Logo, company name

Description automatically generated

**Individual Work Package**

**CS – 598**

Bus System Application

**Individual Work Package**

**There are a lot of things that need to be accomplished next semester in order to have a full working application that will be ready for the app store. Here is a list**

* **Home page UI**
  + **Date & time**
  + **Weather**
  + **Background**
  + **Welcome Text with user name**
  + **Night or dark mode**
* **Notification UI**
  + **how to pull alerts from Firebase**
  + **Display Alerts**
* **Settings UI**
  + **Be able to have an account button with a couple settings**
  + **Logout button**
* **Login UI**
  + **Be able to pull information from Firebase to see if it’s a valid user**

**Detailed Explanation**

**Home page UI**

As listed we will need to be able to code the current date, time and background to the homepage. The background will not only be needed for the home page but also know when the device is in dark mode or light mode, depending on that it will automatically change the colors of the application. The biggest challenge will be pulling the current weather forecast onto the main screen. This seems to be such an easy task but will take some time to be able to get such a feature to work. There multiple ways for getting the weather, things to coded coordinates to active location from the device. If we’re able to code the coordinated of the location the app is based for use in is probably our best option. We will need to pull the weather information from a service called *open weather* and use json API to assist in pulling the information to the app.

**Notification UI**

**The creation of this page will be like others but encoding active notifications will be the real challenge. How the device will pull information related to any alerts will be based on if there is any information in the certain file within firebase. There is still a lot of research to get such a feature to work but the main idea is when admin is aware of an issue then they would have access of sending an alert to only those parents with children on that certain bus.**

**Settings UI**

The setting UI will have two buttons as of now, but within the first button which is the accounts button there will be the following options which are subject to change.

* Notifications
  + Mute all
  + Enable SMS
* Personal Information
* Email
* Phone
* Gender

The second button will be the logout button for the application.

**Login UI**

**Creating the UI for the application will not be the main problem here but learning how to reach out to Firebase with the stored information of authorized users will be a real learning curve. We will need a button for the login UI so when the user is ready it will send that information and see if it exists or doesn’t exist within the data base. If not deny the user access.**

1. **Enter username**
2. **Enter password**
3. **Send data entered to firebase**
4. **Compare information given inside data base**
5. **Send back a true or false to the app to allow permission**