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Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

GitHub Username: lentusignavus

Synkrow

Description

Write a brief summary of what your app does. What problem does your app solve?

Not sure how to write a good description? Search 5-star apps on the Play Store for inspiration.

Watch youtube videos with your friends, make queues, and chat in real time

Intended User

Who is your intended user? (For example, is this an app for dog owners? Families? Students? Travelers?)

Heavy users of the youtube mobile app who enjoy sharing videos and reading comments

Features

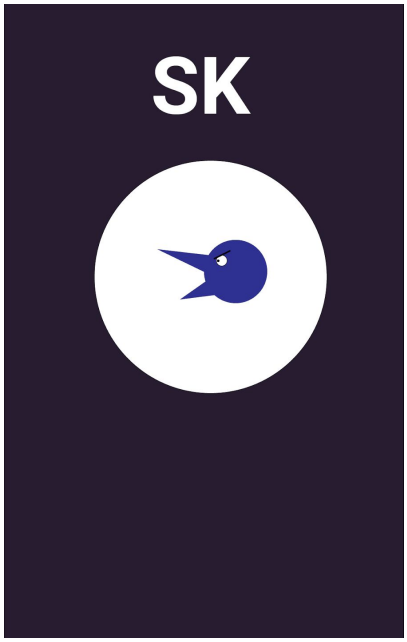
List the main features of your app. For example:

- Watch youtube videos with more control
    - Looping
    - Scrubbing with exact times
    - Watch with friends
- Opening youtube links to the app
- Playlist management
    - Queueing
    - Rearrangement
- Watch the video in sync with others
    - Chatting with current viewers

User Interface Mocks

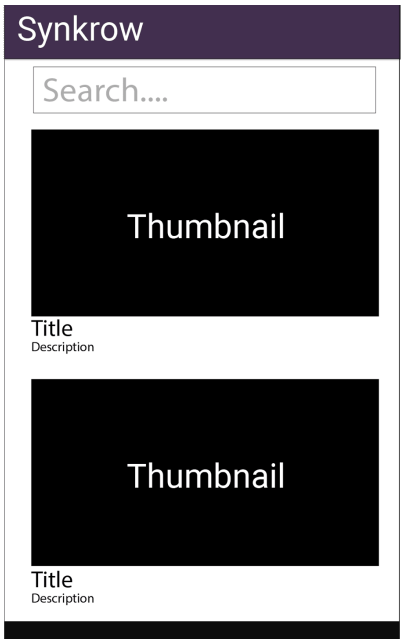
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



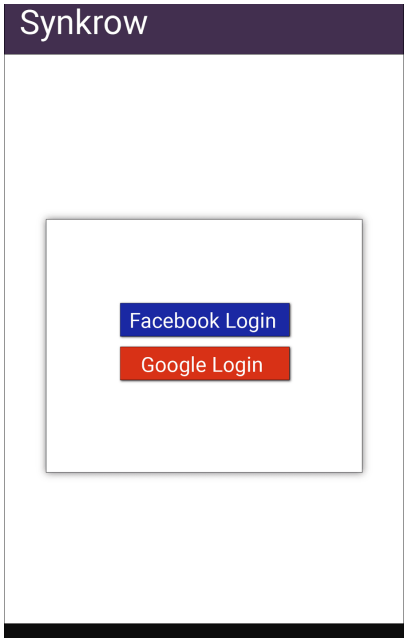
Splash Screen - display while loading

Screen 2



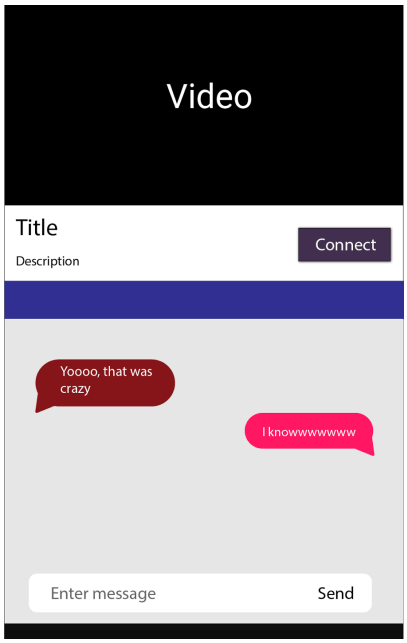
Video list screen. Search results pop up here

Add as many screens as you need to portray your app's UI flow.



Video list screen. Search results pop up here

May remove facebook login



Video screen with chat interface

Key Considerations

How will your app handle data persistence?

Describe how your app with handle data. (For example, will you build a Content Provider or connect to an existing one?)

Data from the API I'm building will be held in memory.

The storage and retrieval the chat messages will be handled using Firebase real time database

Settings will be held in SharedPreferences

Describe any corner cases in the UX.

For example, how does the user return to a Now Playing screen in a media player if they hit the back button?

If they hit the back button while on the video screen, there will be a minimized video player on the screen that they can click and return to
If they leave the app in the middle of a session they will be removed from the session but rejoined automatically if they return and the session is still around

Describe any libraries you'll be using and share your reasoning for including them.

For example, Picasso or Glide to handle the loading and caching of images.

Firebase - Auth, and simple storage
Picasso for thumbnails of videos
Retrofit for http calls

If it needs to pull or send data to/from a webservice or API only once, or on a per request basis (such as a search application), app uses an `IntentService` to do so.

As mentioned above retrofit will handle the actual http calls to abstract away url connection handling.

The library will be used in an Intent Service to remove the networking and subsequent processing of data off the main thread

Describe how you will implement Google Play Services.

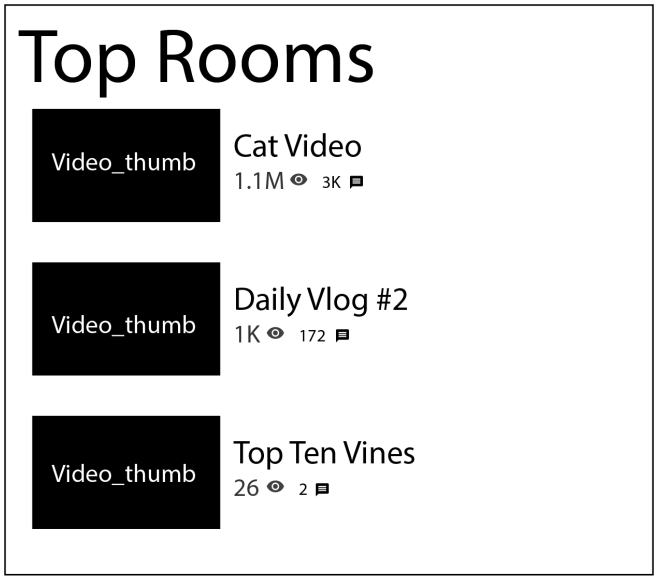
Describe which Google Play Services you will use and how.

- Google login to get auth for youtube, if they want to have access to their favorites others will be able to use the app anonymously
- Using the Firebase Auth library to manage users

Widget?

A widget will be displayed showing a list of up to 5 of most populated rooms at a given time, if the user is logged in

LOGGED IN



NOT LOGGED IN

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

Write out the steps you will take to setup and/or configure this project. See previous implementation guides for an example.

You may want to list the subtasks. For example:

- Configure libraries
- Something else

If it helps, imagine you are describing these tasks to a friend who wants to follow along and build this app with you.

Create the project and compile the libraries needed

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for Video List

    - Make sure thumbnail is clickable and goes to video screen
    - Make sure the search bar loads results
    -
- Build UI for Video Screen
    - Make sure the user can click and the proper video loads
    - Build the chat box with input and mock chat data
- Build login screen

Task 3: Your Next Task

Describe the next task. For example, “Implement Google Play Services,” or “Handle Error Cases,” or “Create Build Variant.”

Describe the next task. List the subtasks. For example:

- Create user data schema for backend, what info do I need about a user to make a compelling experience
- Configure the backend to handle the real time events of pausing and playing between users

Task 4: Your Next Task

Describe the next task. List the subtasks. For example:

- Decide where ads should go and place stubs there
- Draft extensions to the app for paid users, plan pricing model

Add as many tasks as you need to complete your app.

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