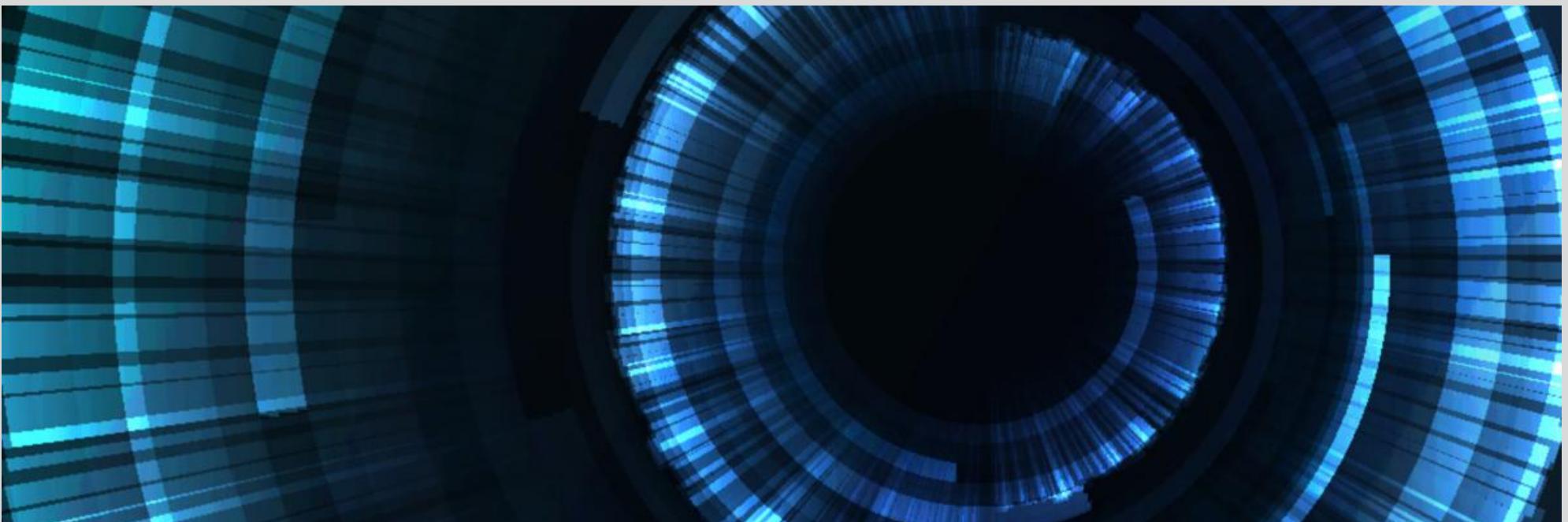


Human Computer Interaction



Original PPT: Dr Grace Eden
grace@iiitd.ac.in

Presented by Dr Indrani De Parker
indrani@iiitd.ac.in



Schedule

This Week Monday 7th March

Information Architecture

Activities

[Information Architecture](#) (Due Mar 12)

Create a map that shows how a user would navigate through your system.

Create ONE group Information Architecture for your system.

Create ONE task flow that supports a user goal from the start-to-end of a single task.

This Week Wednesday 9th March

Prototyping Techniques – Low Fidelity Prototype

Activities

[Low Fidelity Prototype](#) (Due Mar 19)

Sketch a user interface (UI) workflow for your technology

This Week– 07 & 09 March

Monday 07 March

TEAMS - 3, 24, 30

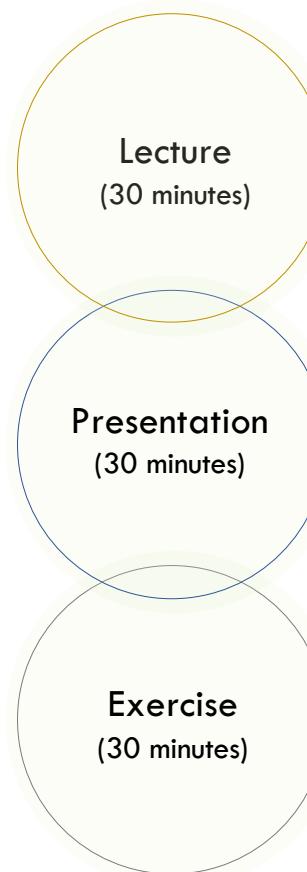
Wednesday 09 March

TEAMS - 16, 27, 40, 5

Wednesday 09 March

QUIZ – 3

Agenda – 07 March



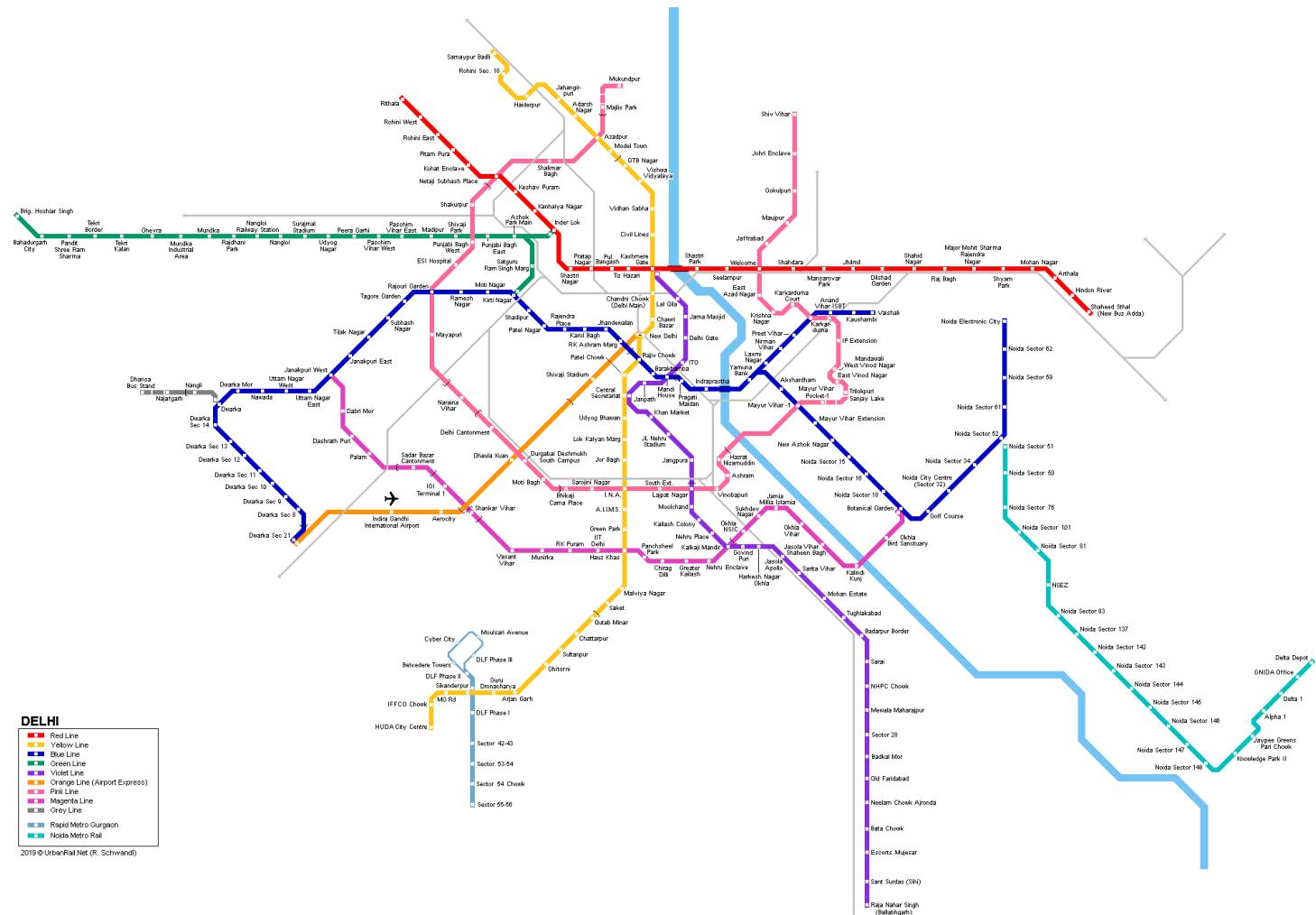
> Information Architecture >

> 10 minutes each team – Groups 03, 24, 30 >

> Information Architecture >

Information Architecture

Information Spaces



Information Spaces



Information Architecture: definition and purpose

- Structural design of shared information environments
 - Including:
 - Organization of content
 - Labelling
 - Search
 - Navigation systems
- Shaping information products and experiences to support usability and findability
 - Principles of design and architecture to the digital landscape.

Information Architecture: characteristics

- **Information**
 - **Data** - basic individual items (date, age, name) without context
 - **Information** - meaning making of data through analysis and interpretation
 - **Knowledge** - understanding and insights that modify thought and perception
- **Architecture**
 - **Structures** – organising space
 - **Design** – for specific purposes (e.g. café, hospital, restaurant)
 - **Navigation** – wayfinding, labelling

Information Architecture: elements

- **Organization system**
 - The presentation of information (e.g. categories of different types of content)
- **Labelling system**
 - Representations of larger amounts of information (e.g. 'contact us')
- **Navigation system**
 - Approaches for moving through content
- **Search system**
 - Information retrieval through keyword queries (metadata, ranking algorithms)

GUSTAVUS 
GUSTAVUS ADOLPHUS COLLEGE

Go Quickly To...

Search for at Gustavus

Calendar Athletics Academics Admission News Arts A-Z Directory

Excellence **Community** **Justice** **Service** **Faith**

The 'eyes and ears' of the chapel

Through "Apprenticeship of Christ Chapel," a unique program that helps mentor students and aid them in the discovery and cultivation of their faith, students become more involved in chapel life.



I am a...

Prospective Student	Alumnus/Alumna
Current Student	Visitor
Faculty Member	Staff Member
Parent	

Information About

Admission	Athletics
Academics	Fine Arts
Faith & Learning	Giving to Gustavus
Nobel Conference	Signature Events

Resources

Calendar	A-Z Directory
News	Contact Us
Featured Blogs	

Featured News & Events

"A Knowing Woman" Dedication

On Monday, Sept. 11, a new sculpture given to Gustavus Adolphus College by the children of Lloyd and Fran Engelsma was unveiled during ceremonies in the Folke Bernadotte Memorial Library.

"Honky" Author to Speak Sept. 20

The public is invited to hear Dalton Conley, author of "Honky," speak at 7 p.m. on Wednesday, Sept. 20 in Christ Chapel at Gustavus Adolphus College.

West to Speak on Nanomedicine at Nobel Conference Preview Dinner

Dr. Jennifer West, who is internationally recognized for cutting-edge research in two of bioengineering's most competitive fields, nanotechnology and tissue engineering, will be the keynote speaker at the Nobel Conference Preview Dinner.

Athletics News

Fine Arts News

Rate this page: 

[Return to top](#)

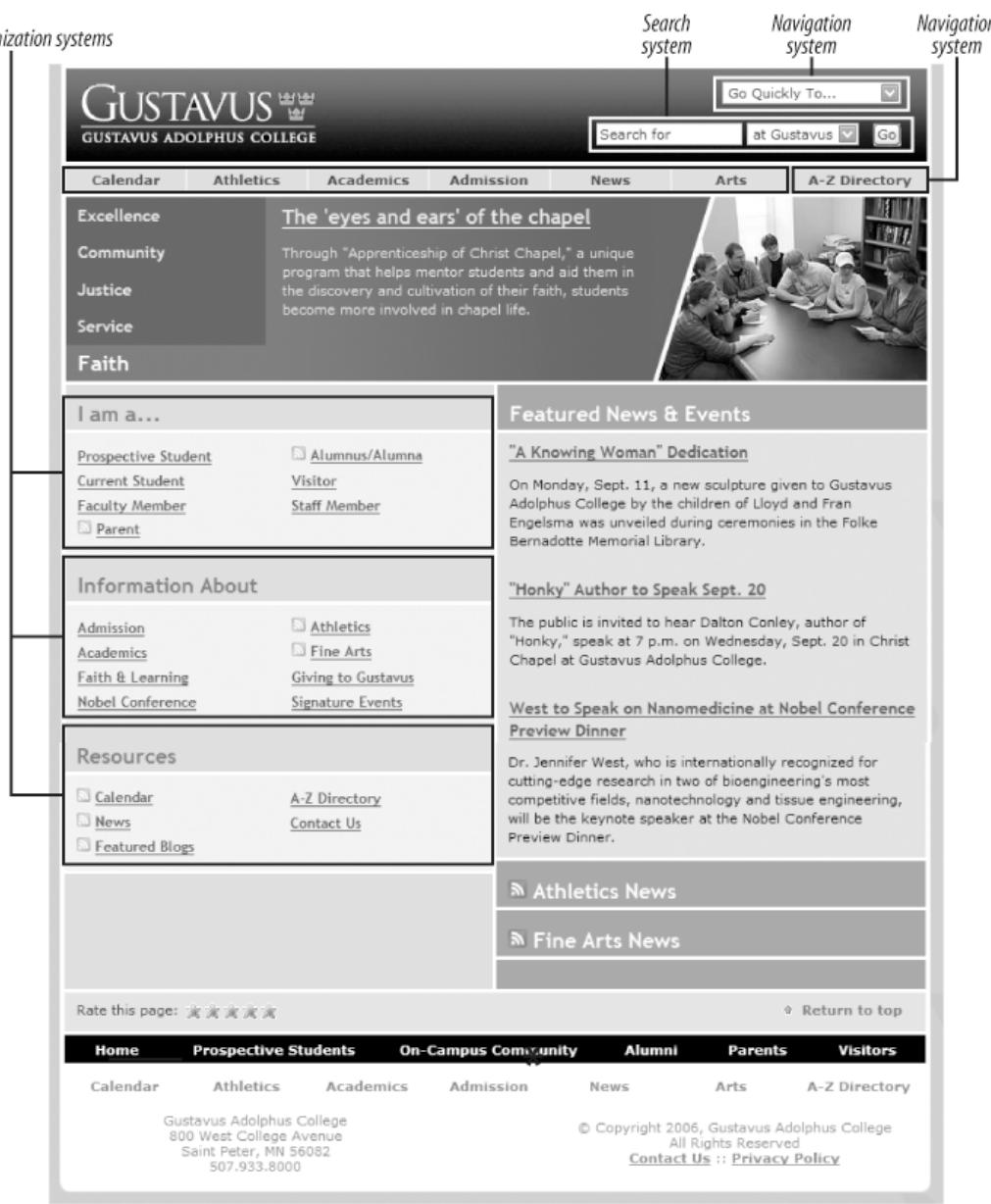
Home **Prospective Students** **On-Campus Community** **Alumni** **Parents** **Visitors**

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Organization systems



Information Architecture: organization system

- **Alphabetical**
 - Encyclopaedias and dictionaries
- **Chronological**
 - Archive of press releases, News stories, Blog posts
- **Geographical**
 - location-dependent information (e.g. Weather, traffic, location-based services)
- **Topic**
 - By subject (e.g. Domain specific content)
- **Task**
 - Workflows and processes
- **Audience**
 - Break a site into smaller, audience-specific mini-sites (e.g. students, faculty, staff)

Information Architecture: organization system - topic

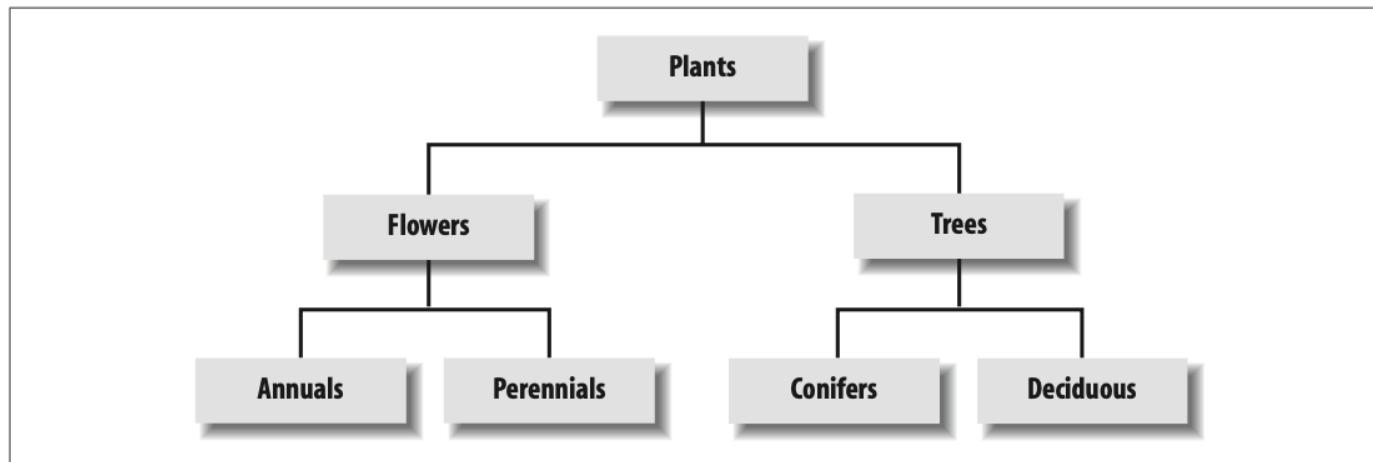


Figure 5-11. A simple hierarchical model

Information Architecture: labelling system

- **Contextual links**
 - Hyperlinks to chunks of information on other pages or to another location on the same page
- **Headings**
 - Describe the content that follows them, similar to print headings
- **Navigation**
 - Options in menu system
- **Index terms**
 - Keywords, tags, and subject headings, meta-data for search

Information Architecture: labelling system - contextual

Fidelity.com Log In Open an Account Search Quotes Contact Us

Accounts & Trade Research Retirement & Guidance Investment Products Your Profile Customer Service

Tuesday, September 19, 2006

Research > **Research Overview**

Search, Analyze, and Monitor Investments



Quickly Search for Investments

- Simple searches allow you to quickly find stocks, bonds, mutual funds, annuities and IPOs based on your preferred criteria.
- Powerful screening tools support advanced selection for stocks, options, mutual funds, and bonds; using over one hundred criteria.

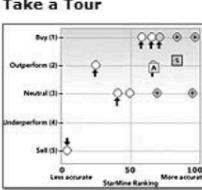
Analyze with Third-Party Research

- Stocks – the most free independent research with reports, ratings, and rankings from a dozen analysts; plus, insight into current analyst recommendations and their historical performance
- Mutual Funds – fund information, ratings, and rankings for mutual funds from Morningstar and Lipper for your portfolio.
- Fixed Income – bond ratings from Moody's and Standard & Poor's.

Get Investment Ideas

- Markets and Sectors – market commentary from Fidelity and industry leaders
- Mutual Funds – Fund Picks from Fidelity® and Morningstar 4- and 5-star fund lists help you find top performing funds.
- Stocks – Search Strategies created by industry experts to find new opportunities.
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- Trades as low as \$8

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Figure 6-2. The contextual links on this page from Fidelity are straightforward and meaningful

Information Architecture: labelling system - headings

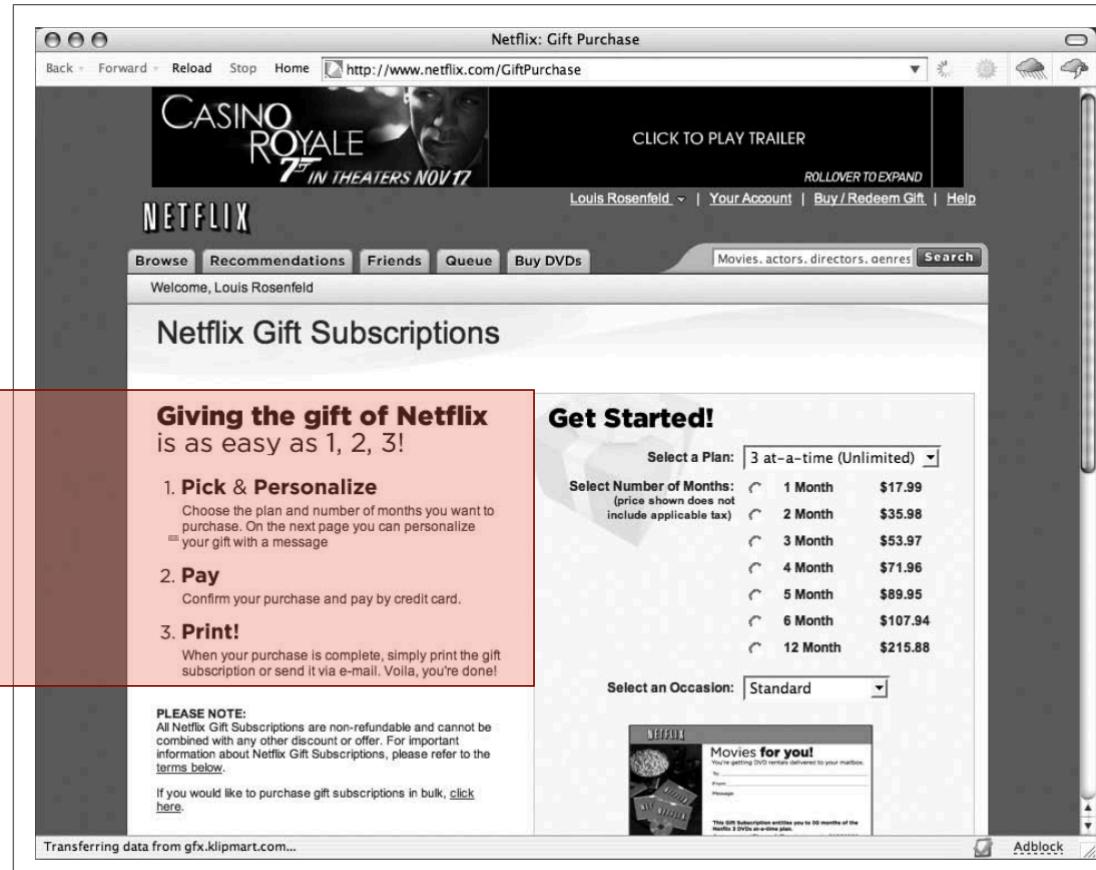


Figure 6-4. Numbering, bullets, bolding, and vertical whitespace help the reader distinguish heading labels

Information Architecture: labelling system - headings

The screenshot shows a flight booking interface. At the top, there's a header with the Northwest Airlines logo, a KLM logo, and navigation links like RESERVATIONS, DESTINATION GUIDE, MAPS, FIND, HELP, MY ITINERARIES, and MY PROFILE. Below the header, it says 'Welcome lou@louisrosenfeld.com • Change Sign-In Sign-Out'. The main title is 'BOOK A FLIGHT' followed by 'Roundtrip search'. A note about e-tickets is present, along with radio buttons for 'Roundtrip', 'One way', and 'Multiple destinations'. The first question, 'Where and when do you want to travel?', is highlighted with a red box and a circled '1'. It includes fields for 'Leaving from' (set to Detroit, MI (DTW-Wayne County)), 'Going to' (empty), 'Departing' (MM/DD/YY) with a calendar icon and a dropdown for 'Morning', and 'Returning' (MM/DD/YY) with a calendar icon and a dropdown for 'Evening'. The second question, 'Who is going on this trip?', is also highlighted with a red box and a circled '2'. It includes a note about travel type, a dropdown for 'Adults (Domestic: age 18 - 61, International: age 12 - 64)' set to '1', a note about unaccompanied minors, and a dropdown for 'Seniors (Domestic: age 62 and over, International: age 65 and over)' set to '0'.

Figure 6-6. Sequential numbering and consistent syntax keep these labels clear

Information Architecture: labelling system - navigation

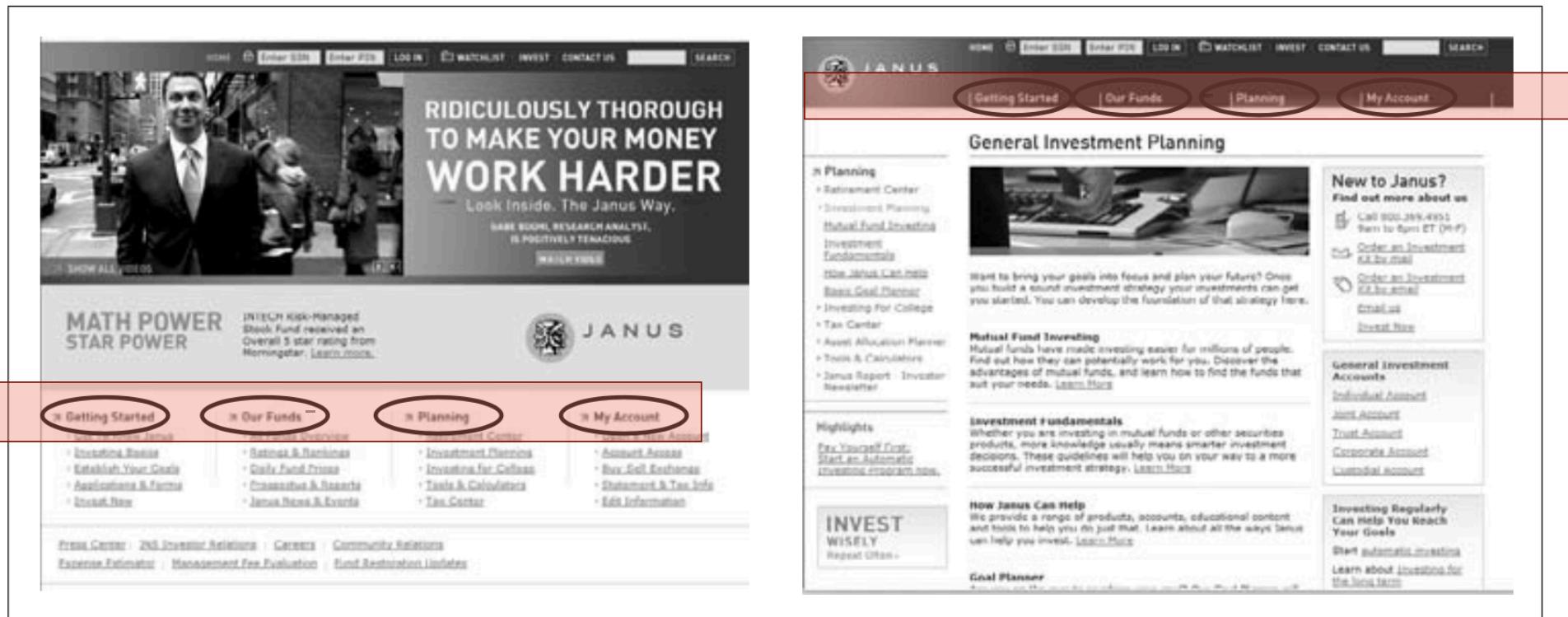


Figure 6-7. Janus' navigation system labels remain consistent throughout the site

Information Architecture: labelling system – index terms

The screenshot shows the BBC's site index page. At the top, there is a navigation bar with links for Home, TV, Radio, Talk, Where I Live, A-Z Index, a search bar, and a BBC logo. On the left, a sidebar contains links for About the BBC (Purpose & values, How the BBC is run, Plans, policies & reports, Annual report, Licence fee, BBC channels, Business services, Freedom of information, Site index), Contact Us, and Like this page? Send it to a friend!. The main content area is titled "About the BBC" and "Site index". It features a large red box containing the text: "The list of available information and topics is organised alphabetically—click on the most likely link to find what you want:" followed by a horizontal menu with letters A through Z. Below this, under the letter A, there are sections for Advertising, Advisory councils, Audio description for TV, Agreement, Annual reports, and Appeals, each with a list of links.

A **Advertising**
▪ Why the BBC does not take advertising

Advisory councils
▪ Advisory bodies

Audio description for TV
▪ Information about the service and how to receive it

Agreement
▪ see Royal Charter & Agreement, Charter review and Future of the BBC

Annual reports
▪ 2004/2005
▪ 2003/2004
▪ 2002/2003
▪ 2001/2002
▪ 2000/2001
▪ 1999/2000
▪ 1998/1999
▪ 1997/1998

Appeals
▪ Charity broadcast appeals
▪ Appeals to governors:
▪ Programme complaints
▪ Fair trading complaints

Figure 6-9. The BBC's site index

Information Architecture: labelling system – index terms

The screenshot shows a web browser displaying the epicurious website. At the top, there's a banner for the GLAMOUR 2002 GLAMMY BEAUTY AWARDS. Below it, a call-to-action says "What's the best beauty product on the market today? Discovered a new miracle in a bottle? Click here to share it!" To the right, there's a box for "Planning a Vacation?". The main navigation bar includes links for HOME, EAT, DRINK, LEARN, SHOP, RECIPES, RESTAURANTS, BON APPETIT, GOURMET, TV, and FORUMS. Below the navigation, there are several utility buttons: "Save to your recipe box", "View your recipe box", "E-mail this recipe to a friend", "Printer ready recipe", a shopping cart icon, and a "PRINT THIS RECIPE" button. The title of the recipe is "GOLDEN-FRIED PUMPKIN PURSES". The recipe text describes the dish as "Uncle Johns" in Monegasque dialect, comparing it to Italian tortelli di zucca. It lists ingredients for the pastry and filling. To the right of the main content, there's a sidebar titled "BEST-SELLERS BOOKSTORE" featuring a book cover for "In the Hands of a Chef" by Jody Adams and Ken Rivard.

Figure 6-10. A search for “snack” retrieves this recipe, even though the term doesn’t appear within the text

Information Architecture: navigation system

- **Global**
 - **Where am I?** Where can I go?
- **Local**
 - **What's nearby?** Where can I go?
- **Contextual**
 - **What links to related content?** Where can I go?
- **Supplemental**
 - Sitemaps, indexes, tutorials for how to use the system

Information Architecture: navigation system

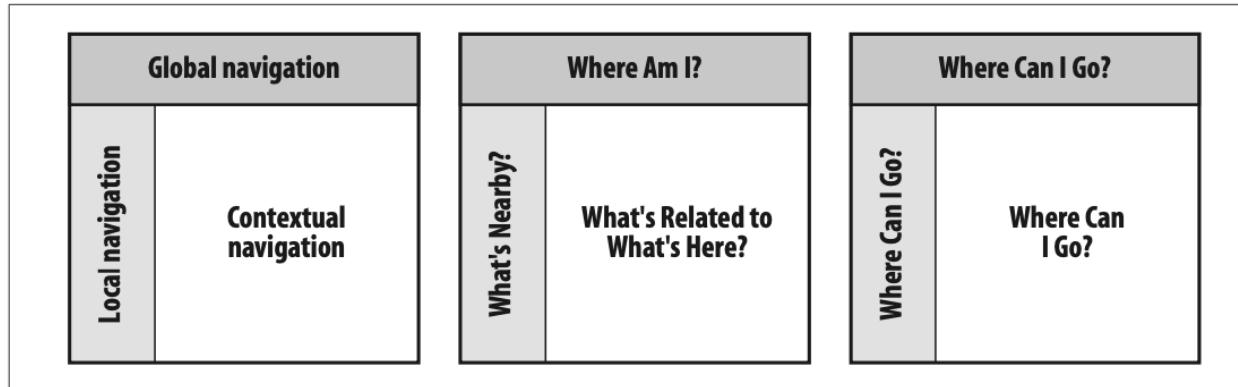


Figure 7-1. Global, local, and contextual embedded navigation systems

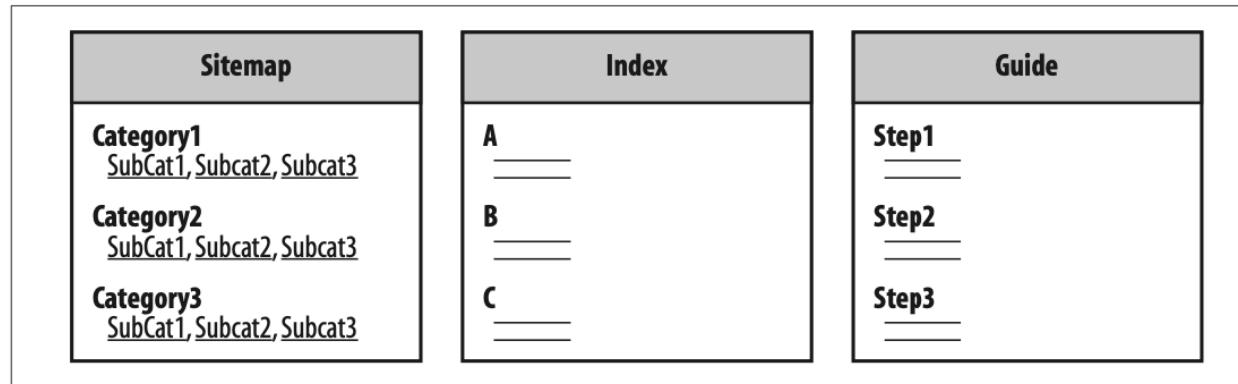


Figure 7-2. Supplemental navigation systems

Information Architecture: navigation system - summary

- Be easy to learn:
- Be consistent throughout the website
- Provide feedback (e.g. breadcrumbs > > >)
- Minimum number of clicks to arrive at the next destination
- Use clear and intuitive labels
- Support user tasks and goals
- Group navigation into logical units
- Avoid making the user scroll to get to important navigation or action buttons
- Do not disable the browser's back button

Information Architecture: summary

- **Context:** Business goals, funding, politics, culture, technology, resources, constraints
- **Content:** Document/data types, content objects, existing structure
- **Users:** People, tasks (sections based on objectives), information seeking behaviour (expert user vs novice user), experience (first time users vs returning users)

Information Architecture: summary

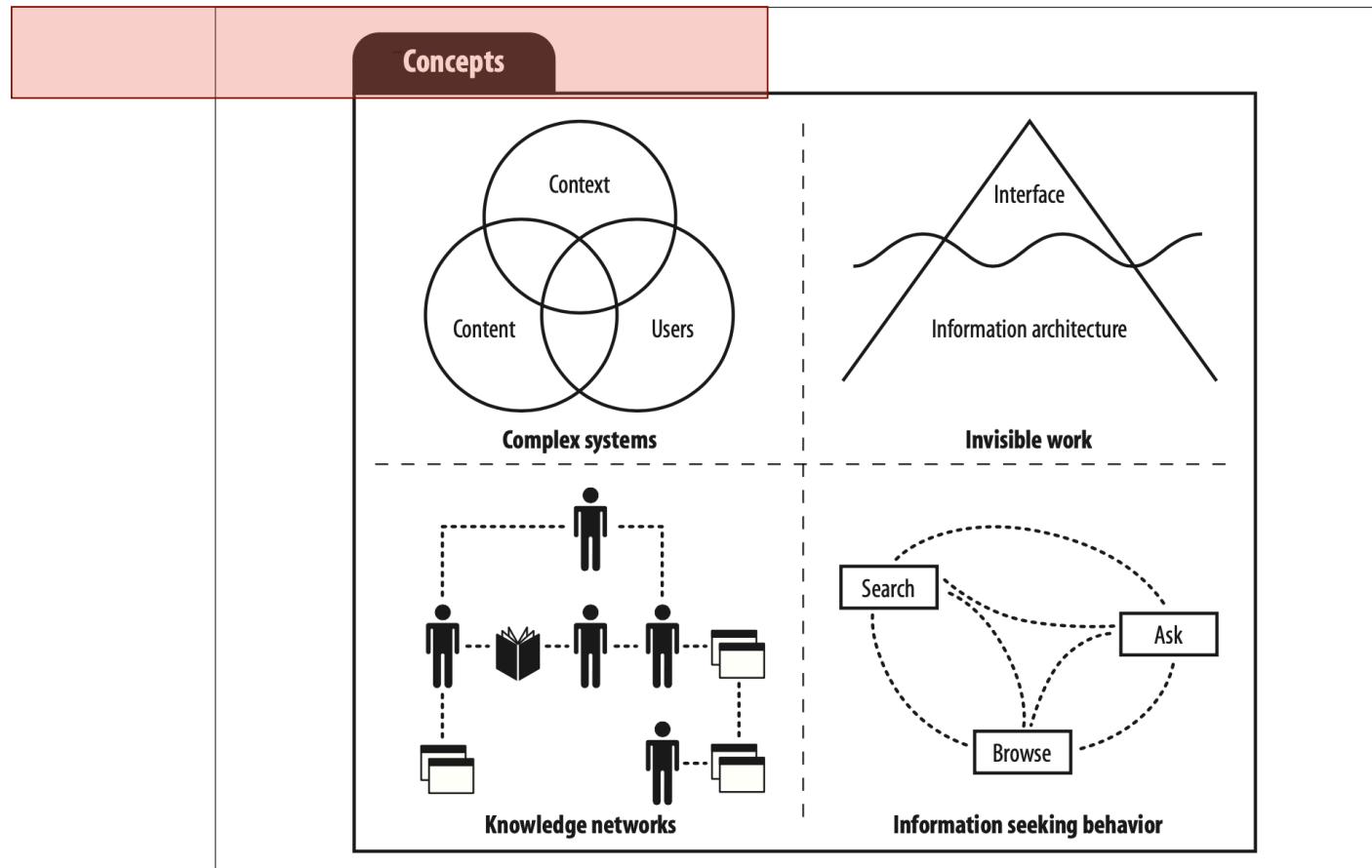


Figure 1-4. Information architecture concepts

Information Architecture: summary

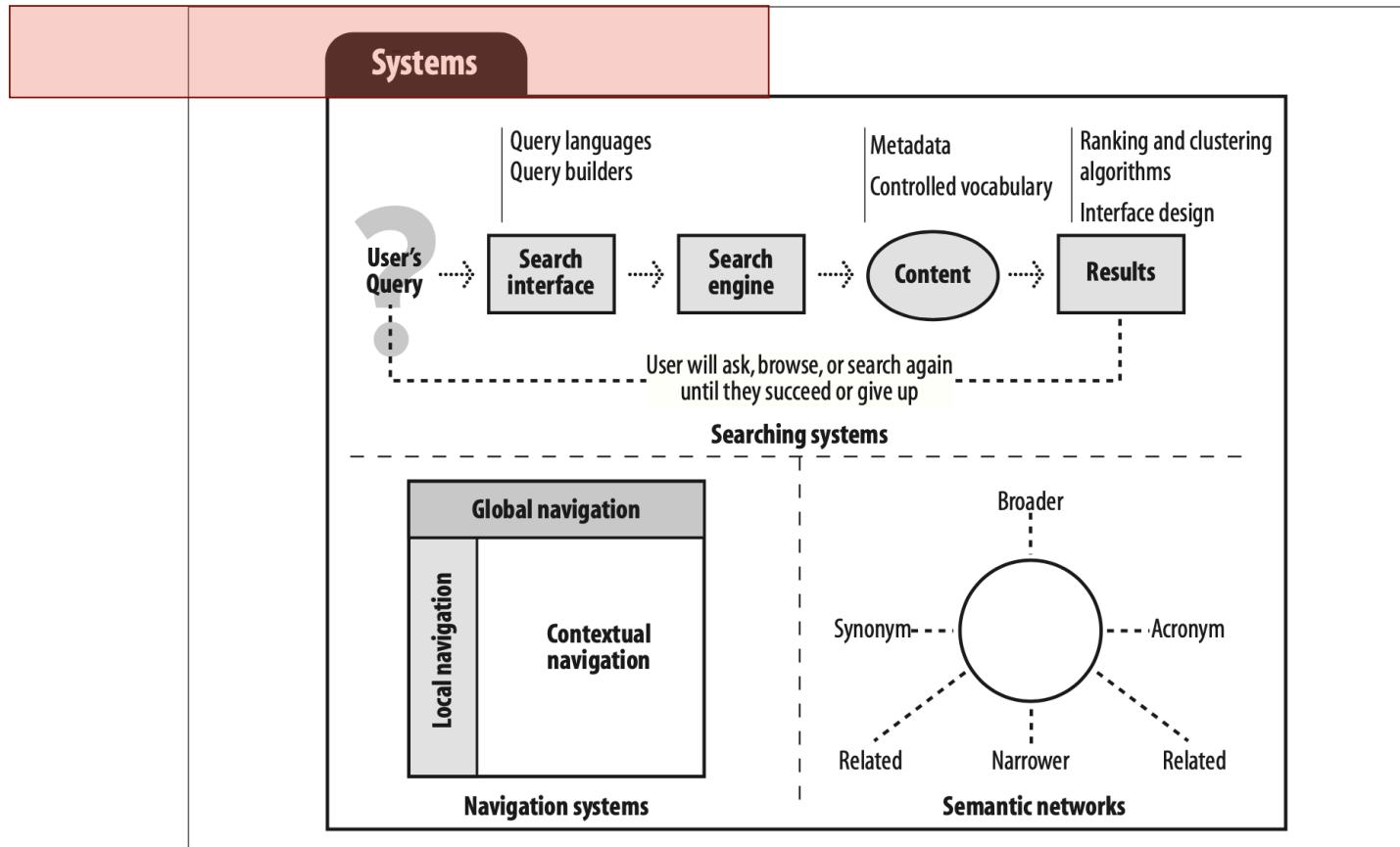


Figure 1-5. Information architecture systems

Information Architecture: summary

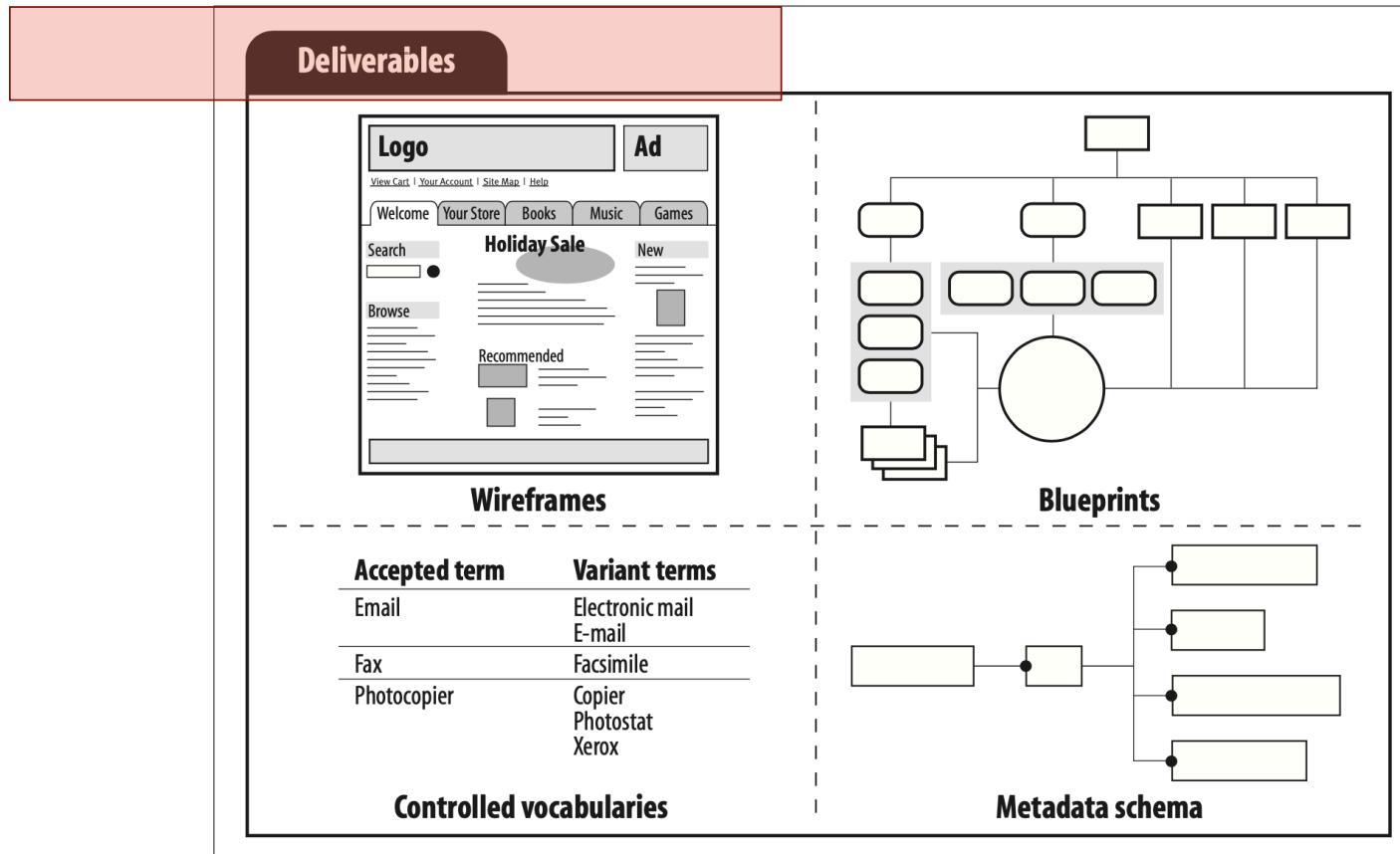


Figure 1-6. Information architecture deliverables

Information Architecture: examples

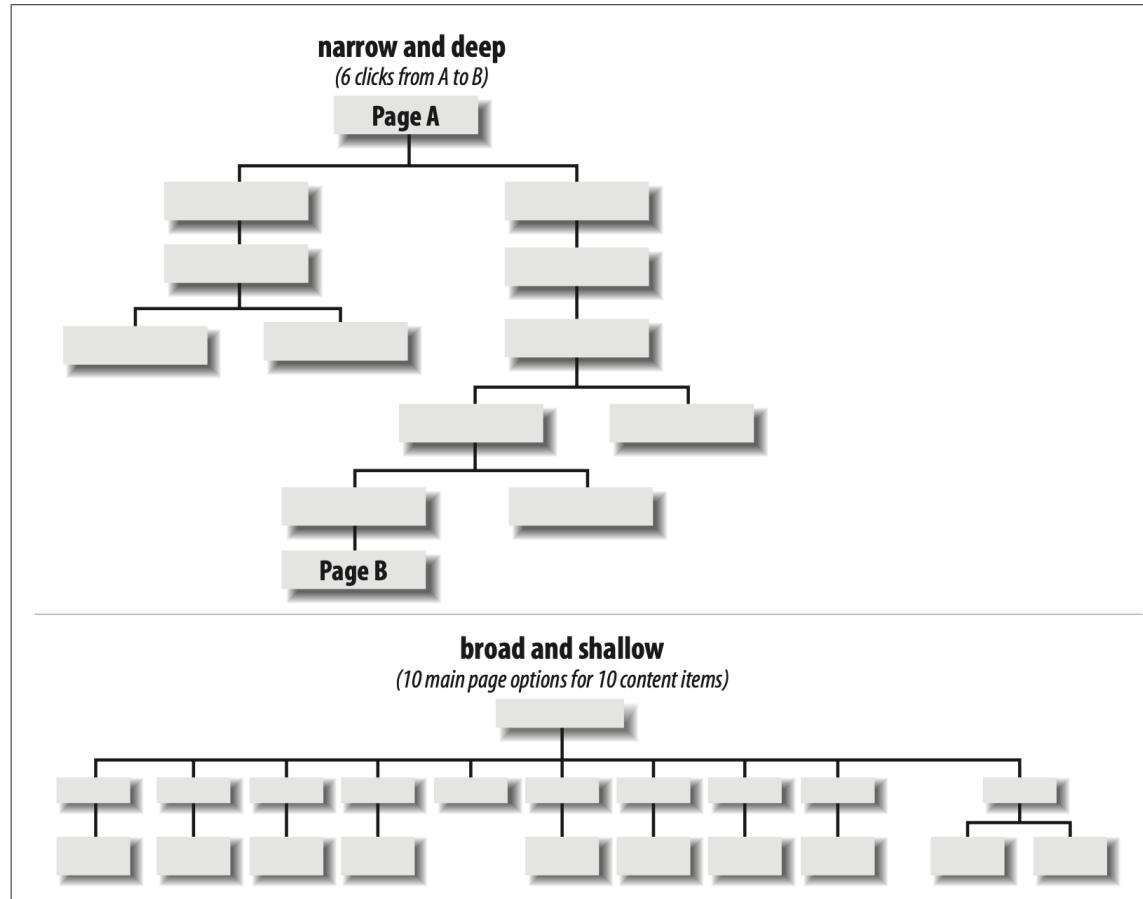
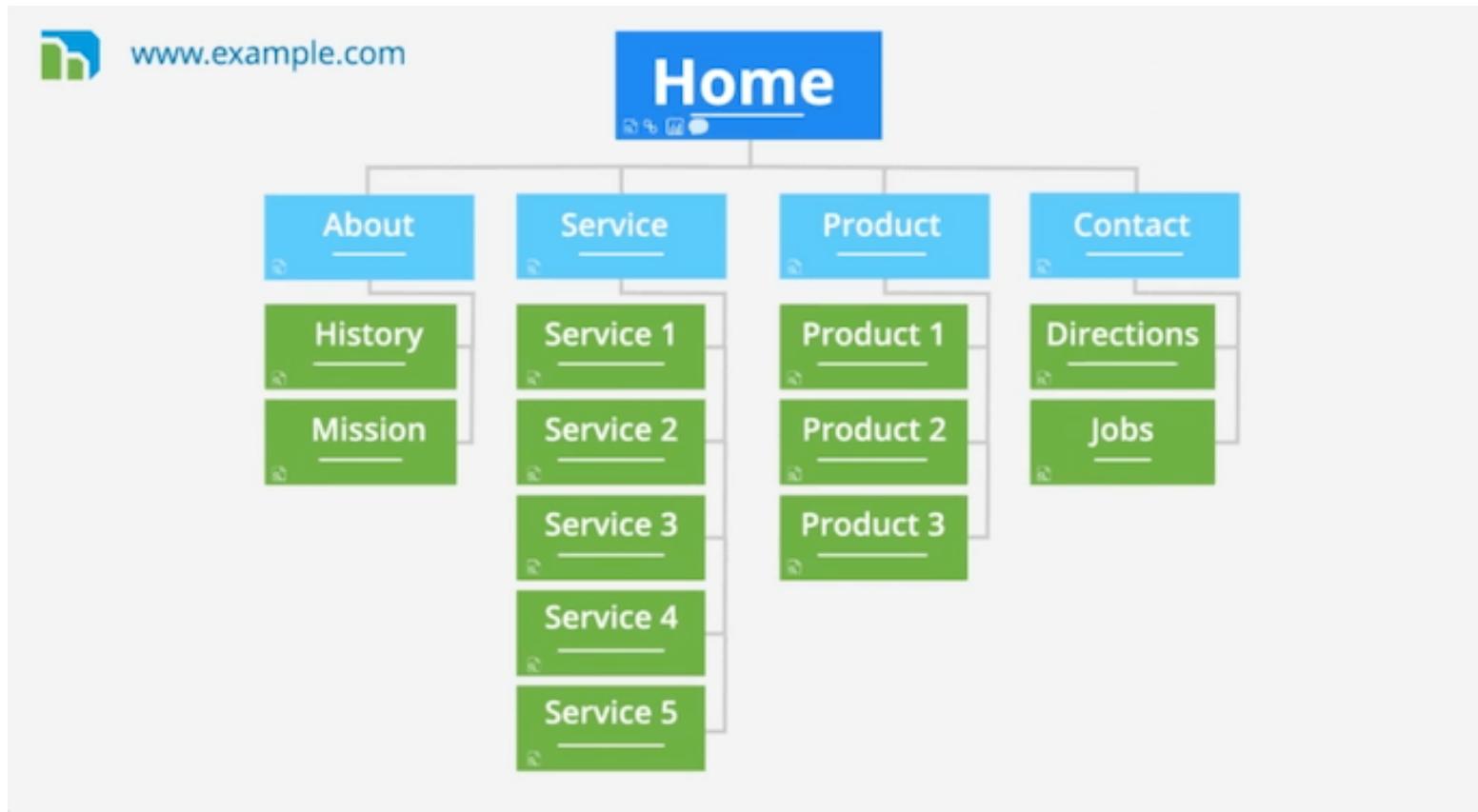
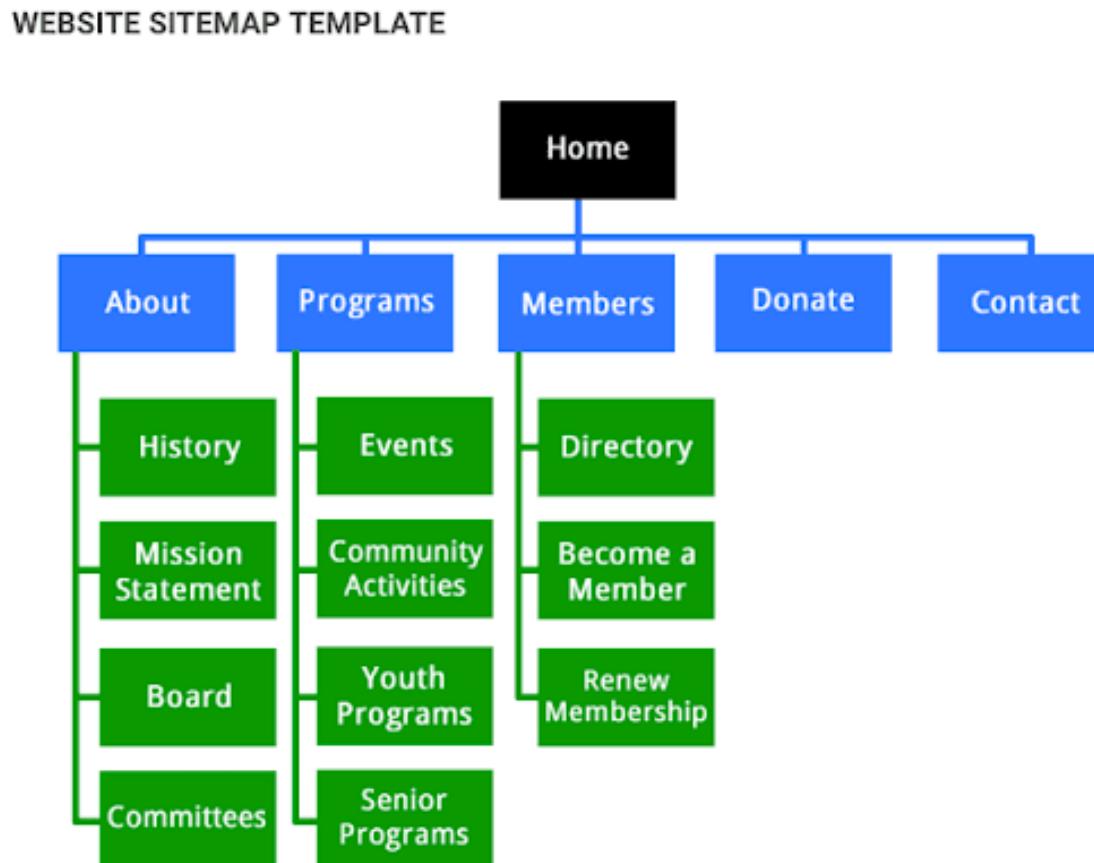


Figure 5-12. Balancing depth and breadth

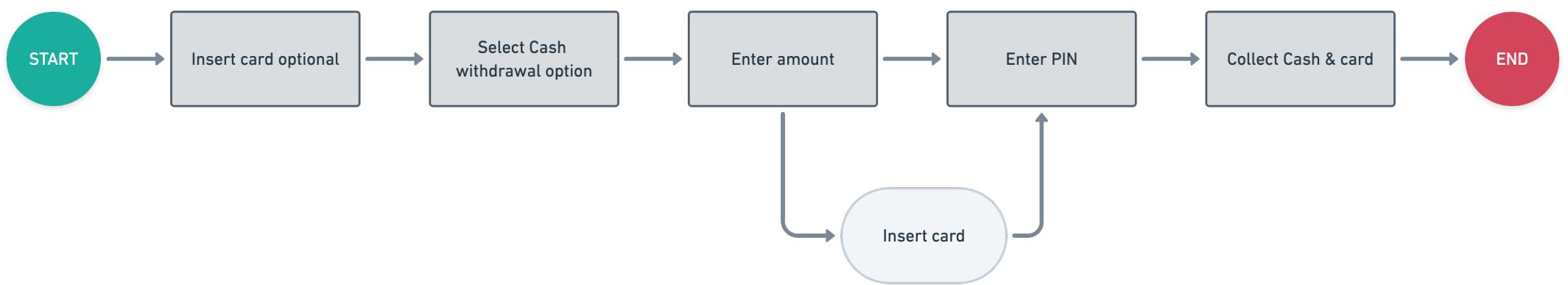
Information Architecture: examples



Information Architecture: examples



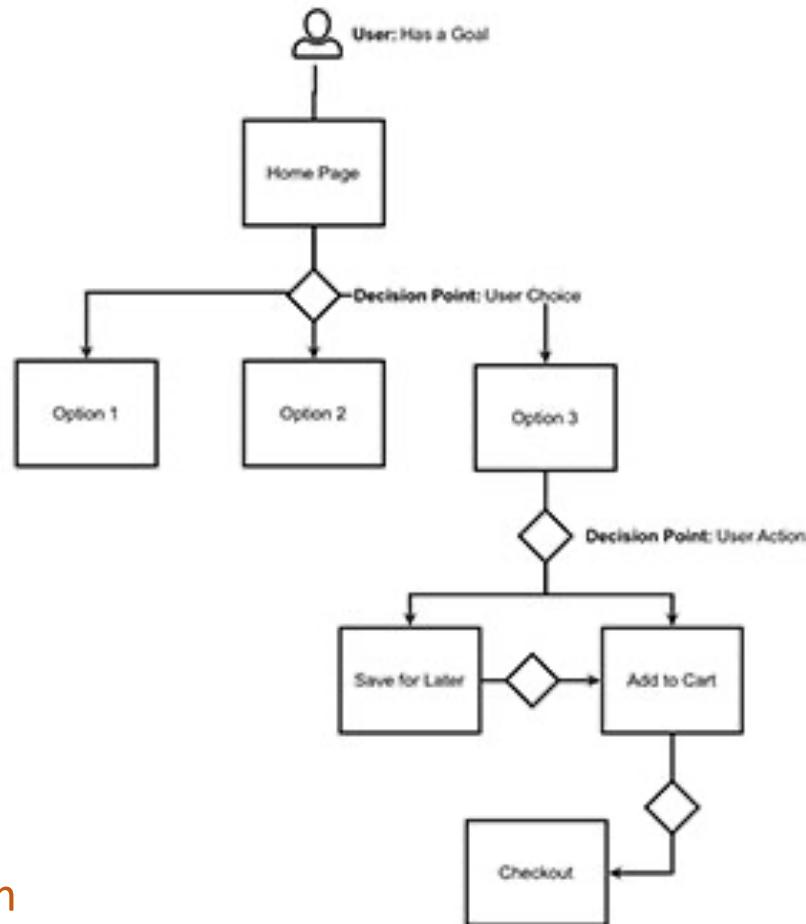
Information Architecture: examples – task flow



Information Architecture: examples – task flow

	Marks the start/ end of the user flow
	Indicates steps users take
	Indicates a choice or decision point for the user
	The arrow indicates the flow of the symbol

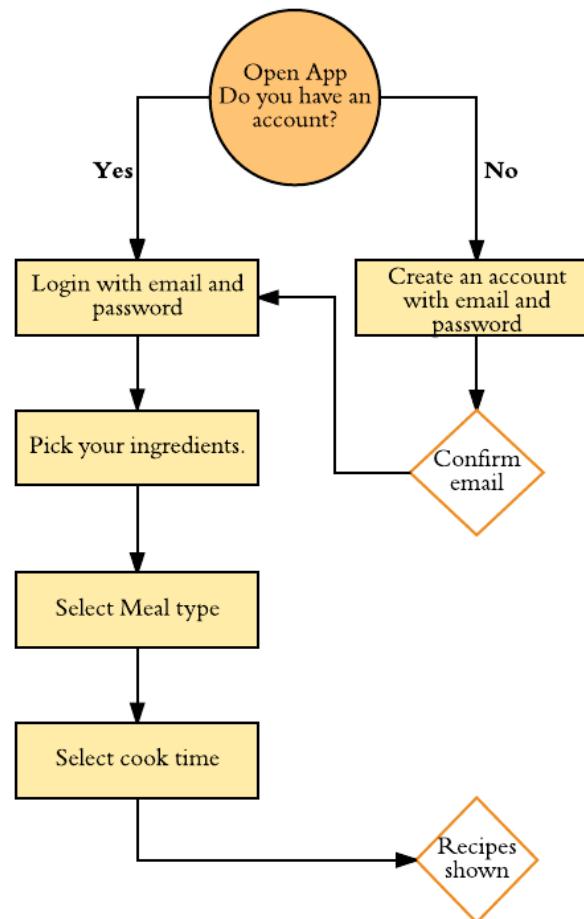
Information Architecture: examples – task flow



UML Diagram

Unified Modeling Language

Information Architecture: examples – task flow



Information Architecture: examples



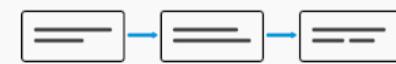
Information Architecture: examples – task flow

User Flow Design

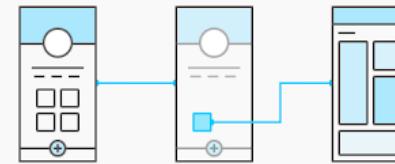
1.
User goal
Goal or story level



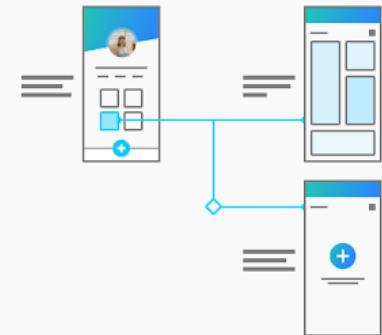
2.
Task flow
Action level



3.
Wireflow
Component level



4.
User Flow
Interaction level



low-res ↔ high-res

Affinity Diagram & Card Sorting

"Affinity Mapping is a practice used to organize ideas or insights. It allows large numbers of ideas stemming from brainstorming to be sorted into groups, based on their natural relationships, for review and analysis. It is also frequently used in contextual inquiry as a way to organize notes and insights from field interviews for synthesis and analysis. Additionally, it can be used for organizing freeform comments, such as open-ended survey responses, support call logs, or other qualitative data."

"Card sorting is a method used to help design or evaluate the information architecture of a site. In a card sorting session, participants organize topics into categories that make sense to them and they may also help you label these groups. Card sorting helps us gain valuable insight about the structure of data."

Information Architecture: exercise

- 1) Create diagrams that demonstrates the primary function of your design

Start diagramming !

Schedule

This Week

Information Architecture

Activities

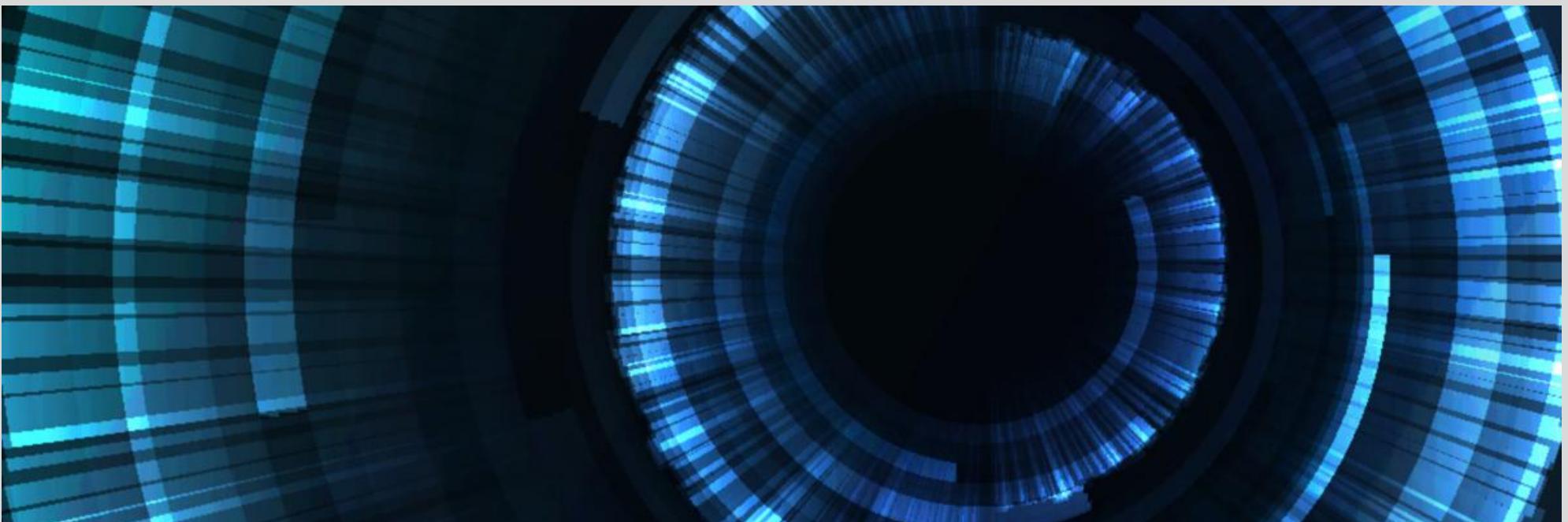
Information Architecture (Due Mar 15)

Create a map that shows how a user would navigate through your system.

Create ONE group Information Architecture for your system.

Create ONE task flow that supports a user goal from the start-to-end of a single task.

Human Computer Interaction



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