

UI / UX Principles

Lecture 6: Concept to Low-Fidelity (Prototyping) (Part 2)



© Spring 2025 – **Dr. Ahmed Moawad** ahmed.moawad@sut.edu.eg

Prototype Stage

Information Architecture



User flow



Sketches

Paper Prototype

Digital Wireframes

LO-FI Prototype

Visual design / UI

HI-FI Prototype

Sketches Paper Wireframes

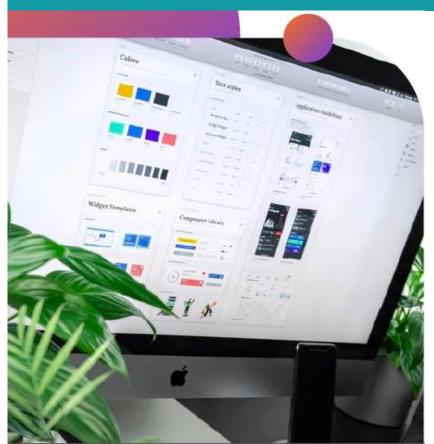


What is the meaning of Wireframe?



- A wireframe is a basic outline of a digital experience, like an app or website.
- They're mostly lines and shapes with some text.

What is the meaning of Fidelity?



- In UX, fidelity means how closely a design matches the look-and-feel of the final product.
- Low fidelity, that means it has a lower amount of complexity.
- High fidelity, that means it closely matches the look-and-feel of the final product.

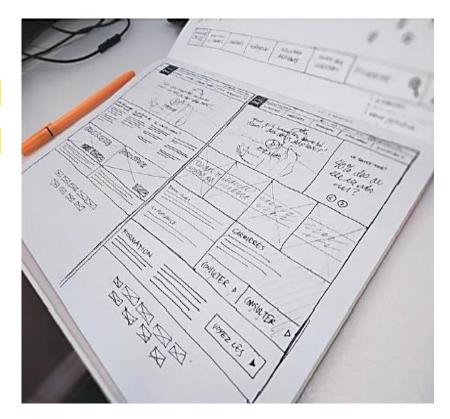
What is the meaning of Prototype?



• A simulation or sample version of a final product, which UX teams use for testing before launch.

What?

- Paper wireframes or sketches are drawings that represent the skeleton of a website or an app interface.
- As the name suggests, it is often done on a **sheet of paper or a whiteboard** using a pencil or a pen for rapid simulation and testing.



Why?

- Establish the basic structure of the pages and Visualize ideas.
- Easy to use- Anyone can do paper prototyping.
- Quick iteration.
- Cost-effective- the paper itself is cheap, and it is easy to identify mistakes before the design or product development.

How?

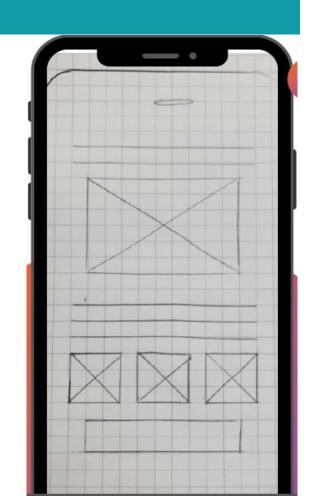
Industrial Standards:

Text is represented by horizontal lines.

Images, **photos**, **illustrations**, and **icons** are represented by a square or rectangle and an X overlapping the square or rectangle.

Calls-to-action is often represented by rectangles or circles. A common example of a call-to-action is a "submit" button on a web form.

No Colors.. Some Text



How?

Step 1: Gather your materials.

Step 2: Write a list of the elements you need to include in your wireframe.

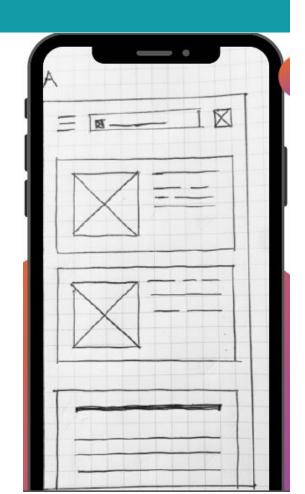
Step 3: Create different versions of how to structure information on the page.

Step 4: Choose which elements to refine

Step 5: Combine elements into a refined wireframe.

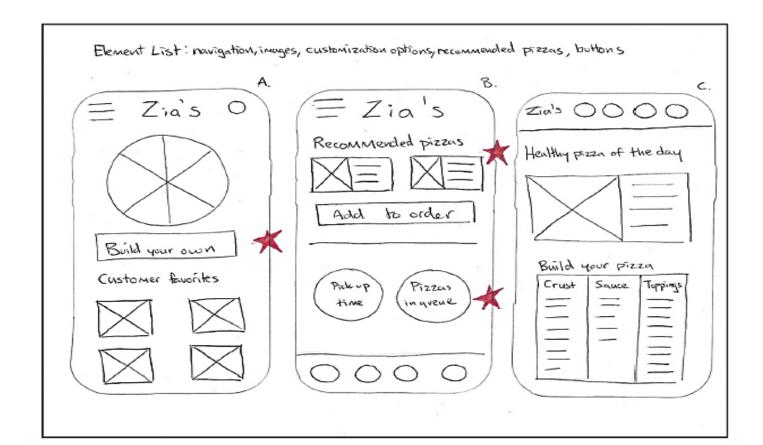
Step 6: Repeat the same steps on all the pages.

Step 7: Save your work



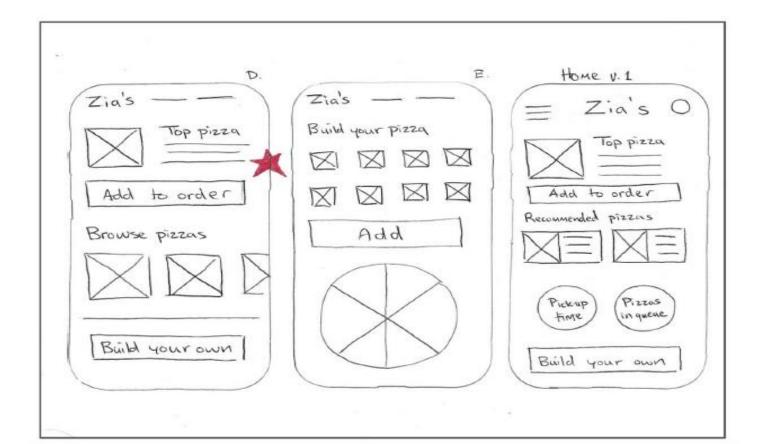
How?

Example:



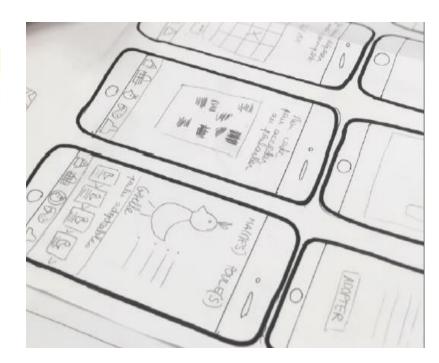
How?

Example:



What?

- Paper prototyping is a process where design teams create paper representations of digital products to help them realize concepts and test designs.
- They draw sketches or adapt printed materials and use these low-fidelity screenshot samples to cheaply guide their designs and study users' reactions from early in projects.



Why?

- Inexpensive.
- Rapid iteration.
- Flexible (easy to modify without losses)



How?

Step 1: Gather materials and tools.

Step 2: Cut out each screen.

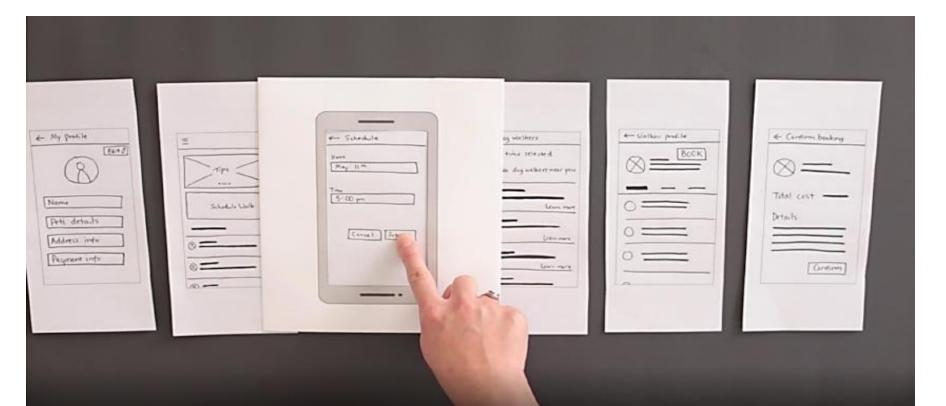
Step 3: Arrange the screens in order.

Step 4: Review your paper prototype's sequence.

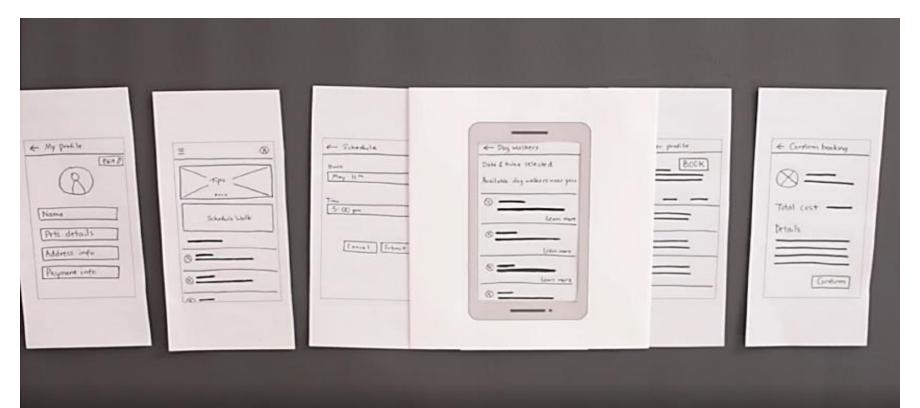
Step 5: Interact with your prototype.

Step 6: Resolve any missing steps.

Example



Example



Disadvantages?

- Unrealistic No matter how skilled the art, paper prototypes will never be more than hand-drawn representations of a digital product.
- False positives Sometimes, paper prototypes don't validate ideas properly. What seems like a good idea on paper might not work effectively in a digital wireframe.
- **No real reactions** Paper prototypes rely on the user's imagination, adding a break between seeing the stimulus and responding to it.

Digital Wireframes.



Digital Wireframes

What?

- The goal of paper wireframes was to get all of your ideas out on paper.
 And it was okay to be messy.
- But now with digital wireframes, it's important to get the structure right. And that means making your design cleaner.
- Digital wireframes are also **easier to** share than paper wireframes.



Digital Wireframes

Before Starting

Ask yourself:

- Is my paper wireframe complete?
- Have I received feedback on my paper wireframe?
- Am I ready to consider basic visual cues?

If "Yes".. Let's go.



Low-Fidelity Prototype



Low-Fidelity Prototype

What?

- Low-fidelity (lo-fi) prototyping is a quick and easy way to translate design concepts into tangible and testable artifacts.
- The first and most important role of lo-fi prototypes is to check and test
 functionality rather than the visual appearance of the product.



Low-Fidelity Prototype

The main difference between Low-Fidelity Prototype and Digital Wireframes is:

- Lo-Fi Prototype focuses on interaction and functionality.
- Digital Wireframe focuses on layout and structure without final details.
- Both help you before starting the actual design or coding.

End of Chapter 4

