Rapid Prototyping

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Introduction

Prototyping = Creation of low-cost representations, mockups of the User Interface to a system

Rapid Prototyping = As the name suggests, it is a process of quickly creating prototypes to get early feedback from the users and adjust the designs accordingly before it is implemented

Design Phases

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Introduction– Key Features

- Is an iterative process
- Simulates User Interface (UI) interaction
- A prototype usually starts with a simple mock-up of key areas and becomes more complex with each iteration based on the feedback gathered from the users
- Key feature of Rapid Prototyping is to display how a feature will work or what the design will look like without prototyping the entire product in detail
- Prototypes can range from hand-drawn sketches (low fidelity) to interactive mockups (high fidelity)
- Prototyping is an excellent method to test new functionalities, test changes in a workflow, new
- Technology and new interfaces

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Materials

- Pen
- Paper
- Online tools for Prototyping

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Instructions

Step 1: Prototype
Create a visual mockup of your solution or UI

Step 2: Review
Share the prototype with users and evaluate if it meets their needs and expectations, deliver if met

Step 3: Refine and Iterate
Based on this feedback, identify areas that need to be improved or clarified

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Step 1: How to create a Prototype?

- Understand the user requirements and expectations
- Choose an appropriate tool to create a prototype depending on the fidelity level (Low, Medium or High)
  - Hand drawn sketches, Paper Prototyping for Low fidelity
  - If you are just looking to test an idea, then the tool of choice should allow navigation from one screen to the next.
  - If you are looking to create an almost ready looking prototype, then you'll want your tool to have the ability to add motion and transitions. e.g. Prototyping on Paper, Invision App, FluidUI etc.
- Build the Prototype and proceed to the next step (Review)

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Step 2: Review

- Share the Prototype with the client and relevant stakeholders
- Check if the Prototypes meet User expectations, deliver if met
- If not, collect feedback and proceed to the next step (Refine and Iterate)
- Gather feedback using methods like User Interviews, stakeholder interviews etc.

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Step 3: Refine and Iterate

- Make changes in the Prototype based on the feedback given by the client in Step 2
- Iterate the whole Rapid Prototyping Process until the User is satisfied with the Prototype and their requirements are me

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Advantages

- Cuts cost and saves time
- Allows designs to evolve efficiently
- Early feedback from the users
- Communicates ideas effectively: A prototype is much easier to understand as it is visual (better than words/documents)
- Improved and increased user involvement
- Helps visualize the user experience of the final product
- More efficient long-term development, as fewer changes and updates are needed when fixes are addressed earlier in the planning process

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Do’s and Don’ts

- Have a clear idea and understanding of what the user needs are and why, before you start prototyping.
- Sketches need not be pretty. Focus on the ideas and remember that there will be many more iterations before you finalise your prototype.
- Rule of thumb: Start broad and then work your way towards a more detailed version of the solution with each iteration. As you iterate, the fidelity of your prototypes, as well as how much you include in them, will increase.
- Inform the users that this is not the actual solution.
- Don’t prototype everything! Focus on the critical functions that will be used most often.
- Save templates and stencils for reuse in future projects.

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