Marwadi University
Marwadi Chandarana Group

NAAC A+

UI AND UX DESIGN

01CE0721

Unit 3

User Research and Information Architecture

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UX

The user experience (UX) design process is a continuous workflow that helps design teams create products and services that solve problems for users.

UX Basics For Case Study

First of all user needs to select topic

Ex. (Real Estate , Restaurant , Education System)

UX Basics Points

- Concept sheet
- Brainstorming
- Affinity mapping
- Domain Research
- Market Research
- Personal Interviews
- user Research Questions
- User Persona
- Competitive Analysis
- User Journey Map
- Information Architecture
- User Flow
- Wireframe

Concept Sheet

Concept Title : unique name of your project

Concept Nature : online / offline

business type : B2B / B2C

revenue model : 1CR

collaboration and partner ? : 2 partners ratio (70:30)

Brainstorming

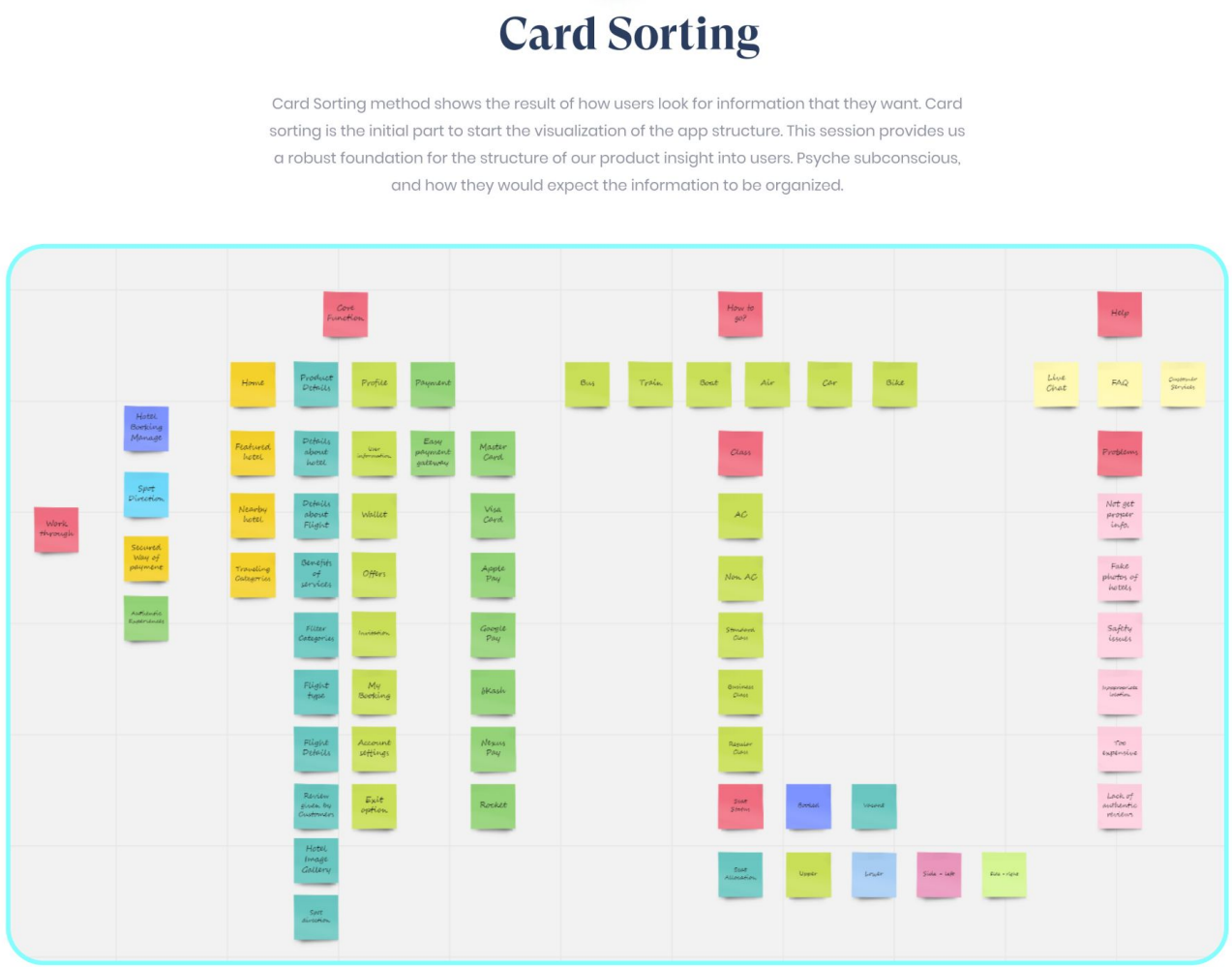
Brainstorming is a group problem-solving method that involves the spontaneous contribution of creative ideas and solutions.

Problems & Solutions

Problems	Solutions
01. Lack of data of the area or city	01. Providing proper guidance about the spot
02. Safety of the client	02. Providing customer care service to customers just in case they have help
03. Fake tour buses and Hotel	03. Providing the real picture of the bus and therefore the hotel room
04. Not having the right ambience of the hotel	04. Providing the proper ambiance to user
05. Inappropriate location of the hotel	05. Providing map direction to navigate the exact location
06. Unusable hotel	06. Providing well-rated hotel to the customer which is almost their dropout location

Affinity mapping

Affinity mapping, also known as affinity diagramming, is a method for organizing and categorizing qualitative data to find patterns and insights.



Domain Research

Research domains are different subjects or areas of study that help us learn new things and improve our understanding in various fields.

user needs to understands about his domain first.

like about Target Audience , Problems Faced in Current Education System , User Needs , Technology Trends in Education , Educational Policies & Standards , Popular platforms (if user working on education case study)

Market Research

Market research is the process of evaluating the viability of a new service or product through research conducted directly with potential customers.

user needs to do research about that field first

Example from restaurant case study.

The user must first understand the various types of food quality standards and the raw materials used.

Before creating a restaurant menu, it is important for the user to conduct market analysis by studying their competitors. This helps in understanding current food trends, pricing strategies, customer preferences, and identifying gaps or unique offerings to stand out in the market.

Personal Interviews

A personal interview, or face-to-face interview, is a type of user interview that is used in the UX design process to understand users' thoughts, attitudes, and experiences.

That contains 5 types of user details

1. User Photo
2. About User
3. His / Her Education
4. Life Goals
5. frustration

user Research Questions

User research questions are questions asked during user research to learn about users' needs, goals, and pain points.

User can Ask Such Types of Questions

1. Specific
2. Practical
3. Actionable

User Persona

A user persona is a fictional representation of your ideal customer. As a UX designer, you'll start the design process by conducting user research - building empathy with your target users and identifying exactly what they need from the product you're designing.

Competitive Analysis

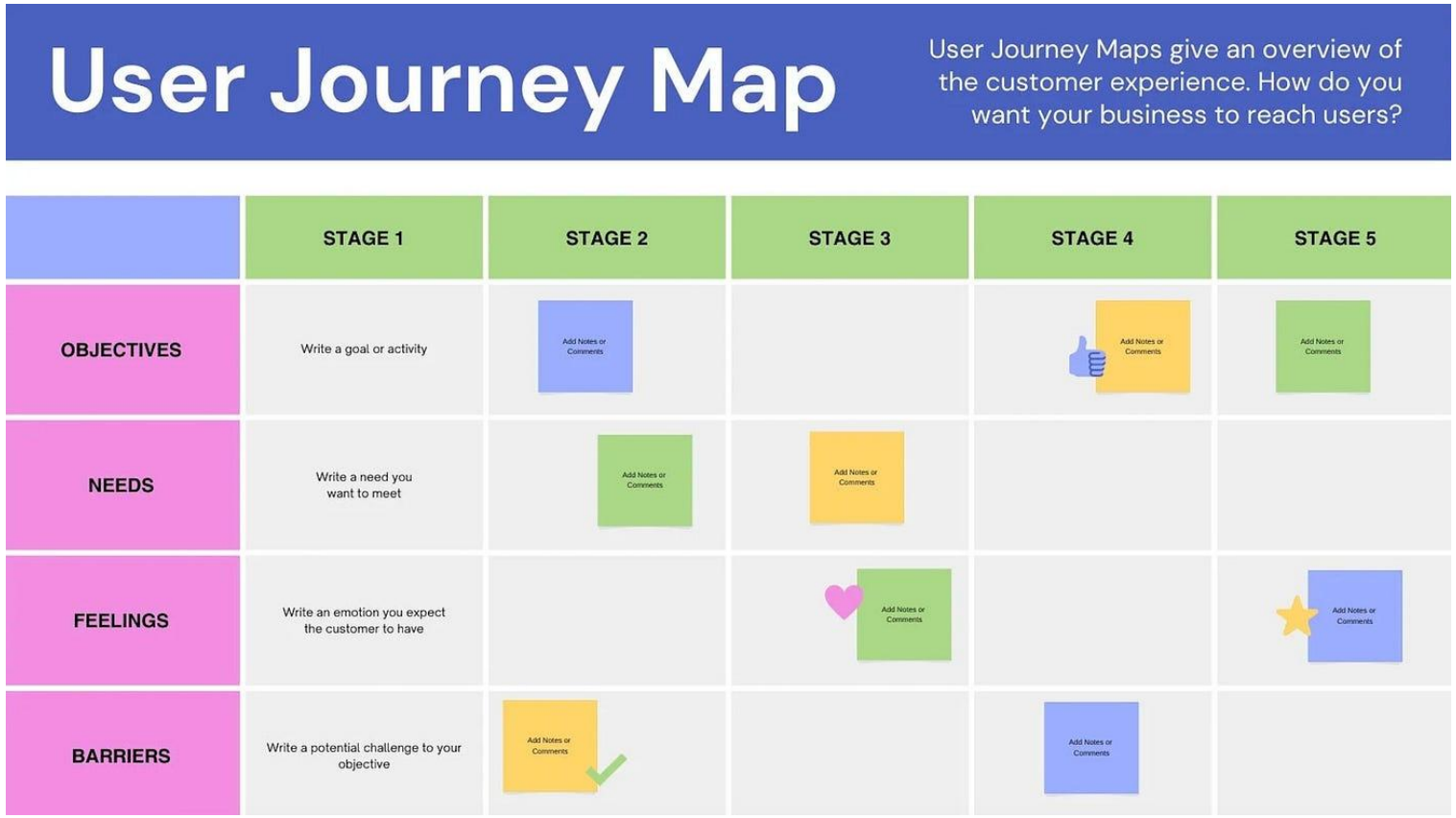
A UX competitive analysis is a technique that UX researchers use to understand the competition, identify opportunities, and find an edge. This analysis provides UX design teams with valuable insights to develop a UX strategy and enhance a product's user experience as well as business value.

Competitor Analysis

Competitors	Strengths	Weakness	Our Attempts
GoZayaan	• A wide selection of travel products and services • Competitive prices • A user-friendly interface • A variety of features and benefits	• A wide selection of travel products and services • Competitive prices • A user-friendly interface • A variety of features and benefits	• Improve customer service • Integrate with other travel apps • Develop new features and benefits
ShareTrip	• A large community of users • A wide variety of travel deals • A user-friendly interface • A variety of features and benefits	• Some negative customer reviews • A lack of integration with other travel apps • A lack of support for offline use	• Expand its community of users • Integrate with other travel apps • Develop new features and benefits • Support offline use
Skyscanner	• A wide selection of travel products and services • Competitive prices • A user-friendly interface • A variety of features and benefits	• Some negative customer reviews • A lack of integration with other travel apps • A lack of support for offline use	• Offer more competitive prices • Improve its user interface • Add new features and benefits • Support offline use
Around.Us	• A variety of travel experiences to choose from • A user-friendly interface • A variety of features and benefits	• Some negative customer reviews • A lack of integration with other travel apps • A lack of support for offline use	• Integrate with other travel apps • Develop new features and benefits • Support offline use

User Journey Map

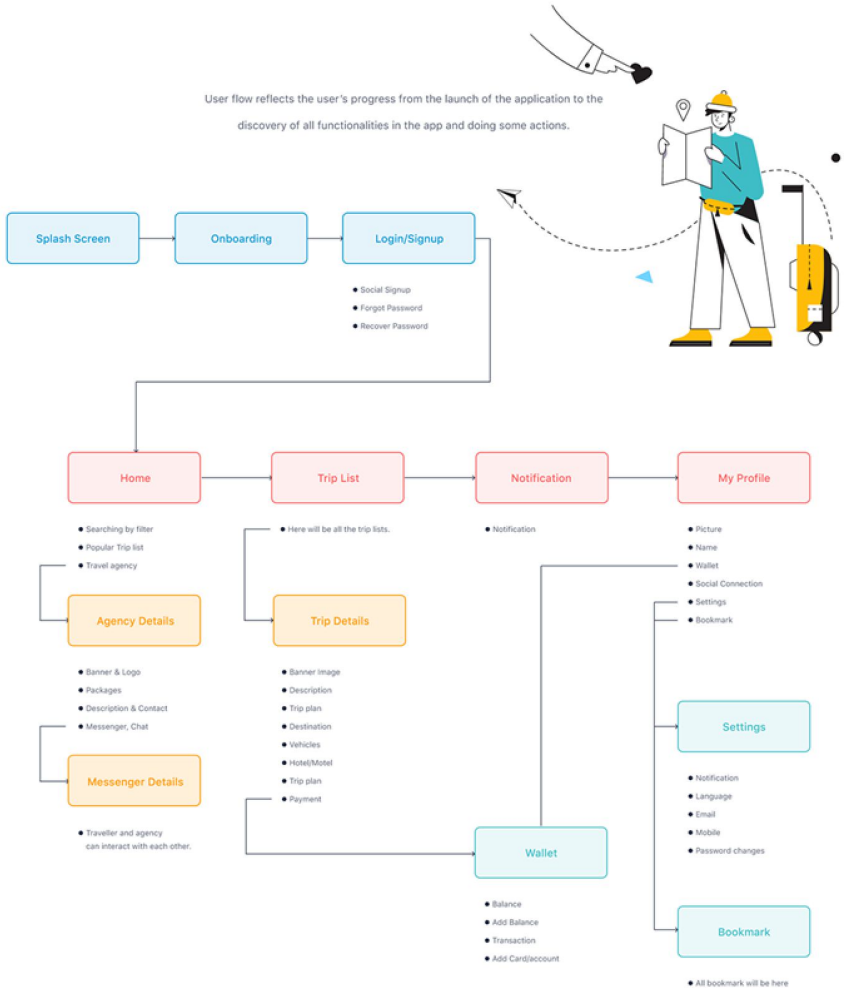
A user journey map is a diagram that visually illustrates the user flow through your application, software, or website. Every user journey map starts with an entry points - initial contact or discovery - and continues through the process of engagement into long-term customer loyalty and advocacy.



Information Architecture

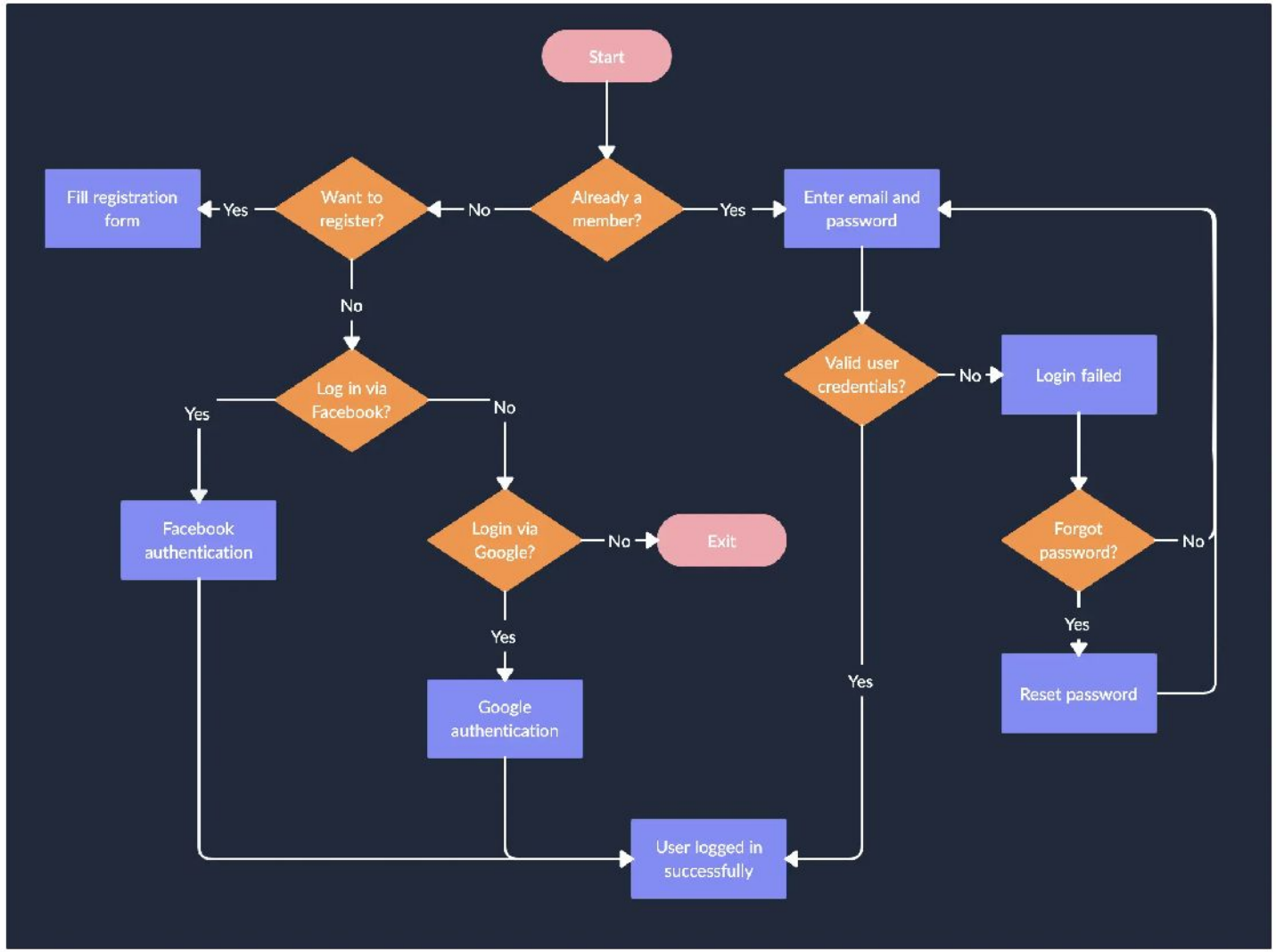
In user experience (UX) design, information architecture is the practice of organizing and structuring content on a website or app to make it easy for users to find and use.

Information Architecture



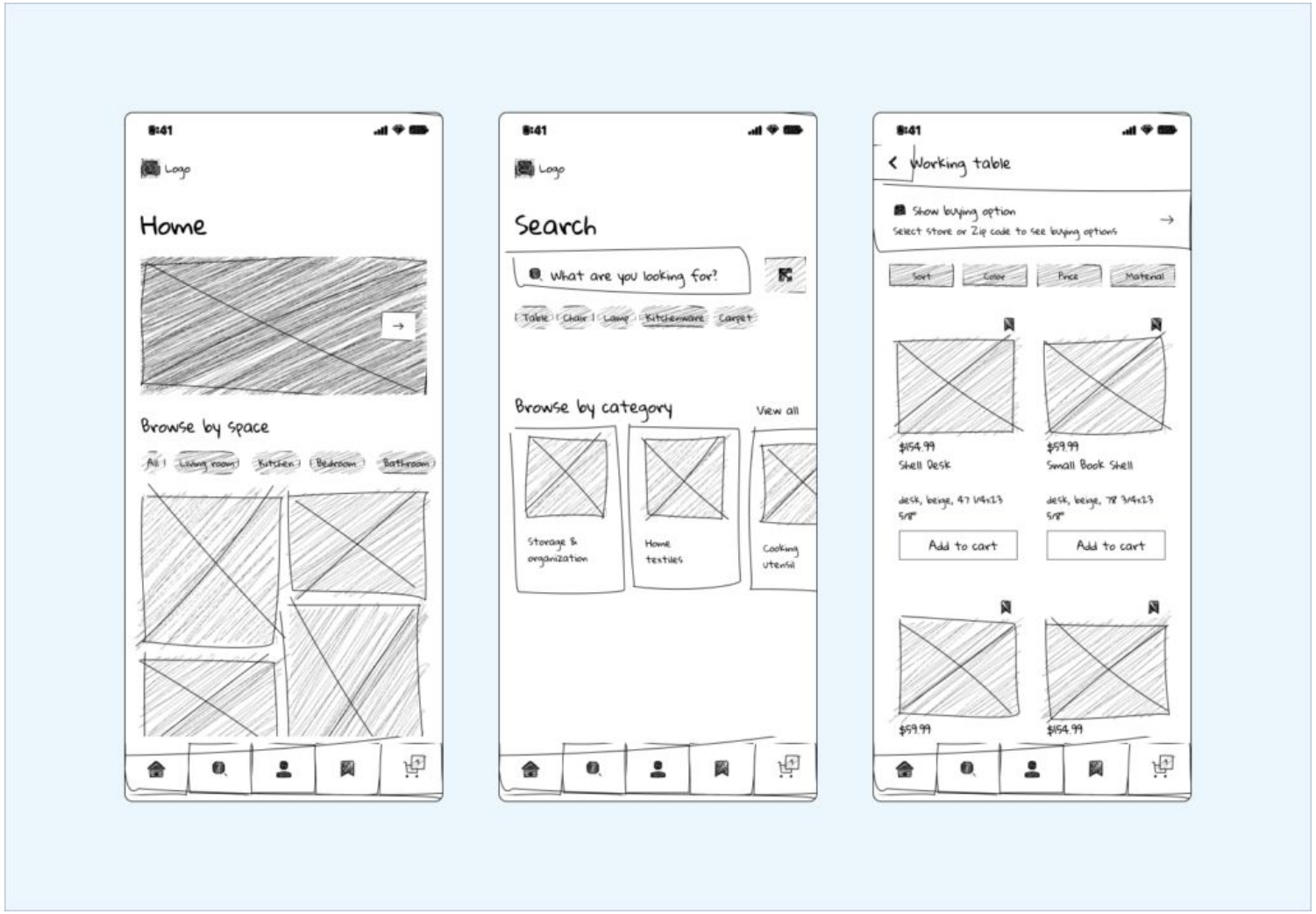
User Flow

A user flow is a user experience (UX) concept that investigates and documents the user actions required by a typical user to complete a defined task.



Wireframe

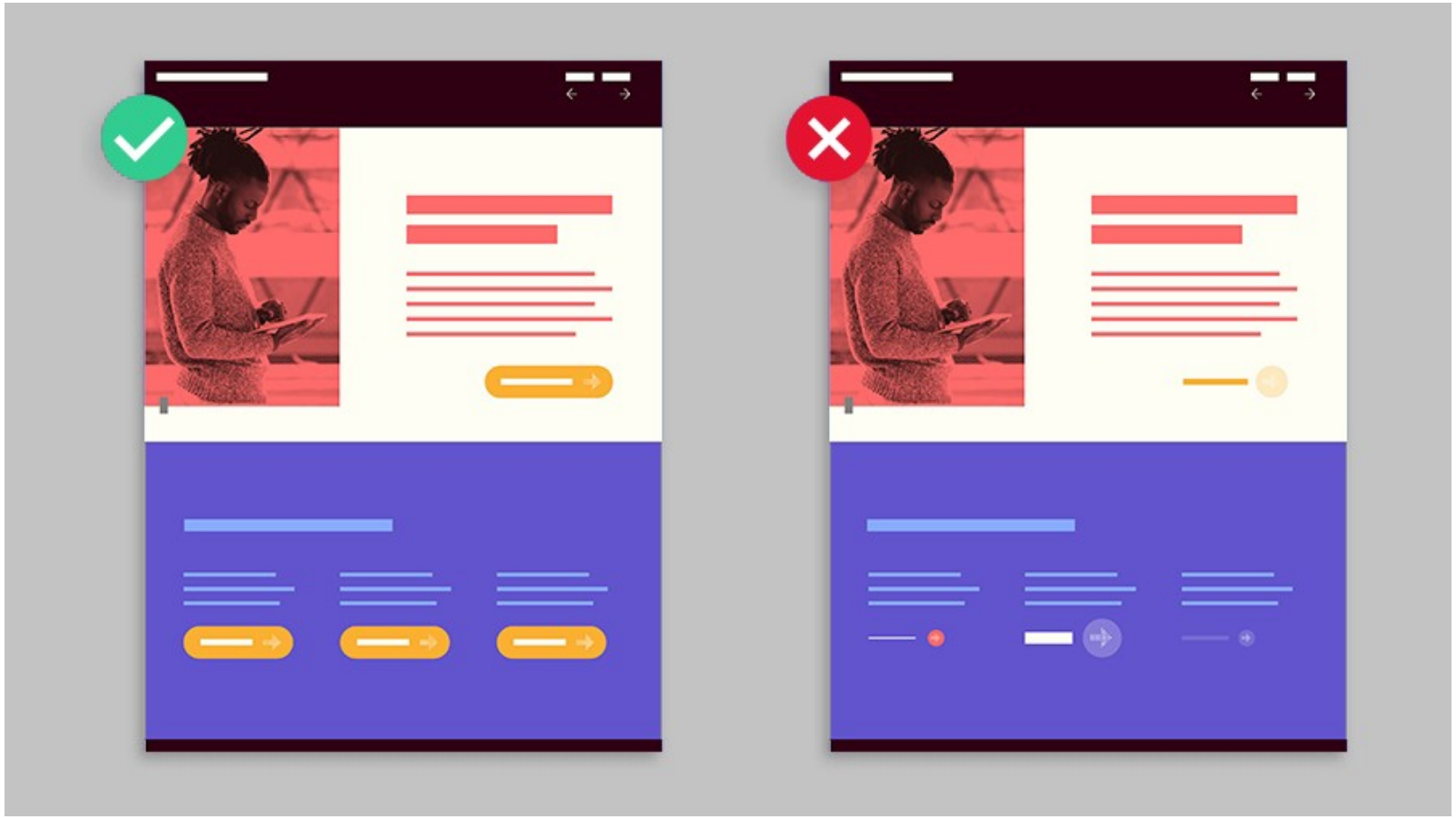
Wire framing is a way to design a website service at the structural level. A wireframe is commonly used to layout content and functionality on a page which takes into account user needs and user journeys. Wireframes are used early in the development process to establish the basic structure of a page before visual design and content is added.



Good And Bad Design

GOOD DESIGN is visually pleasing and creates a sense of harmony and balance. It uses color, typography, and composition effectively to create a cohesive look.

BAD DESIGN is often visually cluttered and unbalanced, making it difficult for the viewer to focus on the important information.



Difference Between Good And Bad Design

Good Design

Meets All technical & User Requirements

Works All The Time

Meets Costs Requirements (Coasting Is Low)

It’s safe (the rejection ratio is very low)

Easy to access & Easy to Explain (Flow is clear)

Difference Between Good And Bad Design

Bad Design

Doesn’t Meets All technical & User’s Requirements

Not Working All Time

Doesn’t Meets Costs Requirements (Coasting Is very high Due to Revision work)

It’s not safe (the rejection ratio is very high by client or by developer)

hard to access & Difficult to Explain (Flow is not clear)

Understanding Your Users

What / who is User

a person who uses a service, or uses your product.

Understanding Your Users

How can you understand your user and user needs

Usability testing: Ask participants to complete a task to understand how they interact with a product.

User interviews: Learn what users think of a product or service, and what they find challenging or convenient.

Focus groups: Understand the target users and market, and what they need.

Card sorting: Ask participants to group items into categories to understand how they organize information.

Field studies: Observe what users actually do, rather than what they say they do.

Diary studies: Gather a deep understanding of user behaviors with a variety of products.

Creating personas: Develop empathy with users and make decisions that address their frustrations.

Understanding Your Users

How can you understand Product Objectives

Start with a problem statement

A problem statement helps you identify the issues your users are having, which can help you define your objectives. For example, if users are having trouble navigating your customer profile pages, your objective might be to uncover usability and navigation issues with the design elements.

Align with the project scope

The project scope describes the problem you're trying to solve, the solution you're proposing, and the constraints and assumptions you're working with.

Use metrics

UX metrics can help you understand how efficient, effective, loyal, and satisfied your customers are. You can use various types of metrics, including quantitative, behavioral, qualitative, and attitudinal metrics.

Understanding Your Users

How can you understand Product Objectives

Use the S.M.A.R.T. framework

The S.M.A.R.T. framework helps you write objectives that are specific, measurable, achievable, realistic, and time-based.

Use feedback widgets

Feedback widgets can help you collect feedback on specific elements or features of your product. This can help you identify elements that are causing frustration for your users.

What is Interaction Design?

Interaction Design (IxD) defines the structure and behavior of interactive systems. Interaction designers strive to create meaningful relationships between people and the products and services that they use, from computers to mobile devices to appliances and beyond. Our practices are evolving with the world.

7 Principles of Interaction Design

1. Visibility

Visibility refers to the ability of users to see and understand the available options for interacting with a digital product. It's essential to ensure that all features and functions are clearly visible to users. This can be achieved by using clear and descriptive labels, icons, and buttons. Visibility helps users to understand what options are available to them and how to interact with the product.

What is Interaction Design?

2. Consistency

Consistency refers to the use of the same design elements throughout a digital product. Consistency helps users to understand how to interact with a product and reduces confusion. It's crucial to use consistent color schemes, typography, and layout to ensure that users can easily recognize different elements of the product.

3. Mapping

Mapping refers to the relationship between controls and their actions. You must ensure that controls are placed in a logical and intuitive manner. Users should be able to easily understand the relationship between different controls and their actions. For example, if there is a button to turn on the lights, it should be placed in a location that makes sense and is easy to find.

4. Feedback

Feedback refers to the response that a digital product provides when a user interacts with it. Feedback can be visual, auditory, or haptic. Make sure to provide feedback to users to confirm that their actions have been registered by the product. Feedback helps to reduce uncertainty and increases the confidence of users in their interaction with the product.

What is Interaction Design?

5. Constraints

Constraints refer to the limitations that are placed on the actions that a user can perform. Constraints help to prevent errors and guide users towards the correct actions. Constraints can be physical, logical, or cultural. For example, a logical constraint would be an error message that appears when a user enters incorrect information.

6. Simplicity

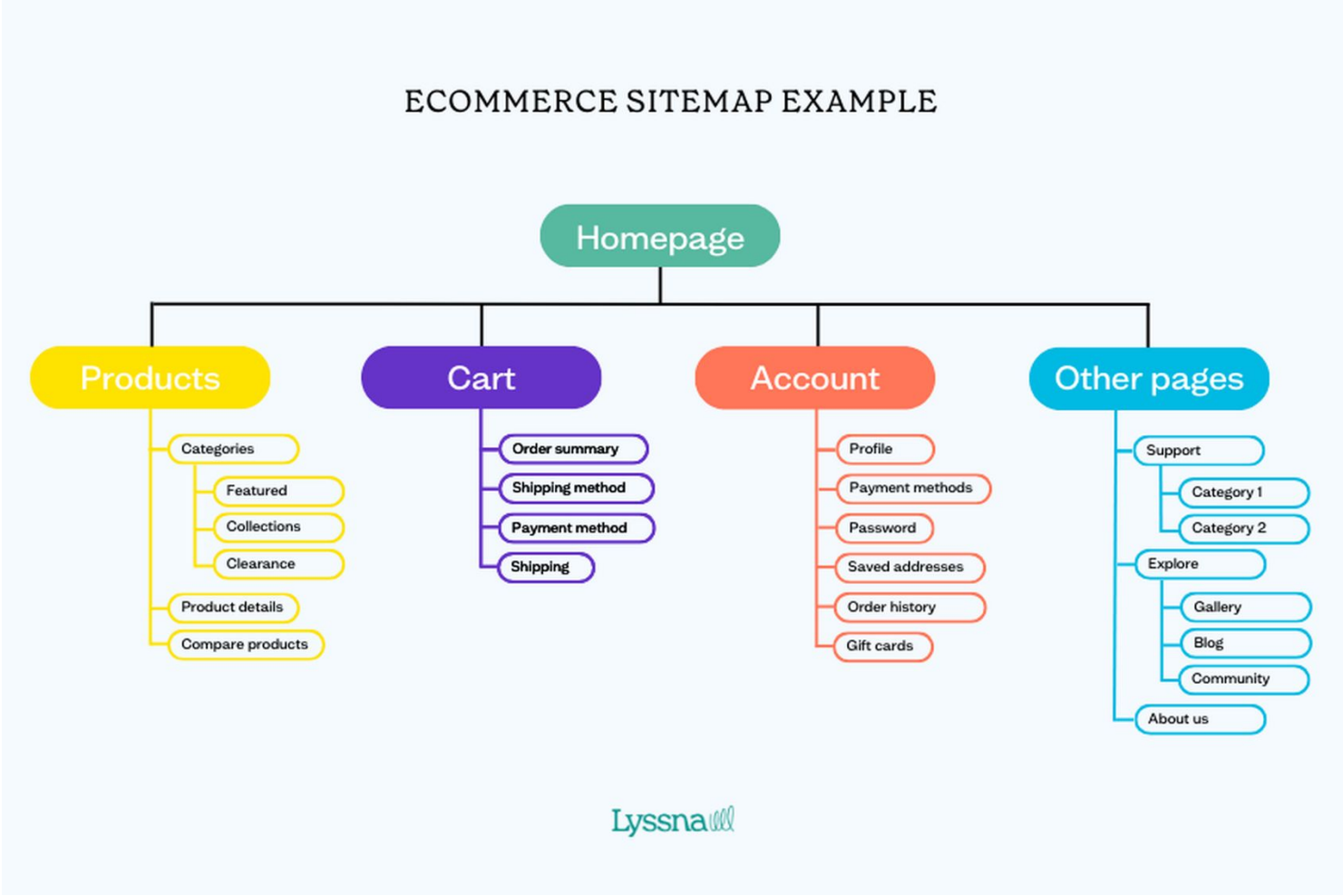
Simplicity refers to the ease with which a user can interact with a digital product. It's important to keep the interface simple and intuitive. A simple interface reduces the cognitive load on users and allows them to focus on the task at hand. It is important to avoid clutter and unnecessary complexity.

7. Flexibility

Flexibility refers to a digital product's ability to adapt to different users' needs. It's essential to provide different options for users to interact with a product. For example, you could provide users a variety of input methods, such as touch gestures or voice commands. It is important to provide different options to cater to the needs and preferences of different users.

Information Architecture

Information architecture (IA) is the process of guiding users through the site by organising and arranging all the relevant content in a clear, intuitive way. It also ensures consistency throughout a product's design by standardising labelling conventions such as menu names, link titles, and button labels across all pages.



THANK YOU