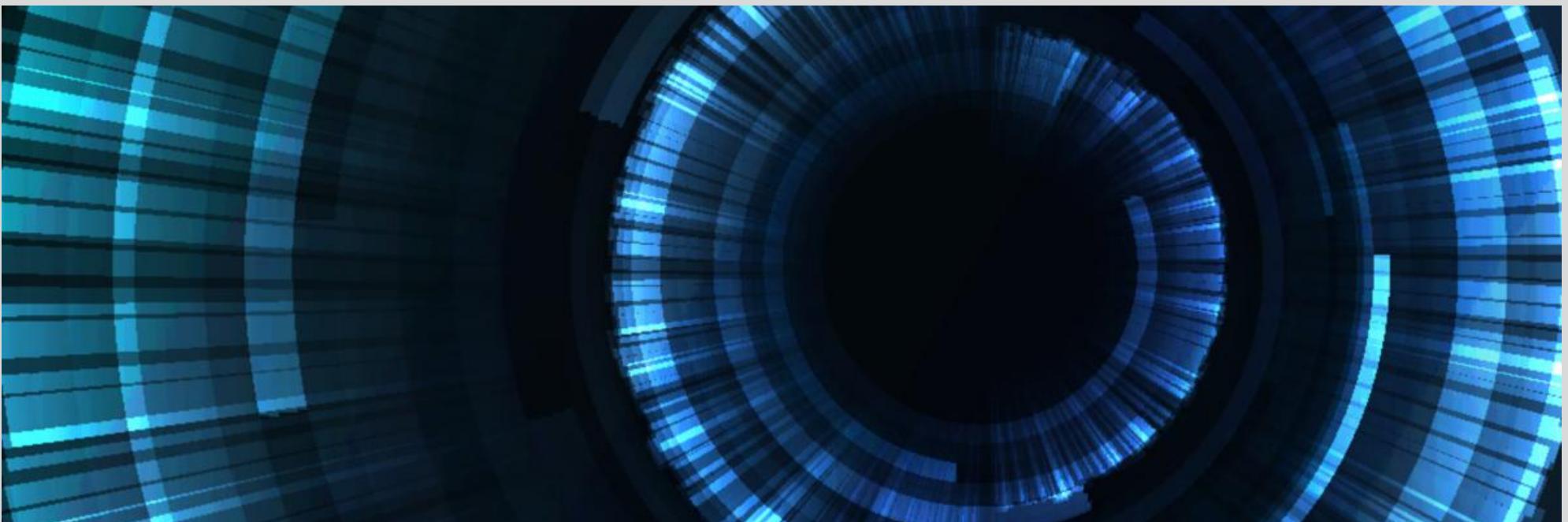


Human Computer Interaction



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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

Wednesday 23 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

Overview of the rest of the semester - IHCI

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

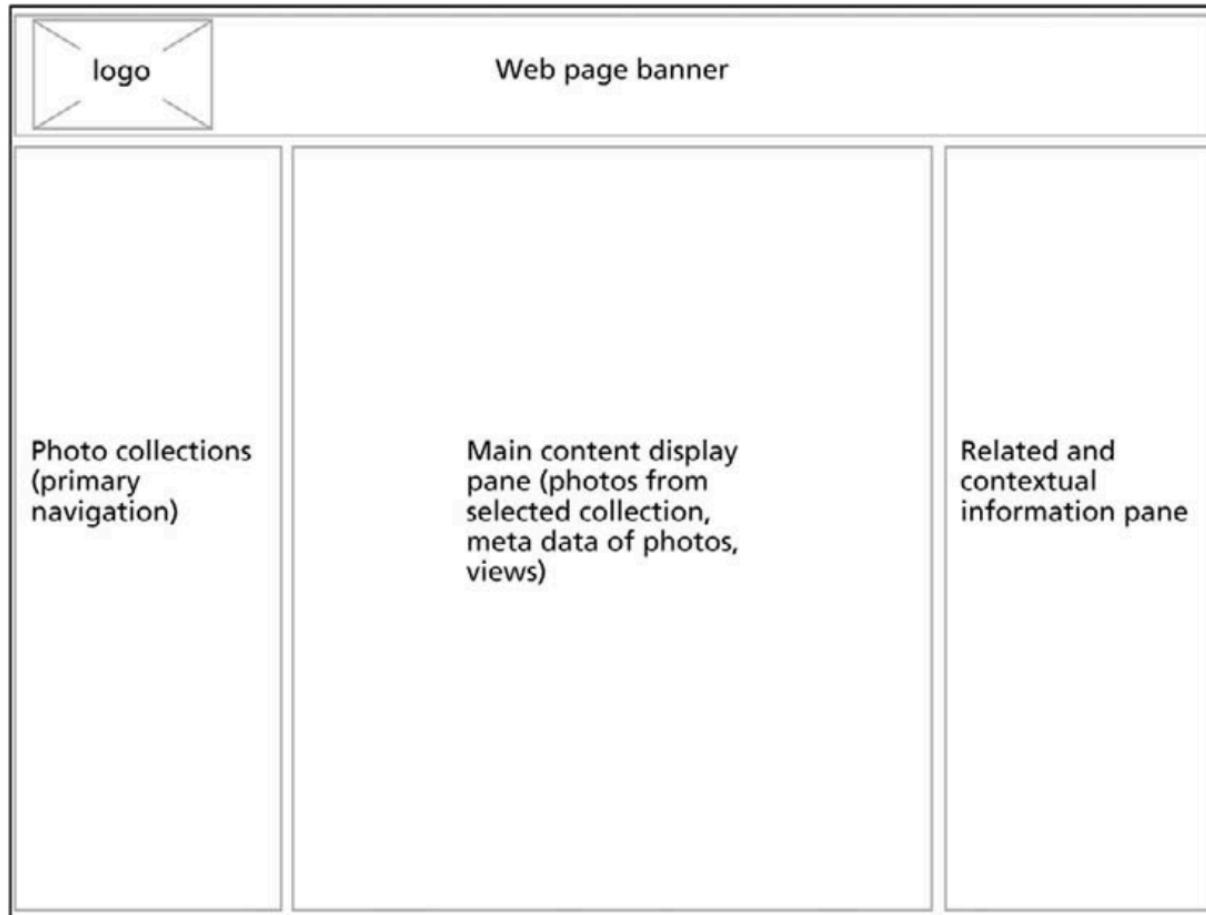
Prototype: medium-fidelity (wireframes) - definition

- 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

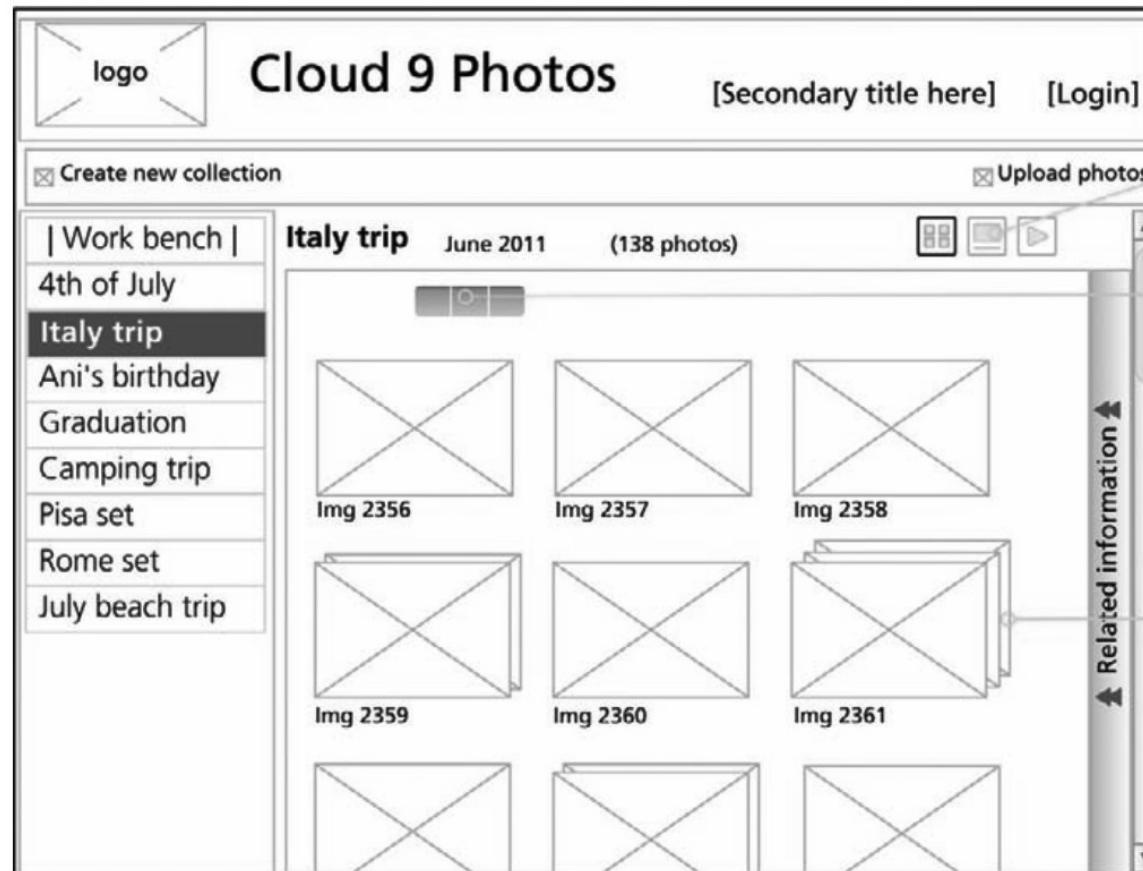
Prototype: medium-fidelity (wireframes) - purpose

- 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

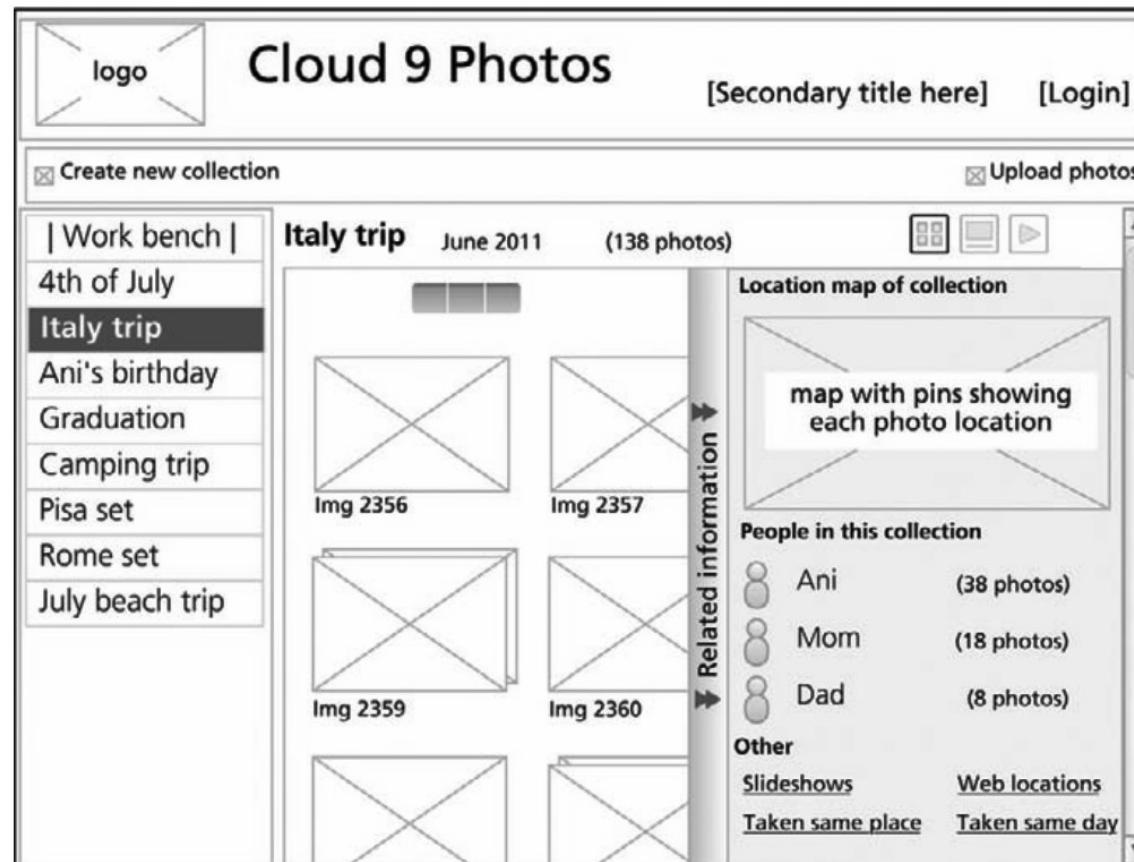
Prototype: medium-fidelity (wireframes) – example [1]



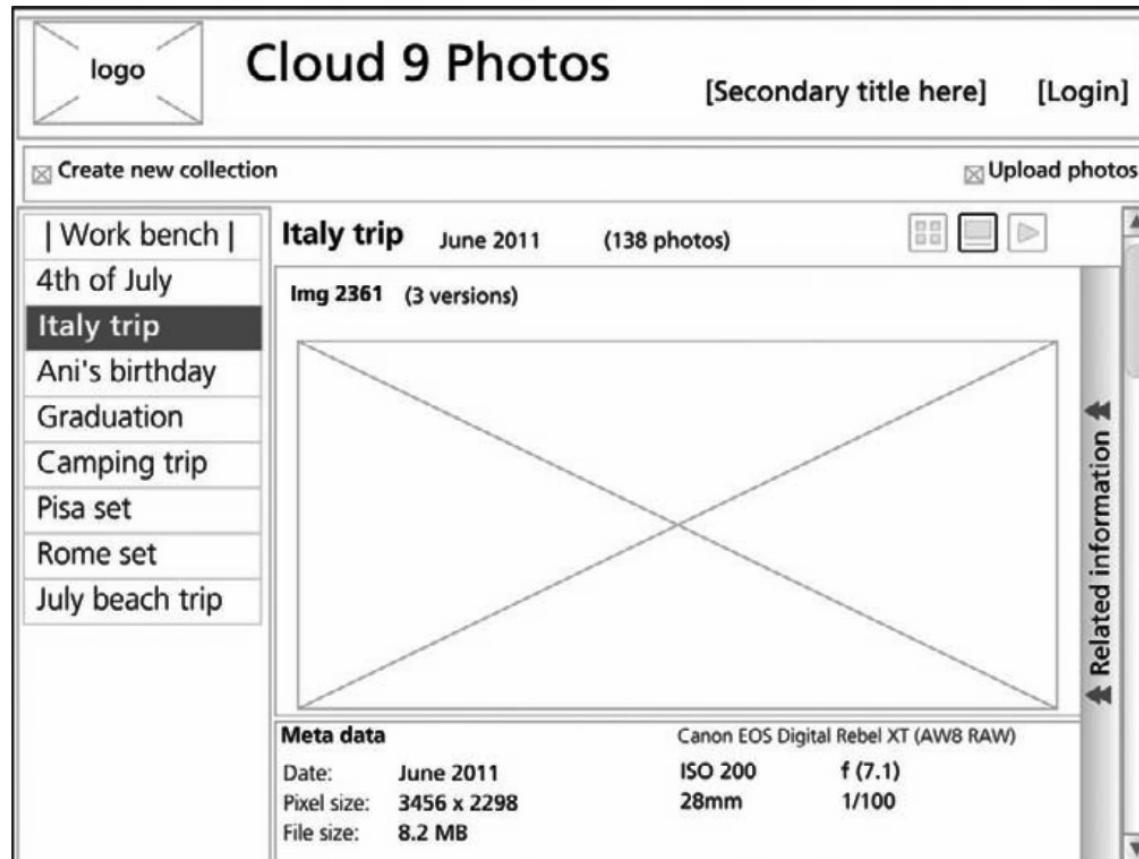
Prototype: medium-fidelity (wireframes) – example [2]



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



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



Prototype: medium-fidelity (wireframes)

The wireframe illustrates a travel booking website interface. At the top, a navigation bar includes links for "Plan journey", "Live info", "Special offers", "News", "About us", and a search bar. The main content area features a large branding placeholder and a "Quick timetable" section for flight bookings. Below this are sections for "Live departures", news, feedback, subscription services, and contact information. A footer at the bottom provides links to various site policies.

Plan journey **Live info** **Special offers** **News** **About us**

<branding>

Quick timetable

Leaving from: Going to: Outward date (dd/mm):
name name

Outward Time: Return date (dd/mm): Return Time:

Find

Live departures

Pellentesque non, dui. Provided by [lorum ipsum](#)
fermentum id, iaculis in, arcu. Nam sodales ornare neque. Sed ut ante.
Choose: **View**

News <>= >>

22 Jan 2006 **Headline**
Aliquam luctus lorem nec nulla. Class aptent taciti sociosqu ad litora aptent taciti
More

Your feedback

Aliquam luctus lorem nec nulla. Class aptent taciti sociosqu ad litora aptent taciti
More

Subscription services

Aliquam luctus lorem nec nulla. Class aptent taciti sociosqu ad litora aptent taciti
Register

Contact us

Aliquam luctus lorem nec nulla. Class aptent taciti sociosqu ad litora aptent taciti
More

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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!

Walmart iPad Application Design: 1.0 / Home Screen, cont.

Version 7.0

Screen Design Notes

location

functionality

interface interaction

2.3

Animation:
All product images are tappable; tapping will cause the product image to enlarge while flipping over to reveal a product detail overlay screen (screen 2.3)

Animation references:
Gap's 1969 Stream app and Amazon's WindowsShop app

Prototype: medium-fidelity (wireframes)

Annotate!

Walmart iPad Application Design: 1.6 / Home / Location Services / Local Ad Access

Version 7.0

Screen Design Notes

001 Anonymous User: Tapping Local Ad displays a modal with GPS location services button and location search entry field

User with 'My Walmart' defined:
Tapping Local Ad takes the user to the Local Ad screen (1.8)

The wireframe shows a sidebar menu with categories like All Departments, Apparel, Shoes & Accessories, Baby, Best Sellers, Books, Craft & Party Supplies, Electronics, Furniture, Grocery, Health, Home, Home Improvement, Jewellery, Movies, and Music. The main content area features a 'Summer fun for less' banner and a grid of product cards. A 'Local Ad' modal is displayed, containing fields for 'Enter a zip code or location' and a 'Discover great deals near local Walmart' button. At the bottom, there are links for 'Rollbacks', 'Local Ad', and 'Discover great deals'. Navigation icons include 'Find My Walmart' and 'My Cart'. A red arrow labeled 'location' points to the 'Local Ad' button in the modal. Another red arrow labeled 'functionality' points to the note about the 'My Walmart' user definition. A third red arrow labeled 'interface interaction' points to the 'Discover great deals' button.

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

Prototype: medium-fidelity (wireframes)

Annotate!

Walmart iPad Application Design: 2.2 / Product / Shelf Level with Grid-View

Version 7.0

location

Screen Design Notes

001 On left/right swipe, the Easter-Egg cycle is enabled on the grid-view content display.

Easter-Egg cycle definition:
On swipe left or right, the current product image will slide out and a new product image will slide in. This is a learned behavior by the user, and there is no dot navigation visible for this functionality.

1.2

On Tap:
'Find My Walmart' is initiated for anonymous users, prompting them to select a store based on their current location.

001

Product Image

Knoll: A Modernist Universe

★★★★½

Online \$24.99

Herzog & De Meuron Natural History

★★★★½

Online \$55.99

Principles of Form and Design

★★★★½

Online \$14.99

Product Image

Blackbook: Graffiti Sketchbook

★★★★½

Online \$14.49

Color and Light: A Guide for the Realist Painter

★★★★½

Online \$24.49

Draw 50 Buildings and Other Structures: The Step-by-Step....

★★★★½

Online \$55.99

Product Image

My Account

Find My Walmart

My Cart

Prototype: medium-fidelity (wireframes)

Annotate!

Walmart iPad Application Design: 2.3 / Product / Product Detail Screen / Photos

Version 7.0

location

functionality

interface interaction

Screen Design Notes

001 Previous and Next sheets are lined up on the right and left of the product detail screen in view.

On Tap or Swipe:
The previous/next product detail screen slides into focus

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

The screenshot shows the Material Design homepage. At the top, there's a banner with the text "Material is a design system... backed by open source code... that helps teams build high-quality digital experiences." Below the banner are two buttons: "GET STARTED" and "WATCH VIDEO". The main content area is titled "Design guidance and code" with the sub-instruction "Use our most popular design and development resources to jumpstart your latest project". There are six sections arranged in a grid:

- Material Design guidelines**: Material Design principles, styles, and best practices. It includes a purple square icon with geometric shapes.
- Components**: Design guidance and developer documentation for interactive UI building blocks. It includes a purple square icon with various UI components.
- Icons**: Access five sets of stylized system icons, available in a range of formats and sizes. It includes a blue square icon with three icons: a refresh, a speaker, and a timer.
- Material Components for the web**: Implement and customize Material web apps with our code and documentation. It includes a green square icon with a globe and other web-related icons.
- Accessibility guidelines**: Learn how to help users of diverse abilities to navigate, understand, and use your UI. It includes a blue square icon with a person icon.
- Developer tutorials**: Implement Material with Java, Kotlin, Objective C, Swift, the web, or Flutter. It includes a green square icon with developer-related icons.



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