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Assignment 6

Q. What is prototyping phase in design thinking ? Elaborate on Prototypes that you may develop based on ideas refined in Assignment 5 .

➔ A prototype is a simple experimental model of a proposed solution used to test or validate ideas, design assumptions and other aspects of its conceptualisation quickly and cheaply, so that the designer/s involved can make appropriate refinements or possible changes in direction.

Prototypes can take many forms, and just about the only thing in common the various forms have is that they are all *tangible* forms of your ideas. They don't have to be primitive versions of an end product, either—far from it. Simple sketches or storyboards used to illustrate a proposed experiential solution, rough paper prototypes of digital interfaces, and even role-playing to act out a service offering an idea are examples of prototypes. In fact, prototypes do not need to be full products: you can prototype a *part* of a solution (like a proposed grip handle of a wheelchair) to test that specific part of your solution.

Prototypes can be quick and rough — useful for early-stage testing and learning — and can also be fully formed and detailed — usually for testing or pilot trials near the end of the project.

Prototyping is about bringing conceptual or theoretical ideas to life and exploring their real-world impact before finally executing them. All too often, design teams arrive at ideas without enough research or validation and expedite them to final execution before there is any certainty about their viability or possible effect on the target group.

We need prototyping because Research conducted during the early stages of your Design Thinking project does not tell you everything you need to know in order to create the optimal solution. Regardless of whether you have researched thoroughly and gathered a large body of information, or whether your ideation sessions have resulted in what many perceive as a world-changing solution, testing is still *crucial* for success. Design teams can easily become fixated on the research artefacts they have gathered during the earlier phases of exploration, creating a bias towards their ideas. By prototyping and then testing those prototypes, you can reveal assumptions and biases you have towards your ideas, and uncover insights about your users that you can use to improve your solutions or create new ones.

To minimise accidents and traffic laws, the government should enact strike rules.

Road maintenance should be performed on a regular basis, and road widths should be increased.

Traffic should be regulated by traffic cops, and anyone who do not obey traffic laws should be fined.

Road construction, maintenance, and traffic monitoring can all be done with new technologies.

The solution would make the road smoother and quicker after it is introduced.