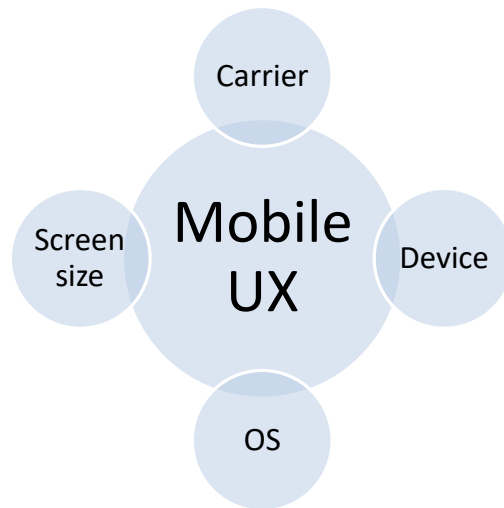




Mobile Design Patterns

UX Fundamentals

The Mobile UX Problem



2

Everyone loves a Venn Diagram! The mobile user experience is a mix of OS, the device capabilities, carrier capabilities (3G, 4G) and screen size.

The Desktop Experience is not Mobile

- **The mobile experience is separate from the desktop experience**
 - Yet so many experiences are squashed desktop pages



Create a simple mental model for using a desktop



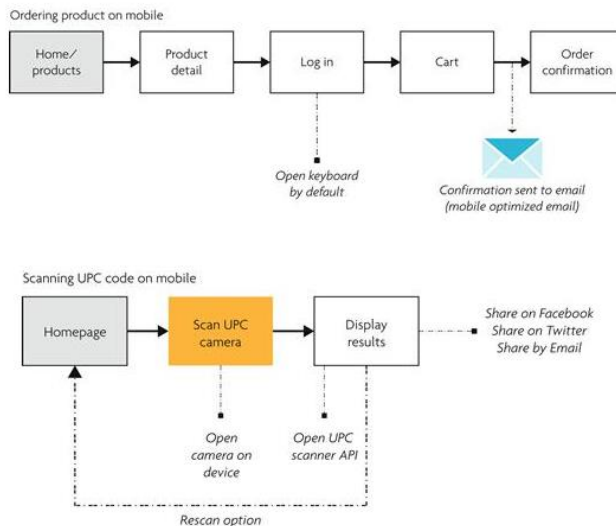
Create a simple mental model for using a laptop



Create a simple mental model for using a mobile device

Rethinking workflows (1)

- With less screen space and a weaker input experience we will also need to rethink mobile user journeys in our task analysis



Rethinking workflows (2)

- **Depending on the mobile experience you want to create; the user flow needs to answer a few important questions:**
 - Is it small?
 - Show that the path is short enough for a mobile user to complete.
 - Is it optimized for mobile?
 - Show any use of the camera, accelerometers, or other mobile-specific features.
 - Is it optimized for our mobile users?
 - Show that the path is clear for what the mobile users want and expect; make it easy to complete this path or function
 - Is it designed for a specific platform?
 - Create a flow tailored to the mobile specific platform that you are designing for.
 - Does it integrate the embedded web view if it's an app?
 - Show areas in your app where you will display mobile web content.

Design Patterns



- **A design pattern is a general reusable solution to a commonly occurring problem**
- **A design pattern is not a finished design; It is a description or template for how to solve a problem that can be used in many different situations**
- **Patterns are formalized best practices that the programmer must implement themselves in the application**
- **Object-oriented design patterns typically show relationships and interactions between classes or objects, without specifying the final application classes or objects that are involved**

6

What is a design Pattern?

It is a design that is used again and again, in order to create consistency. It describes a design in terms of standards that are used throughout the application, or across multiple applications.

Broadly speaking, they are small interface pieces that are loosely joined together into familiar groups. They describe the structural and behavioural features in a way that makes them easier to understand and make the tools more useful.

More often than not, the design pattern describes the layout, but usually also includes the rules of interactive elements.

Some patterns (especially website patterns) are industry standards, where others are much more limited in their areas of use. E.g. the MS Office Ribbon is a design pattern that is used across all Microsoft Office applications, but is rarely used by third parties.

Patterns are:

Concrete

Patterns are concrete enough to help bridge the gap between high-level “general principles” and the low level “grammar” of user interface design, such as widgets, text, graphic elements, alignment grids etc..

Valid across different platforms and systems

Patterns are more concrete than principles or heuristics, but they do define abstractions where the best patterns are not specific to a single platform or idiom. Ideally each pattern remains relevant even when the underlying technologies and media change.

Products, not processes

Unlike heuristic or user-centred design techniques which usually focus on the process of finding a solution, patterns are pre-defined solutions that it may be possible to apply to a problem.

Suggestions, not requirements

Patterns are only intended to be suggestions that you can follow or reject. Their suitability depends on your design context and the needs of the user.

Relationships among elements, not single elements

A text field is not a pattern. A two panel layout where selections are made in the first panel, and information related to the selection are displayed in a text field inside the second panel might however be a pattern.

Changes in a set of elements over time (as the user interacts with the software) can also constitute a pattern, although not all patterns capture changes as they may deal with purely static relationships.

Customised to each design context

When a pattern is used in a design, the designer must adjust the pattern to fit the particular users and requirements.

We can not hope to cover the range of patterns that might be used, so here are a few common examples.

For more, read “Designing Interfaces” by Jenifer Tidwell

Design Patterns



- **Patterns are concrete enough to help bridge the gap between high-level “general principles” and the low level “grammar” of user interface design**
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- **Products, not processes**

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- **Suggestions, not requirements**
- **Define relationships among elements, not single elements**
- **Are customised to each design context**



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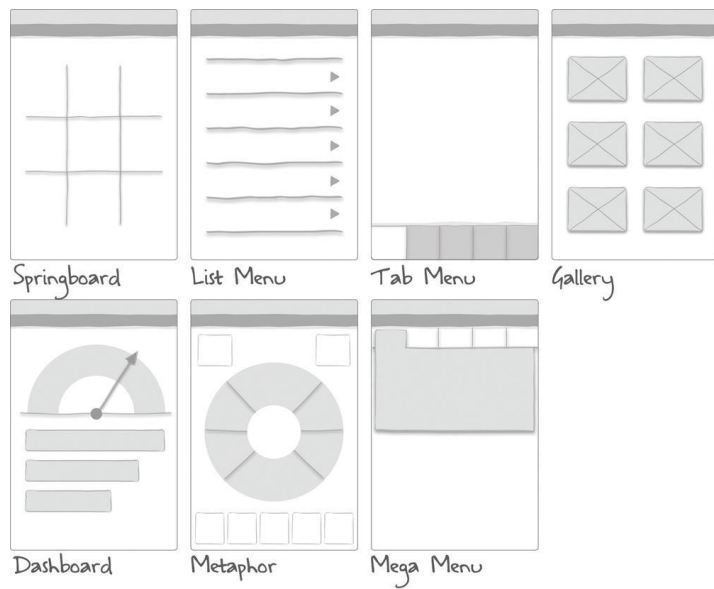
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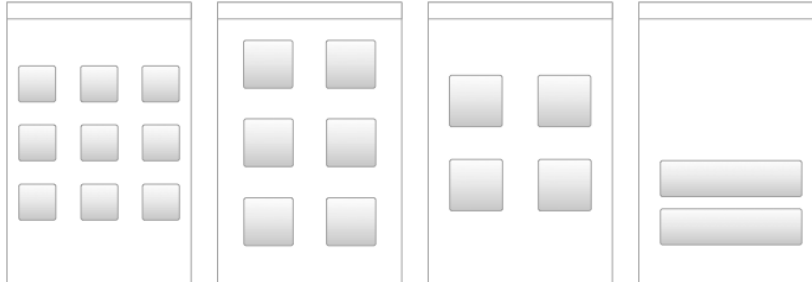
Design Patterns – Primary Navigation



Design Patterns – Primary Navigation

- **The Springboard**

- OS neutral 'grid of equals' sometimes referred to as the Launchpad
- Acts as an icon driven jumping off point to other tasks



Design Patterns – Primary Navigation

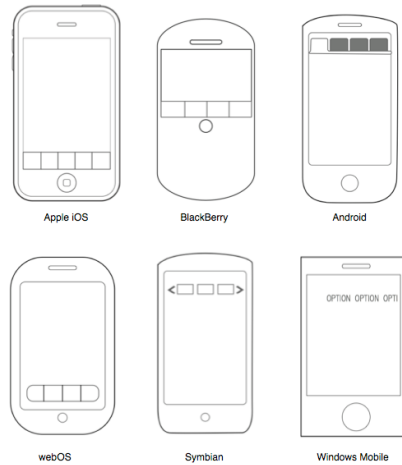
- **List Menus**

- The list menu is another jumping off point into greater detail
- Can carry more detail and a better mixture of text and graphics



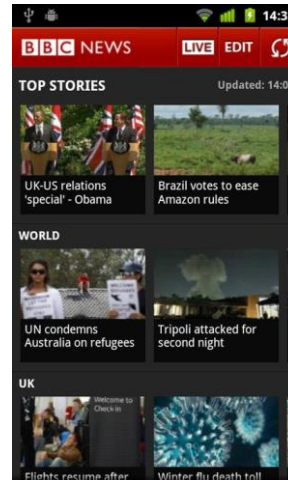
Design Patterns – Primary Navigation

- **Tabs are not OS neutral – each implementation has a different set of guidelines**
 - This must be optimised for the device UI



Design Patterns – Primary Navigation

- The gallery pattern adds a clickable surface on areas of content
 - Usually used for photos, recopies to be arranged into a grid or carousel



Design Patterns – Primary Navigation

- **Dashboards provide a roll up of key data**
 - The metric can then be drilled into for more data



Design Patterns – Primary Navigation

- The pattern is characterised by a landing page to reflect an apps metaphor
 - Primarily seen in games due to the decline of skeuomorphic UI



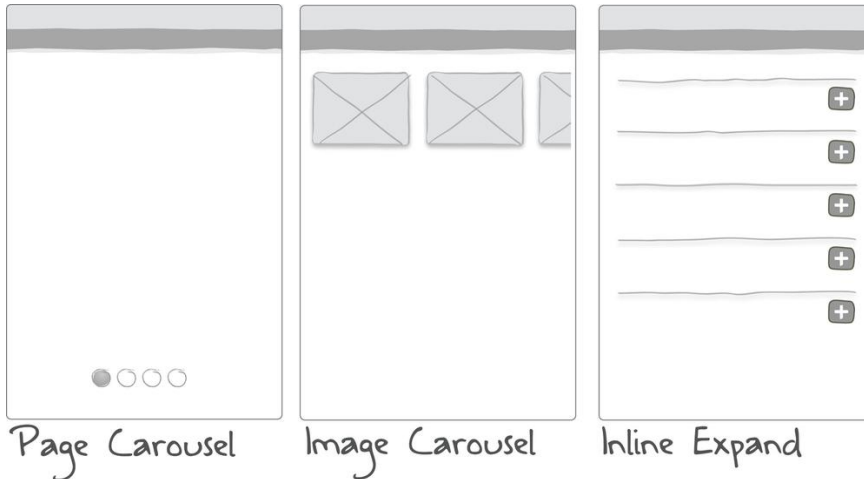
Design Patterns – Primary Navigation

- The mega menu is a sub Launchpad it is used to provide icon driven navigation



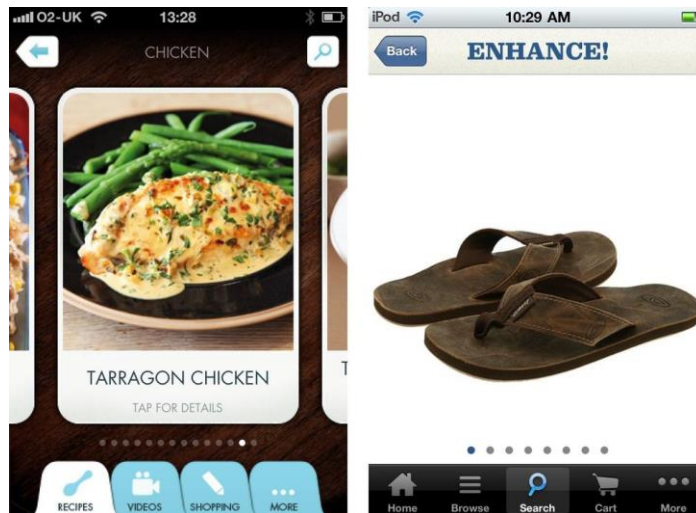
Design Patterns – Secondary Navigation

- **Secondary navigation patterns allow navigation within the screen**
 - Previous patterns can be used within pages but there are some unsuitable as primary navigation types



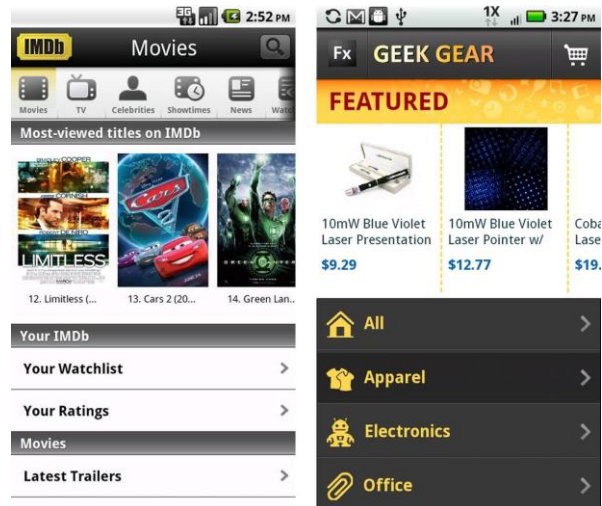
Design Patterns – Secondary Navigation

- Allows a user to navigate through a module of related content with a flick.



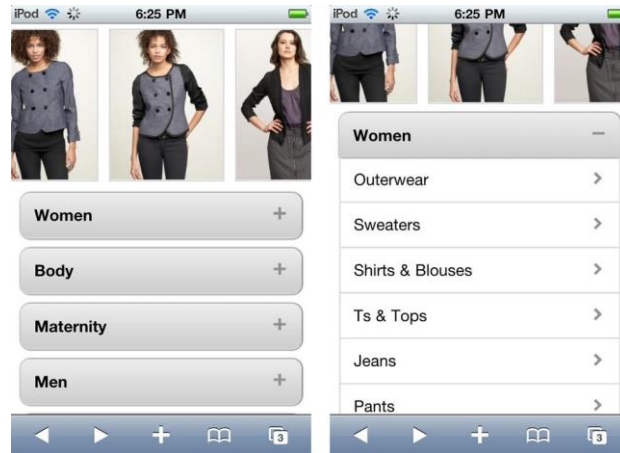
Design Patterns – Secondary Navigation

- Originally seen in the iTunes coverflow – useful when the user needs to see a number of related graphics

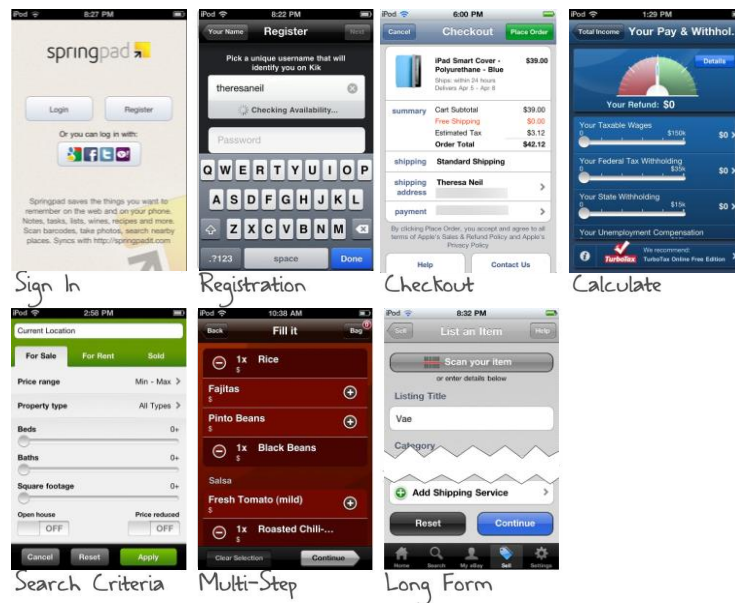


Design Patterns – Secondary Navigation

- An alternative to sublevel hierarchies and options working in a similar way to an accordion panel



Forms



Sign in:

The form should take a minimal amount of information – focused in the top of the screen to ensure the fields are not covered by a virtual keyboard.

Registration:

Have minimal amount of inputs – ruthless eliminate elements which do not require function

Checkout:

Use standard device controls in the checkout form. Consolidate multiple screens into a short form that can be drilled into. Offer a mechanism for fast checkout in the future

Calculate:

Calculator type apps all require user input although these forms can use controls we should follow good UX flow, space and placement

Search Criteria:

Minimise the number of input fields – strip away all unnecessary inputs and reduce the need for the user to add direct input where possible

Feedback and Affordance



Register

Email


User Name

Password

Register


▲ Email is required

Error Messages



✓ Registration complete

Confirmation



Register

Email

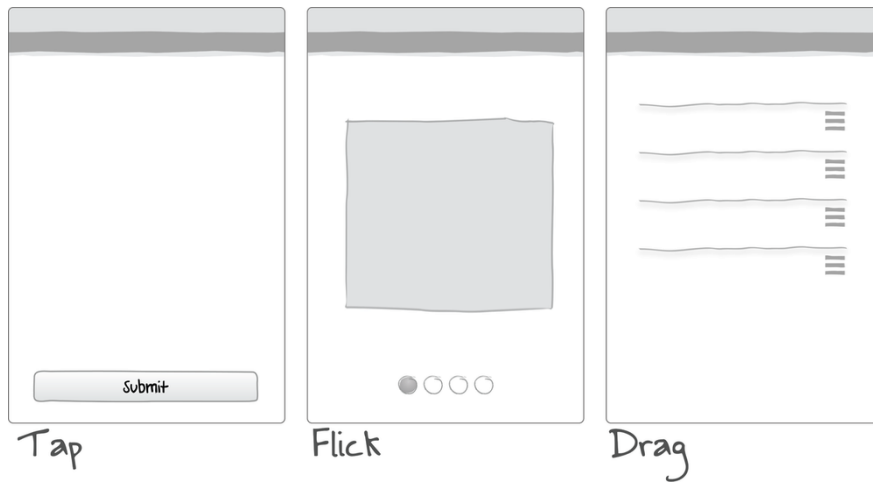
User Name

Password

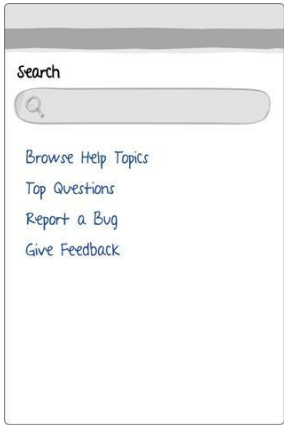
✳ Submitting ...

System Status

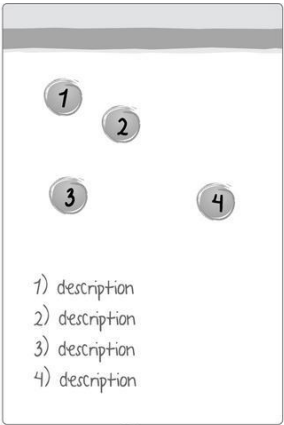
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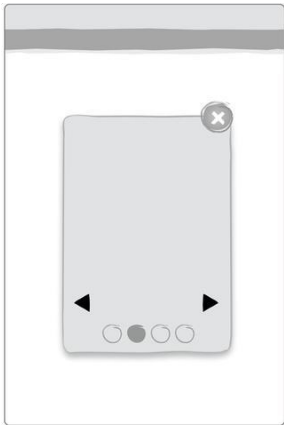
Help



How To



Cheat Sheet



Tour