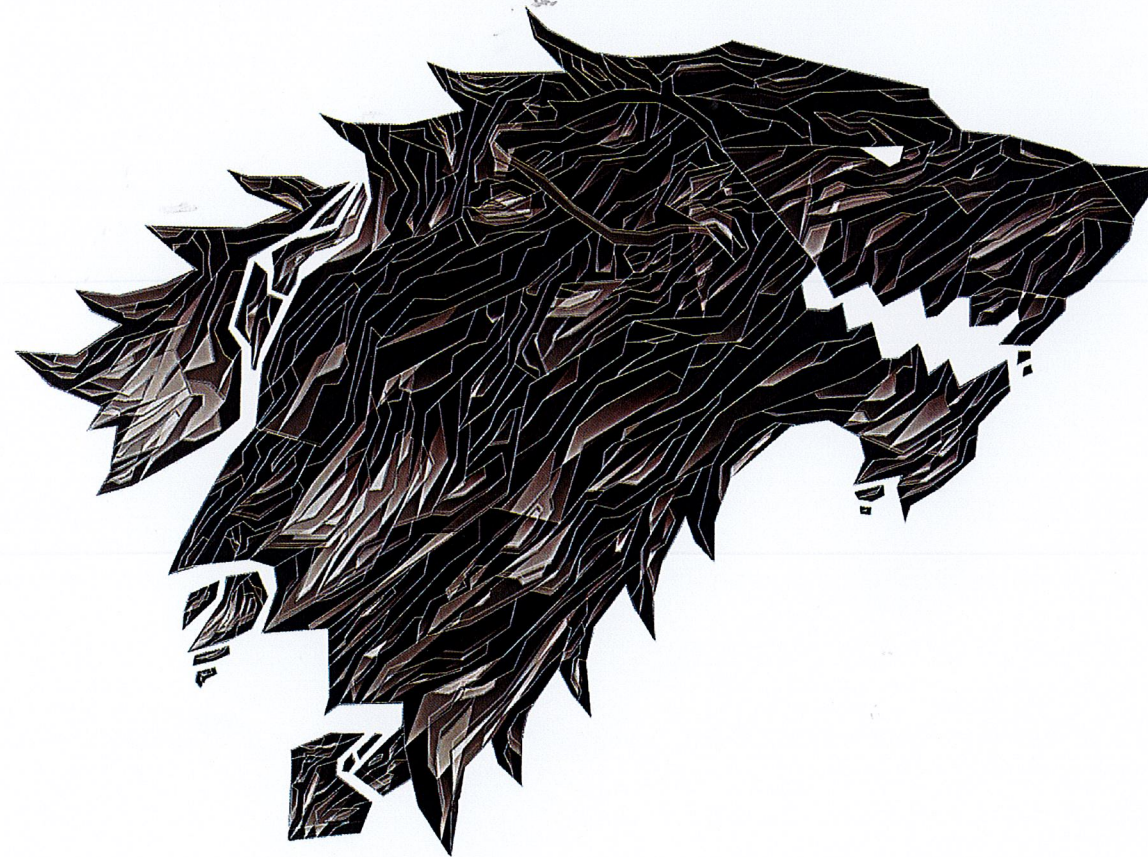


GGGS PDT

Criteria 1



User Profile

Name: Will Roach

Age: 16

Gender: Male

Occupation: Student

Where they live: Currently boarding at GGS

Interests: Loves listening to music, relaxing and enjoying life. Enjoys skiing and table tennis, loves to watch movies and enjoys spending time with family. Prefers the country over city life, loves animals, and enjoys being by the ocean.

Tastes: Prefers clean, cool, neat modern design, particularly that with some Scandinavian influence, and matte finishes

User interview:

Hi Will. Thanks for letting me interview you today. What would you like me to make for you?

I would like a bedside table, something I can use at school, and then at home when I leave. I would also like this bedside table to have a drawer, and it must be able to fit a Sonos Sub underneath it, as well as providing room to store stuff to help keep my room tidy.

Are there any personal restriction that I should consider when designing the bed side table?

No, I don't think there are any

What material would you like it to be made out of, and from any particular location?

I would like the table to be made out of wood, I'm thinking I would prefer a lighter coloured wood, with a bit of Scandinavian influence to it. I would also like it to have a matte frosted effect, like the wood at home, which was whitewashed and sanded back. I would like the wood to be sourced as locally as possible, to support our local economy, as well as reducing it's overall environmental footprint.

What is your budget, and when would you like it by?

Budget wise I'm looking at really no more than \$300, and I would like it by the 23rd August

What are your specific design requirements?

The bed side table must be able to incorporate a Sonos Sub, which is 389mm tall, 402mm wide, 158mm deep, and weighs 16.47kg. I would also like the drawer to be able to go in both sides, so the bedside table can go on either side of a bed

Do you have any other design related requirement/wants?

Yeah I would be using the product a lot, and the cleaners at school would move it to clean around the bed, and I have four siblings at home, plus four dogs, So it has to be sturdy and robust, it should also be made of a harder wood, to lessen the affect of stuff on top of it denting or scratching the wood, such as my fan.

Brief design requirement: A modern looking bedside table with a drawer, with the space underneath the drawer designed to fit a Sonos Sub.

Environment: The product will mainly be used at school, and then eventually at home following the conclusion of year 12. The room at school is somewhat restricted in size, but isn't at home

Attitude toward sustainability: I love being outdoors in nature, and have great respect for it. However, I would also like a product that is sturdy and hard wearing, meaning that the product should be as sustainable as possible, with a reduction in quality

Is there a specific problem that must be solved by the product?

Yes. The current bedside table I have has no room for the Sonos Sub, which is a problem, so the new product must solve that



Design Brief

Outline of context

My user, Will Roach, wants a Scandinavian influenced bedside table firstly to go in his room at boarding school, and then eventually at home in Melbourne. As the name suggests, it is going to be used in the bedroom, mainly used by him, however mum takes over his room during the week to escape from her husbands snoring. He has four siblings and four dogs at home, as well as 70 odd boys in the boarding house, so it has to be sturdy and robust. Being a bedside table, it is going to be used constantly, with items such as his fan going on top of it. The main requirement he has for it is that it must be able to incorporate a Sonos Sub into the design, which has the dimensions 389mm tall, 402mm wide, 158mm deep. This means that the table must also withstand the constant vibration coming from the subwoofer. He also wants it to have a drawer to put stuff in, as well as having space on top for items such as his fan, and general storage.

Who
What
Where
Why

Constraints and considerations

Purpose, Function and Context:

- Must incorporate enough space for Sonos Sub to fit in the design
- The design should also have a drawer included to store personal items
- Space for Sonos Sub needs to provide sufficient airflow, to keep Sub cool
- Design should not block bass being produced by the subwoofer
- The design must also not affect the sound quality/performance of Sub

Visual, Tactile and Aesthetics

- The product should reflect Scandinavian design influences
- Being Scandinavian the design should have a matte finish
- The design should also show off the wood, using minimal treatment
- Should have a fogged finish

Materials

- User would like the product to be made out of wood
- The user would also like the wood to be durable to increase longevity
- The wood should also be strong to withstand any forces applied

User-centred design

- Must be easy to use in low light conditions
- Must meet user wants/needs for Sub storage & design

Legal Responsibilities

- Product must meet Australian regulations
- Product can't infringe on others intellectual property (IP)

Economics - time and cost

- Product must be completed under or as close to budget as possible to meet the user's expectations (\$300)
- Product must be completed by the 23rd of August to meet the user's expectations as well
- Product should also be good value for money

Technologies

- Technologies, such as tools, should be appropriate for the material being worked on
- Technologies should be respected and kept in the best condition possible in order to assure quality
- Appropriate methods should be used when using technologies to work on the final product, ensuring quality

Quality Statement:

The quality of the product must be extremely high, being ensured through the implementation of quality checks and measures, with particular attention being paid to the higher risk, moving parts, such as the drawer. Other areas, such as the corners, have to support the weight of the product, as well as holding its shape, and therefore must be tight and perfect, to ensure the rigidity of the product. The product should also be made of high quality materials, to ensure the longevity of the product, maximising its lifetime and minimising its environmental impact, as well as reducing the number of issues that the end user could potentially face. The corners and surfaces of the product should also be straight and flat where appropriate, as well as corners being square, which can be checked and assured through the use of tools such as corner squares and bubble indicators.

Innovation and Creativity

- The product should make use of innovative and creative solutions to design problems
- The product should also use new materials and emerging technologies

Product Quality

- The product needs to be strong and durable, and must be able to withstand constant use and forces applied
- Needs to be strong enough to hold the Sonos Sub
- Product needs to be built to a very high level of quality to ensure longevity, helping it to be more sustainable

Sustainability

- Sustainability should be considered when designing the project
- The user would like the product to be as sustainable as possible, as long as it doesn't take away from the product's quality or performance
- Client would prefer locally sourced wood if possible
- Should be designed to be fixable if something breaks
- Sustainability and sourcing also need to be considered for the product

Weighted Criteria

PDF	Question/criteria	Score	Comments
Purpose, Function, Context	Does the bed side table adequately provide storage for the Sonos Sub?	/5	
	Does the product have a drawer incorporated?	/5	
Visual, Tactile, Aesthetics	Is the product design in the style of Scandinavian?	/5	
	Does the matte frosted finish meet client expectations?	/5	
Materials	Do the style characteristics and properties of the wood meet client expectations?	/5	
User-Centred Design	Is the drawer east to access in low light?	/5	
	Do the storage areas (for Sub and the drawer) meet the clients storage needs?	/5	
Sustainability	Does the product have the most sustainable design it could?	/5	
Total Score		/45	

Four-Part Evaluation

PDF	Criteria for Design Option	Justification	Method to Achieve Criteria	Checking and Testing Methgod
Purpose, Function, Context	Is there room for the Sonos Sub to be stored in the finished product?	One of the main requirements for the bedside table is to have room to store the Sub	Research the dimensions of the sub, and the shape, and incorporate it into the product into the product in the designing stages	By using the clients sub to see if it fits in the the designated space on the finished product
	Does the bed side table affect the sound quality of the sub?	As per the constrains and considerations, where the sub is integrated into the bedside table cannot affect sound quality	By designing the space for the sub as wall free as possible, in order to provide plenty of airflow, and avoid blocking sound waves	By testing the built product/prototype with the sub in the designated position, and pumping tunes, whilst listening for any imperfections
	Does the bed side table suit the clients usage environment?	The bed side table is a focal piece of furniture in a bed room, and therefore it must suit that rooms decor	By researching the clients proposed usage areas, and choosing a colour palette to match his chosen environment	By placing the product into a similarly coloured room, and assessing how well it suits the space
Visual, Tactile, Aesthetics	Does the style of the product meet the clients request of having a Scandinavian influenced design?	The client specifically requested for the product to have a Scandinavian feel to it	By conducting both primary and secondary research on different forms of Scandinavian design influence, and incorporating this into the design of the product	By assessing the finished product/design ideas by comparing them to existing products featuring Scandinavian design, and assessing their similarities and differences
	Does the product finish resemble the clients request of a footed, slightly whitewashed appearance?	The client has specifically asked for the product to be made from wood, with a matte, fogged, slightly whitewashed finish to it, in order to match the wood used throughout the his house	Going to the site and researching the existing wood, as well as conducting secondary research online in order to find out how to replicate the requested finish on the clients preferred wood type	Comparing design and research to the existing materials the client has referenced, and comparing the quality and style of the finish, and comparing how they differ, in order to make adjustments to perfect it

Materials	Does the wood meet the clients requested strength requirements?	The product will end up having to support both its weight, and hold its shape, whilst also supporting the weight of the clients other products, being placed on top, such as a fan	Through researching and testing different woods and their individual properties, as well as testing their real life strength and durability characteristics in the workshop	By applying weight to the areas that need to support weight, as well as ensuring that there are no visible signs of excess stress, or deformity once completed, and installed
	Does the wood suit the clients preferred colour choice, and style?	The material used in the construction of the projected must match and or suit the existing wood used throughout the clients home, in order to ensure uniformity and connection	By analysing the visual and tactile characteristics of different woods and materials, in order to select one that best matches the clients request	Through comparing the finished product to that used throughout the house already, and receiving client feedback on the selected material, and their ideas
Economics, time, and cost	Did the cost of production meet the clients budget expectation?	The client only has a certain amount of money to spend, and so the project must meet the clients budget restriction	By researching the cost of the materials required, and if excessive costs are required, through considering other alternatives that are cheaper, and evaluating their suitability	By ascertaining the total cost of the final product, compared to the end-user's budget
	Was the project completed by the 23rd of August?	The client has asked for the project to be completed by a specific date, so it must be finished	Through the use of production plans and schedules, to manage the time used during the project, to ensure tasks are done by set dates, keeping the project on track	By determining whether the project was completed by the 23rd of August or not
User-Centred Design	Is the drawer on the product easily accessible, especially in low light conditions?	The product is a bedside table, and therefore the client must be able to access it through the night	By designing and testing a drawer that is going to be easily accessed, and incorporating it into the design	By putting the bedside table in a position similar to being next to a bed, and trying to open the door with closed eyes
	Is the top storage area at a suitable, easily accessible height when compared to the bed?	The top storage area must be at an appropriate height for easy of use, and to ensure items such as the fan that will be used on it, are at the right height for airflow	Through researching the height of the bed in the bedroom where the bed side table will go, and designing the table top to be at a comparative height	By placing the bedside table/prototype in a similar environment and testing different aspects of its use at the designed height, to ensure end user satisfaction
	Can the drawer be opened/go in both sides of the table?	The product will initially be used at boarding school, before being used at home, with the beds having walls on opposite sides, and therefore the table has to work on either side	Through researching ways in which to allow the drawer to go into the table form either side, whilst retaining it full usability	By testing on prototypes and eventually the end product, to ensure that the drawer functions as intended, regardless of which side of the table its operating from
Sustainability	Were the materials sourced from local suppliers?	The local sourcing of materials puts money back into the local economy and supports local jobs, and helps to prevent the use of imported wood, who's origin may not be good	Through researching local suppliers and their product offering, and ensuring that they stock a wood that meets the client's wants/needs, or assessing similar products	By assessing how responsible the sourcing of the wood was, how far it had to travel, and how much gets put back into the environment when the tree is harvested
	Was the wood selected suitable for the product/met user requirements for sustainability?	The client would like the product to be as sustainable as possible, and therefore a strong and durable wood should be used to extend product life, and reduce waste	Through researching and testing different woods and comparing them to select the one with the best balance of strength, durability, and harness.	By testing the selected wood sample to ensure it stands up to the clients demands in regard to durability and strength, ensuring a long lifespan
	Was the product designed to be easily fixable?	The client would like the product to be as sustainable as possible, therefore the product should be easy to fix should something go wrong, extending its lifetime	By designing and testing the joints, screws and fasteners to be easily accessible, in case they get loose, or come undone, so they can be easily tightened again, or re-stuck	By assessing the finished product to determine how easily accessible the screws and fasteners are, and how easy it is to replace them, as well as the availability of the parts
Innovation and Creativity	Were unique, innovative and creative methods used to overcome problems faced, and in the general design of the product?	Using innovative, creative and unique helps to create a product that stands out from everything else on the market,, giving the end user something that no one else has	By researching inspirations and having music filled crazy fast brain storming drawing sessions, to help create innovate ideas, and to think outside the box	This can be tested by comparing the design options/final product to existing products, to asses if the bedside table differentiates itself, and how it does that
Legal Responsibilities	Does the product impede on others intellectual property/patents?	The product being made cannot legally use other peoples ideas without being referenced, and cannot make use of other people's patent without written consent	By ensuring that all work used from other people is referenced and by making sure that no patents are used without permission for their respective owner	By checking accessed resources to ensure that they have been referenced, and by ensuring that there is no patent in place that could be breached

Technologies	Did the production of the product make use of the appropriate technologies required?	In order to ensure the highest level of quality, the correct technologies must be used for their respective tasks, preventing damage to the final product	By researching what needs to be used for each different task, as well as using the people around me, (teachers and other students), to make the right choice	By analysing what has been done in the production process to ensure that each technology was used for the right purpose, and assessing the final product
	Were the selected technologies used in the correct, and safest manner?	In order to ensure the best quality possible, as well as protecting the safety of myself and others, the technologies used must be used for the correct purpose, in the correct manner	By researching how to use the different technologies for each task, as well as by utilising those around me, such as the teachers and other DT students	By assessing what has been done throughout the production process, ensure that steps were taken to ensure safety, and that the technology was used appropriately
Quality	Does the product meet the clients request to have a high level of quality?	The client has requested for a very high quality product, as not only does improve the overall product, but also helps its sustainability by extending its lifespan	Through ensuring that all processes throughout the design and manufacturing are completed to the highest quality standards as possible	By combing the the product throughout the production for imperfections that indicate a lacking of quality, and fixing or replacing the affected part/s

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