

CS 329E

Elements of Mobile Computing

Fall 2017

University of Texas at Austin

Lecture 11

Agenda

- User Interface Design
- Human Interface Guidelines (HIG)

User Interface Design

User Interface Design

This can be a challenging and tricky thing to do.

Oftentimes we design for what we like or need.

We consider ourselves the 'norm'.

Instead of considering the needs and expectations of our users.

User Interface Design

White space versus Negative space

These are conceptually the same thing.

Print designers - anyone working primarily with books, newspapers and magazines - typically use the term 'white space' because any unused part of a page is often white, rather than another color.

User Interface Design

Negative space

Originated with photographers.

- Positive space - the subject of the photo
- Negative space - the background
 - Anything that is not drawing attention

User Interface Design

Why space is important

It is the thread that holds your design together.

It cushions text to make it more readable.

It can more clearly define spatial relationships -
defining what elements go together.

User Interface Design

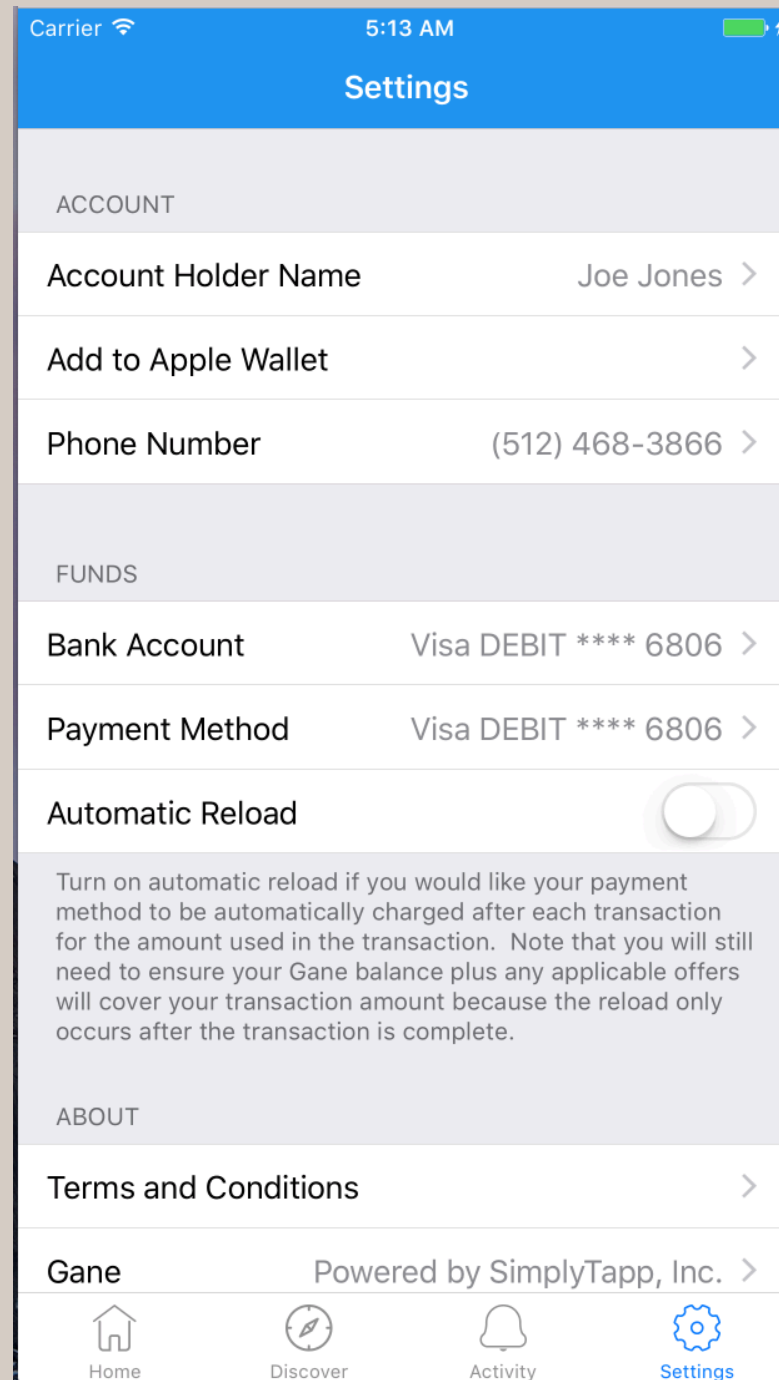
Sections group related items



Arrows indicate additional information



What does this go to?



Tabs indicate ability to jump around in app



User Interface Design

In general - too much white space isn't as important as too little.

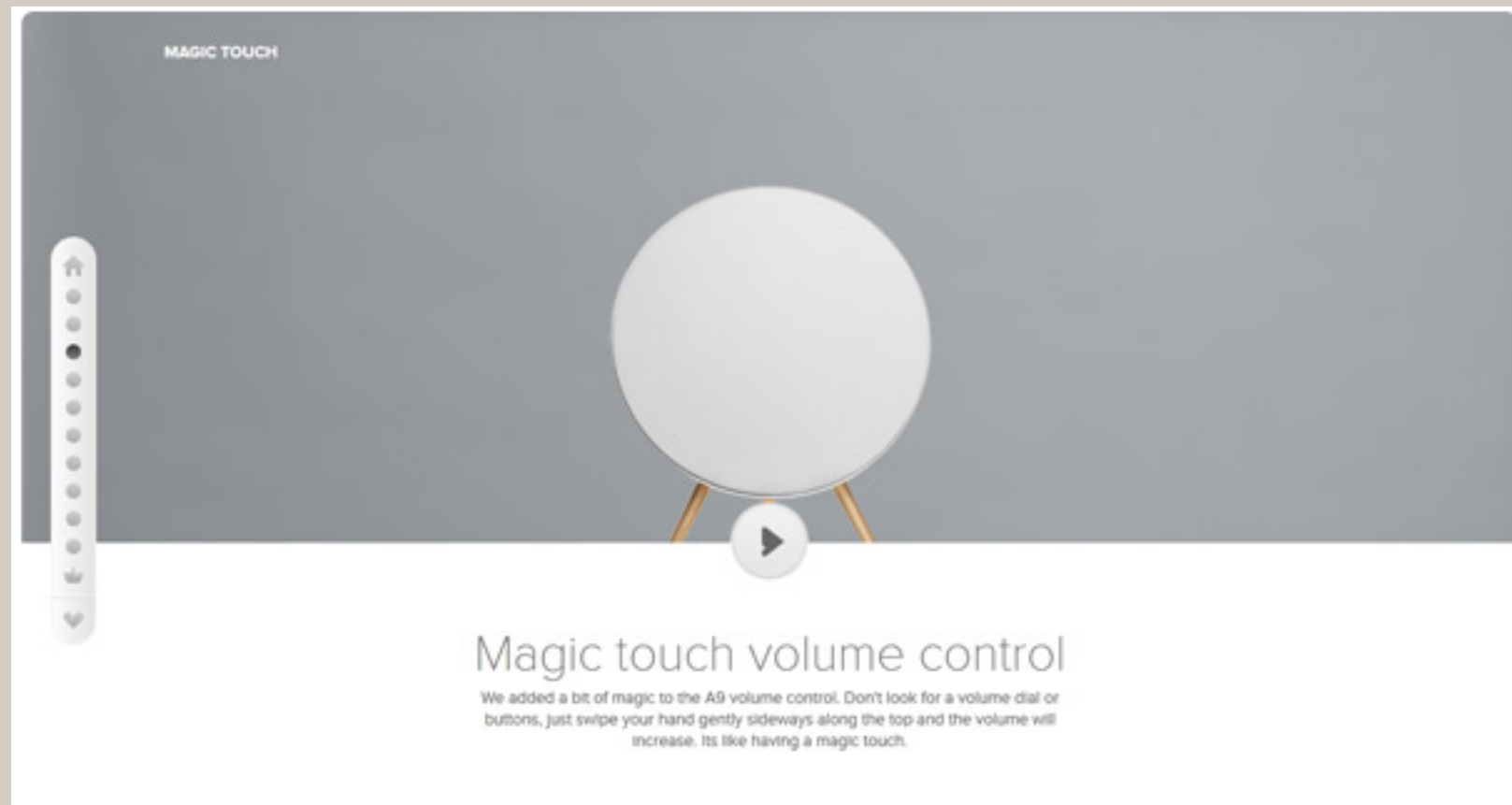
Too little white space makes a design feel crammed, busy and cluttered - difficult to read.

The goal:

Equal and consistent spacing

User Interface Design

Extreme white space



User Interface Design

Extreme white space

- Works with images or text.
- A way to bring focus to a certain part of the design.
- To create and draw attention to a specific thing.
- A way to make the user stop, look and read.
- Caveat: without unnecessarily limiting the information you are attempting to convey.

User Interface Design

General rule 1:

Mirror the language and concepts your target users would find in the real world.

Minimize cognitive strain.

Don't make them have to think (much).

User Interface Design

General rule 2:

Consistency across the app.

Color, imagery, fonts, font sizes, spacing, etc.

User Interface Design

General rule 3:

Provide some control and freedom.

Offer a way to undo and redo - safely.

Creates a positive emotion.

User Interface Design

General rule 4:

Design to keep potential errors to a minimum.

Users don't like having to spend mental energy figuring stuff out.

Creates a negative emotion.

User Interface Design

General rule 5:

Design with the thumb(s) in mind.

Unless the user is interacting with the device with two hands, it's almost impossible to get a finger on the screen.

Means UI elements the user can tap shouldn't be too small or hard to reach from a side.

Human Interface Guidelines

Human Interface Guidelines

Everything Apple does is in support of *Surprising and Delighting* their customers.

In support of that, Apple has developed a set of guidelines for developing iOS apps.

<https://developer.apple.com/ios/human-interface-guidelines/overview/design-principles/>

<https://developer.apple.com/design/tips/>

In-Class Exercise

In-Class Exercise

Critique an iOS UI - Gane