

# Provisioning profile and certificates

## Why Code signing is required?

- Digitally sign your code.
- Add security to your code.
- We can achieve this using profiles and certificates.

## Provisioning profile: [PP]

- Unlike android iOS apps won't run on any device.
- iPhone devices needs to be provisioned.
- PP is link between device and developer account.
- Keeps tracks what all devices we can use for development.
- What services can be accessed by the app. [App Entitlements]

## What does profile contains:

- Development certificates. [Authorizes the devices]
- UUID of the devices. [To add test devices]
- App Ids [Team ID + Bundle ID]

## How does app install from xcode:

- Development certificates matched with keychain certificates.
- Certificate is used to code sign.
- UUID check with provisioning profiles.
- Bundle Id check with App id's bundle
- Verify entitlements mentioned.

## Types of provisioning profile:

- **Development:** We can do the daily dev work. Can't push it to the distribution on test flight or app store..
- **Distribution:** Doesn't contain any UUID. Used to ship it on the app store. Apple code sign this when we push it to the app store.
- **Ad-hoc:** Used to distribute to larger audience. Gives same feel as a app store build.
- **Enterprise:** Share iPA internally to the org. Distribute within the org.

**CSR: [Code signing request]:**

- Block of encoded text which is required for asymmetric check which apple uses.
- We need to create CSR using keychain.

**Steps to create Provisioning profile and certificate.****1. Create CSR:**

- a. Go to keychain
- b. Keychain access -> Certificate assistant
- c. Choose request certificate from a certificate authority.
- d. Add details and save to disk

**2. Create Certificate:**

- a. Go to certificates and identifiers on developer account
- b. Create app identifier in register app section.
- c. Click on developers certificate
- d. Choose Created CSR.
- e. Create certificate and download it.

**3. Create profile:**

- a. Click on generate profile
- b. Select dev / distribution
- c. Select app ID
- d. Select development certificate
- e. Create device if not and register device.

**Submit App To app store:**

1. Create provisioning profile and certificates with help of above steps

2. App store connect:
  - a. Website where you submit and manage your app.
  - b. Check Stats, Analytics, and reports
3. Test your app with proper profile and certificats.
4. Create listing with details on the app store.
5. Select proper apple ID from preferences.
6. Go to app store connect. Select new app [+] -> Select bundle ID -> Select language and other details
7. Add app information
8. Archieve your app from xcode. And click on distribution and submit your app for review. [You can automate this process as well]