SIT305 – Assessment 2

Project Proposal

Overview:

EnergyAustralia is an electricity provider organization that provides electricity supply to the home. The idea of energyAustralia app allows the organization employees to add user details who purchased the electricity or gas plan and set their monthly payment status using database system. The app also has authentication system for the employees to deal with the authenticity requirement. This app is organizational level app to serve ease the problems for the employees in context of their customers.

Product Purpose:

- ### Target Audience:

  Target audience of the Mobile App is clearly focused on organization employees of the EnergyAustralia to help them store and retrieve the information of the customers and check or modify the status of the bills of customer electricity or gas usage.

- ### Creativity:

  The idea of the app shows a unique and adaptive design which will make the employees to easily retrieve the information of particular customer from their customer list as well as add new customers to the list and manage it. With the modern UI and easy navigation in the app, it contains only few required options and no useless information and warning popups to use the app efficiently.

Features:

- ### Authentication:

  Authentication for the employees of the organization allows energyAustralia organization to manage the employees and the corresponding customers of the employee. An employee can login to the app and find all the information about his customers as well as insert new customer data.

- ### Insertion of Information:

  Insertion of the information about the customers such as allocating unique customer id, adding customer name, units consumed and the price per units.

- ### Retrieval of Information:

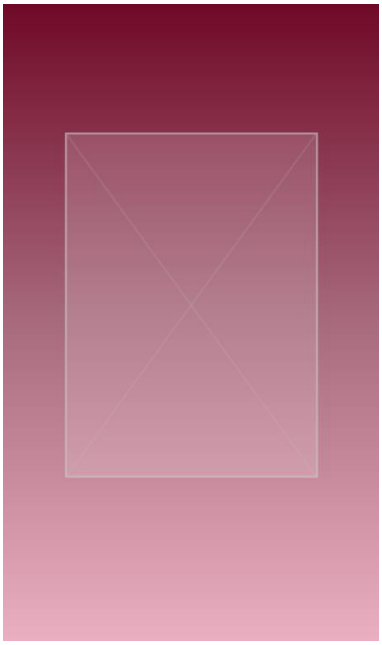
  Accessing the information about the customers that are part of the energyAustralia and check the status of their bills such as electricity units used and the amount the customer is owing.

- SQLite integration for database:

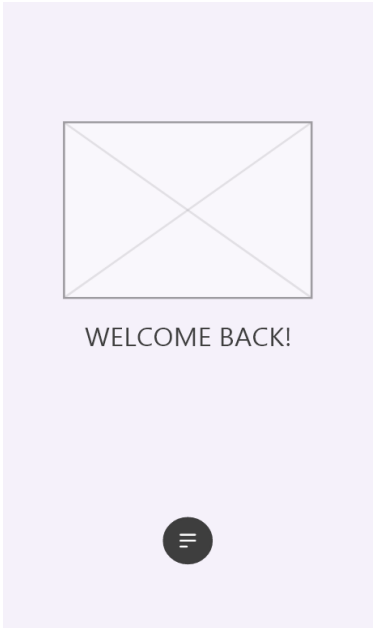
  Local database integration for the app like SQLite database to store all the information that an employee records about the customer and can access it later.

Design:

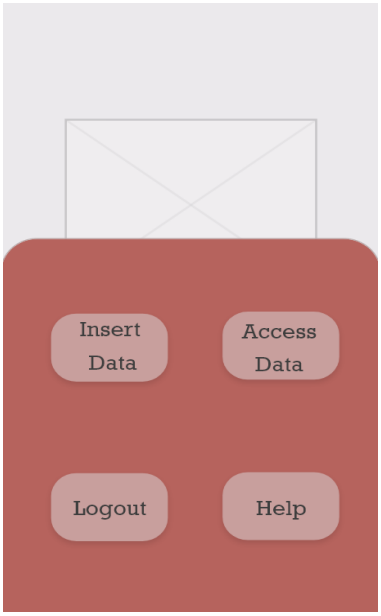
- **Splash screen:** A splash screen in the app to show a window while loading up the app itself. The splash screen in the app consist of the logo of the app. Splash screen for energyAustralia app will look something like below:



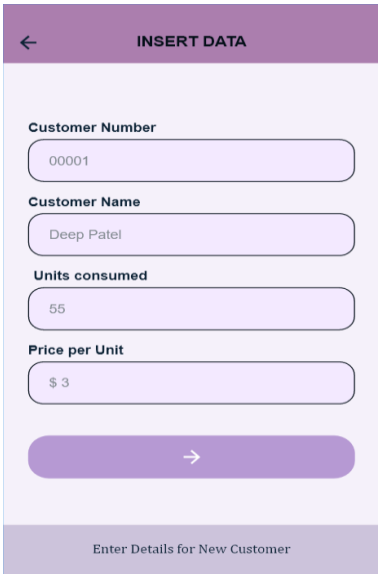
- **Dashboard:** After loading up the app, the main screen that is shown is dashboard. In this app the dashboard contains the logo of the app with the menu button. The dashboard looks like below:



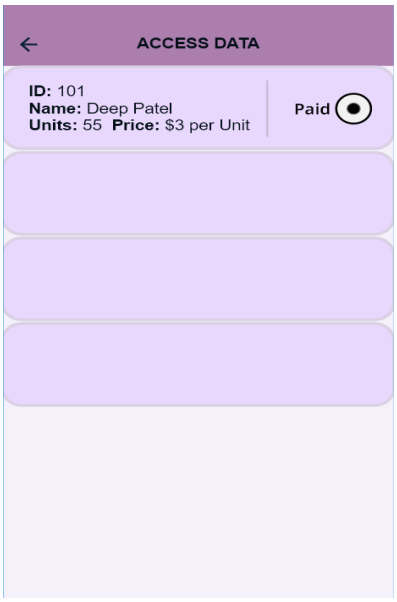
- **Bottom Sheet:** bottom sheet in the app consist of the different features/menu options to perform such as Insert data, Access data, logout of the app and so on. The bottom sheet page will look like this:



- **Insert Data Screen:** insert data screen in the app shows a form that allows user to add data of the customers such as customer id, name, the electricity units consumed, and price per unit. The insert data screen looks something like this:



- **Access Data Screen:** Access data screen consist of the data that has been recorded in a list view. The screen looks something like this:



Data:

- **SQLite Database:** In this app the database system used is SQLite database system which is a local storage system which stores the information of the user input data such as Customer number, Customer Name, Electricity Units used and Price per Unit.

Class Structure:

There are total 7 classes created, each for its own functionality.

- **Main_activity Class:**
  Main_activity class makes sure if the user has already put the credentials, It intends to the Dashboard activity class or else it intends to the login activity class.
- **Login Class:**
  Login class contains the code to for the authentication process. It gets the user inputs and matches it with the actual credentials. If user puts the right credentials, It intends to the Dashboard activity.

- **Dashboard Class:**
  Dashboard class consist of the code snippet that triggers the bottomsheet layout as well as adds the functionality to intend to according activity on pressing different buttons in the bottomsheet.

- **Insert Class:**
  Insert Class contains the snippet of fetching the input values and store it into the database system.

- **DatabaseHelper Class:**
  Database Helper class has code that takes the values from insert activity class and store it into local database by applying variable the values and storing it.

- **allData Class:**
  allData class has code that acts as a median to retrieve the data stored in the database and return it to the activity View.

- **View Class:**
  View class consist of the code that fetches the data from the allData activity class and print it as a ListView on the screen.