Paper Prototyping



Workshop 3

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Today's Workshop

- By now your group should have 2 ideas
- Paper prototype both game ideas, document with video (60mins)
- User feedback (30mins)
- Update your github (10mins)
- Next week you will have one idea which you will start developing



What is Paper Prototyping?

- Paper prototyping is a user-centred design method that is widely used in software engineering projects
- Most commonly, it involves the development of user interface mock-ups and drawn sketches which are presented to end users for evaluation
- Can lead to full wireframes and flow diagrams.
- Best done with <u>actual paper</u> but using a slide deck (PowerPoint prototyping) can also work

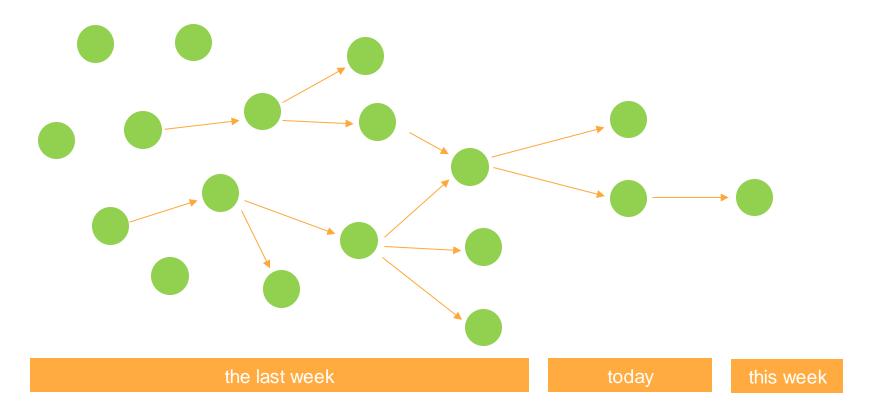


What is Paper Prototyping?

- Paper prototypes are often used at the early stages of projects to provide feedback on:
 - Product concept and goals
 - Logic and flow of user journeys
 - The form of the user interface
- This is a 'cheap' process!
 - 1 interactive prototype (10h)
 - = 10 video prototype (1h each)
 - = 100 paper prototypes (6 mins each)
 - = 6000 sketches (6 sec each)



Game idea progress



"prototype a one button game"



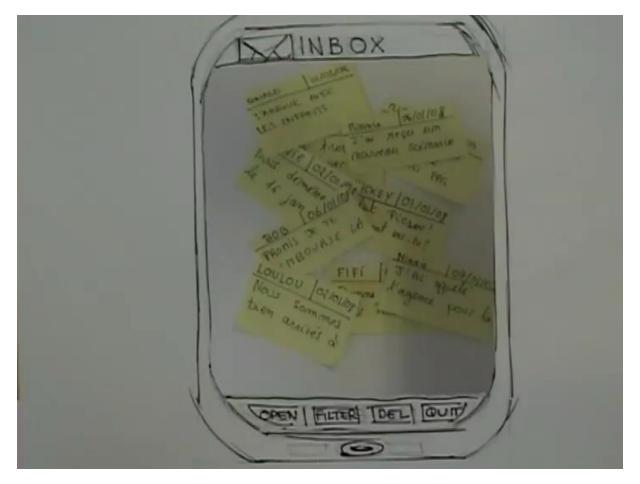
try **animation** – add **sounds** – plan for some **different outcomes**



use colours – use animation



plan the **story paths** – use **fill-in text**



use **post-it notes** – can use pause **jump cuts** (don't bother today!)



use $\mbox{\bf device}$ as $\mbox{\bf frame}$ – make things $\mbox{\bf larger}$ than real life to make it easier!

Why Paper Prototype?

- Quick and cheap design method
- Easy to make instant design change
- Communication. Helps the development team and external stakeholders better conceptualise your product and visualise how it will be used
- Helps us to better understand our product and users

- It is a low-investment means of evaluation:
 - Easier for users to give feedback, no fear of causing expensive change
 - Useful for testing multiple ideas or solution variations
- Makes a clearer distinction between conceptual errors and programmatic errors

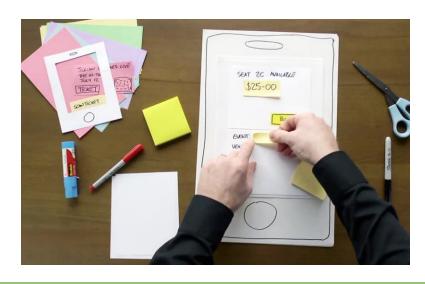
<u>Create</u> a 'working' version of each game in paper ... the second game may be done in Powerpoint

Animate each game in response to user input

Document each with a video

tips:

- use a (thick) **pen**, not pencil
- choose a single task to implement
- don't forget (manual) animation
- use placeholder text
- make devices larger than life-size
- make sure that it's <u>fun</u>



Pair up with the team next to you

<u>Demo</u> your two games to the other team and vice versa

Give Feedback

- Did the game concept make sense?
- Did you understand the controls?
- Was there a good twist?
- Are there obvious challenges to tackle (you need to identify three!)
- Which was you favourite and why?



Week	Date	Workshop Monday 09:00-11:00 <i>MVB</i> 2.11 <i>PC</i>	Lecture Monday 12:00-13:00 QUEENS BUILDING, 1.40 PUGSLEY	Groupwork
1	22/01/24	Teams, Project Brief [slides] [project brief] [github intro slides]	Introduction and Process [slides] [materials]	Research games, create list on team repo. Install Processing
2	29/01/24	Intro to Processing [slides]	Agile Software Development [slides]	Decide on two game ideas
3	05/02/24	Paper Prototyping, Agile Techniques, Ideas Clinic [slides]	Requirements Engineering [slides] [materials]	Collect requirements. Decide on final idea
4	12/02/24	Requirements [slides]	Object Orientated Design [slides] [materials]	Add requirements section to report
5	19/02/24	Classes Activity, Mock test, Game jam, Summer project prep [slides]	Software Quality and Testing [slides] [materials]	Develop a working prototype over reading week!
6	26/02/24	GAMES JAM	READING WEEK	
7	04/03/24	IN CLASS TEST (assessing lectures 1-4); Testing [slides]	Project Management [slides] [materials]	Define team roles, Estimate sprint effort with planning poker
8	11/03/24	Planning Poker [slides] [heuristic evaluation sheet]	HCI Evaluation Part One [slides]	Write up evaluations from workshop. Plan qualitative assessment (of your choice). Add two difficulty levels to your game.
9	18/03/24	Think Aloud and Heuristic Evaluation[slides]	HCI Evaluation Part Two [slides]	Add quantitative assessment (of your choice) to report
	25/03/24	SPRINT 1	EASTER week 1	
	01/04/24	SPRINT 2	EASTER week 2	
	08/04/24	SPRINT 3	EASTER week 3	
10	15/04/24	HCI Quantitative Task	Software Engineering Extended - Sustainability [slides] [materials]	Develop Game
11	22/04/24	IN CLASS TEST (assessing lectures 5-9)	Coursework Feedback Discussion of marking scheme [slides]	Finish Report
12	29/04/24	Game Demo Day Monday 29th April 9am-11am, MVB 2.11 Demonstrate your game. Markers will have a strict 5min window to assess your game, be ready to allow 1-2mins of gameplay and 2-3mins of answering questions.	Feedback on in-class tests (tbc)	Submit Report + Video to Blackboard Thursday 2nd May 1pm Submit entire repo as a single zip file to Blackboard. Make sure link to video is clearly displayed at top of repo. We prefer that you have the video on a streaming service of your choice and not contained within the repo so that we're not having to download video files.

homework / groupwork

- Decide on <u>one game idea!</u>
- Update / improve video sketch/prototype as required
- Your Github team page will have:
 - Your names
 - Team photo
 - List of inspiration and initial ideas
 - Your two paper prototype ideas
 - Your final idea (one paragraph + paper prototype images/video)

