

UI / UX Principles

Lecture 5: Concept to Low-Fidelity (Prototyping) (Part 1)



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Chapter 4



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Let's Remember Design Thinking

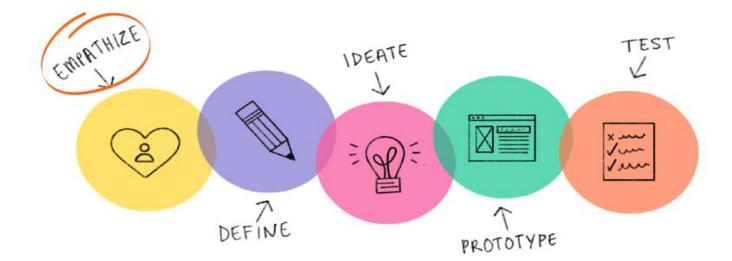
Design thinking is a user-centered approach to problem-solving.

An iterative process in which you seek to understand your users, challenge assumptions, redefine problems and create innovative solutions which you can prototype and test.

Empathize

• Understand the experience, situation, pain points and emotion of the person who you are working for.

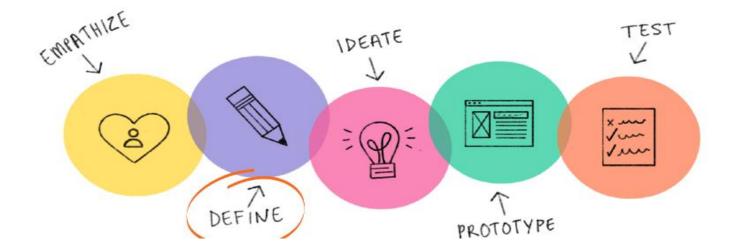
Ex: Empathy map, Persona, User story, and User journey map



Define

• Organize the information you have gathered during the Empathize stage and analyze your observations to define the core user problems.

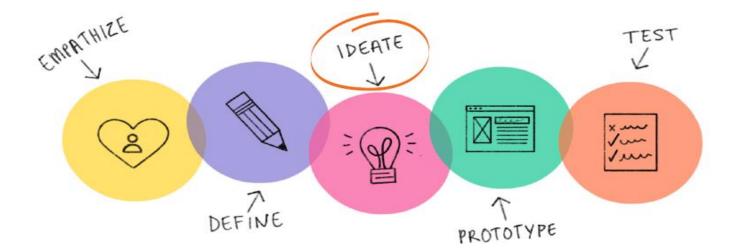
Ex: Problem Statement, The 5 Whys, The 5Ws and H.

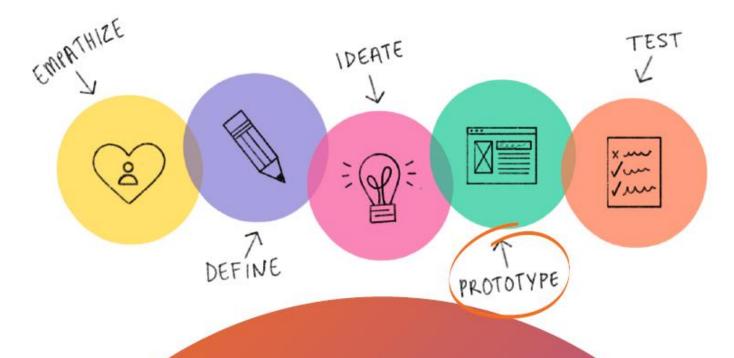


Ideate

• Organize the information you have gathered during the Empathize stage and analyze your observations to define the core user problems.

Ex: Brainstorm, Storyboard, Crazy 8 sketching & Dot Votin.





Prototype



Let's Build Something



Prototype Stage



A simple, cheap, and fast way to build an early model of a product that demonstrates its functionality.

Information Architecture.

User flow

Sketches.

Paper Prototype.

Digital Wireframes.

LO-FI Prototype.

Visual design / UI.

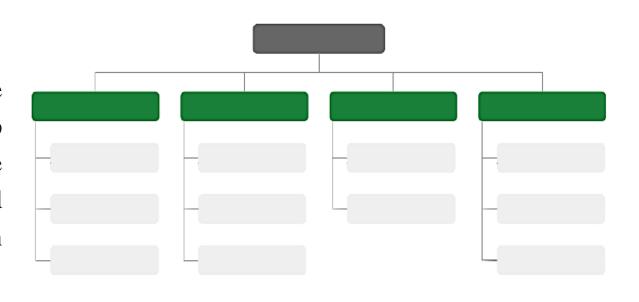
HI-FI Prototype.

Information Architecture (IA)

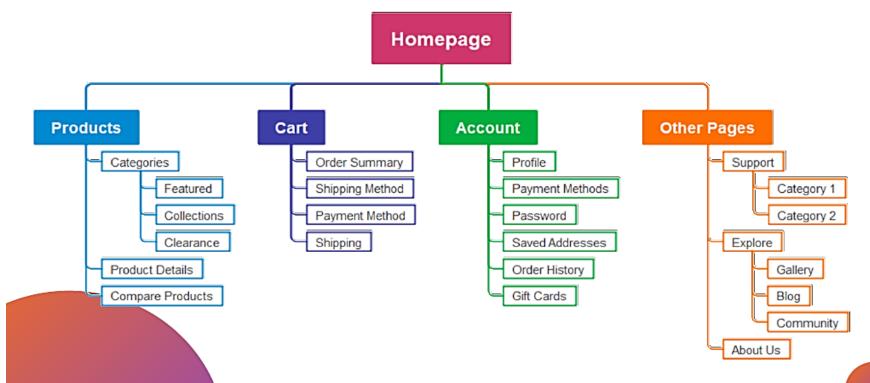


What?

Information architecture organizes content to help users understand where they are in a product and where the information they want is.



Example



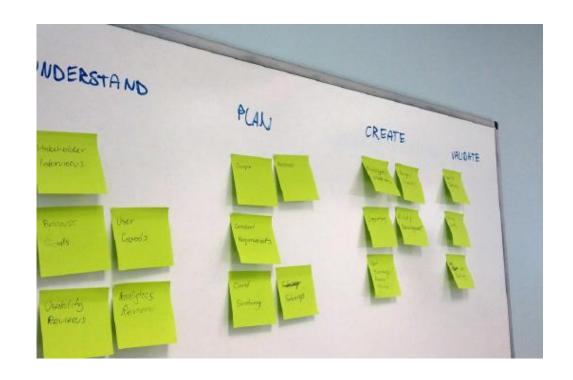
Benefits

- When users find a product easy to use, it means they can find what they're looking for, quickly and intuitively.
- Stakeholders can evaluate whether the content in this site or app is the correct type of content and placed in the appropriate.
- Helps engineers understand how to organize the data

How?

Card sorting:

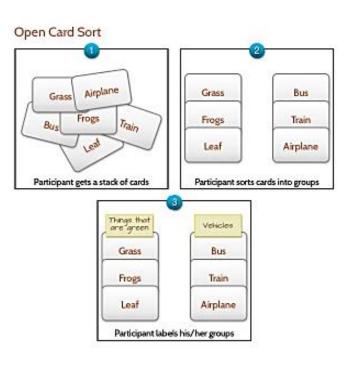
Is a UX research technique in which users organize topics into groups that make sense to them. Use it to create an IA that suits your users' expectations.



How?

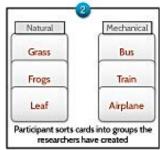
Card sorting:

Types
Open VS. Closed



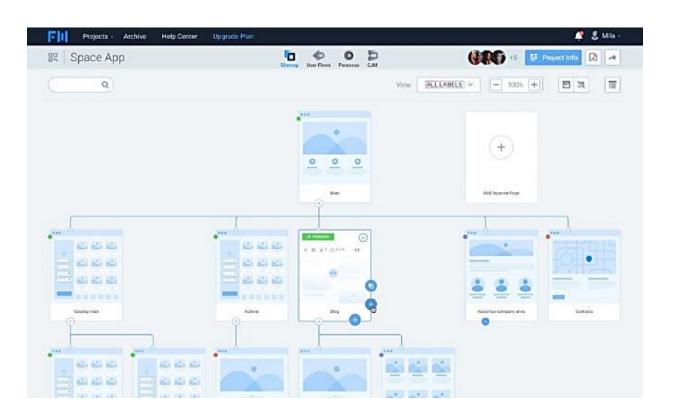
Closed Card Sort Grass Amplane Burs Frogs Train

Participant gets a stack of cards



Tools

- Pen and Papers.
- Adobe Photoshop
- Adobe XD
- Figma
- flowmapp.com



What is the meaning of Gestalt Principles?

- Describe how humans' group similar elements, recognize patterns and simplify complex images when we perceive objects. These principles guide how humans view the designs around them in everyday life.
- There are seven individual principles commonly associated with gestalt theory: similarity, continuation, closure, proximity, figure/ground, symmetry & order and common fate.

Similarity

- Elements that share similar shapes, colors, or sizes are seen as belonging to the same group.
- Used for buttons, icons, and lists to maintain consistency.



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Law of Similarity

Hard to recognize sign in button

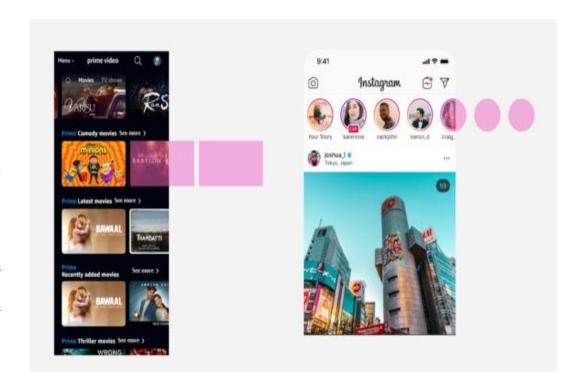


 Obvious purpose of all elements

Password	

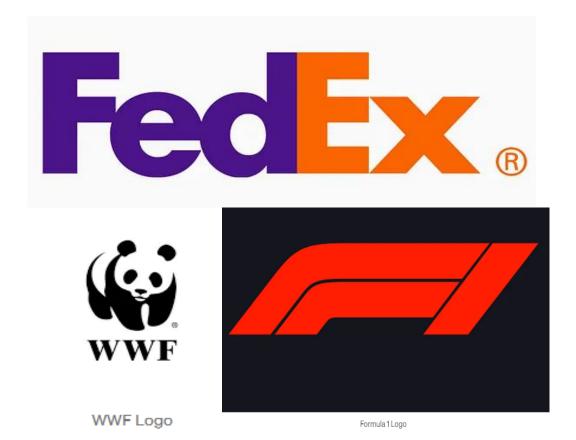
Continuation

- The eye follows lines, curves, and paths smoothly.
- Used in layouts to guide the user's eye naturally across a page.



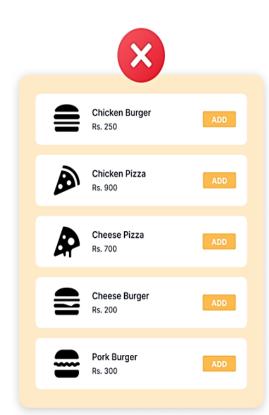
الإغلاق Closure

- The brain tends to fill in missing parts to perceive complete shapes.
- Used in logos and icons to create visually appealing designs.



Proximity التقارب

- Elements that are close to each other are perceived as related.
- Used in menus and buttons to indicate groupings.



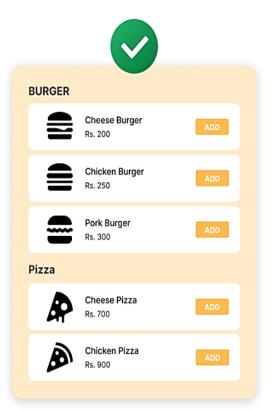


Figure / Ground

Mark

- The brain distinguishes between the main subject (figure) and the background (ground).
- Used to highlight important elements like CTAs (Call-To-Action buttons).

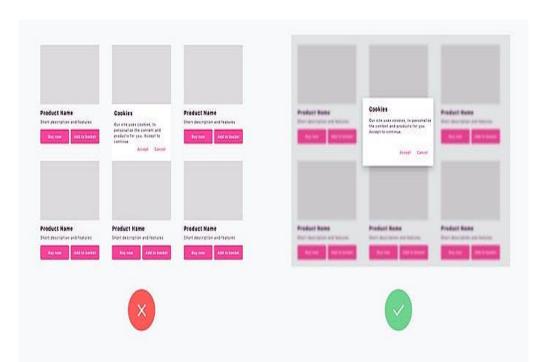
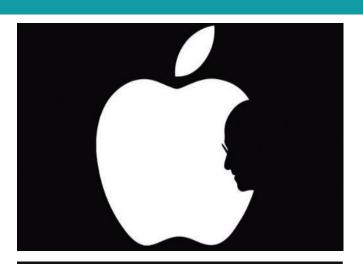
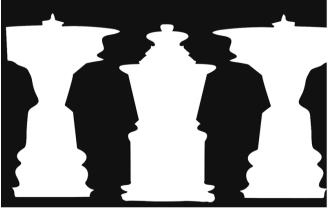


Figure / Ground

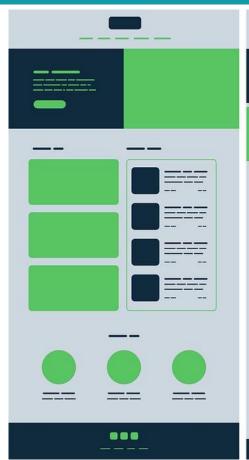
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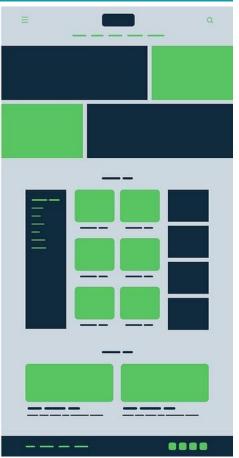




Symmetry & Order

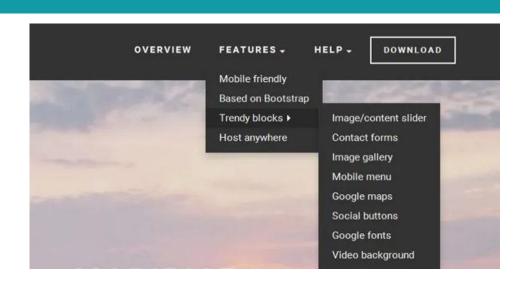
- This principle says that your brain will perceive ambiguous shapes in as simple a manner as possible.
- Symmetrical and well-balanced designs feel stable and pleasing.
- Used in layouts to enhance visual harmony.

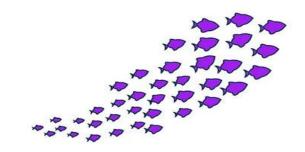


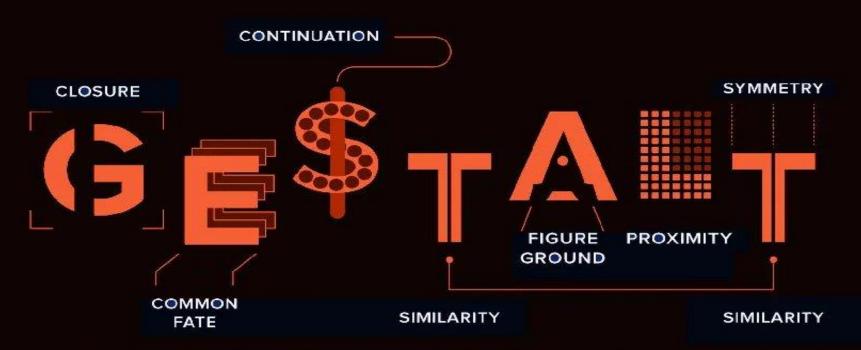


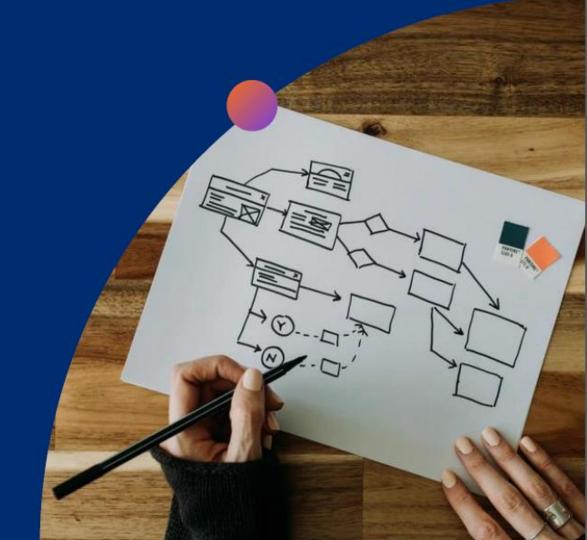
Common Fate

- Elements that move together are perceived as related.
- Used in animations and dropdown menus to show relationships.



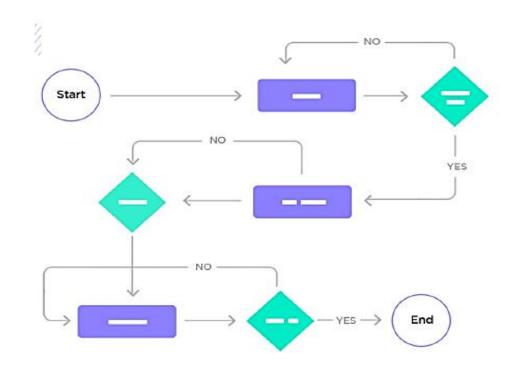






What?

It is the path taken by a user on a website or app to complete a task. The user flow takes them from their entry point through a set of steps towards a successful outcome and final action, such as purchasing a product.



Content

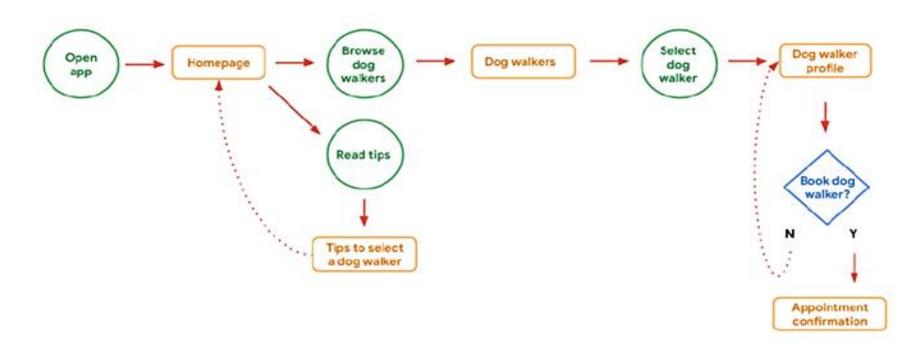


- UX designers often outline user flows with common shapes: circles, rectangles, diamonds, and lines with arrows.
- Each shape represents an interaction the user will have with the product you're designing.
- Assigning a different shape to each interaction makes the user flow clear to anyone on the team involved in creating the product.

How?

- Choose the user's task.
- Ask yourself:
 - What actions will users take in the app?
 - What decisions will users make?
 - What screens will users experience after taking action or making a decision?
- Outline user flow steps.
- Diagram the user flow.
- Save your work.

Example



Thank You

