Mobile Application Development Aileen Pierce

MOBILE APP DESIGN

Mobile Strategy

- We want an app for that!
- Companies want to engage with mobile users
- What mobile strategy makes sense?
 - Mobile web site
 - Responsive web site
 - App (native or web)
 - Combination

Mobile Web Site

- Develop your web site for desktop users and then adapt for mobile
- Keep your web site so simple it works well on the mobile platform
- Create a separate mobile web site for mobile devices

Responsive Web Site

- A responsive web site adapts based on the screen size, resolution, and device that's accessing it
- Single web site, multiple views
- Same text, different presentation(usually)
- Avoids major changes
- Avoids maintaining multiple web sites

App

- Designed specifically for mobile use
- Apps are focused on a specific task users want to accomplish, more targeted than a web site
- Designed for touch
- Scrolling is easy, and ok!
- Used in short bursts of time
- Users are often interrupted
- Is it worth the cost?

Mobile Strategy

- Know your target users
- Apps focus on one task
- Apps are more immersive
- App content is less discoverable than web content
- Will your app be downloaded and repeatedly used?
- Money, money, money

App Strategy

- Web app HTML5
 - Develop once
 - Runs on any HTML5 device
 - Can't take advantage of platform specific feature
- Native apps iOS, Android, other
 - Separate development efforts
 - Can leverage platform specific features
 - Better integrated, more immersive

App Design

- What is the goal of your app?
- Come up with a description for your app that is clear, concise, and complete
- Who is your intended audience?
- Define your app
 - Features
 - Users
- Your goal and target audience should drive all the design decisions you make

Common app styles

- Productivity apps
 - Use and manipulate information
- Utility apps
 - Perform a specific task
- Immersive apps
 - Focused on delivering visually rich content

Engaging the User

- Know your target audience
- Put the users in control
- Download, install, start using quickly
- Get them to the relevant information quickly
- Focus on the task at hand
- Relevant, appropriate content
- Easy to figure out and use
- Immediate feedback

Design Principles

- Simplicity
 - Easy for the target user to understand
- Integrate aesthetics with function
- Use real-world metaphors
 - Provides familiarity for users
- Let users control the decision-making
- Target apps to a specific user level
- Easy, logical, obvious navigation
 - Avoid unnecessary alerts
- Provide subtle but clear user feedback

Design Principles

- Create a compelling user experience
 - User interaction consistency
- Make sure that all user input is valuable
- Aesthetic integrity
 - Quality of artwork is apparent
- Content
 - Provide only content useful to the immediate task
 - If in doubt, leave it out
- Avoid file handling and settings
- Start instantly and be prepared to stop

Design Principles

- Design for the device
 - Use layout that makes sense for the device
 - Adapt art to the screen size
 - Universal apps should have a consistent flow
 - Handle different orientations
 - Support common gestures
 - iPad apps shouldn't just be bigger
- Consistency
 - Use UI elements as they are meant to be used
 - Controls should look and act consistently

Platform Design Principles

- Touch display
 - Responds to gestures, not clicks
 - The comfortable minimum size of tappable UI elements is 44 x 44 points
- Flexible orientation
 - Orientation: portrait, landscape
- Single window
- Movement accelerometer
- Location
- Displays digital content
 - stunning graphics, images, video, and audio

Custom UI

- Focus your design on the task at hand and your target user
- Always have a reason for custom UI elements
- Use standard UI elements whenever possible
 - Take advantage of prior experience
- Don't overshadow the content
- Minimize the number of controls in a view
- Be consistent throughout your app

Mobile Design Process

- Research, brainstorm, gather requirements
- Define the goal, description, and audience
- Plan the interface and functionality
- Design the user interface
- Design the architecture and program flow
- Develop and test incrementally
- Prototype
 - Get user feedback
- Refine and iterate