

DIGITAL PORTFOLIO

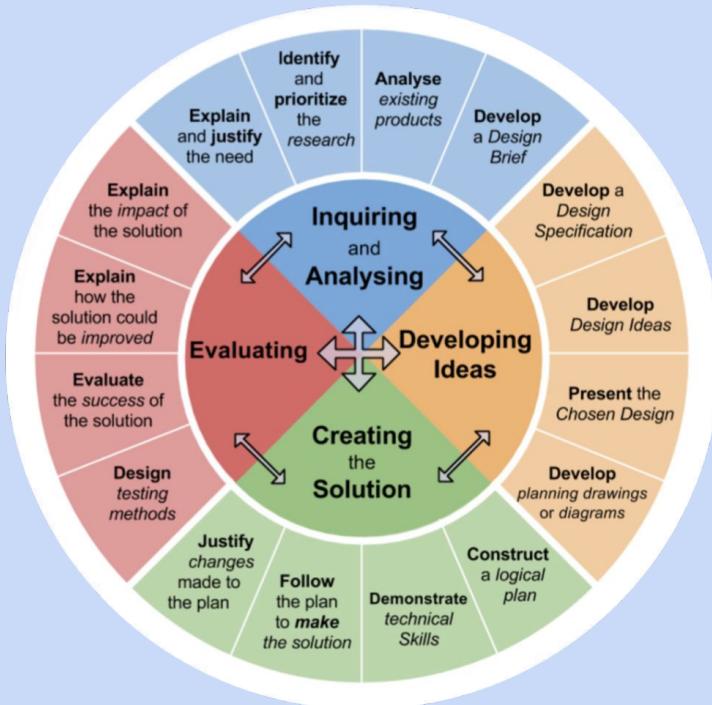
Grade 7 MYP Product Design

Name: Aljazia

Teacher: Ms. Florentina

SUMMATIVE Criteria A- Inquiring and Analyzing

Design Cycle





Grade 7 Unit: Islamic Clock Project Criteria A- Inquiry and Analysis

Name: Aljazia Al Abbasi

Teacher: Ms. Florentina Niculae-Evans

Key Concept: Communities: **Communities** are groups that exist in proximity defined by space, time or relationship. Communities include, for example, groups of people sharing particular characteristics, beliefs or values as well as groups of interdependent organisms living together in a specific habitat).

Global Context: Personal and Cultural Expression

ATL : Research

IB Learner Profile: Inquirers, Knowledgeable, Thinkers, Communicators, risk takers and Reflective.

Statement of Inquiry

Throughout history, designers have used other global forms of **cultural expression**, or **communities traditions**, as a source of **inspiration** to adapt and create new inventions.

SUMMATIVE Criteria A- Inquiring and Analyzing

Design Problem

My target audience is people who are looking for a better clock to organize their time but in a stylish and fashionable package.

There are lots of people who have trouble keeping their time organized and so when there is no clock in the market that meets their criteria, which is a stylish clock that is bold and clear to read, their work life will suffer as assignments and work will not be submitted on time because of a lack of time management. The issue is that there is a lack of artistic designed clocks in the market, especially clocks that have Islamic art.

This is resulting in a gap in the market in fulfilling certain tastes. I intend to solve this by creating a customized clock with Islamic designs.

Product Analysis

Aesthetics- The colors used in this design are red, blue, white, yellow, and an off white color. They have used these colors in way that makes them work well together as white and yellow by themselves do not usually work well together. The designs used in this clock show clearly that this clock is based on Islamic designs, That is something they did well.

Target Market - The target market of this clock is people seeking Islamic art products, because it has a design that uses Islamic patterns, it's also for people who are looking for a stylish clock to help organize their time.

Functions- The function of this clock is to be hung up on the wall and display the time clearly. Also to represent and display the Islamic culture and history in a unique way.



Manufacturing - To manufacture the clock the materials used will be laser cut and glued together, the clock also has 2 layers of wood under the layer of acrylic to keep it sturdy.

Size and shape- The outline shape of this clock is inspired by Islamic light pendant(called fanoos in Arabic), the size of the numbers is a bit small as from a distance you can't see the numbers, so I would enlarge them, although the clock itself is around 40cmx40xm.

Materials- The materials used to make this clock are wood and acrylic, there are 3 layers to this clock 2 are made out of wood to keep it sturdy and there is a layer on top with the engraved acrylic.

Aesthetics- The design of the clock is simple it does not include or use any designs made of acrylic, and although the design is good it does not portray the Islamic theme well, the placement of the numbers also seems to interfere with the clock hands, and so I suggest moving the numbers out more and adding colors using acrylic because this design is very simple and does not attract the eye and bring attention to the numbers or the clock as a whole.

Target Market - This clock's target market will be people who are interested in simple designs this target market is very general as this is a very plain design it doesn't have colors so it may not attract people, and the Islamic theme does not show.

Functions- It is a wall clock, it will be displayed on the wall, although I don't think it will show any Islamic theme to visitors that do not know the specific geometric design on the clock.



Manufacturing - This clock is laser cut, and there are two layers, the bottom that acts as a spine, and the top where the design and numbers are located.

Size and shape- The shape of this clock is a hexagon, which is a geometric shape. It appears that from a distance you will not be able to see any of the designs or even the numbers, so I would move the numbers and make them bigger and also add color using acrylic. The size is around 40cmx40cm

Materials- It's made up of 2 layers of wood the bottom is for support and to keep the clock sturdy, and the top layer is where the number and engraved design is places.

Aesthetics- It has a simple and modern design, this clock also features all the numbers around a clock instead of just the primary four, although it would not attract people who are interested in bold design and bright colors. With heavy accent border.

Target Market - The target market is most likely people who understand Roman numerals, as the numbers on it are Roman numerals. Someone who doesn't know roman numerals won't know how to read it.

Functions- The clock display the time in full numbered dial.

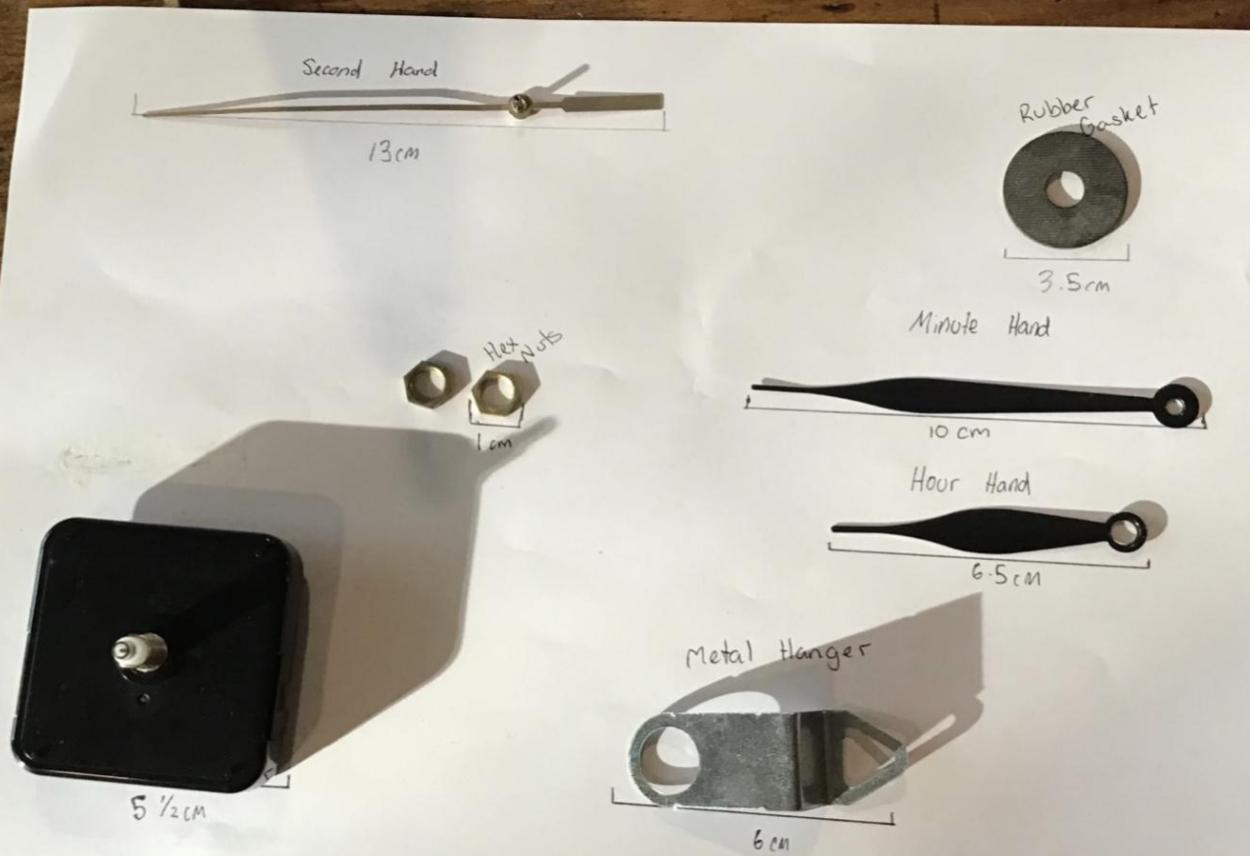


Manufacturing - This is clock seems to utilize excessive production tools and methods. Inclusive of CNC, laser, metal fabrication and possibly glass cutting

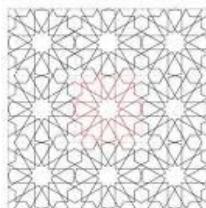
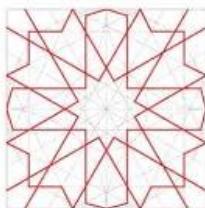
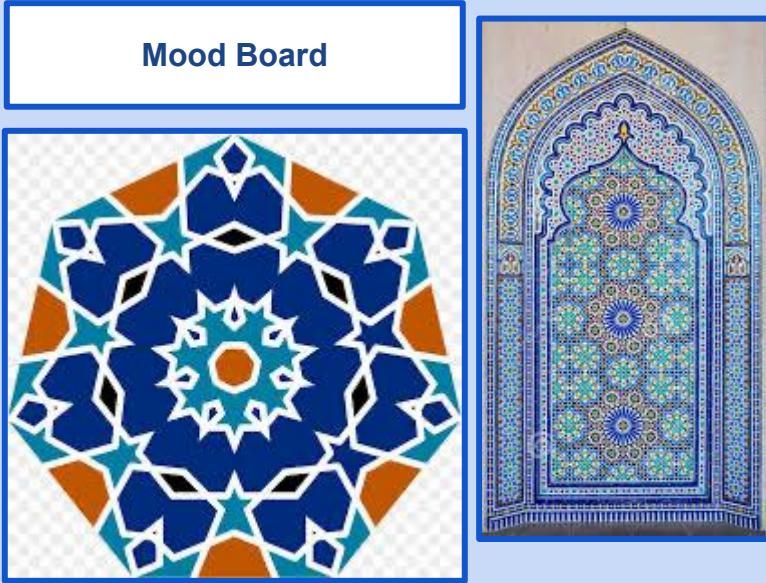
Size and shape- The shape of this clock is a perfect circle. This clock doesn't have a stand, most likely this clock is meant to be hung up on the wall, this can tells us a lot about the size —I can assume from just the picture that this clock is good as people will be able to read it from a distance and so it's very accessible

Materials- It seem that the clock is made of wood, glass, and metal.

Mechanism



Mood Board



Design Brief

I will design and make a clock to solve the issue of people not organizing their time and then losing track and wasting it. I will solve this problem by designing and making a clock that will clearly display the time, in a fashionable way, so it is easy to read. It will also be inspired by Islamic designs to appreciate the UAE's and region history and because I am very curious about the origins of Islamic designs and this project will give me the opportunity to explore the history of these designs.

The target market for the clock is people who need help organizing and keeping track of the time, people who want a clock that will represent Islamic or Arabic culture and history.

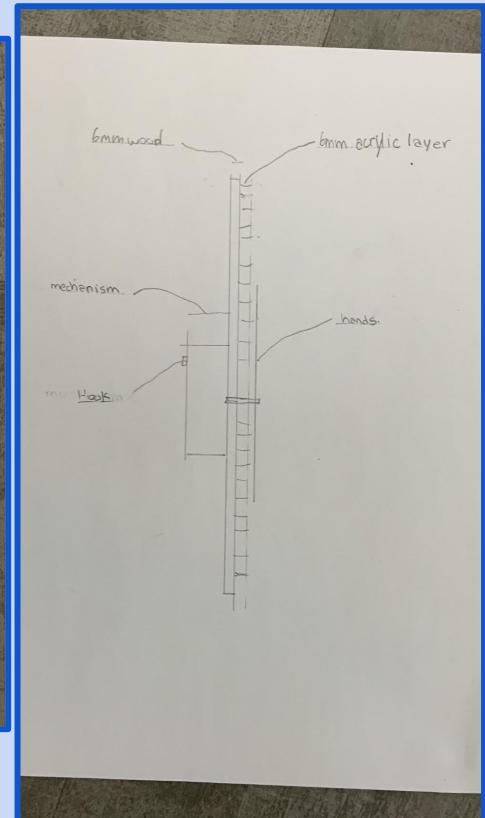
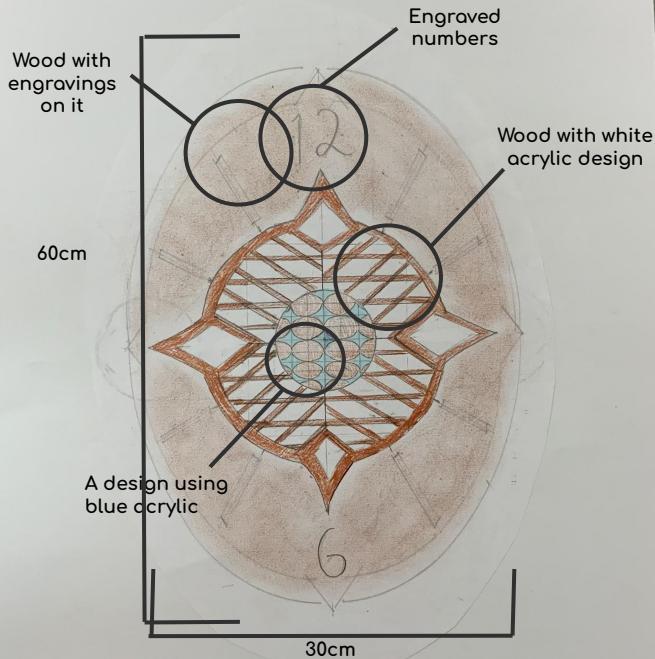
I am going to use a systematic geometric design. My clock will be using the materials acrylic and wood as well as dimensions around 30cmx30cm.

I will be using the colors blue, white, and similar colors that are inspired by Islamic patterns, my target audience will be people who like these colours and have a color pallet in their home that will match with this clock.

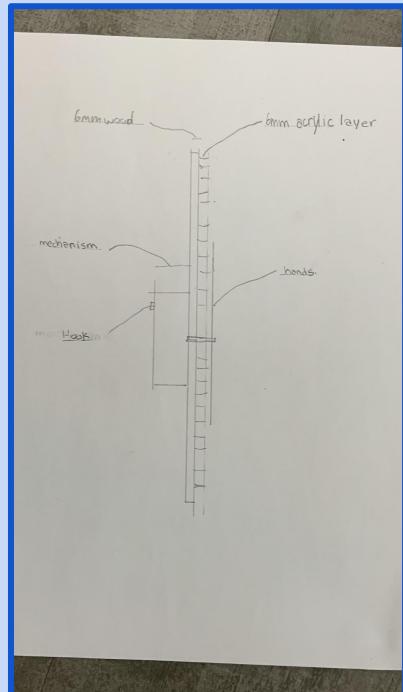
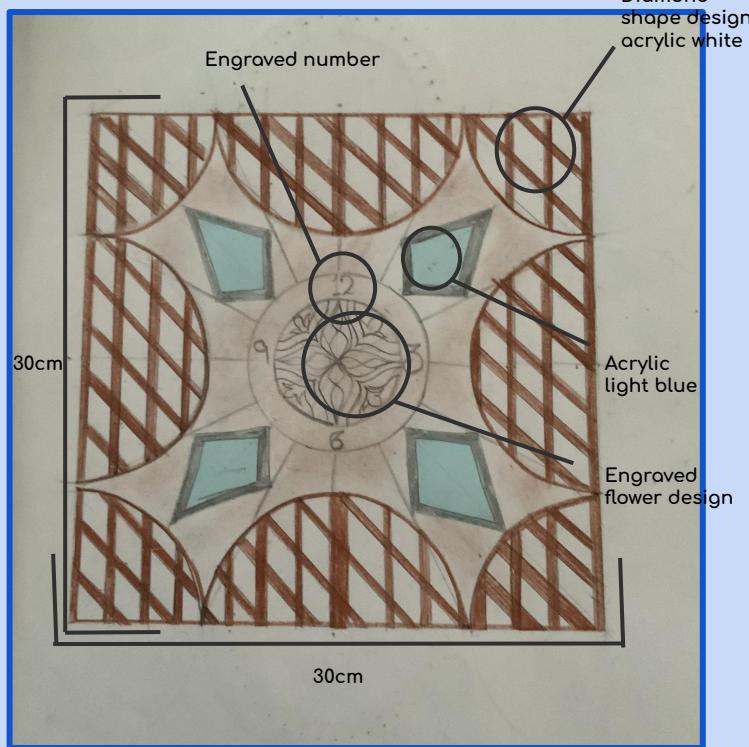
SUMMATIVE Criteria B - Developing Ideas

Key Words	Specification Point	Justification
Aesthetics (colour/shape)	<ul style="list-style-type: none"> • It should have islamic themed patterns • It should have colors that work well together • the numbers should be placed somewhere that will work with the design but also make it so the clock is functional • It should have at least two layers • They should have plywood engravings 	I wanted to explore the Islamic patterns and the different ways it has been represented across different cultures. I was generally more interested in geometric(Arabesque design) patterns during my research period. I also wanted the clock to function properly as the design aspect of anything is just as important as functionality.
Customer	<ul style="list-style-type: none"> • My target audience is people who need to organize their time. And also people who would like to see islamic representation more. And people who Might be interested in design or people who are interested in the history of Islamic. 	This clock is based on Islamic designs, and so it will attract a community of people who are interested in a functional clock with Islamic patterns and culture in it.(it will serve a niche market.)
Size	<ul style="list-style-type: none"> • The clock will be around 250 mm x 250 mm if it is a circle, and if it is not it will have a width below 300 mm and a height below 400 mm. 	This size is good as the numbers on the clock will be legible. A small size wouldn't be functional as you wouldn't see the numbers from a distance, and as this clock will be hung on the wall you need to be able to recognize the numbers on it easily.
Materials	<ul style="list-style-type: none"> • The materials I will use will be acrylic and plywood. 	I will be using these materials because acrylic has many color options -and to achieve the same effect of islamic design patterns colors are a very important aspect.
Manufacture	<ul style="list-style-type: none"> • To manufacture this we will use laser cutting and sawing. To smoothen the pieces out, we will use the belt sander • If multiple were to be made they must be same size, shape and materials. • It should be able to hook to a wall. 	I will be using this machinery to manufacture the clock as this type of machinery is best for creating designs with accuracy and is the most convenient option available to me.
Function	<ul style="list-style-type: none"> • It will serve the purpose of representing Islamic pattern designs as well as being a wall clock that will help many people organize their time. 	The main function of this clock is to display time in order to assist people who have trouble keeping track of and organizing their time. It will serve this function as it was designed using Islamic patterns as inspiration and when displayed on the wall it will represent this culture and history.
Theme	<ul style="list-style-type: none"> • The clock will have a Islamic pattern theme. 	I have chosen this theme as I would like to represent my culture in the design and explore the history and story behind the geometric designs we have created.

Design idea 1

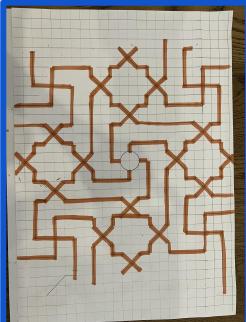
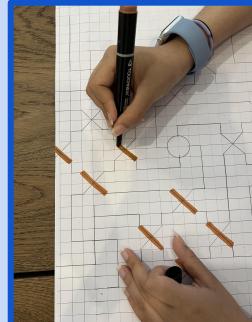
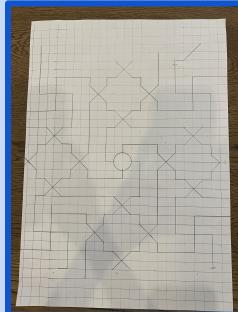
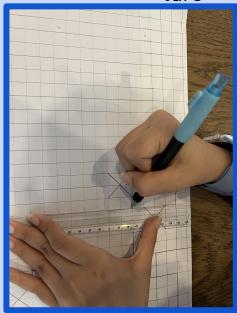
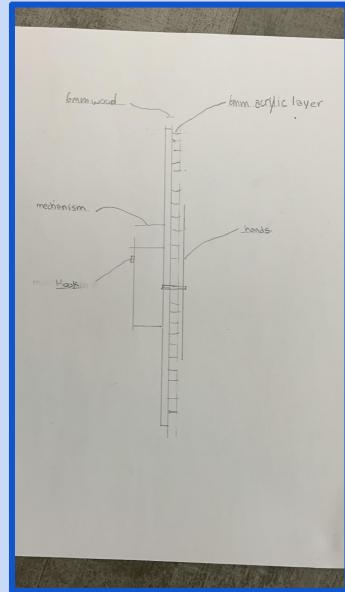
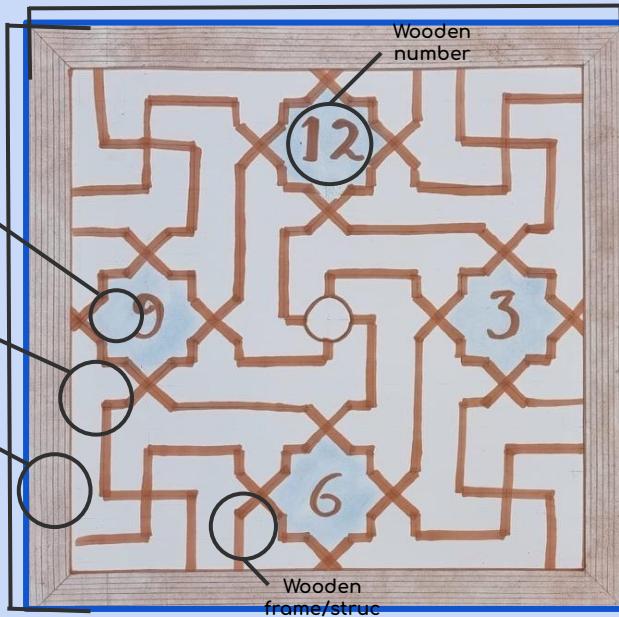


Design idea 2



Design idea 3

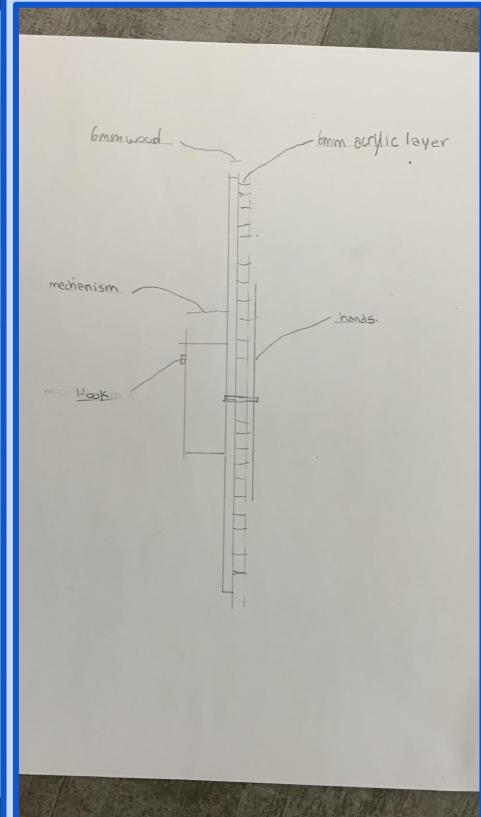
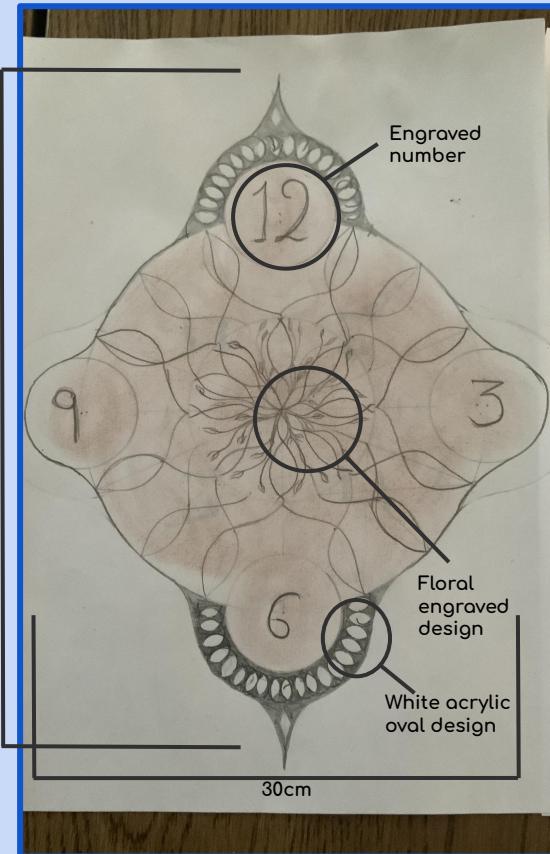
30cm



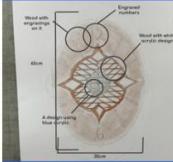
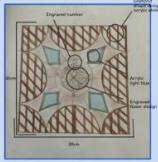
Design idea 4

60cm

30cm



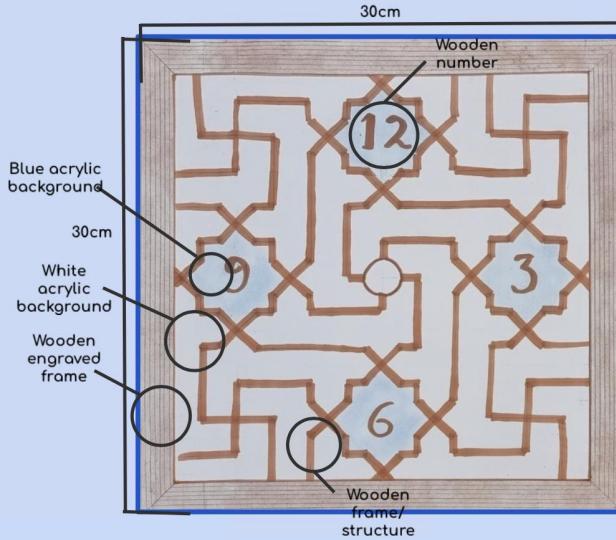
Evaluation of design ideas against specification

	Design 1	Design 2
Aesthetics (color/shape): Islams design, wood finish, colorful	 60cm 30cm	 30cm
Customer: design oriented with focus on Islamic style.	<input checked="" type="checkbox"/> The design is not Islamic related	<input checked="" type="checkbox"/> In the design it shows the Islamic design well
Size: less than 30cmx40cm.	<input checked="" type="checkbox"/> It does not meet the criteria of Islamic design	<input checked="" type="checkbox"/> The design meets the criteria of the customer
Materials: Acrylic and wood.	<input checked="" type="checkbox"/> The size is larger than planned	<input checked="" type="checkbox"/> The sizer is below the maximum
Manufacture: laser, saw, sander.	<input checked="" type="checkbox"/> It uses both materials in the design	<input checked="" type="checkbox"/> It uses both materials in the design
Function: display time clearly, express art	<input checked="" type="checkbox"/> It will use a laser cutter to create	<input checked="" type="checkbox"/> It will use a laser cutter to create
Theme: Islamic	<input checked="" type="checkbox"/> It does not clearly show the time	<input checked="" type="checkbox"/> The number for the time are not placed properly
	<input checked="" type="checkbox"/> The theme is not shown in the design.	<input checked="" type="checkbox"/> The Islamic theme is shown in the design

Evaluation of design ideas against specification

	Design 3	Design 4
Aesthetics (color/shape): Islamis design, wood finish, colorful	<input checked="" type="checkbox"/> In the design it shows the Islamic design well	<input checked="" type="checkbox"/> In the design it shows the Islamic design well
Customer: design oriented with focus on Islamic style.	<input checked="" type="checkbox"/> The design meets the criteria of the customer	<input checked="" type="checkbox"/> It does not meet the criteria of Islamic design
Size: 25cm circle , 30cmx40cm square.	<input checked="" type="checkbox"/> The sizer is below the maximum	<input checked="" type="checkbox"/> The size is larger than planned
Materials: Acrylic and wood.	<input checked="" type="checkbox"/> It uses both materials in the design	<input checked="" type="checkbox"/> It does not use both materials
Manufacture: laser, saw, sander.	<input checked="" type="checkbox"/> It will use a laser cutter to create	<input checked="" type="checkbox"/> It will use a laser cutter to create
Function: display time clearly, express art	<input checked="" type="checkbox"/> It clearly displays the time	<input checked="" type="checkbox"/> It clearly displays the time
Theme: Islamic	<input checked="" type="checkbox"/> The Islamic theme is shown in the design	<input checked="" type="checkbox"/> The theme is not shown in the design.

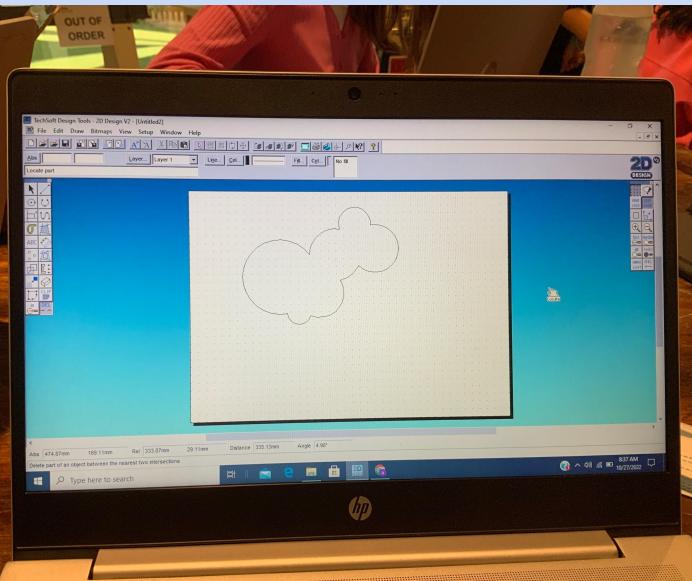
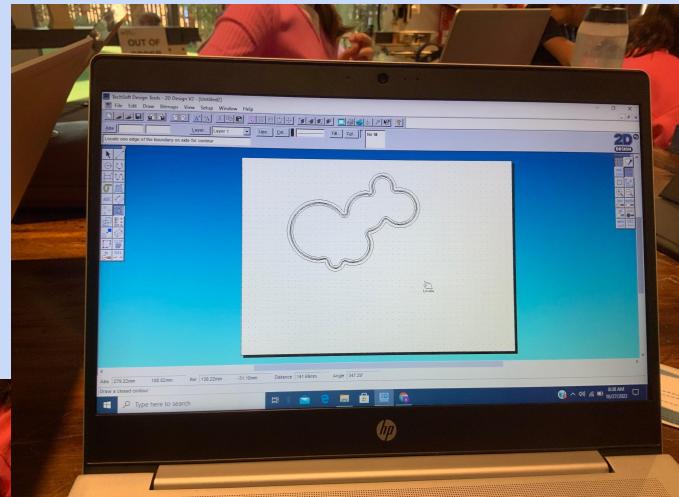
Final idea and justification



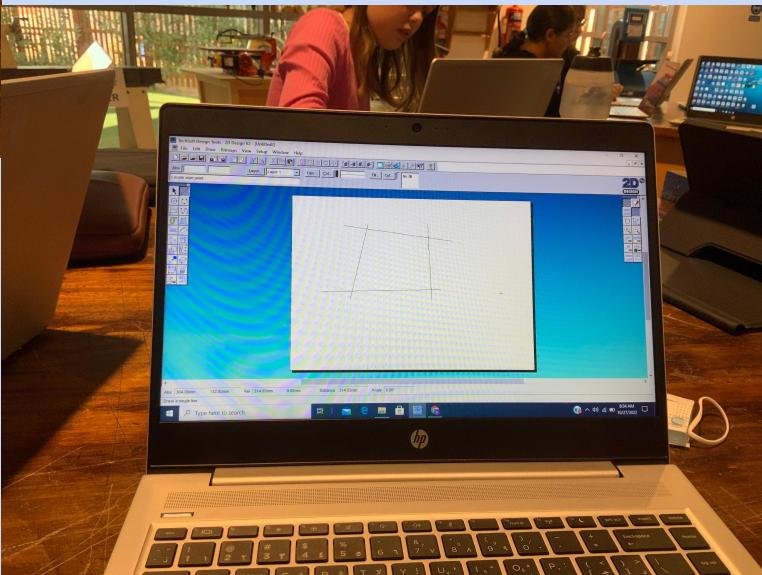
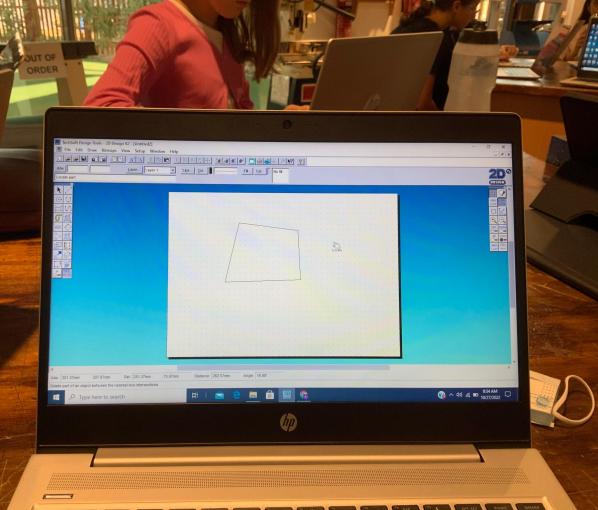
I have chosen design 3 as it meets all the specification.

SUMMATIVE Criteria C - Creating the Solution

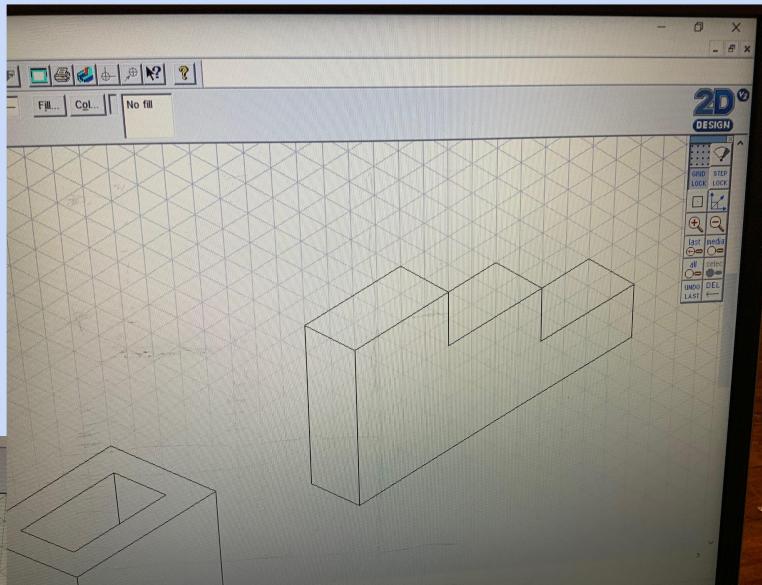
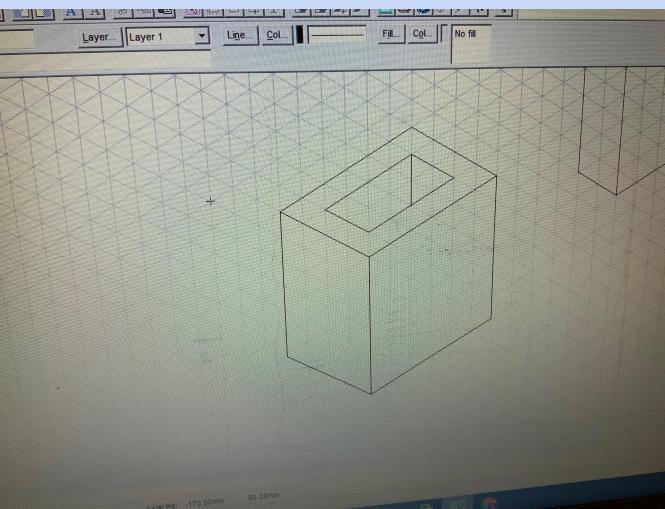
2D design process - Practice



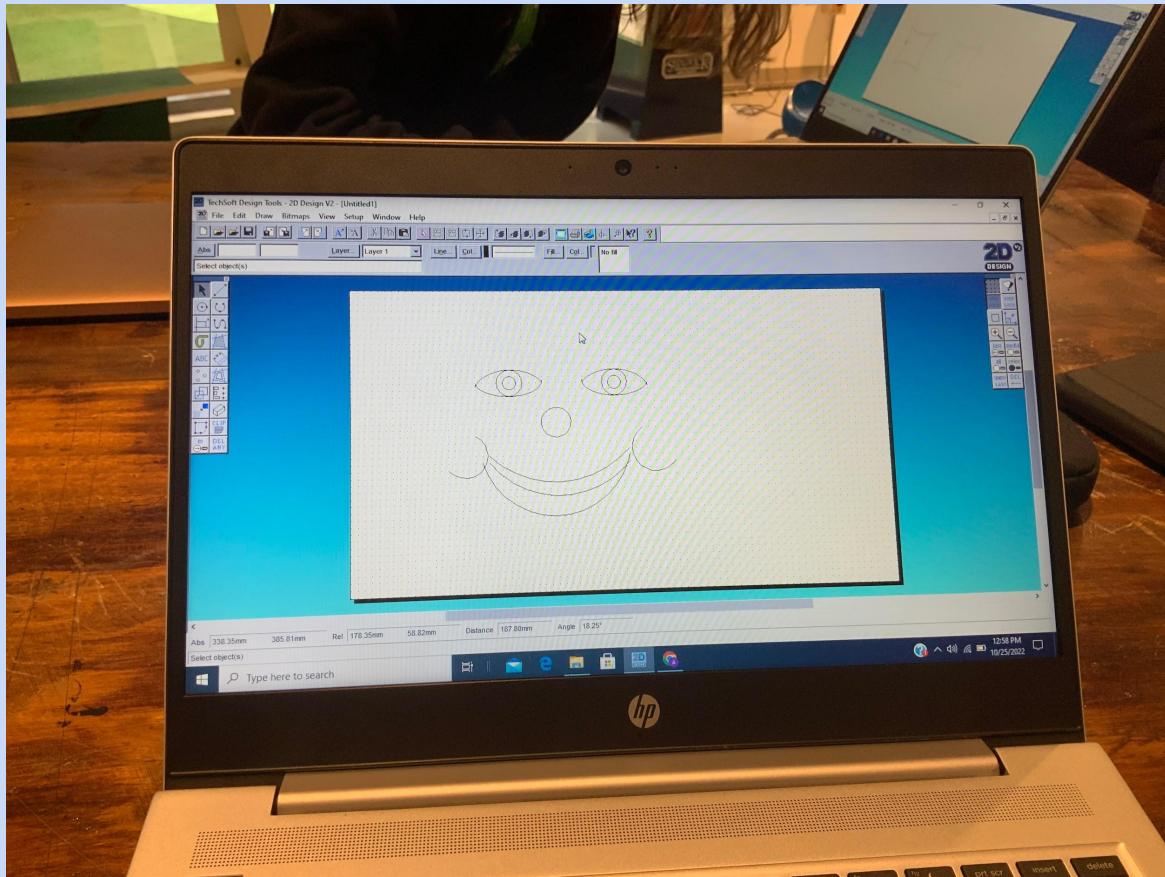
2D design process - Practice



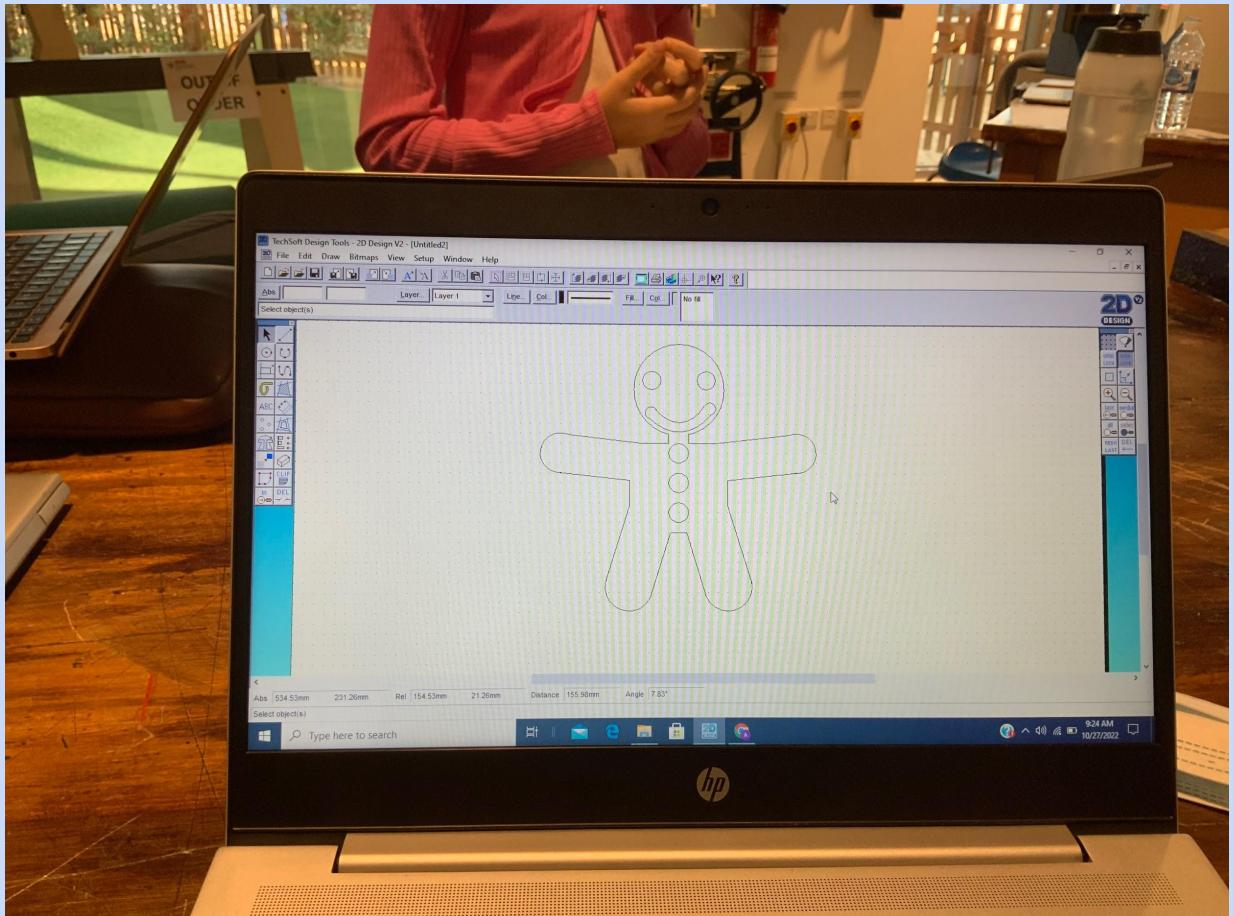
2D design process - Practice



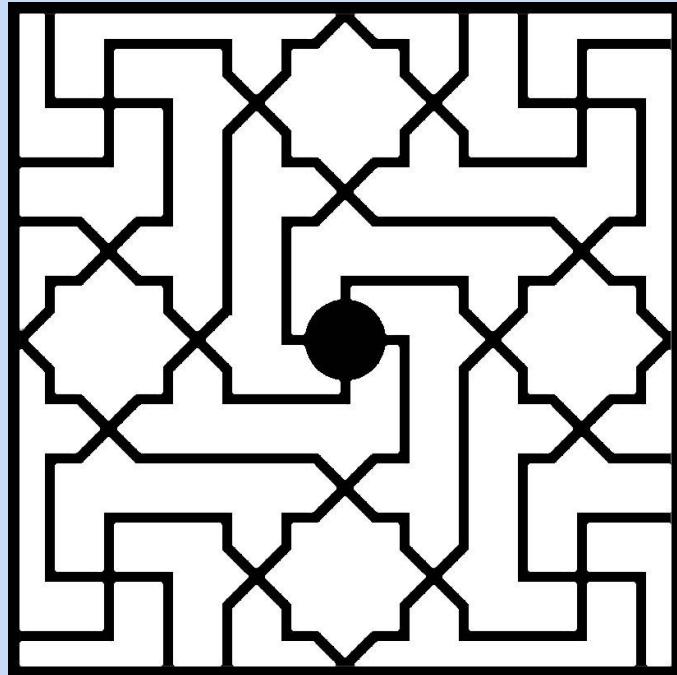
2D design process - Practice



2D design process - Practice

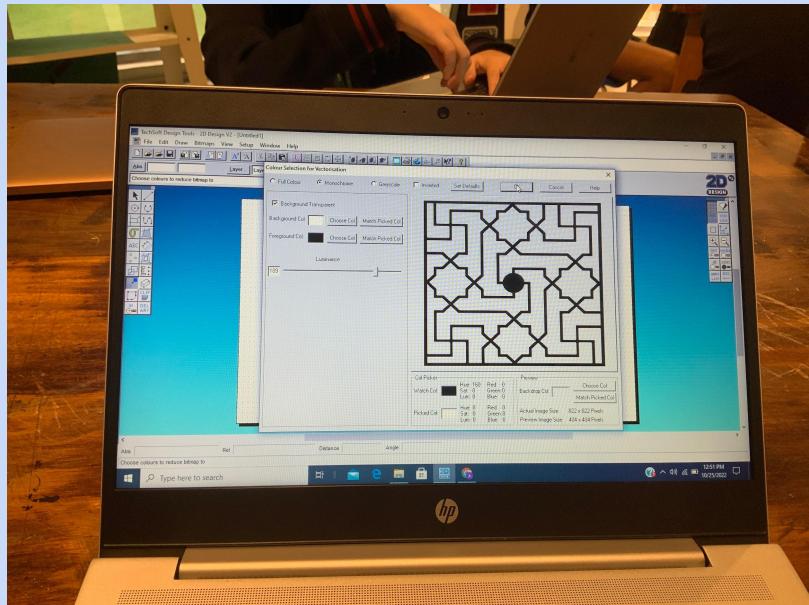


2D design process



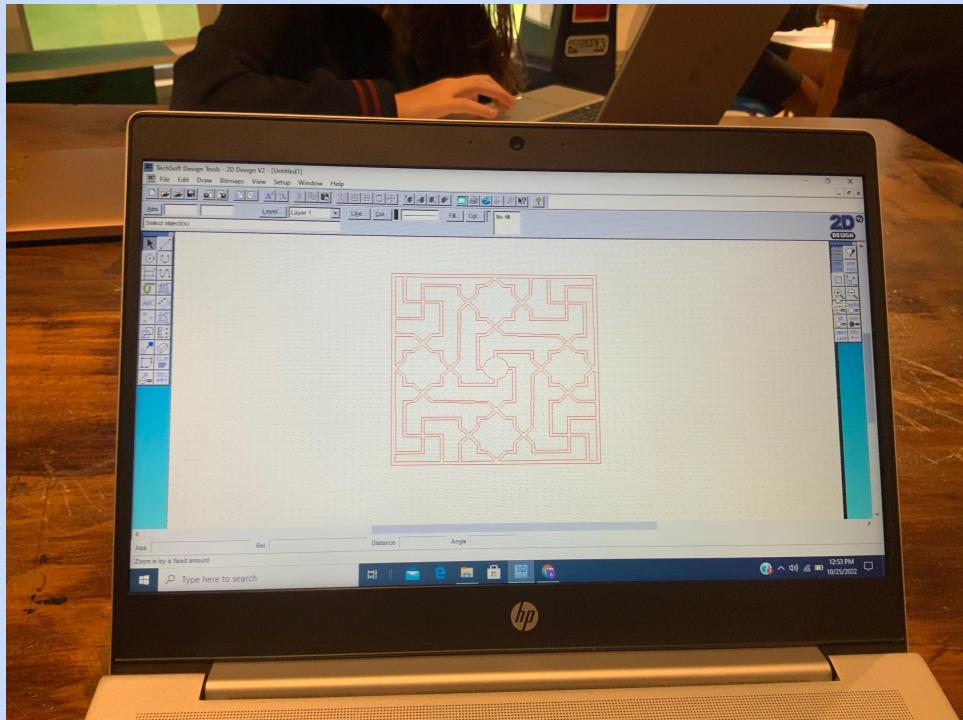
I used this photo of the islamic design i'm going to use for the clock. I will vectorize this photo to be able to use it in my final design.

2D design process



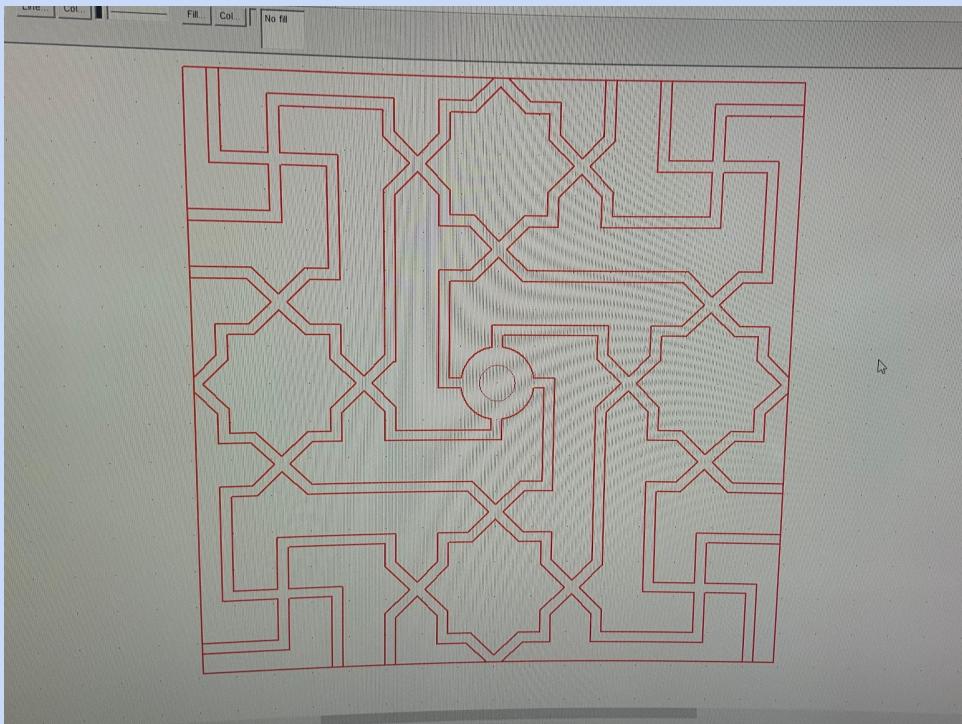
To vectorize it you go to bitmap ↳ Vectorize ↳ then select monochrome and then click ok.

2D design process



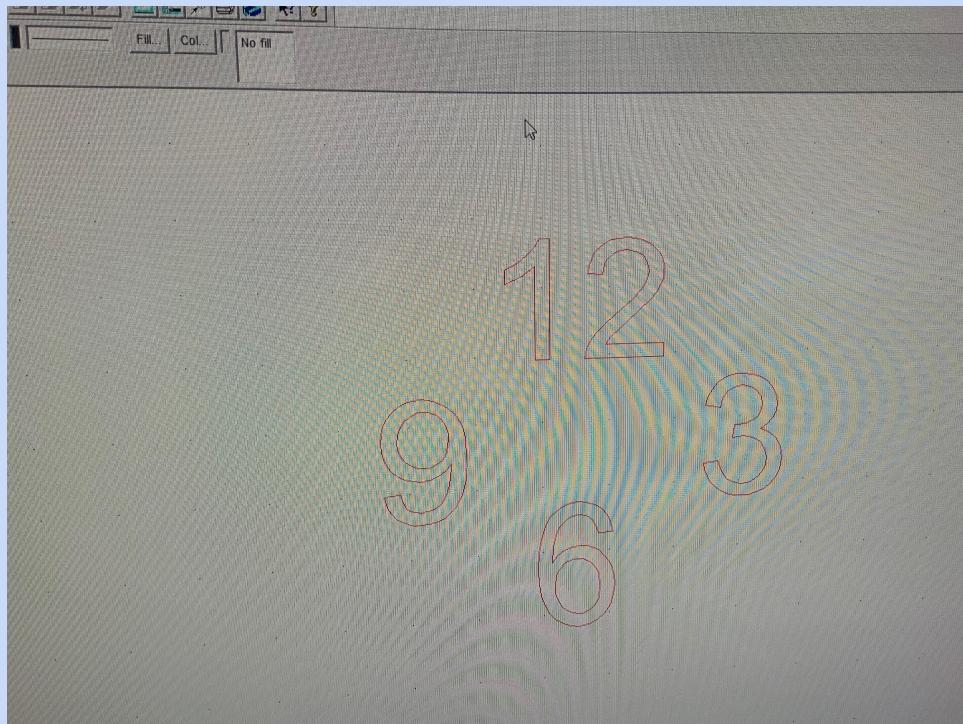
Here is the Islamic design after I vectorized it, I changed the color to red and I just need to add a 10mm hole in the middle.

2D design process - Final Designs



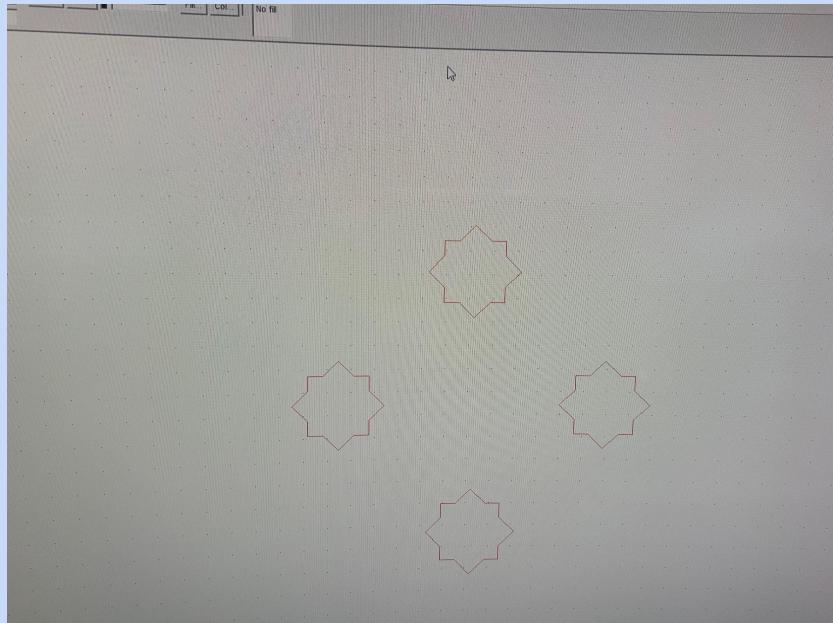
Here is the final version of the Islamic design, I added the hole in the middle, and the design's lines are all connected properly so I won't have to worry about the design not cutting properly.

2D design process - Final Designs



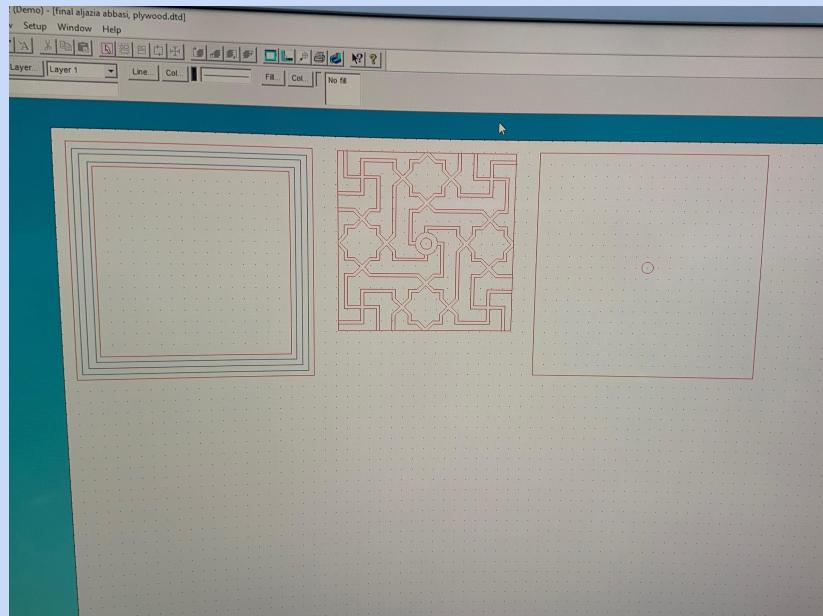
This is the design for the numbers on the clock, there are only 4 numbers to be printed out as the clock design is supposed to be simplistic and not too crowded with designs and numbers.

2D design process - Final Designs



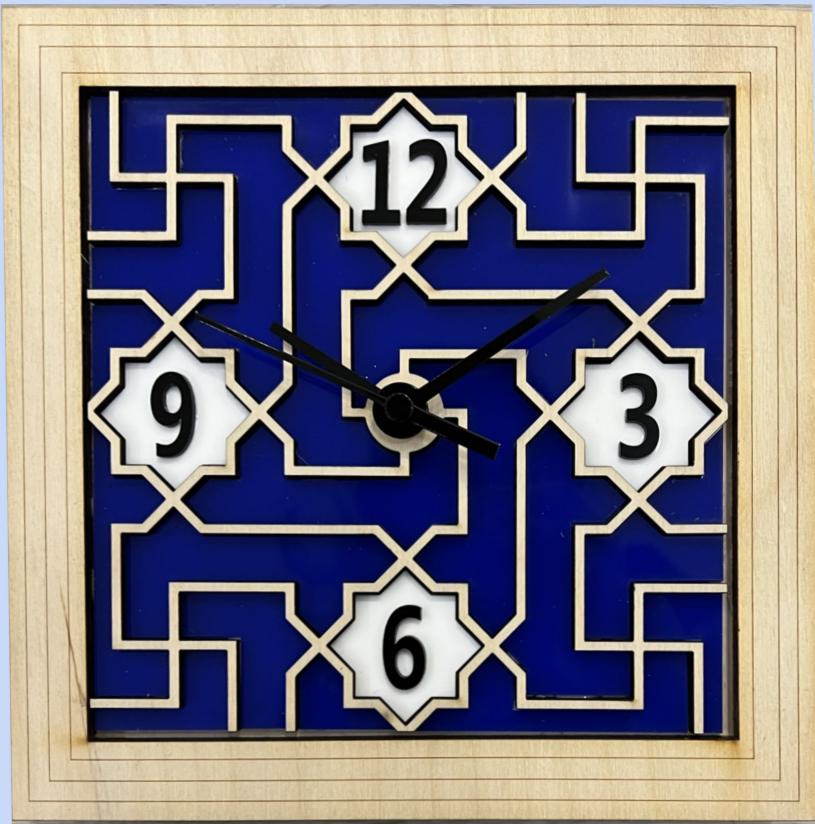
This shape will be cut out from acrylic and will be replacing a specific part in the Islamic design to have colour variation.

2D design process - Final Designs



This will be the plywood, the design includes the base, the frame, and the Islamic design that will be used to frame the blue acrylic inside of it.

The Final Product



In my final product the blue and white's position is different than in my design idea, this is because as I was creating my design online I realized that this color layout was better as it showed the numbers more clearly.

SUMMATIVE Criteria D - Evaluation

Peer Feedback

Alice - The islamic design is clear but you should add more colors. Also you could add points where the numbers that are not shown are(1, 2, 4, 5, 7, 8, 10, and 11).

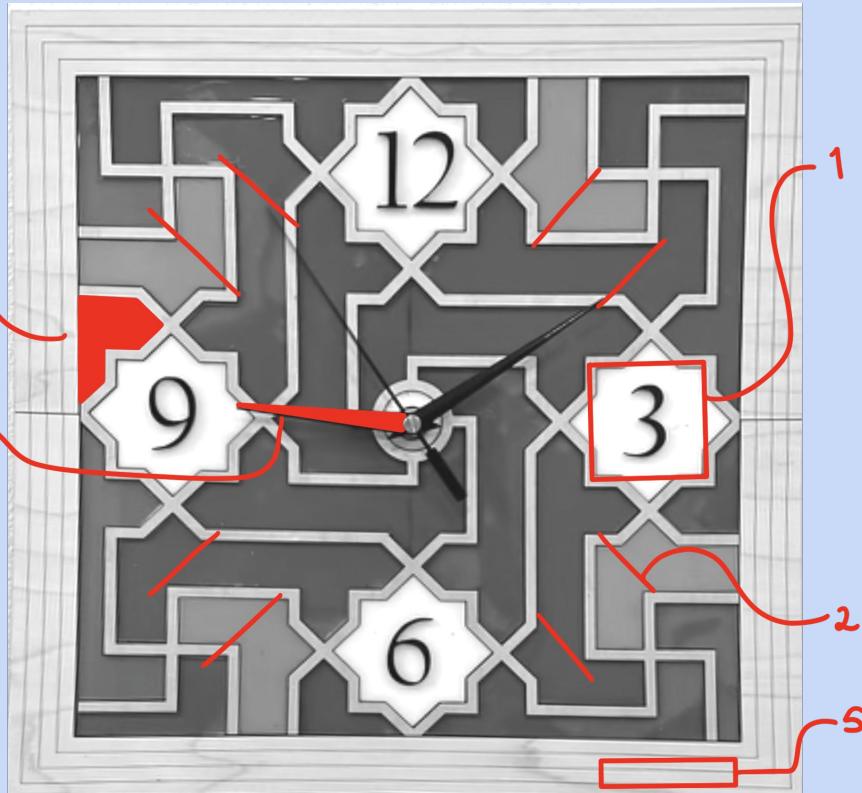
Yasmine - The design is very intricate. Except, you should make the frame smaller so people are more focused on the islamic design.

Elisabetta - The design you made shows you have skill, but you should add more culturally used colors(or lighter colors).

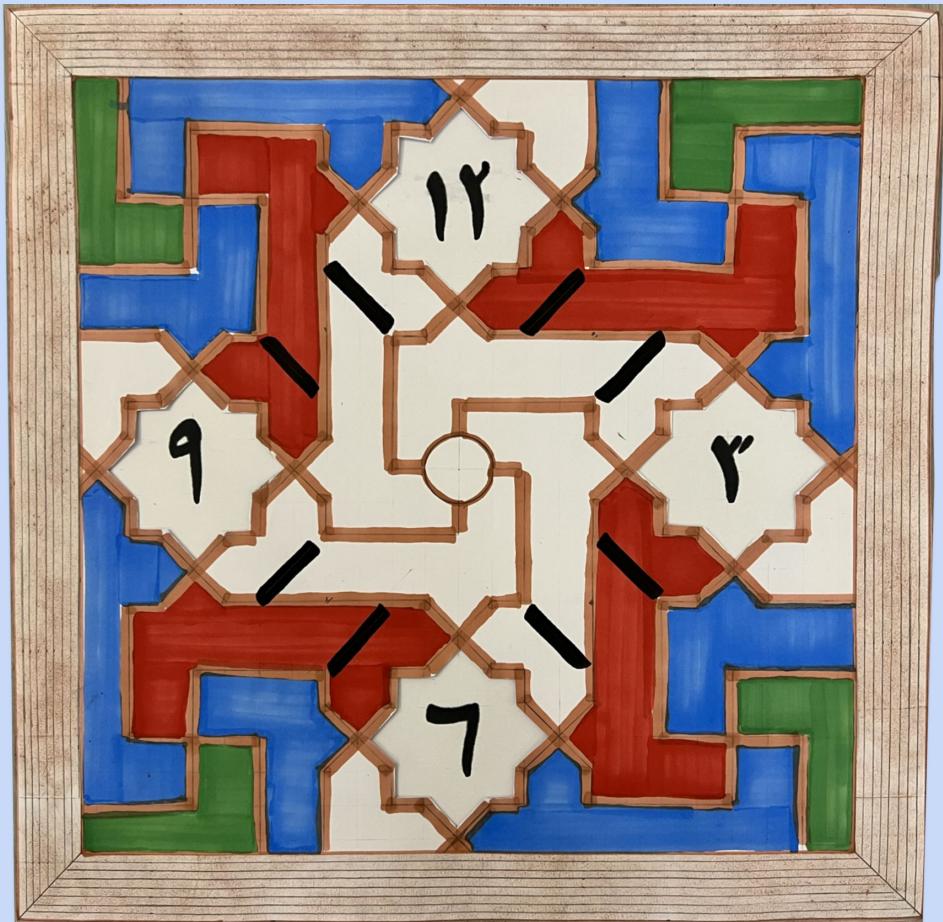
Yeonju - The islamic design is very nice and it's very eye catching, however, you could add an islamic engraving on the frame.

Improvements

1. Use Hindu-Arabic numerals(these numerals used to be used as arabic numerals)
2. Add full hour markers.
3. Add more colours
4. I should also use different color hands to make them stand out more
5. Annotate branding
6. Adding led light or a full digital screen behind design.



Improved design



Reflection

Criteria A - I organized my time well. I analyzed several clock examples, I added lots of detail, but, I could have done better by picking a wider variety of types of clocks and designs to analyze.

Criteria B - In criterion B I managed to generate suitable ideas. I added lots of detail to my specifications, although, I could have added more notes and information in my design ideas. In the future I would give more attention to this stage.

Criteria C - In my opinion, I managed to learn 2D design rapidly, using my previous exposure to other softwares like illustrator and procreate. I have separated the different materials in smaller parts for cutting purposes to save materials well.

Criteria D - In this criteria I think that I did well when improving my clock design, and taking feedback from others and my teacher. The analysis done at this stage would help me in enhancing future design process.