

Welcome to A level DT

Product Design and Design Engineering

Identifying requirements

- ▶ The A level non-exam assessment follows the same formula as the GCSE content being:
 - ‘explore’ needs
 - ‘create’ solutions that demonstrate how the needs can be met, and
 - ‘evaluate’ how well the needs have been met.
- ▶ However you will need to identify your own challenging context that has the potential to be an innovative design solution
- ▶ You will be expected to have explored several unknown and challenging contexts through mind maps, mood boards, interviews, observations, surveys, focus groups before you choose your specific context.

Identifying requirements



- ▶ How can you identify a suitable context?
- ▶ I would like you to identify 10 different social design issues ie effective PPE
- ▶ Complete 3 mind maps focus on the below key points and mood boards based on your social issues research

You may wish to revisit these when we start your NEA next academic year

1. Describe the types of person who fit the description of a typical user of the product.
2. What is the age range of potential customers?
3. Are potential customers likely to be male or female or does gender matter?
4. Where are they likely to use the product?
5. What are the most likely issues for stakeholders?
6. What are the general likes /dislikes of potential customers?
7. What does a typical customer want from the product?
8. What are the most common design requirements shared by your stakeholders?
9. Does the cost of your product influence a customer's decision to buy a particular brand?
10. What factors are your potential customers likely to consider before purchasing your product?
11. How will potential customers find out about the product being sold?
12. List all the ways in which contact can be made with your potential customers.

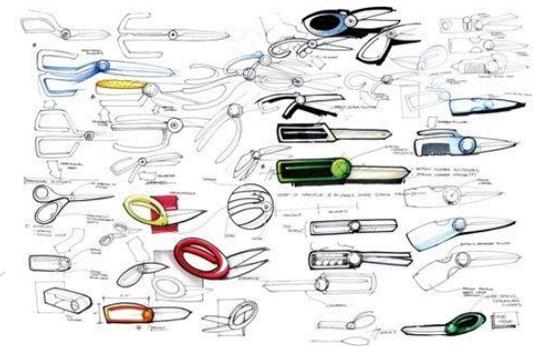
Thinking contextually

- ▶ How can usability be considered when designing prototypes?
- ▶ User-centred design is an iterative design process in which designers focus on the users and their actual needs in each phase of the design process. UCD calls for involving users throughout the design process via a variety of research and design techniques so as to create highly usable and accessible products for them.
- ▶ Recognising the specific needs of a particular user, such as someone with restricted, movement will help develop a range of designs solutions for a product that will make life easier.



UCD design task

- ▶ Restrict the movement of your fingers on both of your hands using small strips of masking tape or surgical tape - you do not need to go over the top as this is a controlled task
- ▶ Try to use a standard kitchen utensil, such as a tin opener and record your efforts with photographic evidence
- ▶ You may need to ask someone to help you with this task!
- ▶ I would like you fill an A3 page with a range of fully annotated design ideas including details of possible solutions that meets the users needs.
- ▶ We will be modelling and testing your design solutions when we return



Suggested further reading

- ▶ <https://www.core77.com/>
- ▶ <https://www.solidsmack.com/>
- ▶ <https://www.yankodesign.com/>
- ▶ <https://www.makodesign.com/blog/>
- ▶ <https://intavant.com/blog/2014/10-terrible-product-designs-and-the-lessons-they-teach-us/>
- ▶ <https://www.youtube.com/user/IfOnlyApp/videos>
- ▶ https://www.youtube.com/watch?v=sW_7i6T_H78&t=193s
- ▶ <https://www.youtube.com/watch?v=6RNnzfUHwY8>