Bus Automation System
SPL-2, Final Presentation

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Introduction

- Our objective of the project is to make an automated University Bus System.

- It will be a web application. The university students and the officers will be the user of the system.

- They have to create a user account to use this app. This application will provide us the location of the bus. It will also bear information about the schedule of up-trips and the down- trips of each bus.

- This schedule will be updated dynamically. It will also dynamically show the current location of the bus. There will be a notice part which will give the user the present information about the bus. The users can also give feedback.

WHY?

❖ The university has **16 routes** to commute its non-residential students.

❖ There are **75 regular buses** in these routes.

❖ About **10,000 users** everyday.

image source : https://tariqul09tmgmail.wordpress.com/2017/04/25/khonika-a-story-of-a-dhaka-university-bus-route/

Background Study

- **60% users** of the bus miss varsity bus as they do not know the summer and winter schedule correctly

- **30%** knows the schedule

- **10% students** (non-resident) do not use varsity bus

source: google-form questionnaire
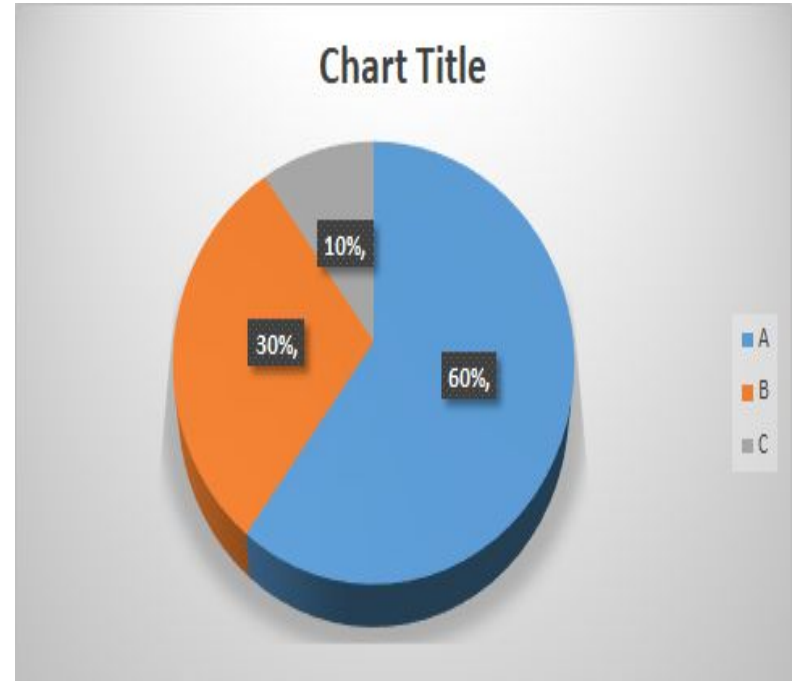
Bus Automation System

- This is a regularly needed android app.
- This app contains all the names and routes of bus services of University of Dhaka. You can find names of any bus of Dhaka University using this bus service app.
- This android app can help you providing list of bus schedules.
- You can search for a particular bus location in map.
- This app will also send notification of the bus to its users.
- Users can give feedback.
- In the near future we will add all bangladesh bus and intercity bus fare list.

Why we consider to move to Flutter

- **Straight forward integration with Firebase**
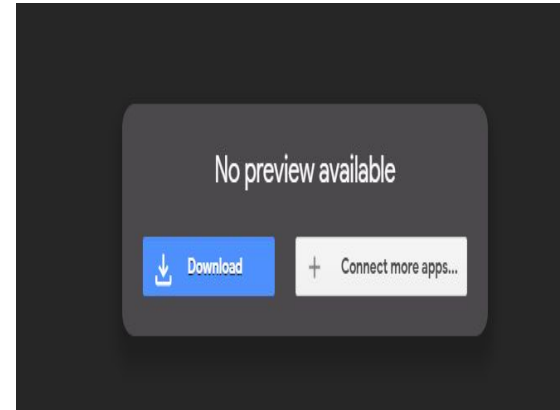- **powerful design experience out of the box**

Installation

Step 1.Download the apk file from the following link

Google drive link For Apk Download:
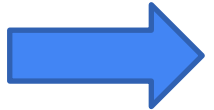https://drive.google.com/file/d/1SI0kOTGQfKpWdOqfFLcSfczaHk2xRxTs/view?usp=sharing
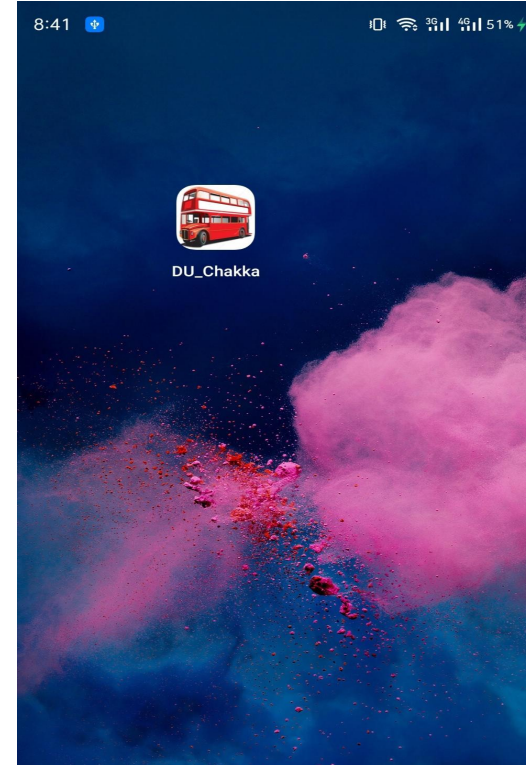

Step 2. Install the app in your mobile
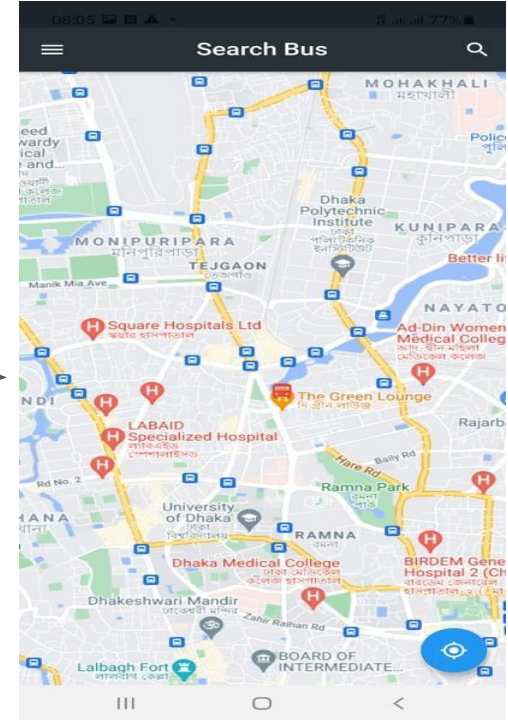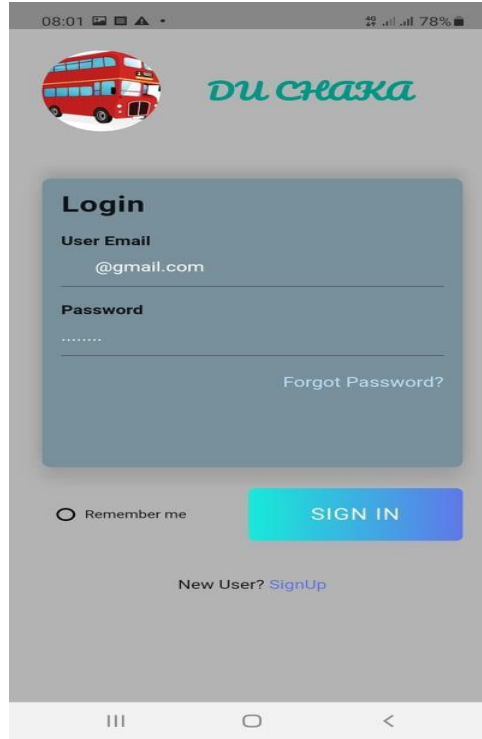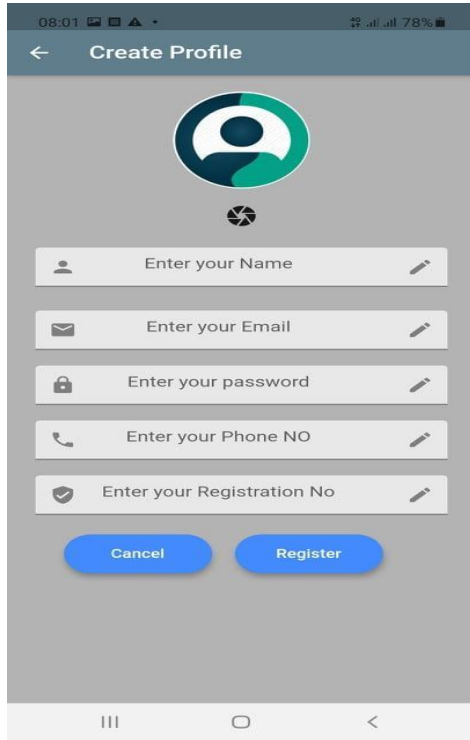
Features : After Installation

Tap into the icon
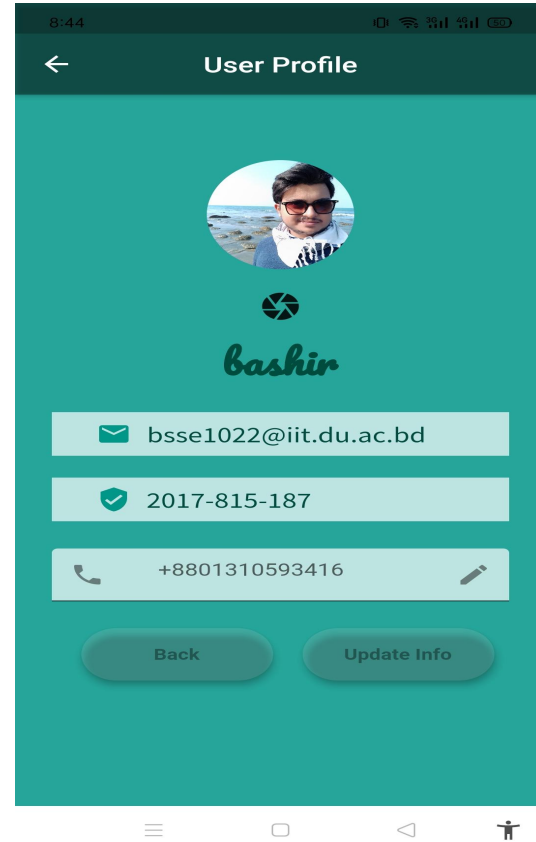
you will see the welcome screen
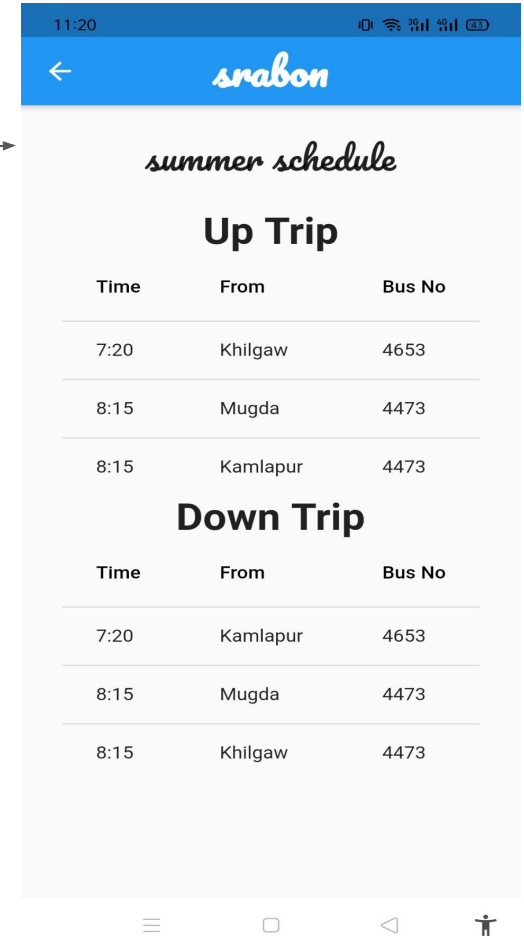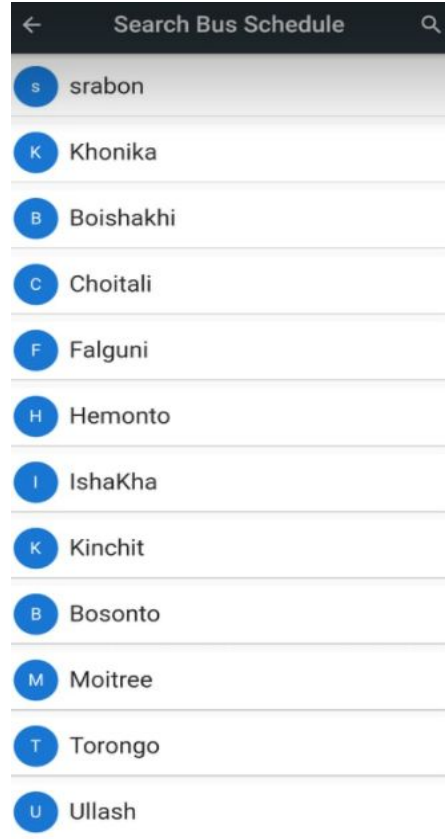
Features : Registration and login

Profile View and Edit

- User and Admin must register

- A profile will be Viewed

- User can change the phone number

Schedule

- Dynamic summer and winter schedule

srabon
summer schedule

Up Trip

Time	From	Bus No
7:20	Khilgaw	4653
8:15	Mugda	4473
8:15	Kamlapur	4473

Down Trip

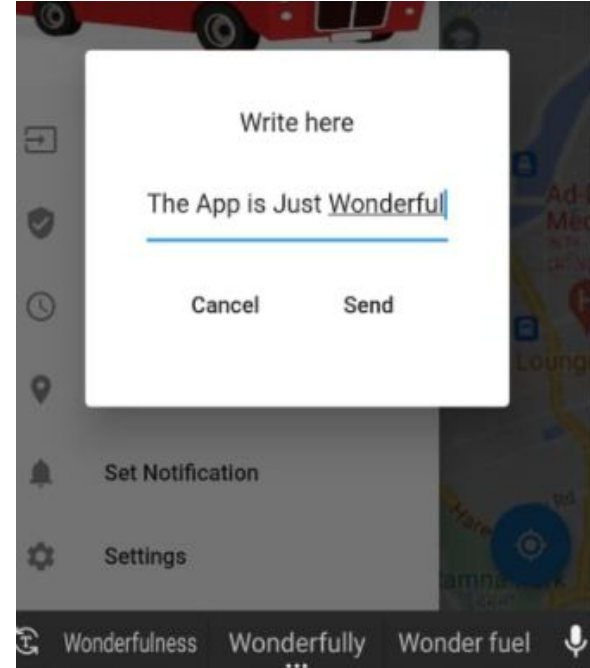| Time	From	Bus No
7:20	Kamlapur	4653
8:15	Mugda	4473
8:15	Khilgaw	4473

Notification and feedback

- admin posts an announcement
- system sends SMS to users
- user can also give feedback

feedback

notification

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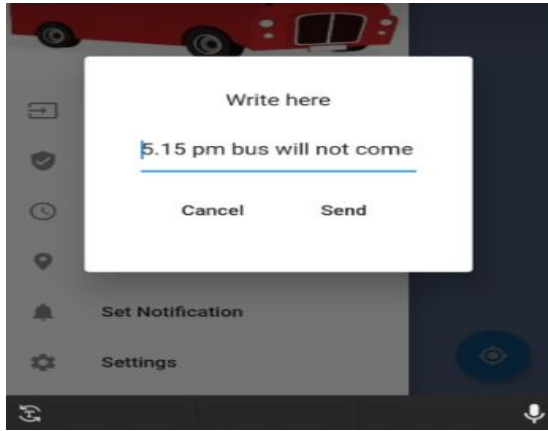
SRS to Code

SRS Class	Source Code Class
Homepage	Homescreen
Registration	RegistrationScreen
Sign In	WelcomeScreen
User	User
Database	Database Service
Image	Image Upload
Bus Location	NavDrawer

SRS to Code (Continued….)

Bus Search	Bus Search
Profile	Profile
Bus Schedule	Schedule
Notification	Nav_drawer
Contributor	Contributor
About	About

Class Diagram

We have maintained all relationship between these classes
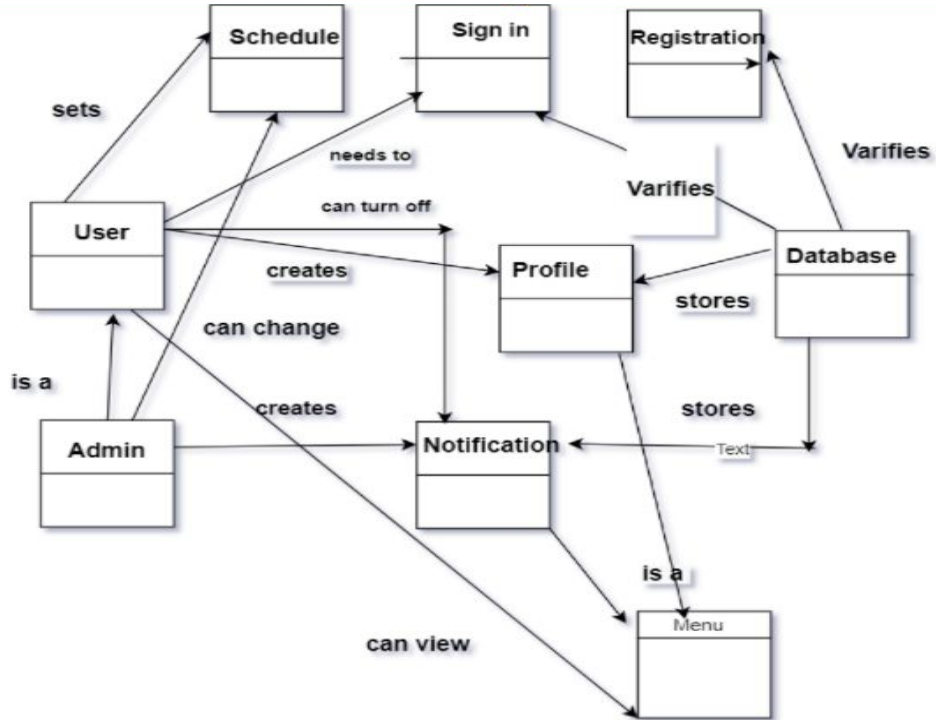
Future Plan

- google play store upload integration
- create automation system for all buses in Dhaka City

git link :

https://github.com/Basirul-Islam/DU_CHAKKA

Limitations

- the app does not show location of the bus without internet connection

- admin to admin communication is not possible

Thank you