

LAB 3: Information Architecture (IA)

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Information Architecture (IA)

Information architecture (IA) is, like a **blueprint**, a **visual representation of product's infrastructure, features, and hierarchy**. IA may also include **navigation, application functions and behaviors, content, flows, labeling, and information hierarchy**. IA should encompass the generalized structure of the product so anyone (theoretically) should be able to read it and understand how the product works.

IA is the practice of organizing and structuring information to support **usability, findability** and **understand complex information**. IA provides designers (as well as product development and engineering teams) a **bird's-eye view** of entire product.

With IA available, it becomes significantly **easier to make** key decisions for new features and implementations and to follow user behavior through multiple processes.

The **challenge** while creating IA is in understanding how your app or website **actually works** from the user's perspective, and **how to organize** that information **into a readable and understandable** format.

Steps to create an IA

1) Content inventory and analysis

A content inventory is a comprehensive and structured **collection of all the content assets** within a digital product or website. It is detailed catalog that captures information about each piece of content, including its location, format, metadata, and key attributes.

Managing a content inventory provides a centralized and organized view of the content. With a content inventory, UX designers can clearly understand the content's scope and structure, enabling them to plan and create user-centered experiences effectively.

A **content audit** (systematically and thoroughly) evaluates the content inventory within a digital product or website. It **involves** reviewing and analyzing the content to assess its quality, relevance, accuracy, and effectiveness in meeting user needs and business goals—like the company's content marketing strategy.

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UX designers use content audits to identify content gaps, redundancies, inconsistencies, and areas for improvement, enabling them to make decisions about content strategy, organization & optimization. **Identify** any missing or outdated content that must be created or updated. **Eliminate** redundant and **ensure** clarity & consistency.

2) Card sorting

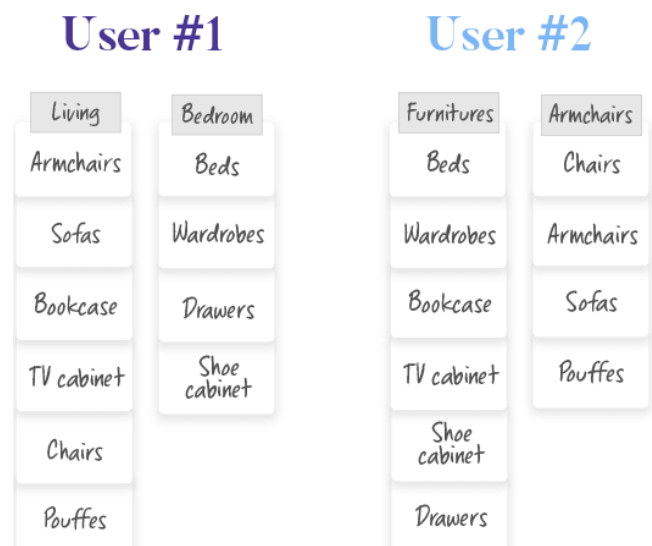
Card sorting is a UX research method used to discover **how people understand and categorize information**. In a card sort, participants group ideas or information written on cards into different categories in a way that makes sense to them. You can use virtual cards, pieces of paper, or an online card-sorting tool.

Card sorting is a highly useful technique in information architecture; it is used to understand **how users think about your content**. It can help you organize content so that it suits your users' mental models, rather than the point of view of your company.



How do you create an information architecture card sorting?

You write down the elements that you wish to organize onto cards and then ask participants to collect them into groups that make sense to them. Once the sessions are done, if many users organized the cards in a similar way, it is just a matter of applying that same organization to your content.



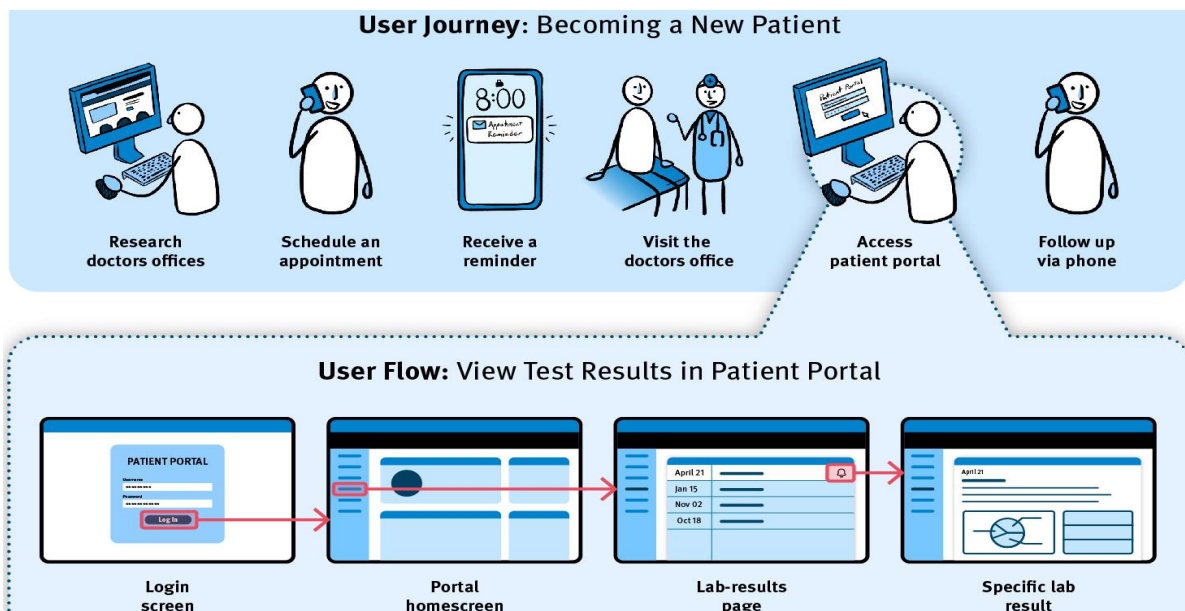


3) User flows and navigation design

A **user flow** is a path (steps) which users take to complete a certain task. This path includes the journey (aka navigation) from the entry point (like login) to the task completion (like creating a profile).

Navigation design (aka user journey) is a process of allowing visitors to flow from one page to another. It increases the ways to make it easy for users to find a formation they want to visit and let them explore more within website.

Key difference between navigation & user flow is that navigation focuses on overall experience of an individual user, while user flow focuses on each step in design process.

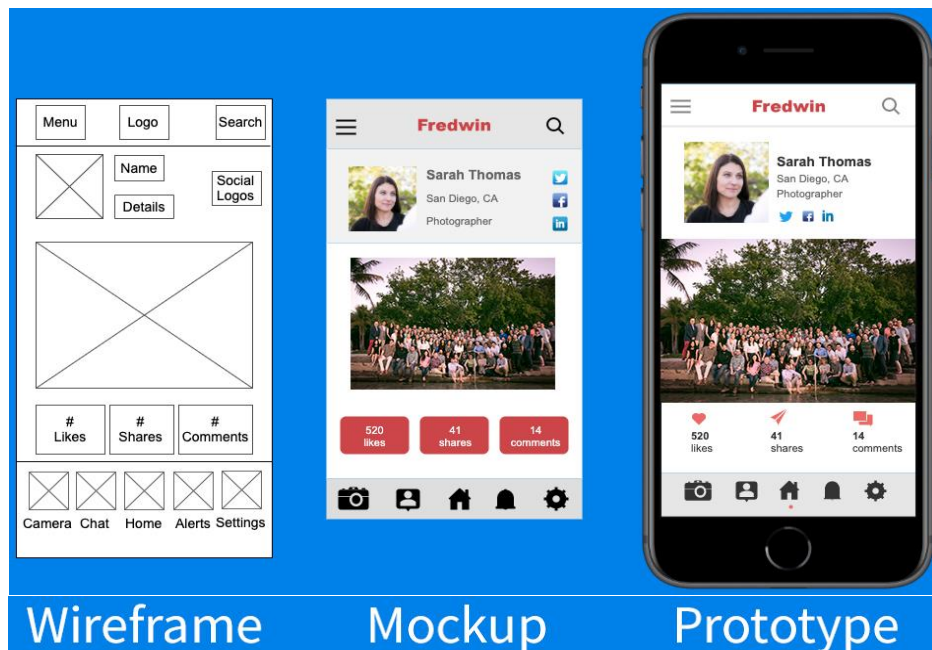


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4) Wireframing and prototyping:

A **wireframe** will make use of placeholders and focus on the overall structure. A **prototype** will make use of the actual design. A prototype is something that will be similar to how the final product acts and behaves. The wireframe is very low-fidelity, simple boxes and text convey a concept. The prototype is usable and clickable. (The mockup has added logos, colors, and icons to make it more realistic.)



Various models of information architecture

Models of IA are hierarchy, network, and matrix models. These models provide different ways to organize and structure information, depending on the nature of the content and user needs.

- 1) **Hierarchy model:** This model represents information in a hierarchical structure, where content is organized into levels of importance or category. It is commonly used when there is a clear order or hierarchy among the information.
- 2) **Network model:** In the network model, information is interconnected, allowing users to navigate through multiple paths or connections. This model is suitable for interconnected content where users may need to explore different paths.

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- 3) **Matrix model:** The matrix model organizes information into a grid or matrix format, with multiple dimensions or categories. It is useful for displaying complex information that has multiple attributes or characteristics.

By understanding these models, we will gain insights into how to choose the most appropriate model based on the characteristics of the content and the user's needs.

Key principles and considerations for creating an effective IA

By applying below principles, you will be able to design information architectures that enhance usability, findability, and user satisfaction in websites and app

- 1) **Organizing content:** organizing content in a logical and natural manner. This involves grouping related information together, defining categories and subcategories, and creating a clear information structure.
- 2) **Labeling:** Effective labeling is crucial for guiding users and helping them understand the content. Use clear and concise language, employing consistent terminology, and ensuring that labels accurately represent the content.
- 3) **Navigation design:** Navigation plays a crucial role in helping users move through the information space. Different types of navigation patterns are hierarchical menus, faceted navigation (e.g. filter search) and search-based navigation. Create clear and intuitive navigation systems that enable users to easily find and access information.
- 4) **User-centered design:** considering user needs, preferences & mental models when designing the IA. By understanding the target users and their goals, you can create an IA that aligns with user expectations and enhances the overall user experience.

Tasks:

1. Develop an information architecture for a website or app

To complete this task, students will go through the following steps:

- a. Identify the project scope and goals: Students will first understand the purpose and goals of the website or app they are working on. This could be a hypothetical project or

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a real-world case study. They need to have a clear understanding of what the website or app aims to achieve and the target audience it caters to.

b. Conduct a content inventory: Students will analyze the content that needs to be included in the website or app. They will assess the existing content, identify any gaps or redundancies, and determine how the content should be organized.

c. Create an initial IA structure: Based on the content inventory, students will start creating an initial IA structure. They will determine the main categories, subcategories, and relationships between different pieces of content. This can be done using tools such as diagrams or mind maps.

d. Refine the IA structure: Students will review and refine initial IA structure to ensure it aligns with the project goals and the needs of the target audience. They will consider factors such as ease of navigation, clarity of labeling & logical organization of content.

Test the effectiveness of the information architecture through card sorting or tree testing: Once the initial IA structure is developed, students will test its effectiveness through card sorting or tree testing. These methods involve involving users or participants in evaluating and providing feedback on the IA.

a. Card sorting: Students can conduct a card sorting activity where they ask participants to categorize and organize information cards into groups that make sense to them. This helps in understanding how users naturally perceive and organize information. Students will analyze the results to identify any patterns or inconsistencies in user expectations.

b. Tree testing: Another method is tree testing, where students present participants with an IA structure (represented as a hierarchical tree) and ask them to locate specific pieces of information or perform certain tasks. This helps evaluate the findability and effectiveness of the IA structure. Students will collect data on task success rates and user navigation paths to identify any issues or areas for improvement.

2. Revise the information architecture based on feedback from users