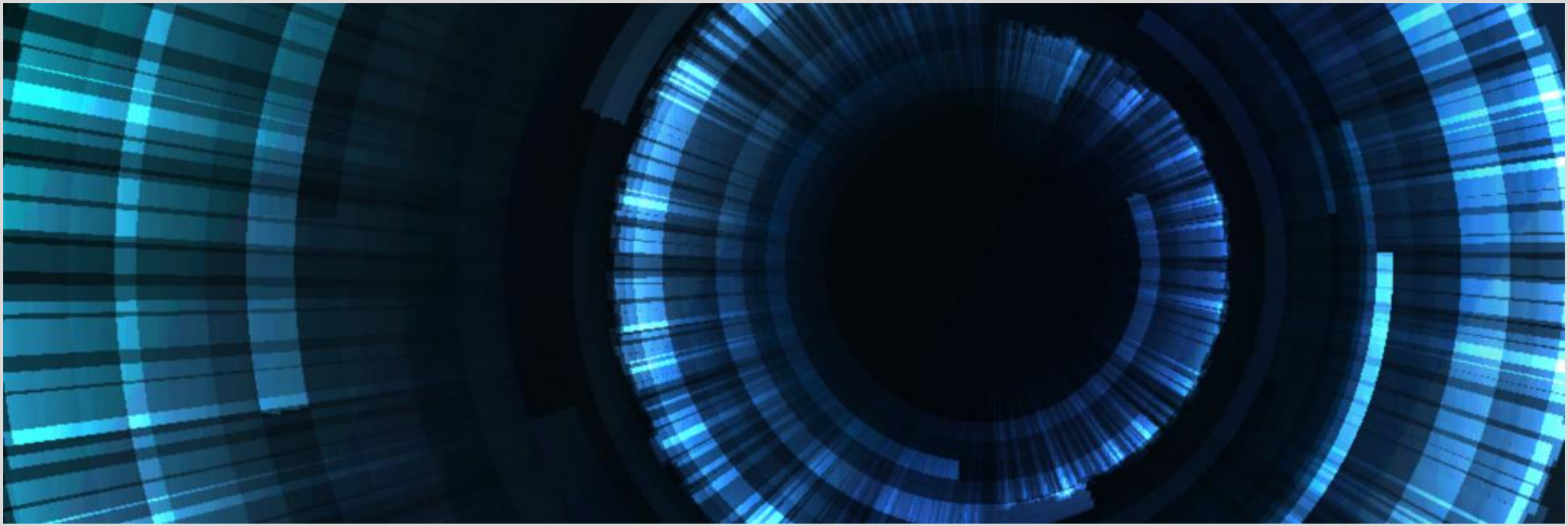
Human Computer Interaction



Original PPT: Dr Grace Eden
grace@iiitd.ac.in

Presented by Dr Indrani De Parker
indrani@iiitd.ac.in

HUMAN CENTERED DESIGN

This Week – 14 & 16 March

LECTURE 14th March

Medium Fidelity Prototyping

OPEN STUDIO 16th March

Low & Medium Fidelity Prototyping

Next Week – 21 & 23 March

LECTURE 21st March
High Fidelity Prototyping

QUIZ 4 23rd March

GUEST LECTURE 23rd March
High Fidelity Prototyping

Next Week– 21 & 23 March

Monday 21 March

TEAMS - 07, 38, 49

Wednesday23 March
NO IN-CLASS PRESENTATION

TEAMS- 9, 20, 46, 50 WILL PRESENT ON

MONDAY 28 March

March 14, 16 // March 21, 23 // April 28, 30 // April 03, 04, 05, 06

From Week 10 … until end of term

Lecture topic

Prototyping & Evaluation Techniques

Activities

Low Fidelity	(physical sketches)	Lecture: 09 March	(Due Mar 19)
Medium Fidelity	(digital wireframes)	Lecture: 14 March	(Due Mar 19)
High Fidelity	(realistic design elements)	Lecture: 21 March	(Due Mar 26)
Evaluation	(user feedback)	Lecture: 28 March	(Due Apr 02)

••••• SUBMIT HIGH-FIDELITY PROTOTYPE : 03 APRIL •••••

With a link to clickable prototype on Google Classroom

••• FINAL PROJECT PRESENTATION : 03, 04, 05, 06 APRIL •••

With a link to clickable prototype on Google Classroom

March 14, 16 // March 21, 23 // April 28, 30 // April 03, 04, 05, 06

Week 9 (Feb-March)						Week 10 (March)						Week 11 (March)						Week 12 (March)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
28	1	2	3	4	5	7	8	9	10	11	12	14	15	16	17	18	19	21	22	23	24	25	26
	Mahashivratri, Dropped GH															Holi						Pre-registration Starts	
					H						H						H						H

Week 13 (March-April)						Week 14 (April)						Week 15 (April)						Week 16 (April)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
28	29	30	31	1	2	4	5	6	7	8	9	11	12	13	14	15	16	18	19	20	21	22	23
					TT FRI				Last Day of the class	Research Showcase					Mahavir Jayanti	Good Friday				Moderation Meeting			
											End-Sem Examinations (9th April - 13th April 2022)				H	H	H						H

Prototyping Techniques

Prototype: fidelity

1. Breadth
2. Depth
3. Interaction
4. Look & Feel

Prototype: fidelity – 1) breadth

- Refers to how much content/functionality is *represented* in the prototype
- Narrow prototype
  - *represents* a single content or feature area
- Broad prototype
  - *represents* all (or most) intended content/functionality
- Note: Prototype your system as broad as needed to cover basic or most important tasks
- Resource (human) management or allocation

Prototype: fidelity – 2) depth

- Refers to how much of the prototype is *functional* and how stable
- Shallow prototype
  - *actions* respond as though the user had provided real input in a specific task sequence
- Deep prototype
  - *actions* respond to all (or most) intended functionality
- Note: Affects the amount of exploration a user can perform and has an influence on early user testing

Prototype: fidelity – 3) interaction

- Refers to how a prototype demonstrates input and output
- *Simulation*
  - Use hyperlinks or animation to simulate clicking interaction

Prototype: fidelity – 4) look & feel

- Refers to how accurately a prototype represents intended appearance, e.g. fonts, colours, and graphics

- BEWARE
  - less likely to throw it out and start again
  - may fixate on the "little" things (e.g. colour rather than information display and interaction

- Hold off on a high fidelity look until later in the design process

Prototype: fidelity

1. **Breadth :** representations of content and features
2. **Depth :** representations of functionality
3. **Interaction :** demonstrates input/output
4. **Look & Feel :** appearance, branding look and feel

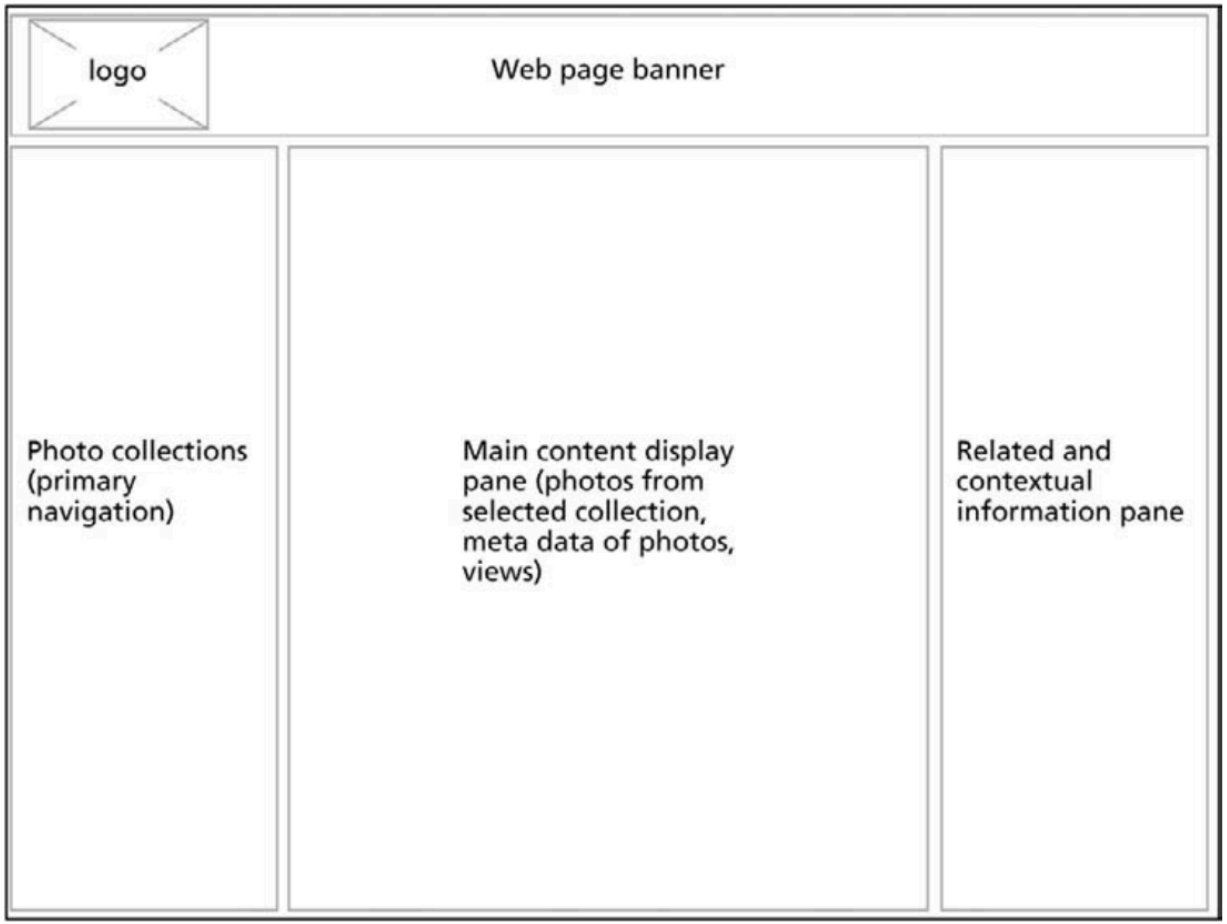
Prototype: medium-fidelity (wireframes) - definition

- Lines and outlines of boxes and other shapes that represent interaction design
- Define screen content and navigational flow
  - Task flow, interface object, visual layout and user interaction
- Doesn't contain finished graphics, colours, or font choices
- Gives people a better sense of what the solution or part of the solution might look like

Prototype: medium-fidelity (wireframes) - purpose

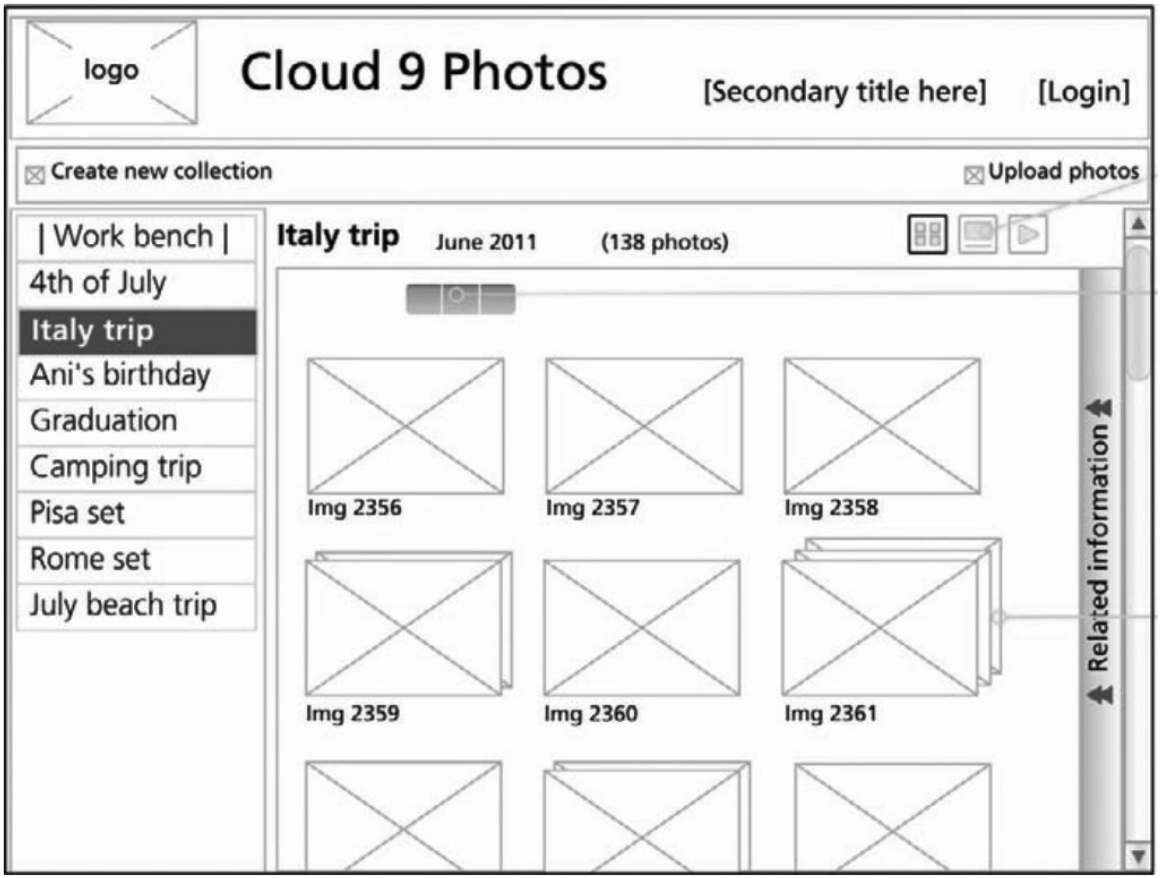
- Used as conversational props to discuss designs and design alternatives
- Elicit feedback from potential users and other stakeholders
- Walkthrough a deck of wireframes one slide at a time, simulating a potential scenario using simulated interaction widgets on the screen
- Page sequences can represent the flow of user activity within a scenario

Prototype: medium-fidelity (wireframes) – example [1]



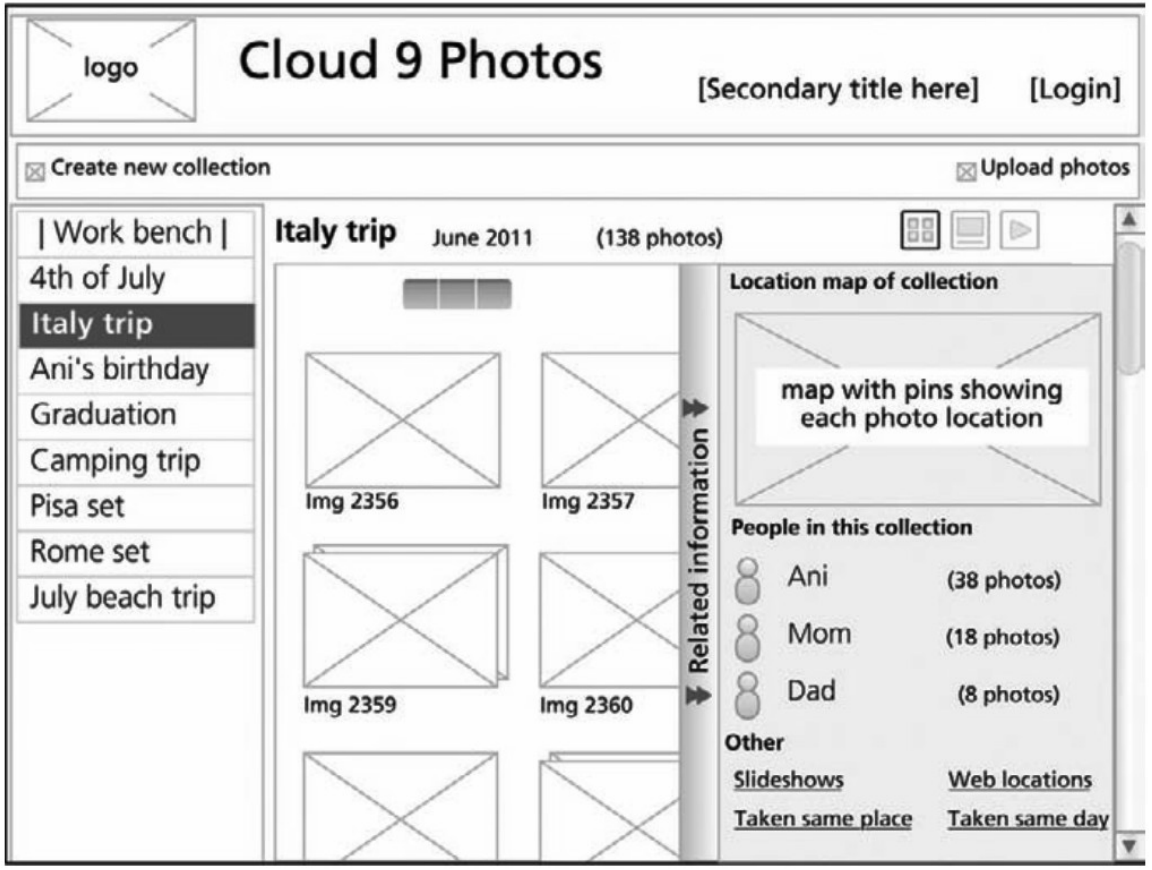
The UX Book, Rex Hartson

Prototype: medium-fidelity (wireframes) – example [2]



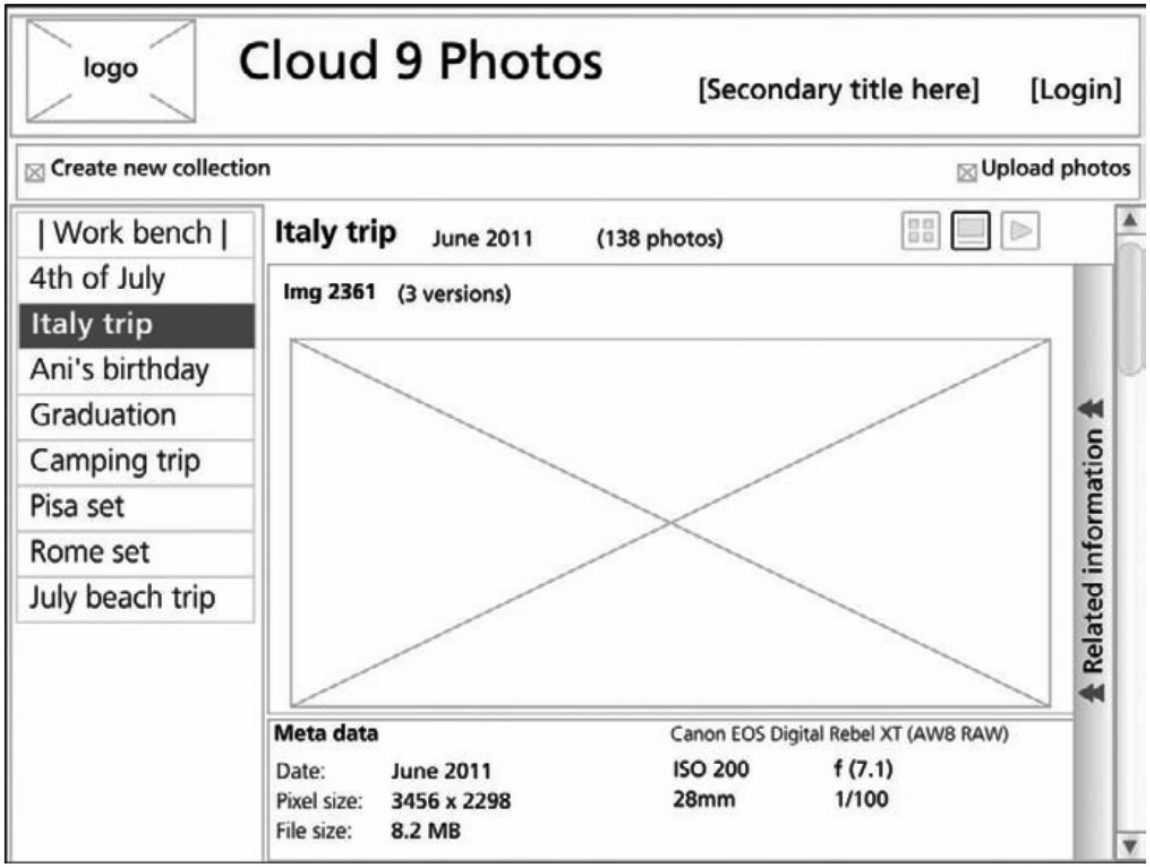
The UX Book, Rex Hartson

Prototype: medium-fidelity (wireframes) – example [3]



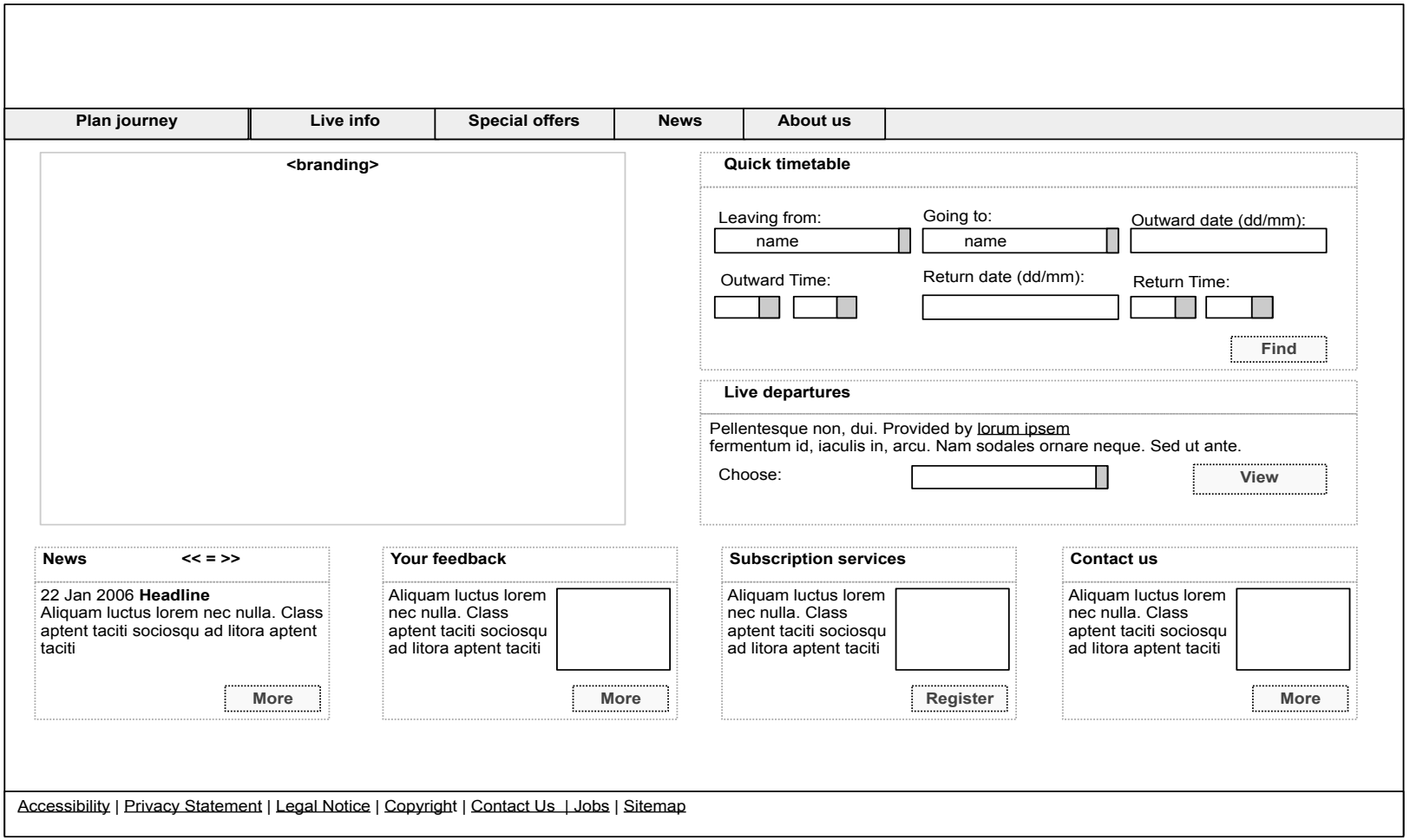
The UX Book, Rex Hartson

Prototype: medium-fidelity (wireframes) – example [4]



The UX Book, Rex Hartson

Prototype: medium-fidelity (wireframes)

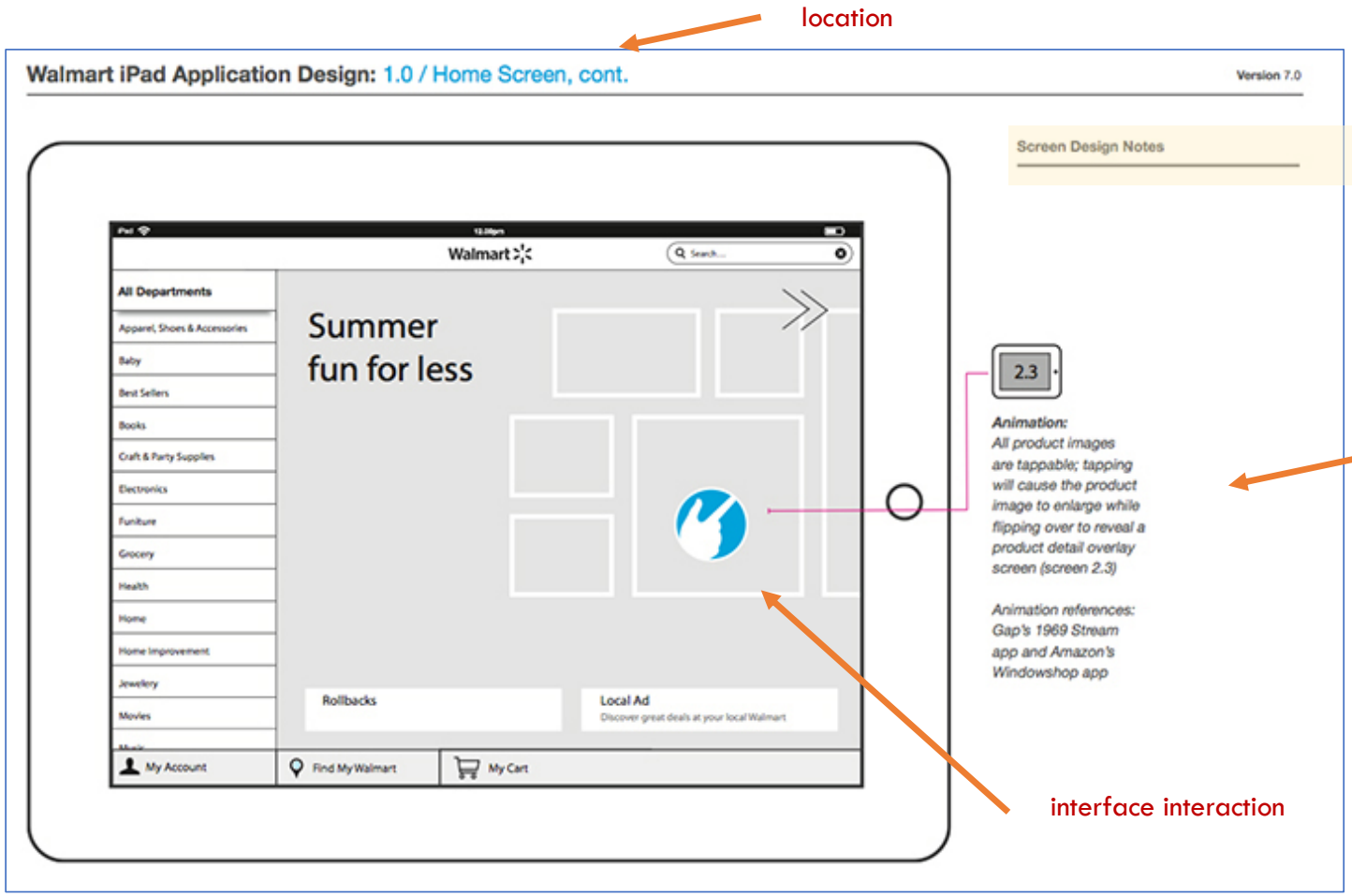


Prototype: medium-fidelity (wireframes) - tools

- Invision
- Adobe XD
- Figma
- Others like Balsamiq…
- Use the tool of your choice
- Links to tools posted on Classroom

Prototype: medium-fidelity (wireframes)

Annotate!

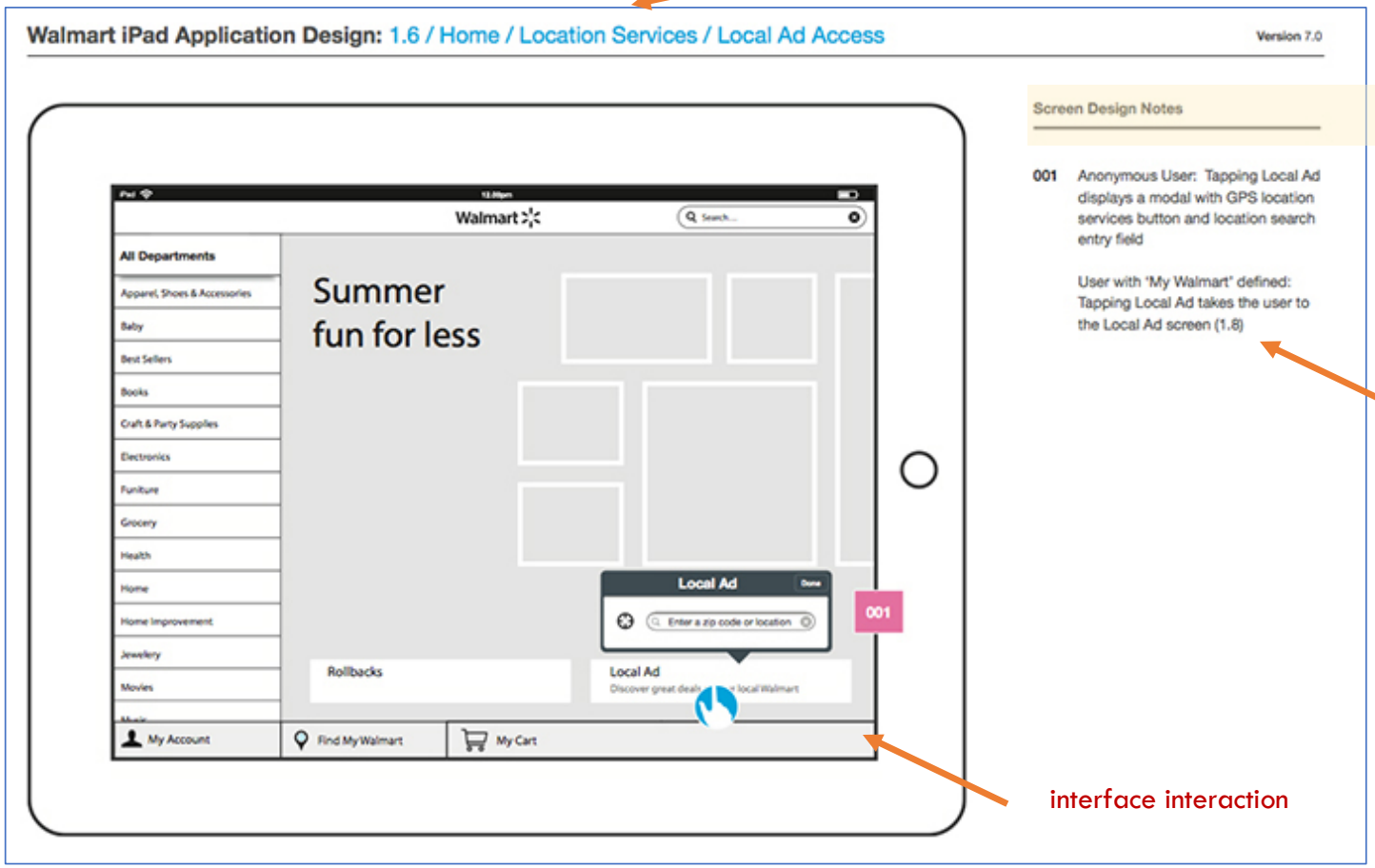


http://www.mandymesser.com/walmart-ipad.html

Prototype: medium-fidelity (wireframes)

Annotate!

location



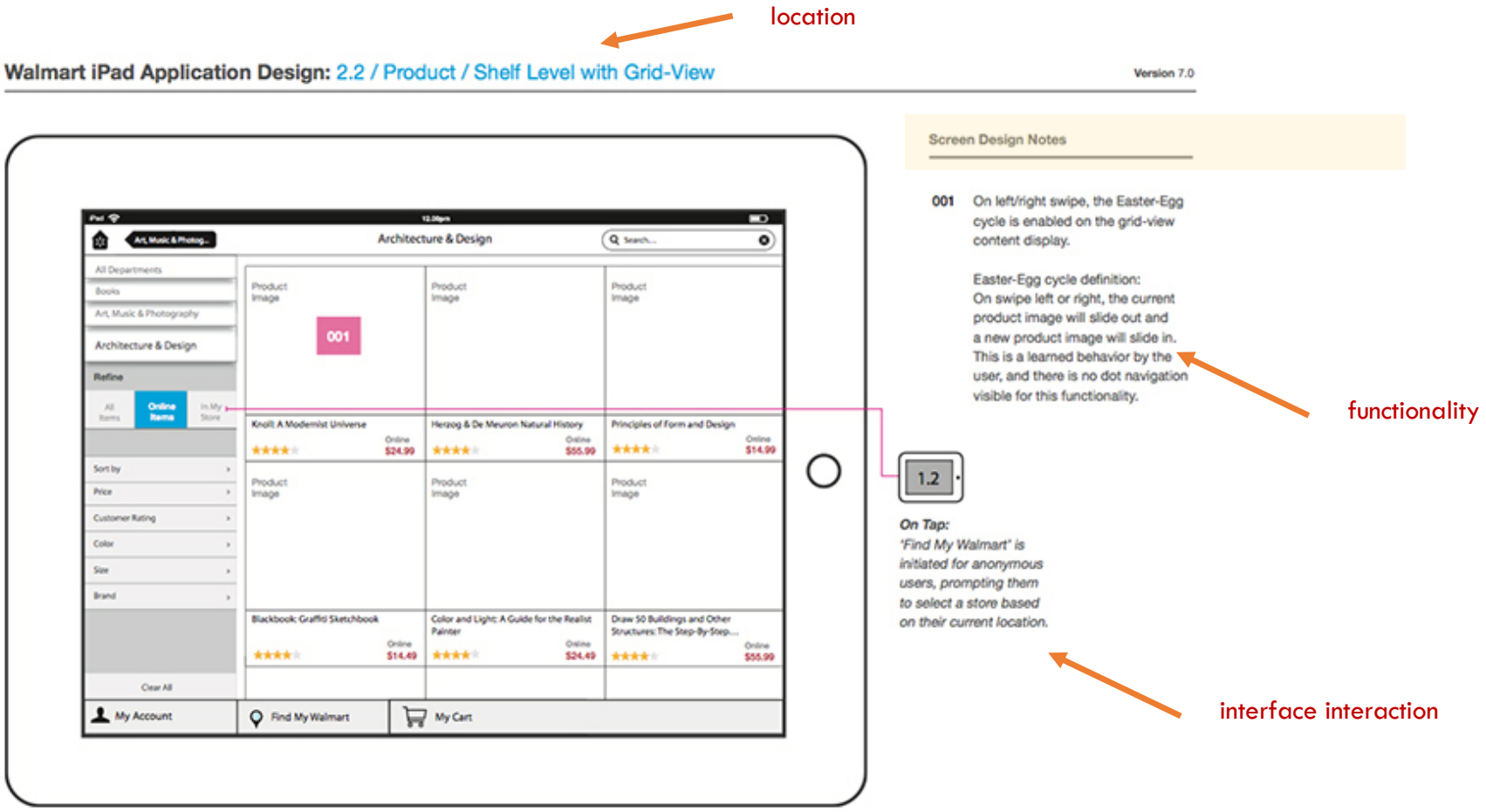
functionality

interface interaction

http://www.mandymesser.com/walmart-ipad.html

Prototype: medium-fidelity (wireframes)

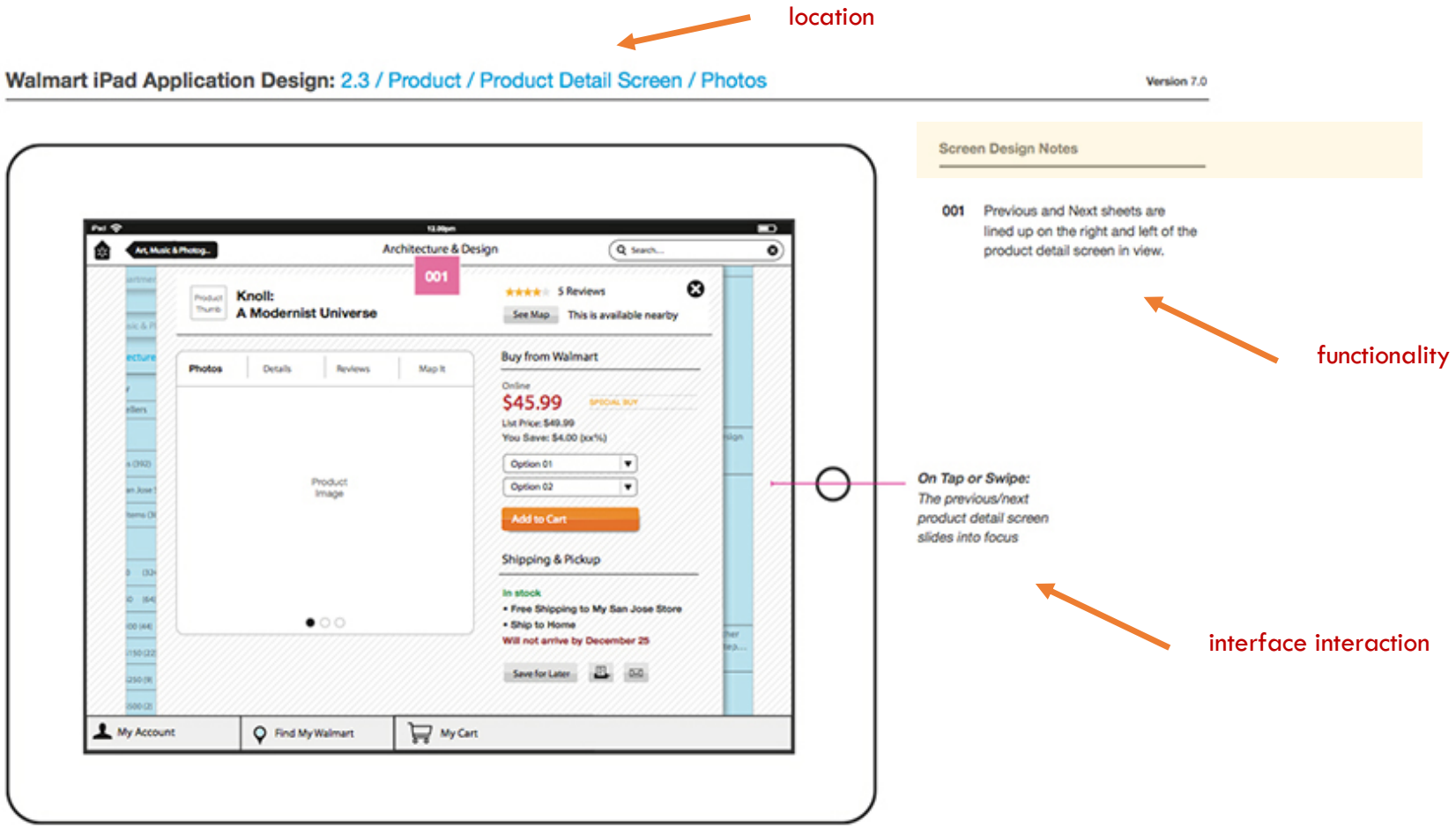
Annotate!



http://www.mandymesser.com/walmart-ipad.html

Prototype: medium-fidelity (wireframes)

Annotate!



http://www.mandymesser.com/walmart-ipad.html

Prototyping Techniques: assignment – Medium Fidelity (digital wireframes)

Exercise

Create digital wireframes of how people will interact with your technology

Assignment 10

Submission Date: Saturday, 19th March 2022

Low Fidelity Prototype:

GROUP PROJECT:

Objectives:

1. Based upon the revised lo-fi sketch GROUP UI prototype

2. Create digital wireframes of how people will interact with your technology

   - include breadth (BROAD) and depth (SHALLOW)

Breadth

- Narrow prototype
  - represents a *single* feature
- Broad prototype
  - represents *all (or most)* intended functionality

Depth

- Deep prototype
  - actions respond to *all* (or most) intended functionality
- Shallow prototype
  - actions respond as though the user had provided real input in a *specific* task sequence

Assignment 10

Submission Date: Saturday, 19th March 2022

Medium Fidelity Prototype:

GROUP PROJECT:

Objectives:

- This week's assignment is for your team to produce digital wireframes that display the content and interaction elements of your technology.
- Build upon previous work.
- ITERATE, do not start from a blank sheet of paper

10. Medium Fidelity Prototype

1) Create digital wireframes based upon the revised low-fi sketch GROUP UI prototype.
2) Include:
   a. Broad Breadth - represent all (or most) intended functionality. This is navigation LABELS, content AREAS
   b. Shallow Depth - specific TASK SEQUENCE actions that respond as though the user had provided real input. This is one scenario WORKFLOW that demonstrates how a user would complete a task to achieve their goals.
   c. Homepage (LANDING page)
   d. ANNOTATE each wireframe to highlight the relevant features of each screen
   e. DEMONSTRATE how it provides a solution to your Problem Statement.

Prototyping Techniques: assignment – Medium Fidelity (digital wireframes)

Create a PDF

You MUST include a cover sheet with the following:
(team name, team members, project title, problem statement)

Upload the assignment using the file name convention:
"GROUPNAME_Mid-Fi.pdf"

** Reduce the image file size to ensure
the PDF file is not more than 1 to 2 MB in size **

NOTE:
Build upon previous work,
ITERATE, do not start from a blank sheet of paper: all of your assignments are LINKED.

The UX PROCESS is a PROGRESSION from assignment to assignment - building upon each deliverable.

- Create UI screens informed by your Persona-Scenarios, Storyboards and Information Architecture
- Use the digital wireframe software of your choice

Prototype: medium-fidelity (wireframes) - tools

- Invision
- Adobe XD
- Figma
- Others like Balsamiq…
- Use the tool of your choice
- Links to tools posted on Classroom

Medium Fidelity User Feedback

Prototype : Evaluation – 'quick and informal'

Introduce

- your project – 'we are designing a prototype of …'
- the session – 'only 10 minutes', 'we are not testing you'

Preliminaries

- background information – 'do you use' (similar product or service)
- first look – 'what is your general impression of the landing page'

Evaluate

- introduce the exercise – Now we would like you to ….
- make notes – while the participant performs the exercise

Wrap-up

- thank them and offer a small gift if possible – 'Thank you, that was helpful', etc

Solution statement: add to group assignments - write a one pager for your project

Upload the most recent iteration of your Problem Statement –

Adding a Solution Statement beside it in a two column format.

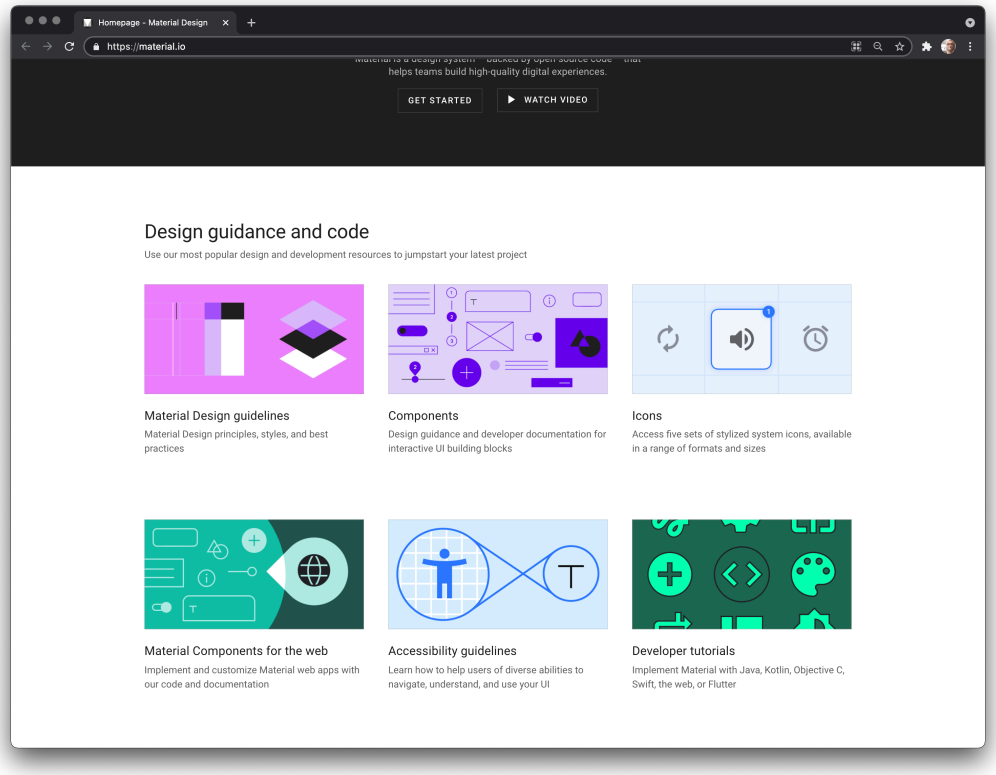
Problem Statement –

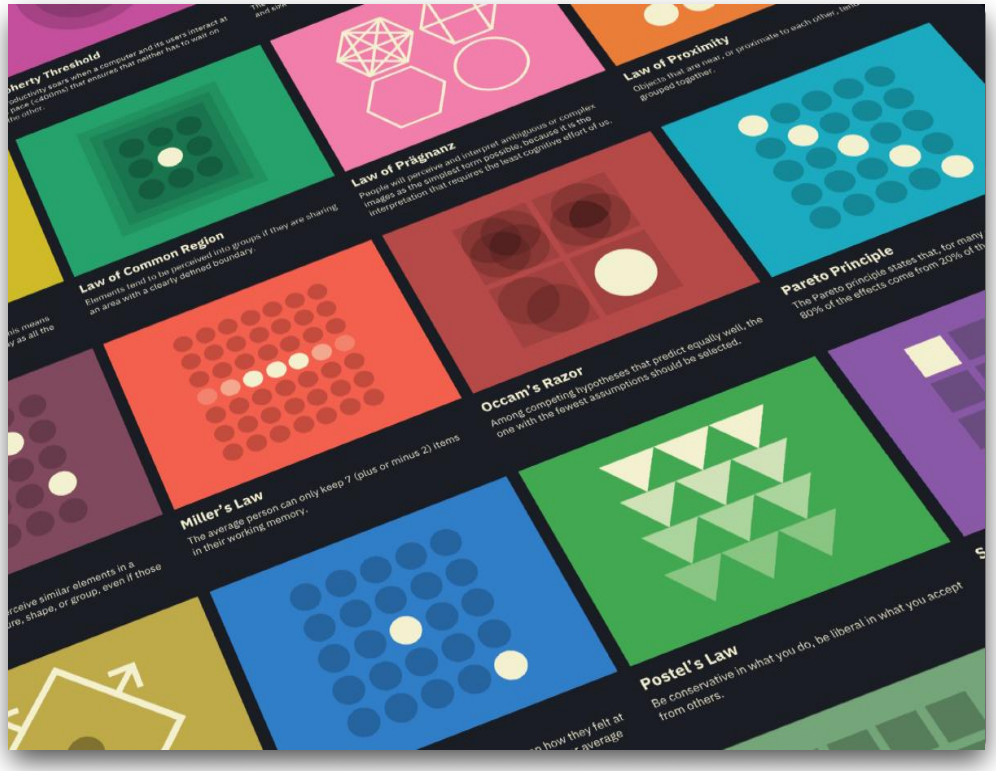
A fitness enthusiast who feels bad about his/her physical and mental health needs to keep in shape and stay fit but cannot find motivation, time and support to do the same.

Solution Statement –

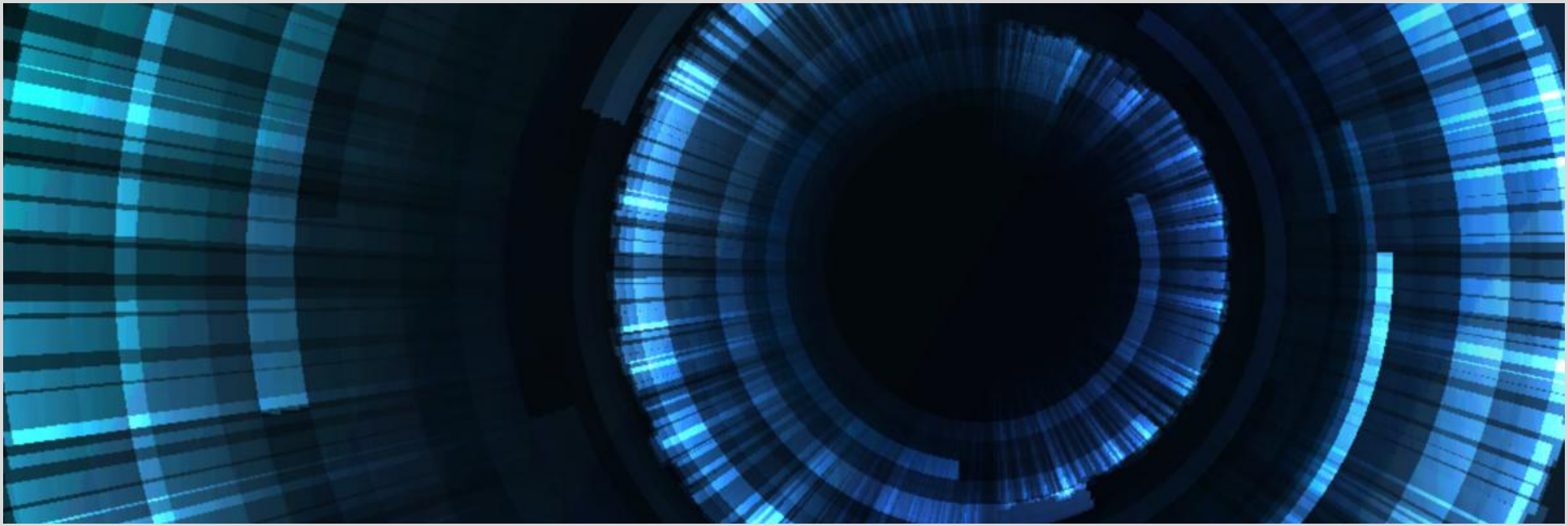
"Sworking Fit" will enable users to achieve x,y,z (overcome the problem) through a,b,c (features of your technology)

Pre-read for Next Week : Visual Design Guidelines for High Fidelity Prototype





Human Computer Interaction



Original PPT: Dr Grace Eden
grace@iiitd.ac.in

Presented by Dr Indrani De Parker
indrani@iiitd.ac.in

HUMAN CENTERED DESIGN