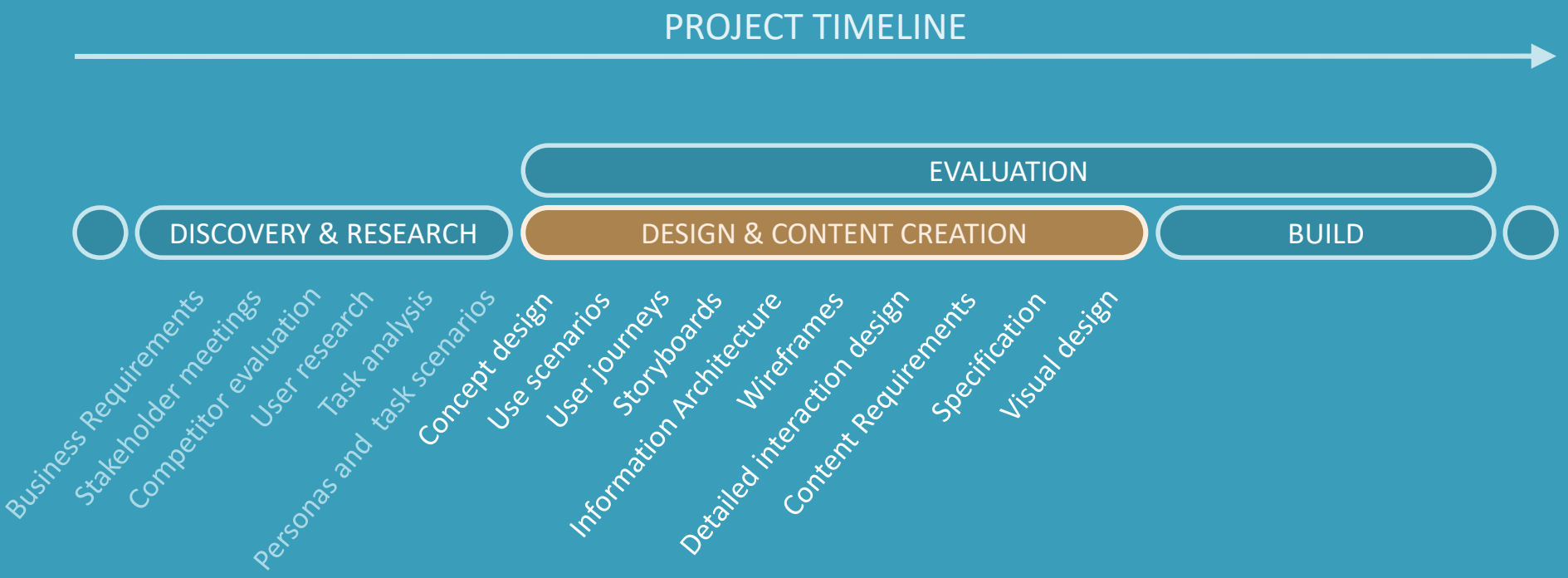
Information Architecture and content creation

Recap: *What you've learned so far*

- **User Experience** – the way users experience your web site
- **User Centred Design** – a design process that is built around user input
- **Six layers** of user experience
- **Norman's model** – how the designer's view differs from the user's
- Understanding **business requirements** and **stakeholders**
- Conduction **user research**
- Documenting user **needs** and **goals** as **personas** – representative users of your site

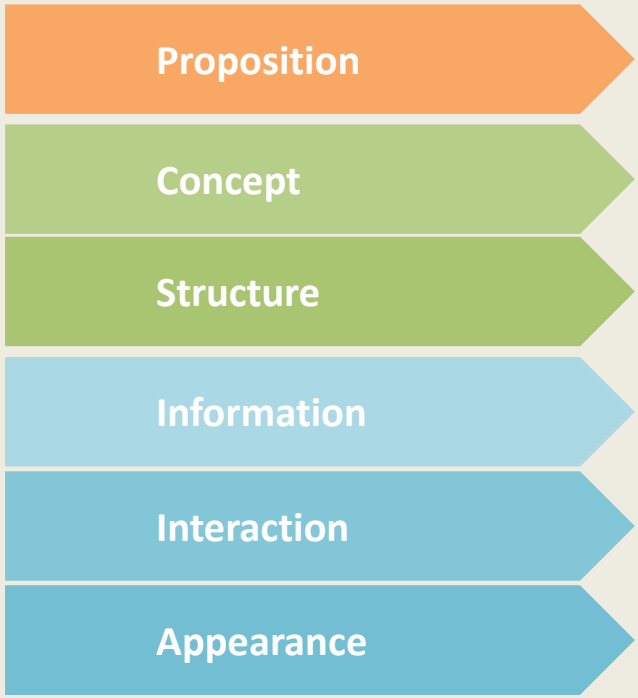

PROJECT TIMELINE
EVALUATION
DISCOVERY & RESEARCH
DESIGN & CONTENT CREATION
BUILD
Business Requirements
Stakeholder meetings
Competitor evaluation
User research
Task analysis
Personas and task scenarios
Concept design
Use scenarios
User journeys
Storyboards
Information Architecture
Wireframes
Detailed interaction design
Content Requirements
Specification
Visual design

Discuss: *How are you doing?*

- Were you be able to complete the **client survey?**
- Can you formulate a **proposition** for your site?
- What are the **site goals?**
- Are you clearer about who your **audience** is going to be?
- Did you manage to **research your audience** to identify its **goals and needs?**

Creating a concept design

The elements of user experience



Value delivered to customer

Concept for how the value is delivered

Organisation of product components

What information is used by users

How users interact with product components

What it looks like and how it is arranged

…one view of it. Here's another one

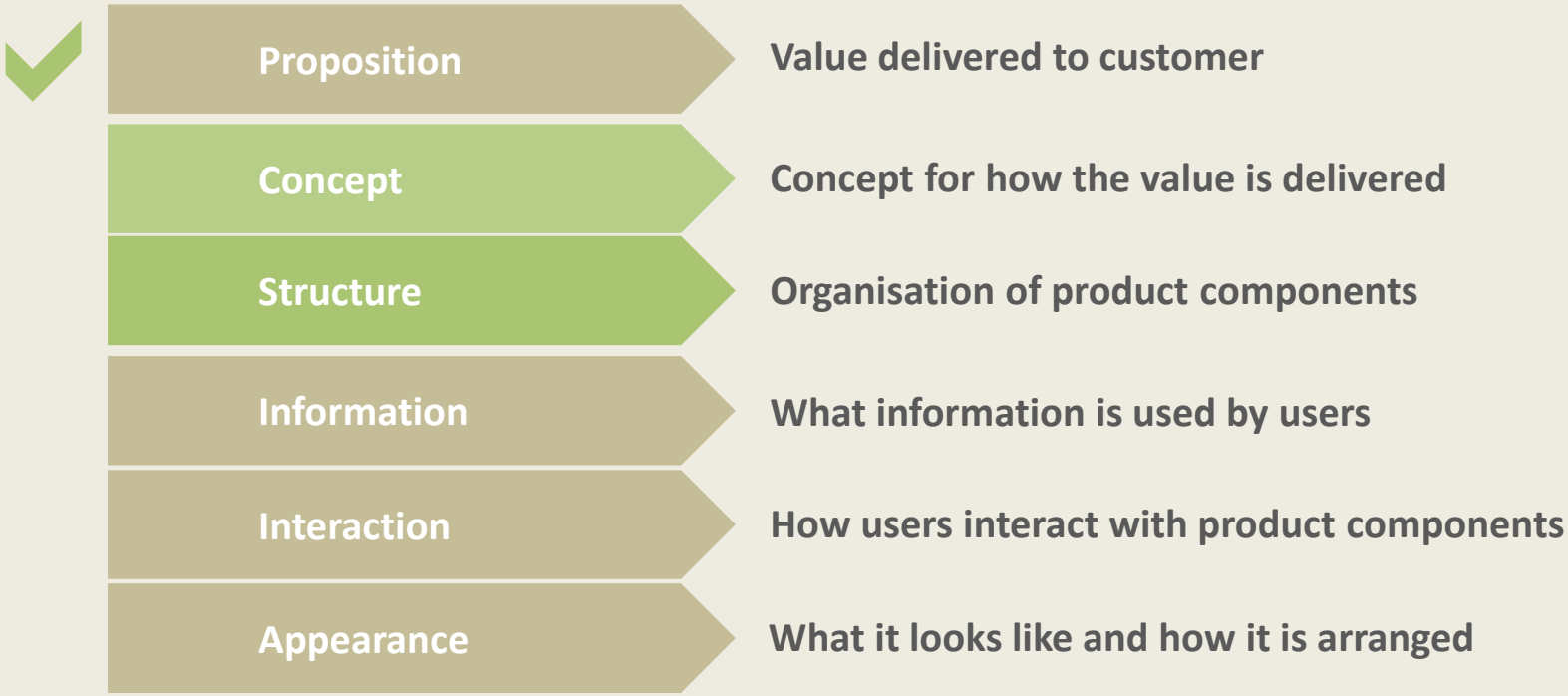
Creating a concept design

We followed a UCD process and have completed user research to understand:

- **Organisational structures** and **business goals**
- The overall **market**
- **Users** and their **goals** and **needs**
- **Personas** (models of the users) and **scenarios** (stories of what users want to do)

We've created a **value proposition and site goals that bring user goals and business objectives together.** We can now look **how to deliver this value** to the user.

The elements of user experience



…one view of it. Here's another one

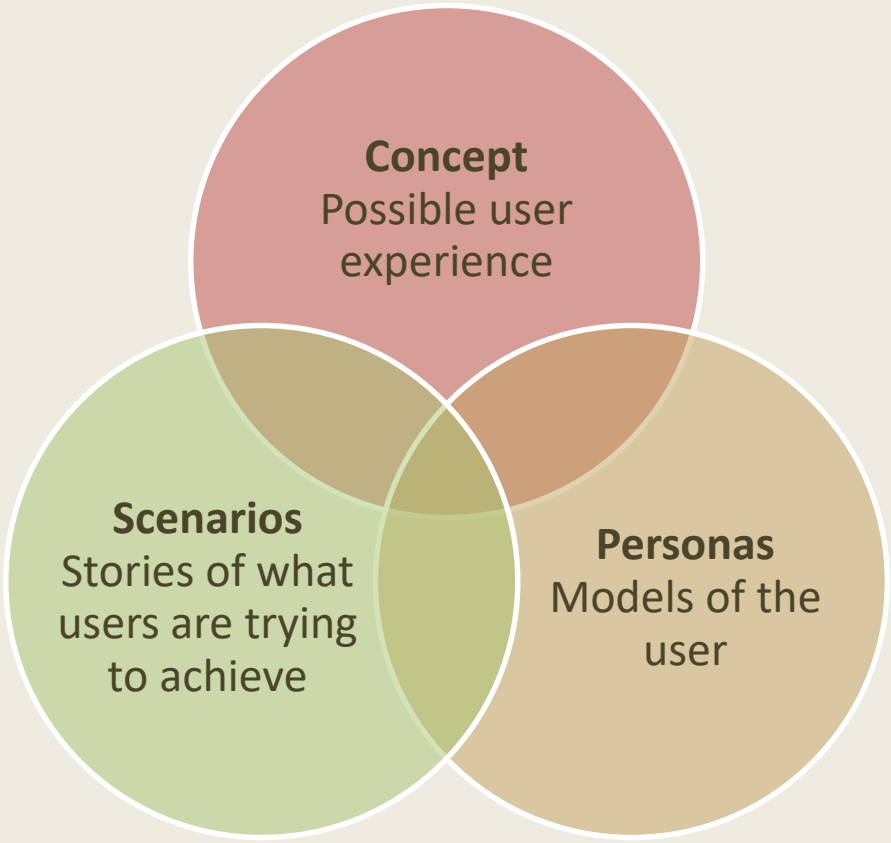
What is concept design?

A thinking process involving:

- Creation of **conceptual ideas** that bring user and business needs together
- **Refinement** of these ideas to define a ideal solution

Generating ideas

- **Knowledge from user research** is used to generate ideas and make decisions about which ideas to eliminate and which to keep and improve.
- **Personas** and **scenarios** are tools we use to keep user focus.



Creating a concept design

Look at your personas and task scenarios and think:

- **What shape could the design take?** Is it more like a magazine, a catalogue, a guided tour?
- **What existing Web patterns could you use?** Take advantage of conventions that you know work already
- **What real-world metaphors could work?** Take advantage of the fact that people already have an understanding of the way certain things work in the real world
- **Does your proposition change?**

Discuss: *Crocus.co.uk*

- check Crocus.co.uk
- Can you think of what key concepts the site is based on?

It’s important to start simple…

…sometimes a **little doodle is enough** to test an idea.

Many great designs have started with **simple sketches and prototypes.** It’s too expensive to do the real thing and then watch it fail.

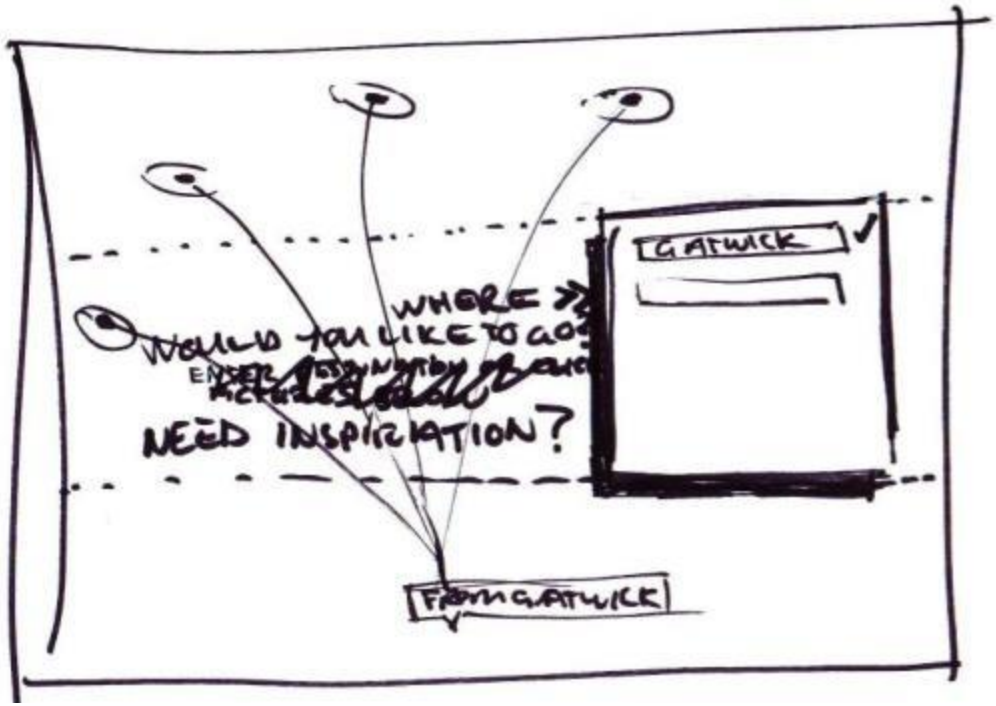
UCD is about **iterating your design** until it’s right.

Therefore it’s important to work at the **right level of fidelity** for each stage of the project – that is just doing enough to be able to evaluate the design

Low-fidelity prototyping

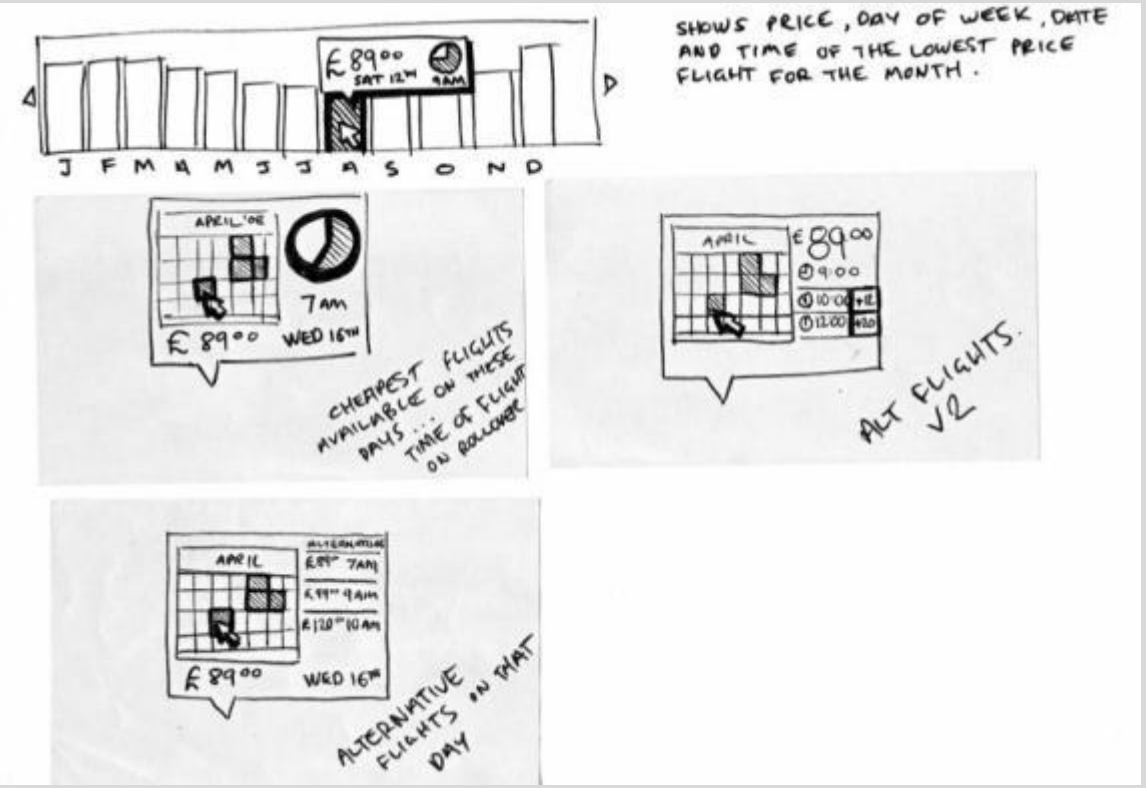
The first prototypes for Concorde – made out of a bit of paper and tape

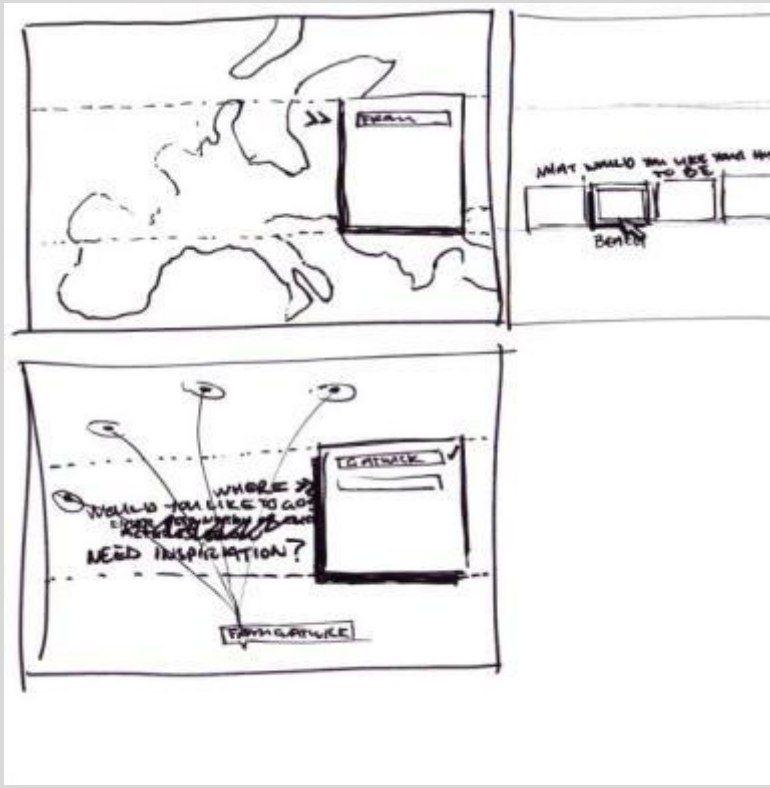
Low-fidelity prototyping



Sometimes you need only a few pen strokes to test an idea

Low-fidelity prototyping





Sketches of different widgets for a website

Recap: *Scenarios*

Scenarios are user stories that describe the steps users go through to satisfy their goals:

- **Task scenarios** describe what users are doing currently
- **Use scenarios** describe how users will perform the same task using your product or service

Use Scenarios

- Take your task scenarios of your personas and turn them into use scenarios – **stories of how users would use your site**
- For each scenario think of the **user's goal,** the **tasks** it takes to achieve the goal, and what **functionality** and **information** of your site users will use to complete their task
- **Do users have the right information and functionality** to complete the task?
- **Does your solution align with the mental models** you found in your research?
- **Use your personas to validate**

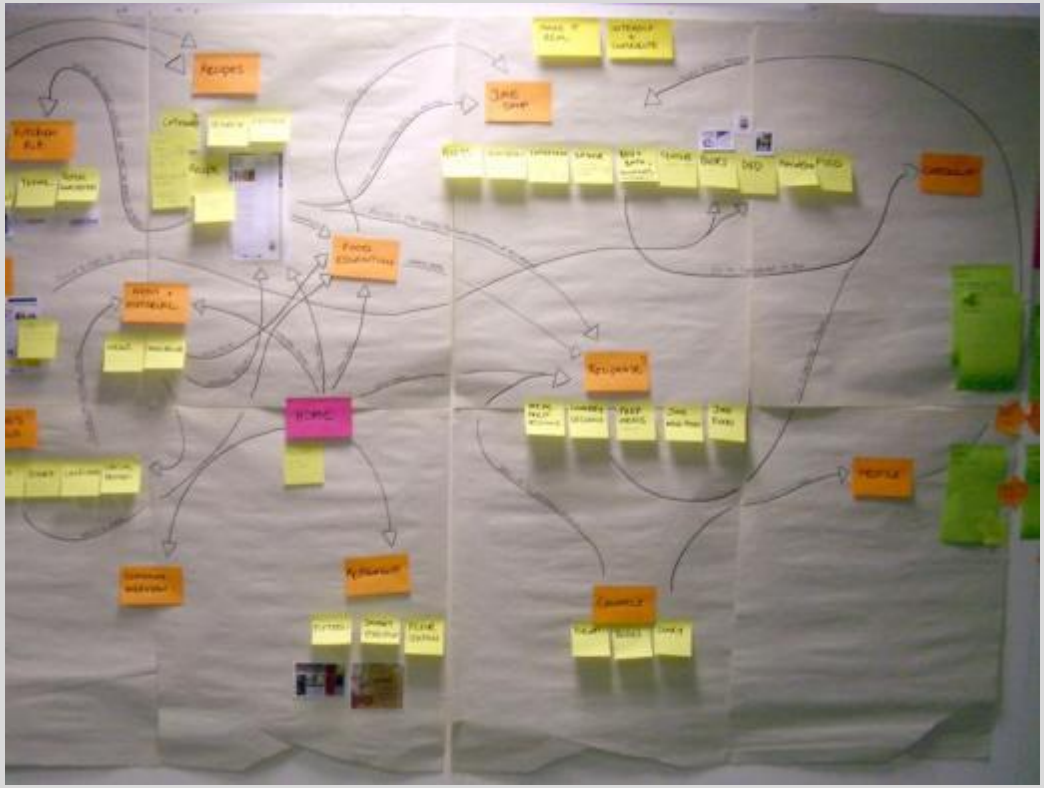
Storyboards

Storyboards allow you to prototype different task flows quickly without thinking of too much detail.

Storyboards

- **Storyboards are series of illustrations or images** displayed in sequence to create the outline structure of a motion graphic or interactive media sequence
- In web design you can use them to plan how a user would use your site
- You a can vary the level of detail as needed: Click-by-click or just showing key steps in the user journey
- A great book that will help you to understand how to effectively storyboard is Understanding Comics
- See also Adaptive Path's article on "sketchboards" and downloadable templates

User journeys



Often a few stickies and a bit of paper is enough to create a site structure. Working on the wall makes it easy to view and communicate structure and key task flows.

Creating a structure to your site

- You can now start thinking about a **structure** to your site
- Look at the different use scenarios: what **content and functionality** does the site need to provide?
- Create a **diagram of the key users journeys** through the site...
- Where do they **overlap?**

- An article about user journeys on boxes and arrows

Remember – UCD is iterative

- Successful evolution happens through many **alternative designs**
- Using **paper, pen and post-its** (and a digital camera to document progress) or **storyboards** helps you quickly explore alternative solutions
- Producing fancy diagrams and designs too early in the process is a waste of time

Task: *Create a concept and a storyboard*

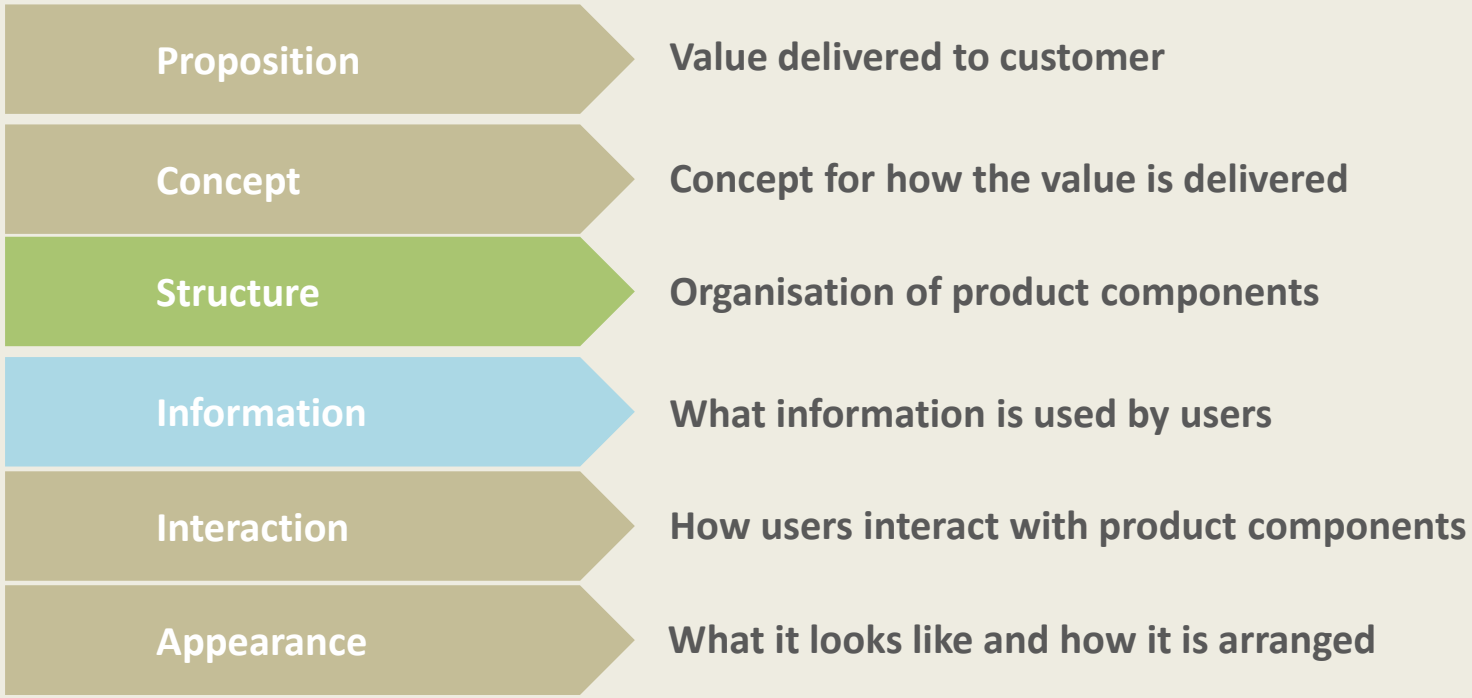
- You are an user experience designer who's been **asked to design the concept and information architecture for *Deliverease,*** a new online service to be launched by a major supermarket chain.
- *Deliverease* allows users to **find and view recipes and order all required ingredients** directly from the supermarket chain online store for home delivery.

Task: *Create a storyboard*

- For a meeting with the product team you need a **first draft of some of the key user journeys.**
- **Design for the persona supplied** (see worksheet).
- Think of a **conceptual metaphor** that addresses the challenge
- Work in teams of 3 to **storyboard one user journey** (i.e: Find and view a recipe and order ingredients) using the storyboard template provided. **Focus on the essential,** not the detail.
- **Validate against the persona** chosen.

Organising Information

The elements of user experience



…one view of it. Here's another one

Organising information

Organizing complex information on a web site presents huge challenges:

- **Findability:** Users need to be able to find what they want among a potentially huge numbers of items
- **Ambiguity:** Language is ambiguous, e.g. multiple definitions, cultural differences (the words "pitch", "catch")
- **Heterogeneity**: "Objects composed of unrelated or unlike parts" Most Web sites are very heterogeneous because they have multiple formats, usually all mixed up together
- **Differences in user perspectives**: Ignoring different user perspectives can make parts of your site unusable; make sure that you know your user!

Labelling systems

- **Can't present all information at once,** so need to use informative short cuts, i.e. labels
- These need to **communicate information effectively**

Why labels are important:

- Users have **short attention spans** (avoid high "cognitive load" for your users)
- **Bad labels make bad impressions;** they frustrate users
- **Self-centred labelling makes a bad impression** (avoid business-speak & terminology)
- Labelling systems need serious planning.

An unplanned labelling system…

- **Technology Interface Unit**
- **Project QA**
- **Business & Media Interaction**
- **Internal Services Office**
- **New Media Center**

These assume that the user knows what you are talking about!

A planned labelling system…

- **Arts & Humanities**
- **Business & Economy**
- **Computers & Internet**
- **Education**
- **Entertainment**
- **Health**

These might also make us wonder... e.g. what resources are contained within these categories? We do know what subject areas are covered, though. It's also a common system. Users have seen it before so they only need to learn the system, not individual labels (familiarity breeds contentment!)

Organising information

Information can be organized in the following ways:

- **Alphabetical,** e.g. Cambridge Uni
- **Chronological,** e.g. Facebook
- **Geographical,** e.g. Hotels.com
- **Topical,** e.g. Birkbeck
- **Task-oriented,** e.g. Three mobile
- **Audience-specific,** e.g Birkbeck
- **Metaphor-driven**

Organising information: Classification and hierarchies

- **Taxonomy is the classification of things.** e.g. Dewey Decimal System, Linnaean classification
- **Not all taxonomies are hierarchical** e.g. days of week
- Classification schemes provide important metadata for a Web site. They provide the basis for efficient search and information retrieval and sharing of data between Web sites.

The hierarchy: a top-down approach

- A more rigid approach with usually **mutually exclusive categories**
- You can choose a **narrow and deep approach;** fewer sections, more levels of sub pages beneath
- Or a **broad and shallow approach:** lots of section with fewer sub pages.
- If you expect your site to grow, **it's easier to incorporate change into a broad and shallow design**
- **Don't feel trapped by hierarchies,** and don’t force topics in a hierarchy, hyperlinked or database driven approaches are useful too

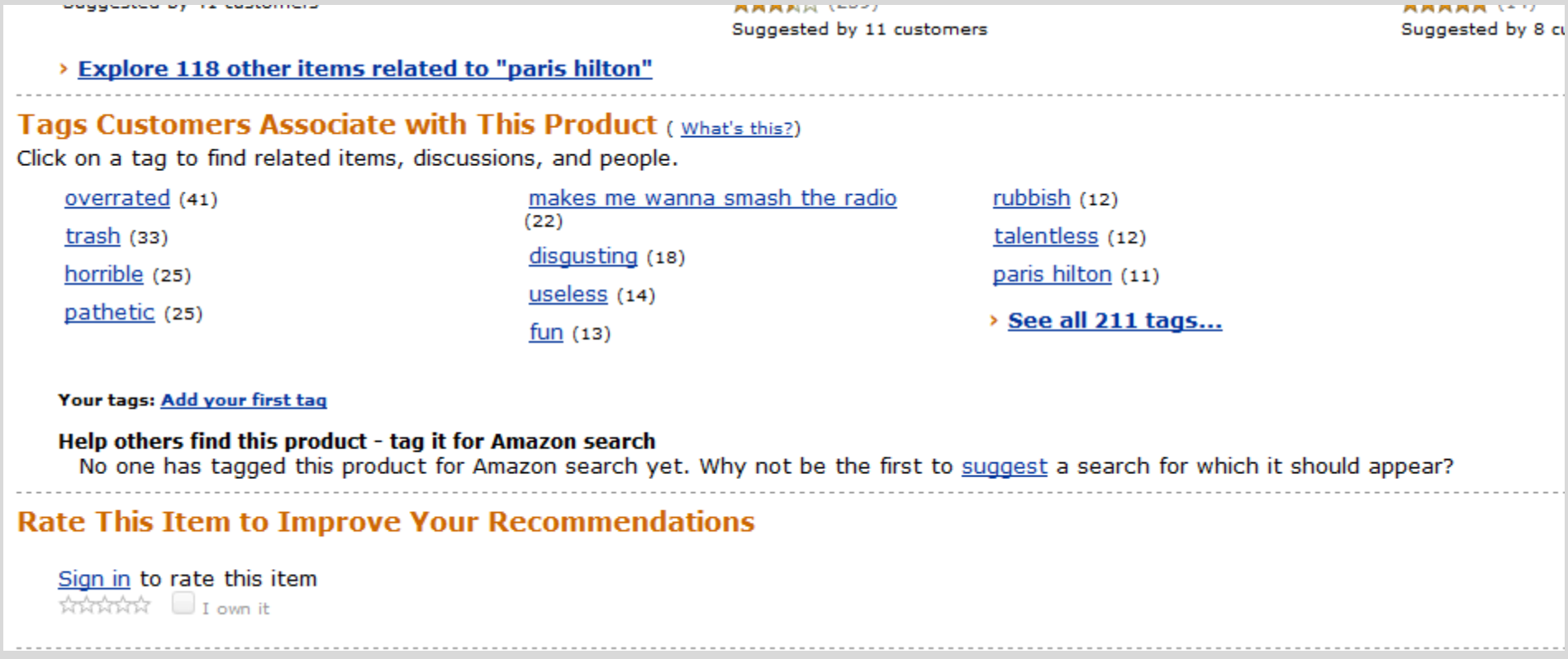
Relational databases: a bottom-up approach

- Better where users want to retrieve information in different ways, having different starting knowledge.
- Content created "on-the-fly" depending on requirements
- Examples of a bottom-up approach are **search based** sites, or **faceted navigation** e.g. Amazon or Ebay

Folksonomies

- Informal structures are common and and in many websites users are tagging their own content e.g. Twitter , Flickr, Pinterest
- See also: the Wikipedia entry for Folksonomy

Folksonomies



Sometimes the results of allowing users to tag content can be interesting…

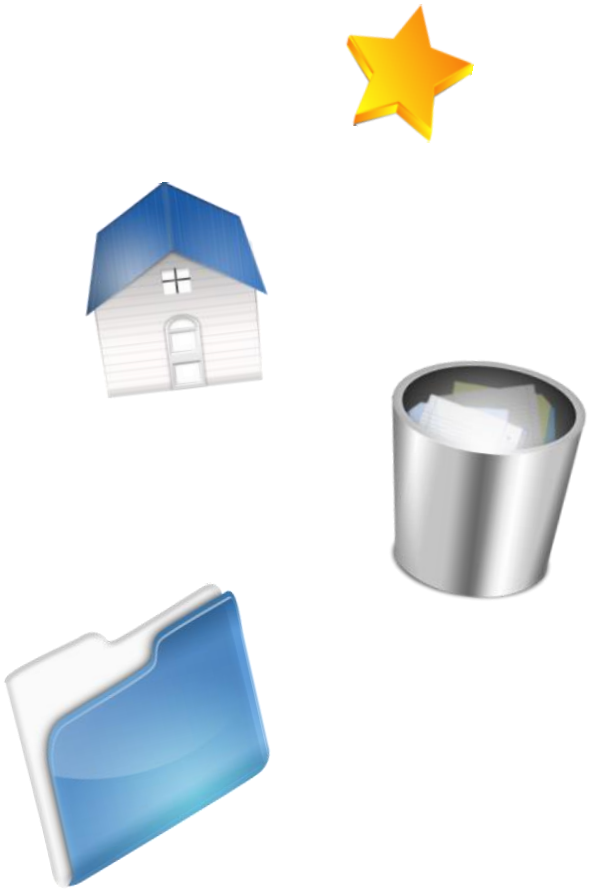
Common labels within navigation systems

- Home / home page / main / main page /
- Search / find / browse / sitemap / index / table of contents
- Contact / feedback
- Help / FAQ / frequently asked questions
- News / what's new

Some of these have clear user expectations attached to them; use these in your favour!

Using metaphors

- Sometimes the use of metaphors helps users understand things
- Use them wisely to support your navigation
- **Steer away from metaphors that are obscure or ambiguous,** or have different meanings in different cultures
- Common metaphors include: Checkout, Shopping basket, Home



Card sorting

- Card sorting is a simple, quick method for **understanding how site users classify content** (by shuffling cards around, hence the name).
- The method is used to generate an **overall structure for your information,** as well as **suggestions for navigation, menus,** and **possible taxonomies.**

- **See also:** Card sorting: a definitive guide on Boxes & Arrows and Information design using card sorting

Steps in a card sort

- **Select the content to be tested** (pages of existing site? new content?)
- **Find the participants** (should be representative of site users)
- **Prepare the cards** (write names of pages on cards)
- **Conduct the tests**
  - **Open sort** - participants create and label groups for the cards as they see fit
  - **Closed sort** - how do the cards fit into an existing classification? (validation of an existing classification)
- **Analyse the results** (common groupings? cluster analysis?)

Task: *Conduct a card sort*

Go to optimalsort.com

Working in groups of 3, conduct the open card sort on the site. Try to group the cards in a meaningful way (what is 'meaningful'?) and try to produce appropriate labels for the groups.

Designing navigation systems


Where am I?
Where have I been?
Where can I go?

Four modes of information search

See: Four Modes of Seeking Information

- **Known-item searching.** You know what you're looking for.
- **Exploration.** Seeing what's around.
- **Don't know what you need to know.** Know general area, but looking for guidance.
- **Re-finding.** Finding something that you've found before.

If we understand which of these modes our primary users are most likely to use, we can design our interface to support them (e.g. via search, navigation, contextual links, site indexes, bookmarks, wish lists etc.)

The scent of information

- This is an extremely important concept in designing navigation. It's "the magical force that pulls users to their content“.
- **"Trigger" words and phrases** that users recognize give them confidence that their information quest is on the right track.
- Specific phrases that have direct meaning to the user (e.g. *Second Hand Audi, Arctic Monkeys CD*) produce a stronger scent than very general phrases (e.g. *Products, Solutions*).
- Use of the back button is usually associated with a lost scent of information.
- See: Getting Confidence From Lincoln

Hierarchical navigation

- Information hierarchy as primary navigation system
- Main options at each level taken are directly from hierarchy

For example, BBC.

Global (primary) navigation systems

- **What's on the whole site?**
- Allows greater vertical & lateral navigational movement
- Simple navigation bar

Local navigation systems

- **What's nearby?**
- **Complement global navigation**
- Navigational options refer to **information in a specific category**
- Get list of **options for entire level**
- Can get secondary, tertiary navigation, etc...
- Such navigation systems **can be challenging to design,** particularly when there are many options/levels
- How does the BBC site deal with multiple levels?

Ad hoc navigation

Embedded links

- Links within the page (hypertext)
- Must be informative (avoid "click here" and "more..."!)

Structural links

- Point to other levels of site structure
- e.g. "up to services and products"

Associative links

- "See also..."

Most easily implemented in database-driven sites where information has to be classified in detail e.g. Guardian

Browser navigation features

- **Open URL**
- **Back & Forward buttons**
- **Bookmark**
- **History**
- **Visited links**
- **URL display in status bar for links**

Don't override these features - support them!

“Just wait, Gretel, until the moon rises, and then we shall see the crumbs of bread which I have strewn about, they will show us our way home again.”

Breadcrumbs paths

Breadcrumbs are a secondary navigation aid

Why are they useful:

- They tell users **where they are** and/or **where they have come from**
- They provide a **mechanism for back-tracking** (in addition to the back button)
- They are small: **low real-estate "cost"**

See: Guardian.co.uk or Ellis Brigham

Navigation to avoid: mine-sweeping

Also known as Mystery Meat navigation

- Options are not clearly presented
- User has to roll-over every option to see what it is
- Can only really be justified if it's for entertainment, to get a sense of exploration (it can be useful for kids sites - kids love to explore!)
- Example: Flat Pak House, The Clove Club

Task: *Navigation stress test*

Have a look at Keith Instone's navigation stress test

Further reading…

Chapter 8: Content Strategy

Chapter 9: Transition

Chapter 10: Design Principles