**Topic: App Testing and Distribution**

Beta Testing an App

1. Test outside the development environment because:
   1. The simulator doesn't run all the threads that run on real devices
   2. Devices provisioned for dev testing (simulators) have some of the watchdog timers disabled. Explanation of WDT: <https://en.wikipedia.org/wiki/Watchdog_timer>
2. Ad Hoc  
   User's devices must be registered. Up to 100 devices can be registered. The app installation file can be posted on a web site, attached to an e-mail or distributed on electronic media like a flash drive.
   1. Process:
      1. Register all test device UUIDs on the Apple developer web site.
         1. To find the UUID: sync with iTunes, click on the device serial number
         2. Example: LCC Registered devices: <https://developer.apple.com/account/ios/device>
      2. Update the build string
      3. Archive and validate your app
      4. Install the app on test devices
      5. Solicit crash reports from testers
3. ITunes Connect and TestFlight  
   *Not available with the University Developer Program*
   1. Methods for distribution
      1. Invite testers to download your app
      2. Distribute to iTunes Connect users by e-mail address. (Requires app approval.)
   2. Process
      1. Create a record for the app in iTunes Connect. You must be authorized by the team agent to do this.
      2. Update the build string
      3. Archive and validate the app. Tests are performed by iTunes Connect
      4. Distribute a pre-release build using TestFlight