

Development Evaluation

Product Design Specification Criteria	My Evaluative Comments	My Client's Evaluative Comments
<p>PURPOSE: The purpose of the bedside table is allow somewhere for essential items to be stored and accessed at ease i.e. medicines, tablets etc. Also somewhere to store regular house hold items i.e. telephones, perfume bottles, books etc</p>	<p>The chosen design accommodates somewhere for essential house holds items to be stored and accessed at ease because of the lightweight design and other features such as the pulling drawers make it easy to access items also the lightweight design would make the product relatively easy to move around the room.</p>	<p>Product appears that essential items can be stored and accessed at ease</p>
<p>FUNCTION & PERFORMANCE:</p> <ul style="list-style-type: none">➤ Suitable for the use of people aged 55 and over, as this is the target market I am designing for.➤ The height of the bedside table should be 635mm as this half way between the two most popular ranges I found from my research, a further 80mm should be added on to this height as is height of a standard bed plus the thickness of one standard pillow, so items do not get knocked off when arms are stretched out in bed, so the overall height of bedside table should be 715mm.➤ The width of table from side to side should be 500mm as this is approximately the correct range of space my target market would have left on either side of the bed presuming their room is square. The length of table from front to back should be 500mm as this again is within the range correct space range my target market would have left on either side of the bed, but also this is around the standard dimension for the length of a bedside tables that I have found from my research.➤ Drawer should be 400mm long (front to back) as this is more than enough room to store medicines and tablets in and can fit roughly 10 tablet boxes in. Width of drawer should be 400mm again giving enough room to fit a good variety of items in. Depth of drawer should be 225mm as this is between the average height of medicine bottles, as this will be the sort of items my target market will store in the drawers, by making it this height my target market can put items in standing up, instead of lying flat, which save more space and allow more items to be stored in drawer.➤ The width of the table top should be 600mm an the length of table top should be 600mm as again this provides enough space for a range of house hold items the target market will have i.e. telephone, perfumes, lotions etc.➤ Robust for everyday use, durable with at least 4-5 years life expectancy as this is the minimum standard bedside tables should last in stores, after speaking to several furniture stores.➤ Easily wiped down and kept clean, so that the product does not become too dirty and start to look unappealing or even start to damage.➤ Material used must be able to be recycled or reused, so that it does not harm the environment.➤ Must be relatively lightweight so that can product can be moved around the room at will, so the product must weigh no more than 16kg as this is the max range one woman adult can lift from elbow height , but preferably 10kg, taking into account my target market would not be as strong as say 20-30 year old adults. (see research)	<p>Product is suitable for the specific age range as it accommodates features that will be suited to such an age group i.e easily opened drawers, preventing strain, specialist product height so out stretched arm don't knock items of the top table etc.</p> <p>The height of the bedside table does incorporate all recent research figures, so the height of the bedside table is 715mm in height; this also incorporates the 80mm thickness of a standard pillow.</p> <p>The width and length of the bedside table are both 500mm so it will fit perfectly in the estimated space that my clients and target market would have.</p> <p>The length and width of drawer are both 400mm which will give enough space to hold roughly 10 tablet boxes and a range of other medicines. The drawer will have a depth of 225mm so items such as medicine bottles and deodorant cans can stand in the drawer.</p> <p>The table top has a length and width of 600mm which will allow more than enough space for items such as telephones, perfumes bottles etc, but also with add more strength and stability to the drawer.</p> <p>The design is robust as MDF, Plywood and softwood are all relatively strong material, they are all hardwearing and durable so should last more than the expect 4-5 years of standard bedside tables.</p> <p>All materials used are able to be recycled and reused, I will include a word document making customers aware materials are recyclable and reusable</p> <p>All materials are reasonably lightweight and all materials come in sheets with the biggest thickness being 18mm, so product should weight less than 16 kg.</p>	<p>The design seems suitable enough for people our group so that should be fine. This height is ideal for us as it will stop those annoying items being knocked off the table, which will be a huge bonus for us.</p> <p>Again this measurement is fine as we have more than enough space either side of the bed to fit this bedside table, so that should be fine.</p> <p>This is probably the most beneficial measurements for us as it allows us plenty of space to store our more private items, and the fact that items can be stood up straight gives us even more space in the drawer which is always a plus</p> <p>This looks like more than enough space for other items so that fantastic, I think we can even fit both lamp and telephone on there and still have space.</p> <p>All materials from past experiences are reasonably strong durable materials and should more than do the job, plus by adding paint it should help the bedside table withstand any bad treatment.</p> <p>Most wood are easily recyclable and reusable, so that should be fine.</p> <p>As the weight is unknown at this time I cannot comment on it. However from working with all materials and judging by the scale of production in theory the product should not be overly heavy and should weight around 10-16kg.</p>

<p><u>AESTHETICS:</u></p> <ul style="list-style-type: none"> ➤ The product must not be too modern as it would look out of place in an 'old-fashioned' bedroom, this because my target market would have more mature tastes and their houses would have not been recently, so they would not currently be keeping up with the latest fashion and trends. ➤ It should follow a simple design that is appealing, but at the same time not too plain. It should incorporate features that have been discussed earlier in the interview, these are features such as adjusting the height of bedside table, designing drawers that do not get stuck, making the top shelf big enough so a lamp and other house-hold items can fit on it. ➤ Materials that would be best suited for this type of product would be solid Pine, as this is cheap, an available in this right sizes need for this type of product, so I would have minimal amount of waste. MDF as this is also available in the right sizes, but I would have to use a different material for legs as MDF is only available in flat sheets. Another material that could be used is Beech wood, this has very good aesthetic qualities, but can be expensive, and suitable sizes may be hard to buy, so there more likely to be waste material. Oak could also be used, as this is a very high quality material, but at the same time is very expensive, which is not what my target market is looking for. ➤ Finishes that can be used for these materials are oil based or emulsion paint, this would be suited more towards MDF and solid Pine, but on the higher quality woods such as Beech wood and Oak could use varnish or lacquers to preserve the wood but also bring out the aesthetic qualities of the grain. Natural oil stains could also be a solution as this also makes the wood more appealing. 	<p>The chosen design its agreed by clients that the design does not look too old fashioned and would suit the trends of my clients and my target market The design does follow a simple design with lots of simple shapes and straight lines. It also covers all features discussed in previous interview (section A).</p> <p>Materials that are used for this product will be MDF, Plywood and softwood, these all come in suitable sizes relevant to the product.</p> <p>Finishes for this product will be chocolate brown gloss paint as this colour is what was requested by my clients and also be the most suited to my client's room décor.</p>	<p>The product looks good and doesn't look to old-fashioned which is exactly what we wanted which is good. All features seem to have been some how fitted into the design, which is what we asked for ; the adjustable height of the bedside table has been done by making the bedside higher than the bed, the rotating drawer will prevent drawer from getting stuck, and the size of the table top allows enough space to store our desired items Again materials have been discussed and we are happy with the choice.</p> <p>We love the chocolate brown gloss paint as we have that same paint on our wardrobe so the bedside table would look right at home in our room.</p>
<p><u>QUALITY & TESTING:</u></p> <ul style="list-style-type: none"> ➤ Must be value for money, and cost less £30 to make as I would like to make 50% profit, so I will be selling my product for £60. Along with this, quality factors that should be incorporated are things such as; suitable for use indoors, but resistant to water form spillages. Able to support the weight of a range of house hold items such as perfumes, books, telephones, lotions, medicine bottles. These items overall weighed 4 kg (figure got from research of household items) ➤ Product must be able to withstand stains from drinks .i.e. Tea, coffee. Also withstand dents and scratches, so appearance of product s not affected. ➤ Drawer must be opened as easily as when first designed for example drawer must not get stiff after 10,000 times of opening. 	<p>The design will cost 143.80 to make if I was making a one-off production, however If designing in industry this product would be batch manufactured, due to cheaper material cost, more being made in a shorter time etc, so the cost to make this product if batch produced would be £20.59 which is below my £30 target making price. It will also be suitable for indoors as using water proof gloss paint will help the product become more scratch proof and will also protect the wood from spillages. This can not be tested at this stage, but looking at the design of the drawer the drawer should be able to open as easily after any amount of times, but the metals haft that allows drawer to rotate might be the first past of the design to wear.</p>	<p>An important factor is that the product is resistant from water spillages, so using that sort of paint is a very important factor. The design does appear sturdy and durable enough, however the thickness of legs do appear quite thin, but 4kg it not heavy enough to affect the product, so that should b e fine .</p> <p>We can not comment on this part of the design yet as it has not been built.</p>
<p><u>MANUFACTURE:</u></p> <ul style="list-style-type: none"> ➤ Must be flat-packed, so it can be assembled easy buy people that are not very D.I.Y literate, as it is being flat-packed. As it being flat-packed, biscuit joints, knock down fitting will be used as these are easy assembly joints, to set up a product at hoe buy an average everyday person. ➤ Suitable for batch manufacture, as the joining methods that will be used will be relatively simple and easy to manufacture for example dowels joints. These are easy to manufacture as all you need is to drill holes and get the right size dowels. This is suitable for batch manufacture as dowels can be made quickly, an do not have to be assembled as they are easy assembled by people that are not very D.I.Y literate, which save on manufacturing time, which in turn saves money. ➤ Joints must be permanent joints, so adhesive such as PVA should be used so that joints are reinforced and do not get weak over time.. 	<p>The design does incorporate joints that can be taken apart and assembled relatively easily, so it can be flat packed. Also all materials used are thin sheets will also aid design to be flat-packed Simple shapes were used in this design, so by using jigs and templates the design should be able to be batch produced</p> <p>The design uses a range of permanent joints that are joined with PVA glue, which will allow a more stable product. Although the customer will need to be confident about using PVA glue</p>	<p>Looking again at this design it seems fairly straight forward to fit together and we don't believe we would have any real struggle assembling this type of product.</p> <p>Again we are happy with the permanent joints shown to us, so we feel that the product is going to be properly assembled.</p>
<p><u>SAFETY:</u></p> <ul style="list-style-type: none"> ➤ Product must be made following the British Standard rule BS 5852 Parts 1 and 2 Fire tests for furniture, which is the rate fire spreads from a cigarette or match is measured in part one and two of the standard. Another standard that must be met is BS 4875-7 Stability and Strength Test, which involves applying various parts, loads or forces simulating normal functional use, to see how well the product withstands these factors. This is so that the product is safe to use and of a high quality, also it covers manufacture from legal action if customers get injured using their products. ➤ Must have no finger traps, or sharp edges, so that the product is safe and can be used by all age groups. ➤ Must be strong and stable so that is can take peoples weight when being leant on my client who weighs 55kg and as she is in the same target market I am designing for, so I am assuming that on average women of this age group will weigh between 50-60kg. However it is being leant on, so their full weight will not be put on product, it will be around 50% of their actually weight, so product should be able to support a weight of 25kg. But also so it can support everyday item i.e. books, perfumes etc. 	<p>The product would need to be submitted for testing against all parts of the relevant British standard rules</p> <p>This design does not incorporate any major finger traps and would be more than safe to use, although the rotating drawer can be seen as a hazard as fingers could get trapped when being opened and closed. The design will be strong and stable and will support a weight of 35lbs, due to the way it will be fixed together and the joints used.</p>	<p>The design doesn't appear to have any major finger traps, but a concern may be getting finger stuck in the rotating drawer, however been careful will prevent any injury. We cannot really comment on this aspect of the design as it has not been made yet.</p>

