Script for presentation slides

Good afternoon everybody, today my team, Chinam, and I will present to you what we have done for the past 10 weeks. My team members are: Ziyang, Rain, Duke, Hoang and Lam.

The scope for today will be:

1. Problem Statement
2. Intended Audience
3. Our solution
4. FindYourFlat which is our app name and lastly
5. Use Case Diagram

Now lets move on to our problem statement. Flats sourcing has been a problem for many Singaporeans due to the high costs and limited land space. Especially with BTO and SBF flats where information relating to them are only available on HDB. The aim of our application is to help Singaporeans be more readily available to such information in the form of an Android Application.

Our intended audience for the app will comprise of users from 2 main groups.

1. Young Married/Engaged Couples
2. Mature Adults in their 30s/40s looking for their 2nd flats

These 2 adult groups are our main audience as they are the bulk of Singaporeans actively looking for flats around Singapore. However, we need a more user-friendly platform for Singaporeans to access such information, a one stop where they provide flat information for the different kind of flat categories. Therefore, we came up with our solution, FindyourFlat.

Our app aims to be the platform between HDB and Users. When HDB publishes new BTO flats or when another flat owner puts up their flats for sale, our app will be the platform where users can access such information quickly and efficiently.

Our app functionalities is built upon different APIs and tools and these are just some of the more significant technical tools that we utilised.

1. Google Firebase where we use to store our flat information that we scraped
2. Data.gov.sg Resale Flat Prices Data API where we used to fetch resale flats data
3. Python Data Scraping with BeautifulSoup to gather data from HDB which was not available in the form of data api.
4. Google Maps API to display our maps for our resale flats

This would be the more significant technical tools that we used. Now lets move on to class Diagram.

Our application has boundary classes MainuiActivity and Map Activity where MainUIActivity firstly, uses UserController to read from our User Entity Class where they perform different methods such as get bookmarks, adduserbookmarks and remove bookmarks.

Next, MainUIActivity also interacts with Map activity which uses flat controller to read our flat entity class. The following entity classes, Upcoming launch, past launch, SBF and resale flats below the flat entity classes are subclasses of our flat entity class and the flat controller interacts with the different entity classes through different methods such as GetSBF, GetResale and getBTO methods.

Now, lets move on to the use case diagram. The use case diagrams are edited in a way to look visually appealing therefore there are missing parts such as the extension points in the base cases are missing. However, we will include them properly in the SRS but for now we will put it this way to make it more visually appealing. These are the different use cases which will happen.

The main functionalities of our application would be the 3 functions in the middle, View bto flat information, view resale flat information and view resale flats on map. But before doing so, they must fulfil the precondition of Logging in. Users can choose to login via Google or guest and if they do not have a google account then registration can be done on the spot with google as well. After doing so, users can proceed to view the different flats information. For BTO flats, filtering is not necessary therefore it does not include the filter flats use case. Also, both view bto flat information and View Sale of Balance Flats will be retrieved from google firebase, therefore the association with the googlefirebase. For resale flats, it will be abit different as resale flats can be viewed on maps. Therefore, through google maps API and data.gov.sg, we retrieved the flats information to be placed as markers on top of google maps API.

Lastly, users will be able to bookmark the flats if they want to after viewing the flats and also, in the main page where they can view their consolidated bookmarks. Without further ado, lets proceed to our live demo where my teammates will bring you through the functionalities of our application LIVE.