# App Distribution

#### Bundle ID

- Your Bundle ID is how both Apple and your device recognizes your app.
- Your app's Bundle Identifier must be unique to be registered with Apple
- Usually written out in reverse DNS notation (ie com.myCompany.myApp)
- The Bundle ID you have set in your App's Xcode project MUST match the Bundle ID you have assigned to the App on the iOS Dev Center.
- In Xcode, the Bundle ID is stored in the Info.plist, and is later copied into your app's bundle when you build.
- In Member center, you create an App ID that matches the app's bundle ID.
- In iTunes Connect, you enter the Bundle ID to identify your app, after your first version is available on the store, you cannot change your bundle ID EVER AGAIN.

### Teams!

- Each Xcode project is associated with a single team.
- If you enroll as an individual, you're considered a one-person team.
- The team account is used to store the certificates, identifiers, and profiles needed to provision your app.
- All iOS apps needs to be provisioned to run on a device.

## Team Provisioning Profile

- When you set your team, Xcode 'may' attempt to create your code signing identity and development provisioning profile.
- Xcode creates a specialized development provisioning profile called a team provisioning profile that it manages for you.
- A team provisioning profile allows an app to be signed and run by all team members on all their devices.

### Provisioning Profile Creation

- Here are the steps Xcode takes when creating your provisioning profile:
  - 1. Requests your development certificate
  - 2. Registers the iOS device chosen in the Scheme popup menu
  - 3. Creates an App ID that matches your app's bundle ID and enables services
  - 4. Creates a team provisioning profile that contains these assets
  - 5. Sets your project's code signing build settings accordingly

### Version Number & Build String

- The version number of an app is 3 positive integers separated by periods (ex: 1.0.4)
- The first digit is a major release, the 2nd is a minor release, and the third is a maintenance release.
- Build String represents an iteration of the bundle and contain letters and numbers. Change it whenever you distribute a new build of your app for testing.

## Code Signing

- "Code Signing your app lets users trust your app has been created by a source known to Apple and that it hasn't been tampered with"
- The **signing identity** is a public-private key pair that Apple issues. The private key is stored in your keychain and used to generate a signature. The certificate contains the public key and identifies you as the owner of the key pair.
- To sign an app, you also need an intermediate certificate, which is automatically installed in your keychain when you install Xcode.
- You use Xcode to create your signing identity and sign your app. Your signing identity is added to your keychain after creation and the corresponding certificate is stored in the member center.
- A development certificate identifies you, as a team member, in a development provisioning profile that allows your apps signed by you to launch on devices.
- A distribution certificate identifies your team or organization in a distribution provisioning profile and allows you to submit your app to the store.
- You can view your Signing Identifies and Provisioning Profiles in Xcode if you need to troubleshoot them! Everything should match what you see in Member Center.

## Submitting your app

- 1. Create a distribution certificate for your app in Xcode.
- 2. Create a store distribution provisioning profile on Member Center.
- 3. Archive and Validate your app in Xcode.
- 4. Create your App on iTunes Connect and get it to 'Ready for Binary' status.
- 5. Submit your app binary using Xcode or application Loader.