Xcode and Version Control

CIS 399 - iOS Application Development

Xcode 4

- What is Xcode?

1. An integrated development environment (IDE) for OS X / iOS

2. Integrated code editor, build system, version control, debugger, interface builder, data modeler, project manager, simulator, etc…
Xcode 4

- Anatomy of Xcode 4
  1. Toolbar
  2. Project Navigator
  3. Editors and Jumpbars
  4. Utility Area
  5. Debug Area / Console

- Code editor features
  1. Configurable syntax coloring
  2. Code completion
  3. Code folding
  4. Breakpoints
  5. Command-click through
  6. Etc...
Xcode 4

- Toolbar features
  1. Run and stop application
  2. Choose target to run
  3. Enable/disable breakpoints
  4. Configure editor and window
  5. Open the organizer

Xcode 4 Demo
Version Control

• At a high level: a system for keeping track of the changes made to some set of files
  1. Automatically keeps a history of all revisions, allowing for easier merging of changes by multiple people that conflict and reverting to previous states
  2. Eases concurrent development on a project with multiple people by making it easy for people to stay current and providing conflict resolution mechanisms

Version Control

Version control systems supported by Xcode:
• Subversion (SVN) - Open source Apache foundation version control system
  1. Client/Server model
  2. Changes are committed to a central repository
• Git - Open source version control system brought to us by Linus
  1. Distributed model (each client has a complete repository)
  2. Changes are committed locally; pushed/pulled between clients
Subversion Demo

Version Control

- Everyone will be provided a personal Subversion repository
  1. Emulate real-world project environment
  2. Provide a mechanism for distributing template projects
  3. Provide a mechanism for milestone and project submission
- Repositories will be deleted after the class, so make sure to backup any files you wish to keep (there will be enough notice given prior to deletion it shouldn’t be a problem)
Related Reading

- From the developer documentation:
  - *Tools for iOS Development*
  - *Xcode Quick Start Guide*
  - *Xcode 4 User Guide*