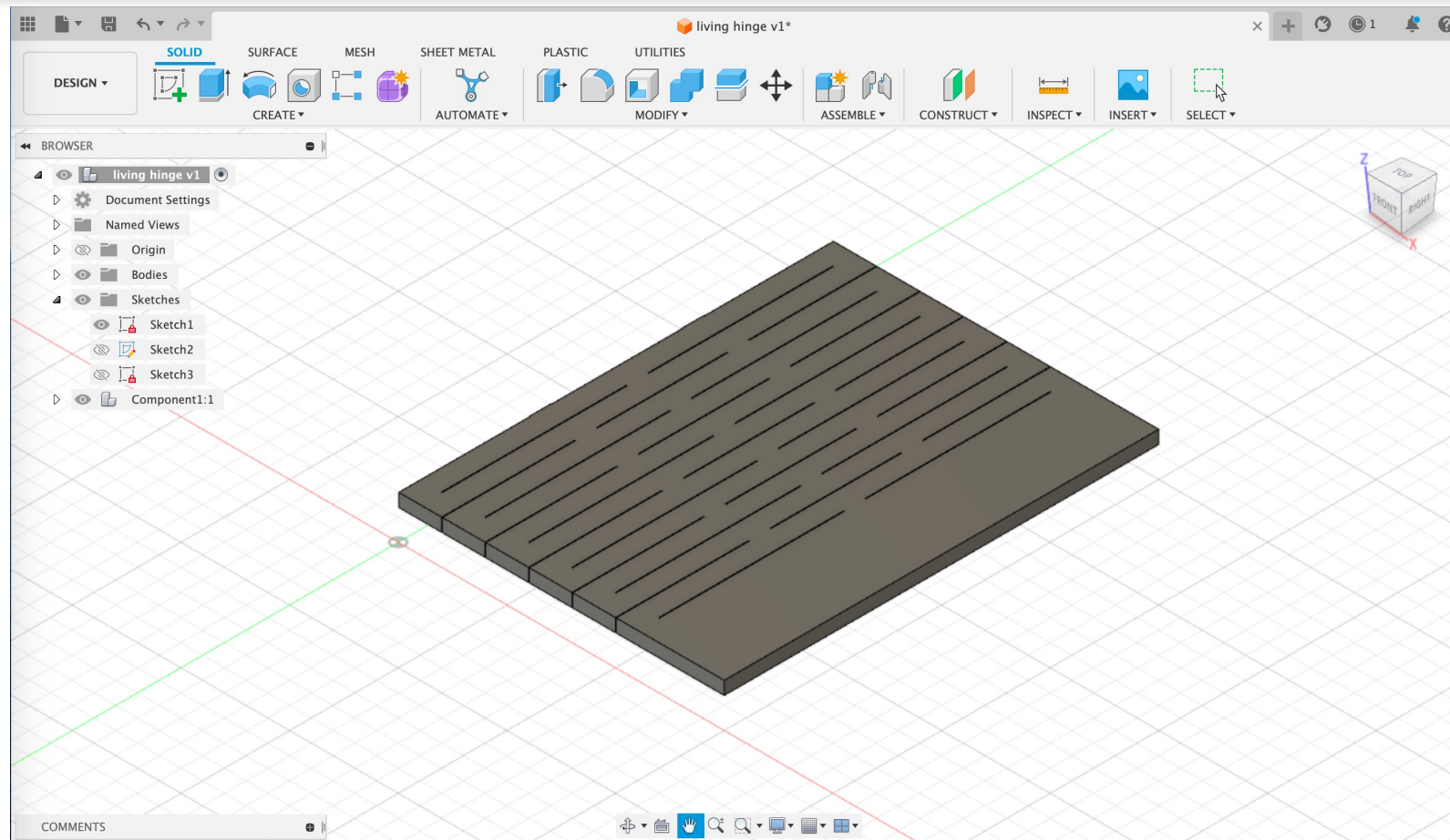
Iterative and Creative Development

- Shown are my living hinge tests, Starting with 3mm going up to 5mm. This is to understand how the spacing reacts to being bent, the further away the spacing the less bend can be applied.



Iterative and Creative Development

- 3D model of the living hinge, this will be printed out as a 3D component from the 3D printers,
- I found it quite difficult to get the living hinge correct on fusion, but I am interested to see the result.



Design Prototype

- Here is a failed prototype of my design, I tried to use the living hinge all the way across the width of the stool. The reason this prototype failed was a mix of the spaces between the hinges as well as the quality of the plyboard.
- There will be more prototypes however they are not pictured in this documentation but will be provided when physical submission is submitted.



Project/Process Reflection

- Overall, I think that the living hinge is a great tool that can be utilised when making certain objects. There are some things I wish I did a bit differently however, and that includes adding more living hinges and maybe using this process for things other than just making one piece of plywood flexible. I think my design could do with a bit more work as well however I think that the way I used the living hinge worked very well for what I was aiming for, and it created the results I was looking for. Ideally, I would've liked more time and more materials to create something even better however with what was available I am quite pleased.