Chapter 8

Publishing, Distributing, Monetizing, and Promoting Applications

Signing and Publishing android app

- Android applications are distributed as Android package files (.APK).

- To be installed on a device it needs to be signed. This is done before distributing the app or release it for use.

- To sign an app
  - JDK includes the **Keytool** and **Jarsigner** command-line tools which are necessary to create a new keystore/signing certificate
  - Alternatively, you can use the **Generate signed bundle/apk wizard**

- Importance of Signing Certificate
  - It is a means of *identifying the authenticity of application updates*, and *applying inter-process security boundaries between installed* applications.
  - If you lose your certificate, you would need to **create a new listing**, **losing all the reviews, ratings**, and **comments associated** with your previous package, as well as making it impossible to **provide updates to the existing users of your application**

- Follow the steps mentioned on the handout to sign and publish your app

Distribute android app

- One of the advantages of Android's open ecosystem is the freedom to publish and distribute your applications

- The most common and popular distribution channel for android apps is **Google Play**

- But you are also free to distribute your applications using **alternative markets(**including the Amazon App Store, GetJar, Mobogenie, SlideME, F-Droid and carrier-specific stores), **your own website**, **social media**, or **any other distribution channel**

- **When you distribute your app make sure that**
  - **application package name is unique. Because it is** used as unique identifiers for each application
  - The filename of your APK **does not have to be unique because** it will be discarded during the installation process

Monetizing android app

- Android enables you to monetize your applications using whatever mechanism you choose

- If you choose to distribute and monetize your applications using Google Play, three options are available:

  - **Paid applications** — Charge users an upfront fee before they **download** and **install** your application.

  - **Free applications with In-App Billing (IAB)** — Make the download and installation of the application free, but charge within the application for **virtual goods, upgrades, and other value-adds**.(More effective)

  - **Advertising-supported applications** — Distribute the application for free, and monetize it by **displaying advertising**.

- If you want to monetize your app in google play using either of the first two options

  - You should have a **merchant account** and you are **responsible for any legal or taxation obligations** associated with the sale of your application

  - the revenue split between google and the developer is 30/70 respectively.

- If you want to monetize your application using **in-app advertising**
  - You are required to set up advertising within your application:(it may vary asper the ad providers)
    - Create a publisher account.
    - Download and install the associated ads SDK.
    - Update your Fragment or Activity layouts to include an ad banner.
- In many cases, developers have chosen to **offer a paid alternative** (either using up-front payment or IAB) to **allow users to eliminate ad banners from their applications**.

Application Marketing and Promotion Strategy

- 1st step- provide the full set of **high-quality assets for your Google Play listing**

- marketing and promotion strategies vary widely depending on your goals and budget, here are some of the most effective techniques to consider:

  - **Offline cross promotion** —offline presence (such as a stores or branches), or a large media presence (such as within newspapers, magazines, or on TV), these increases awareness and help to ensure users **trust the download**.

  - **Online cross promotion** — if you have a website, promoting your application through direct links to Google Play can be an effective way to drive downloads.

  - **Third-party promotion** — Distributing a promotional video on *YouTube and leveraging social networks, blogs, press releases, and online review sites* can help you provide positive word of mouth.

  - **Online advertising** — Online advertising using **in-app ad networks** (such as **AdMob**) or traditional **search-based advertising** (such as **Google AdWords**) can drive significant impressions and downloads for your application.

Application Launch Strategy

- **Ratings and reviews** can have a significant impact on your application's ranking in category lists and within Google Play search results. Poor launch will have impact on it.

- Here are some of the strategies you can use to ensure a successful launch:

  - **Iterate on features not quality** - A poorly implemented but feature-rich application **will receive worse reviews** than a well-polished application that **doesn't do everything**. Ensure each release is of the **same high quality**, **adding new features** as part of each release. Similarly, each **release should be more polished and stable than the last.**

  - **Create high quality Google Play assets –** The **first impression** your application makes is through its appearance in Google Play. Create assets that represent the quality of your application.

  - **Be honest and descriptive** - Disappointed users who find your application is not as it was described are likely to uninstall it, rate it poorly, and leave negative comments.

Promotion with in Google Play

- In addition to the effect of reviews, no of downloads and installs, Google Play editorial team uses several criteria to **highlight high quality applications and categorize them as Featured.**
  - **Featured applications** receiving priority placement in Google Play.
- **T**he criteria mentioned above are **not publicly available**, but some of the general criteria associated with featured application includes:
  - **High quality and innovative** - featured applications in Google Play act as a **showcase for the platform**. So that it should be **useful and innovative**.
  - **A high degree of fit-and-finish –** include all the **requisite promotional assets**, while the applications themselves have **few bugs and a high quality UI**.
  - **Broad device and platform support** - typically support a broad range of device types and platform versions, including both handsets and tablets.
  - **Use of newly released features** - should offer an opportunity for the Google Play team to *highlight those new features to reviewers and early adopters*.
  - **Consistency with the platform user experience** - provide a convincing user experience that is consistent with the UI and interaction models offered by the Android platform.

Analytics and Referral Tracking

- Mobile application analytics packages are effective tools for you to *better understand who is using your application and how they are using.* Example **Google Analytics and Flurry.**

- can help you to
  - discover bugs, prioritize your feature list and make objective decisions on where to focus your development resources

- Using these tools you can track three types of data within your application:
  - **User analytics** -Understand the **geographic locations and language settings, Internet connections speed, screen sizes and resolutions, and the display orientation of your app users.** So that it help you to prioritize **translation efforts, optimize layout and assets for different screen sizes and resolutions**.
  - **Application usage patterns** – during integrating analytics the first step is to record each Activity. This will help you understand the *way your application is being used, optimize workflows and better understand how well the assumptions you made during design match actual usage.*
  - **Exception tracking** - In addition to printing an error, post each unique exception thrown using your analytics. This will help you to see if there **are particular devices, locations, or usage patterns that lead to particular exceptions.**