

**BOILER LABS**  
**Sprint One planning Document**  
**Team 5**

Team Members:  
Rishabh Ahluwalia  
Chen Gong  
Akshit Gupta  
Abhinav Kumar  
Shalin Shah  
Ayan Singh

**1. USER STORY:** As a user, I want to be able to be taken to a menu screen where all the functions of the application are displayed and selectable.

**TASK:** Develop the front end menu screen using Android XML. This screen will be made to look very aesthetically pleasing but at the same time it will be minimalistic. The screen will be optimized for ease-of-access. The buttons on the screen will redirect the user to the appropriate screen when clicked. These buttons include 'Nearest Lab', 'Lab List', 'Favorites' and 'Map'.

**TEAM MEMBER ASSIGNED:** Akshit Gupta

**TIME:** 15 Hours

**TASK:** Create the data structures to implement the basic functionality of the application that will include classes and different helper functions. The included classes will be Lab, Buildings, Coordinates, LabHelper, MapView and User. The classes will represent the tables and databases.

**TEAM MEMBER ASSIGNED:** Akshit Gupta

**TIME:** 15 Hours

**2. USER STORY:** As a user, I want to be able to access a list of labs and their specifications without having an established internet connection.

**TASK:** Develop a client side database that stores the list of all the ITaP computer labs and their specifications such as the number of computers, location of the lab, type of lab and timings. This database must be accessible to the client side user interface.

**TEAM MEMBER ASSIGNED:** Ayan Singh

**TIME:** 15 Hours

**TASK:** Develop the front end user interface for the offline mode. This interface will pass information back and forth between the client side and the database to obtain the relevant data.

**TEAM MEMBER ASSIGNED:** Chen Gong

**TIME:** 30 Hours

**3. USER STORY:** As a user, I want to be able to view the real time data of all the ITaP computer labs on campus (via an internet connection).

**TASK:** Using Java to establish a connection between the client and the ITaP server to access the ITaP Labs directory website. Then develop methods to send and receive data from the client to the ITaP server.

**TEAM MEMBER ASSIGNED:** Shalin Shah

**TIME:** 30 Hours

**TASK:** Develop a client side database that stores the list of all the ITaP computer labs and their specifications such as name of the ITaP computer lab, the total number of computers, number of computers available, the building it is located in, location of the lab, type of lab, status of the lab and timings. This database must be accessible to the client side user interface.

**TEAM MEMBER ASSIGNED:** Ayan Singh

**TIME:** 15 Hours

**TASK:** Once the connection is established, using a JSON parser to query the information needed from the server and store the relevant information in the online database.

**TEAM MEMBER ASSIGNED:** Rishabh Singh Ahluwalia

**TIME:** 30 Hours

4. **USER STORY:** As a user, I want to be able to view a map of campus with all the ITaP labs marked on it.

**TASK:** Obtain the user location using Google Maps. Implement this on the client using the Google Maps API. The API will be used to display the map of campus as well the MapView class.

**TEAM MEMBER ASSIGNED:** Abhinav Kumar

**TIME:** 15 Hours

**TASK:** Obtain the location of each lab from the database and then display it as markers on the MapView class using the Google Maps API. The API will also be used to display the location of the user and all the labs on campus.

**TEAM MEMBER ASSIGNED:** Abhinav Kumar

**TIME:** 15 Hours