

Good morning, everyone my name is ... , and today I am here to give you a brief overview of our app, CloudPlay

### **What is CloudPlay?**

CloudPlay is a Youtube-based music streaming app with a minimalistic design aiming to be easy for general usage.

**What sets this app apart** from a larger production app such as SoundCloud or Spotify is its straight-forward UI with only essential features, allowing user to focus on the music rather than the features of the app.

**Target audience** of CloudPlay will mostly be general users or regular music listeners who want a more lightweight options to their current online audio player.

**Main features** of the apps include: vertical scrolling based UI which will be populated by video from Youtube, a Search function allowing the user to find their desired music, and an ability to save and delete their favorites songs.

### **Main library used/api used**

(\*แถมสไลด์\*)

### **General program flow/app preview:**

The app design are mostly fragment based with two activity, one main activity which will display other fragments and a login activity for user authentication

There are three main page in the app: Home, search, and My favorite

All of them are fragment which are swap around in the main activity using a fragment manager.

The home and search page will request video information from the Youtube Data API and use it to populate its recyclerview while the favorite page will send its request to a custom favorite servers used to interact with the database instead.

Once the user selected a song from either pages, its data will be send to a common media player fragment which will send request to a youtube-dl server in order to get a direct link to the file, which will then be played in a media player service through a broadcast receiver.

(\*จอมอธิบายเกี่ยวกับ media player เพิ่มเติม\*)

**There are also some setbacks and obstacles during development,** For instance, early in development stage, the app initially meant to used SoundCloud API for its songs data. However, it was discovered that SoundCloud have shut down registration for API, preventing new apps to made utilizing it.

We then moved on to use Spotify API. However, there are many features which are limited by it such as not being able to choose specific songs unless you are a paid user. Moreover, the SoundCloud API only allow use to use media player service from its own app, making our app dependent on external installed application which is not ideal.

Another obstacles that comes to light when we first start using Youtube Data API is media player. While Youtube does have its own media library, it would only allow video to be played. For this reason, we decided to use an external youtube-dl server which allow us to get direct link using data obtained from Youtube API. This allow us to create our own media player along with full control over the song.

**In conclusion,** CloudPlay provides user with an alternative lightweight option to online audio player. Its minimalistic style make music listening experience quicker and more convenient compared to a larger, more feature-heavy app. This make CloudPlay suitable for regular music users and general users who have little time to spend looking through the app.