An Interactive Transport Management System by Geolocation Tracking, Measuring Speed and Seat Status Checking of Vehicles.

AT A GLANCE

- Motivation
- Abstract
- Introduction
- Working Process
- ER Diagram
- DF Diagram
- Existing Work
- Our Contribution
- Project View (Web Platform)
- Technology Used
- Project View (Android Platform)
- Technology Used
- Impact
- Virtualize Overview
- Conclusion
- Future Enhancement
- References

MOTIVATION

- There are approximately 10 thousands students come around our university campus for their academic purpose. In spite of university transport management system there have been occurred many issues throughout transportation. As like as waiting time is so long, seat allocation disorder, administrate issues occurred etc.
- To solve this problem our respectable Supervisor has advised us to build an application which will be used to solve the issues of IIUC transportation management system. By our application students can know about location of buses, seat allocation and bus routes. Our TMD administrator can supervise the system easily.

OBJECTIVES

- Online based **Interactive Transport Management System**
- Students can get transportation service & TMD administrator can manage system
- User can know their bus route, location, and seat allocation
- Administrator can provide their updated schedule
- User friendly environment

INTRODUCTION

- **Interactive transport management system** one of the most important part of our university students.
- Our services are widely acknowledge for their features like time saving & very efficient to use
- Using the application there no need to wait longer for buses and where they located
- The system is used for activities such as booking seats, track location & schedule of university buses

WORKING PROCESS

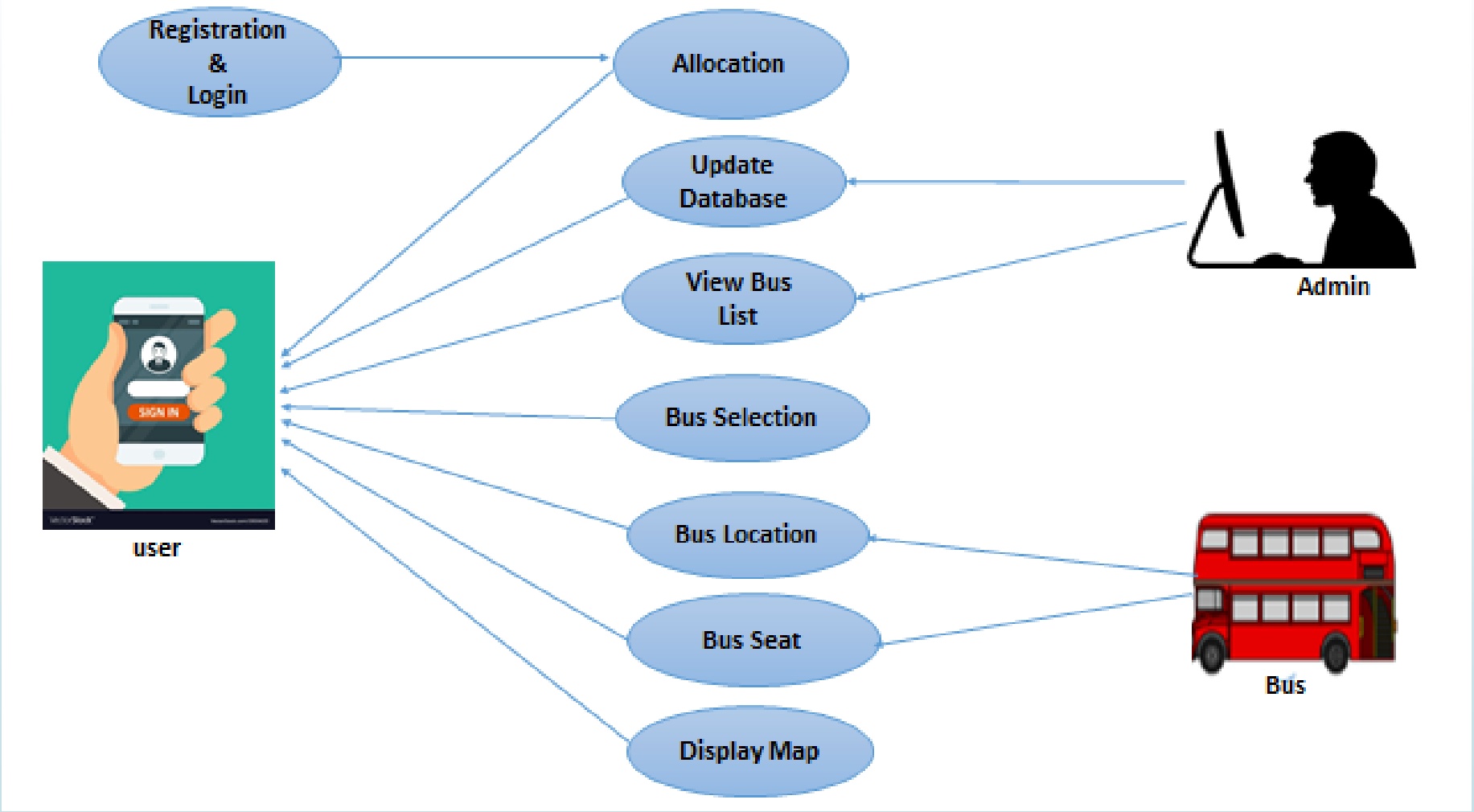

Figure 1: Use Case Diagram

ENTITY RELATIONSHIP DIAGRAM

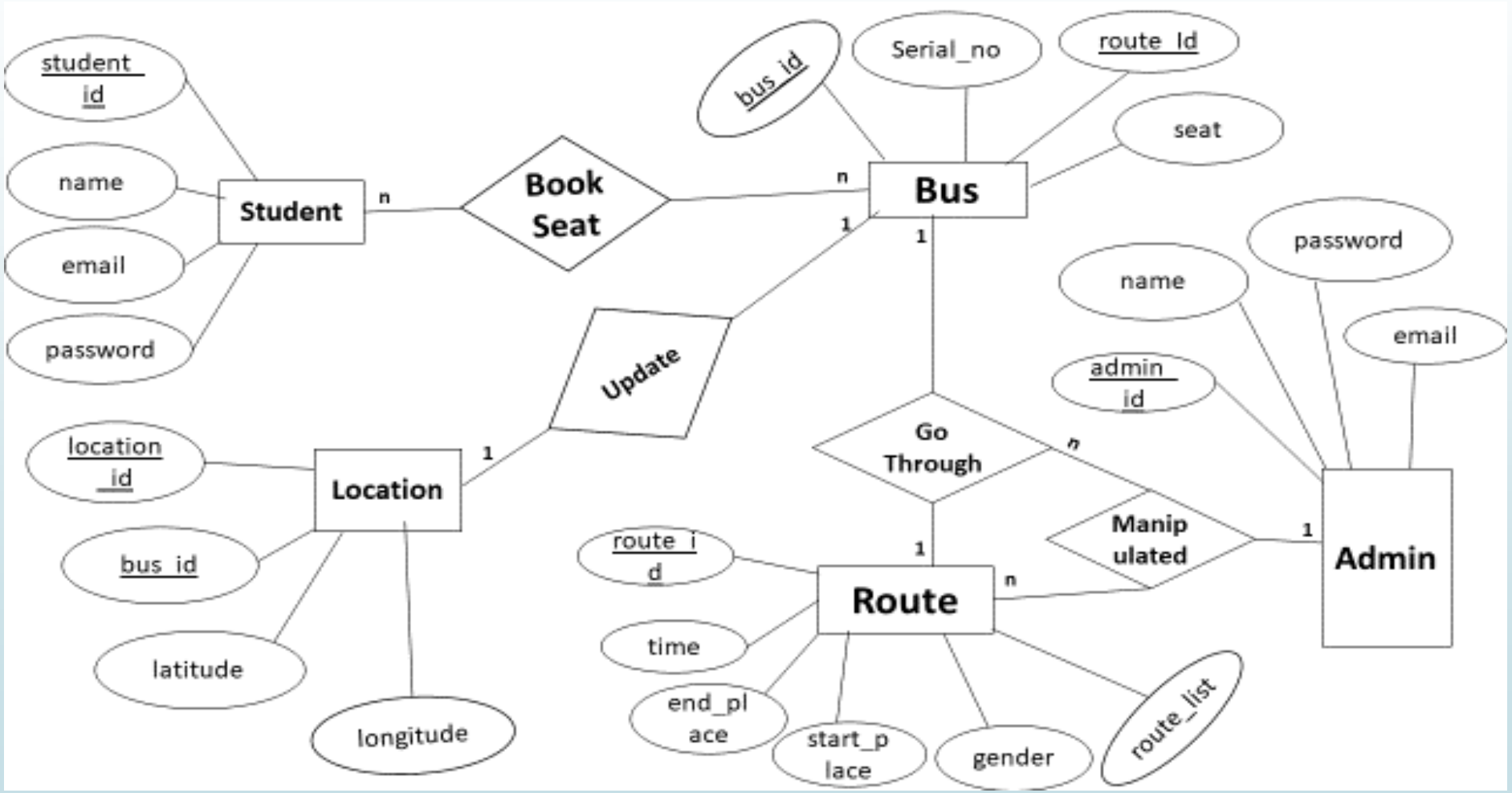

Figure 2: E-R Diagram

DATA FLOW DIAGRAM

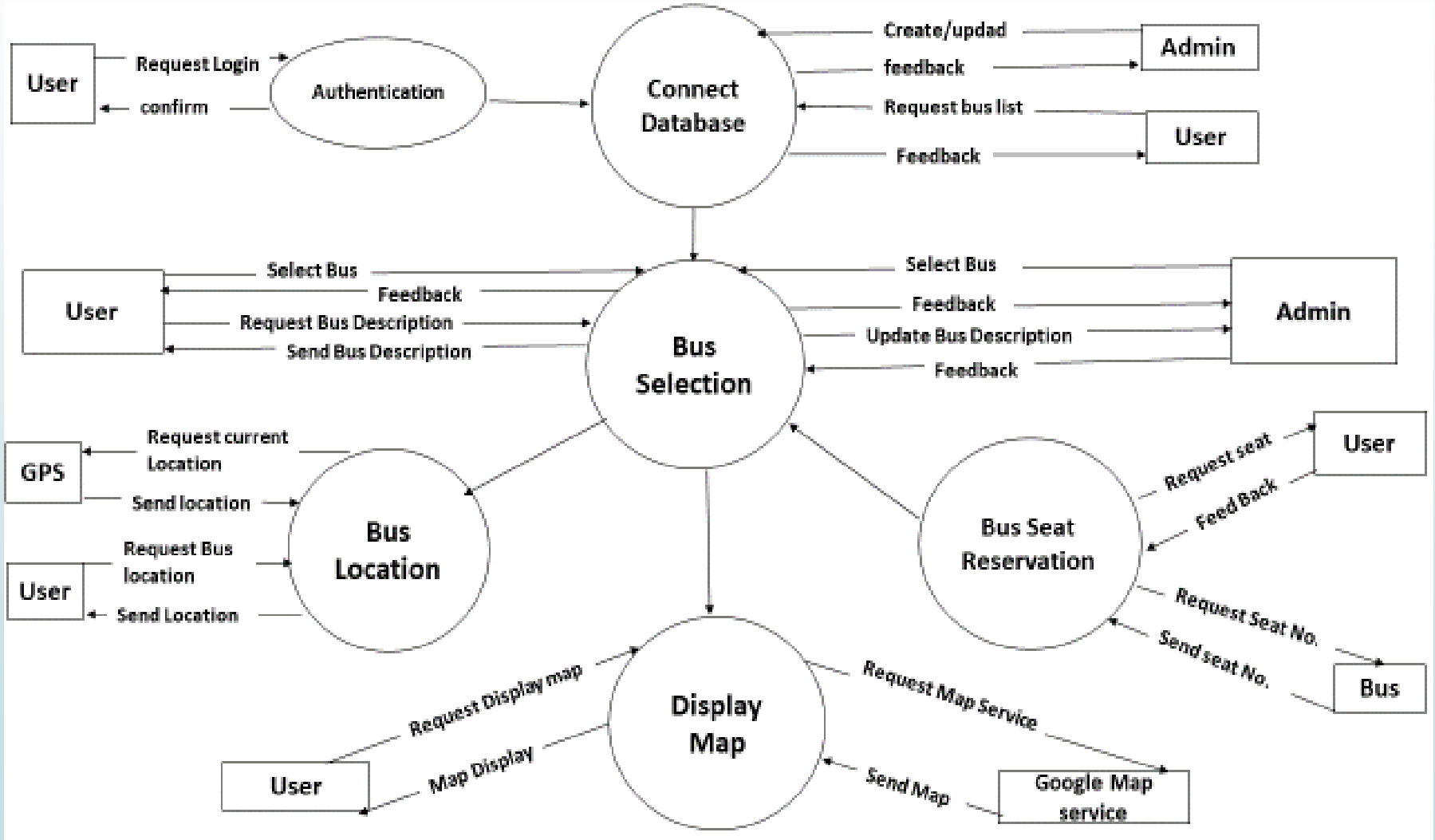

Figure 3: DFD Diagram

Existing Work(CONT.)

- The author in [3] developed a system of **Real Time Interactive IIUC Bus Tracking System**

- **Features**
  - Tracking university Buses
  - Give exact location of buses
  - This application Generated for Teachers, Students and staffs

Existing Work

- The author in [6] Developed a application **Locafie (community-based location sharing platform**

- **Features**
  - Community Based Location Sharing Platform
  - Helps to use transport
  - Reduce waiting time
  - Give Exact location
  - Offered Schedule Transit

OUR CONTRIBUION

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- Route description
- All Bus Route
- Nearby Bus List
- Seat allocation
- Exact bus location
- Nearby Bus Location
- Start time & place
- Emergency contact to the administration

PROJECT VIEW

Web platform

SIGN UP/REGISTRATION

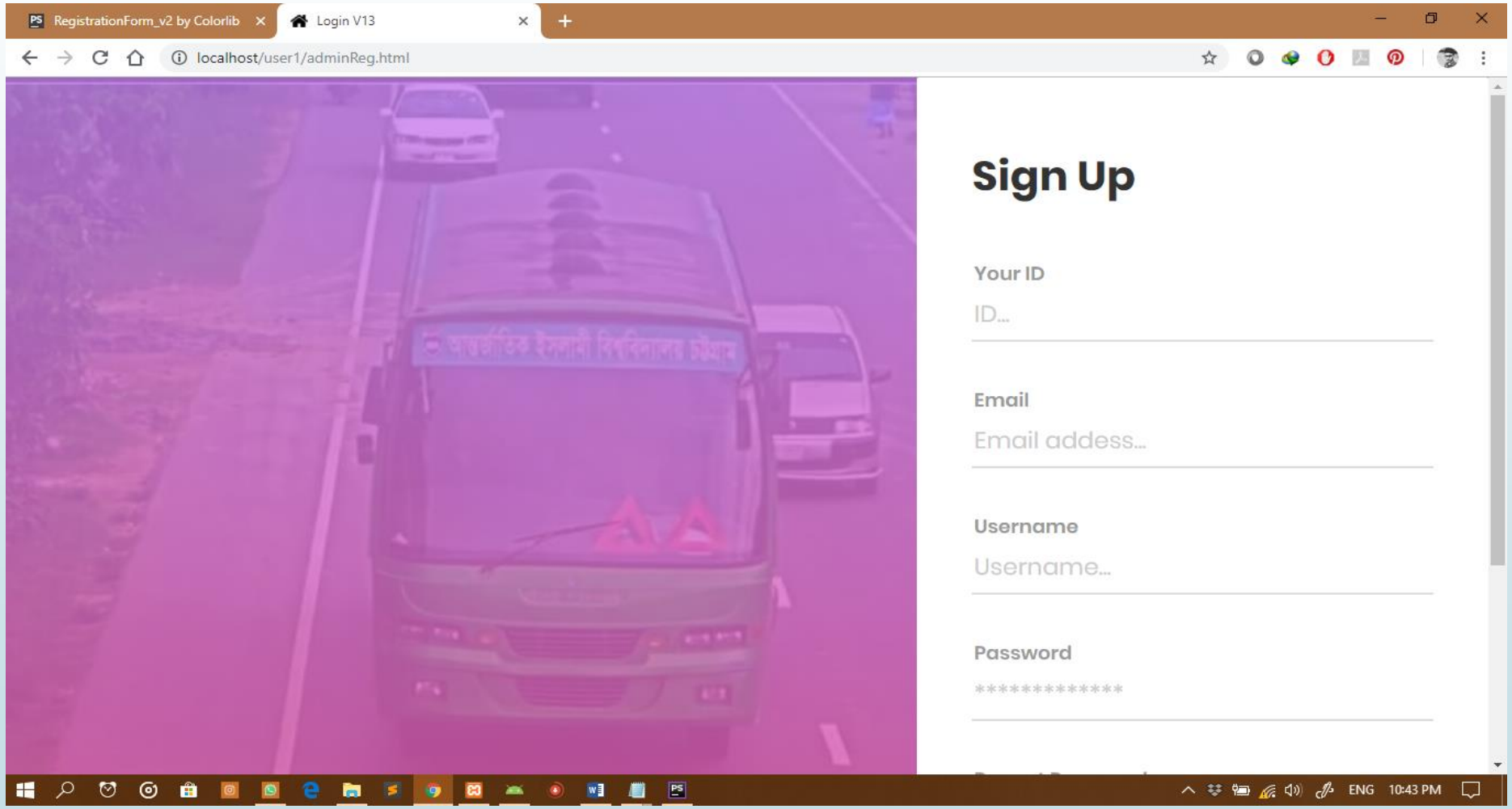


Figure 4 : admin panel registration

SIGN IN/LOGIN

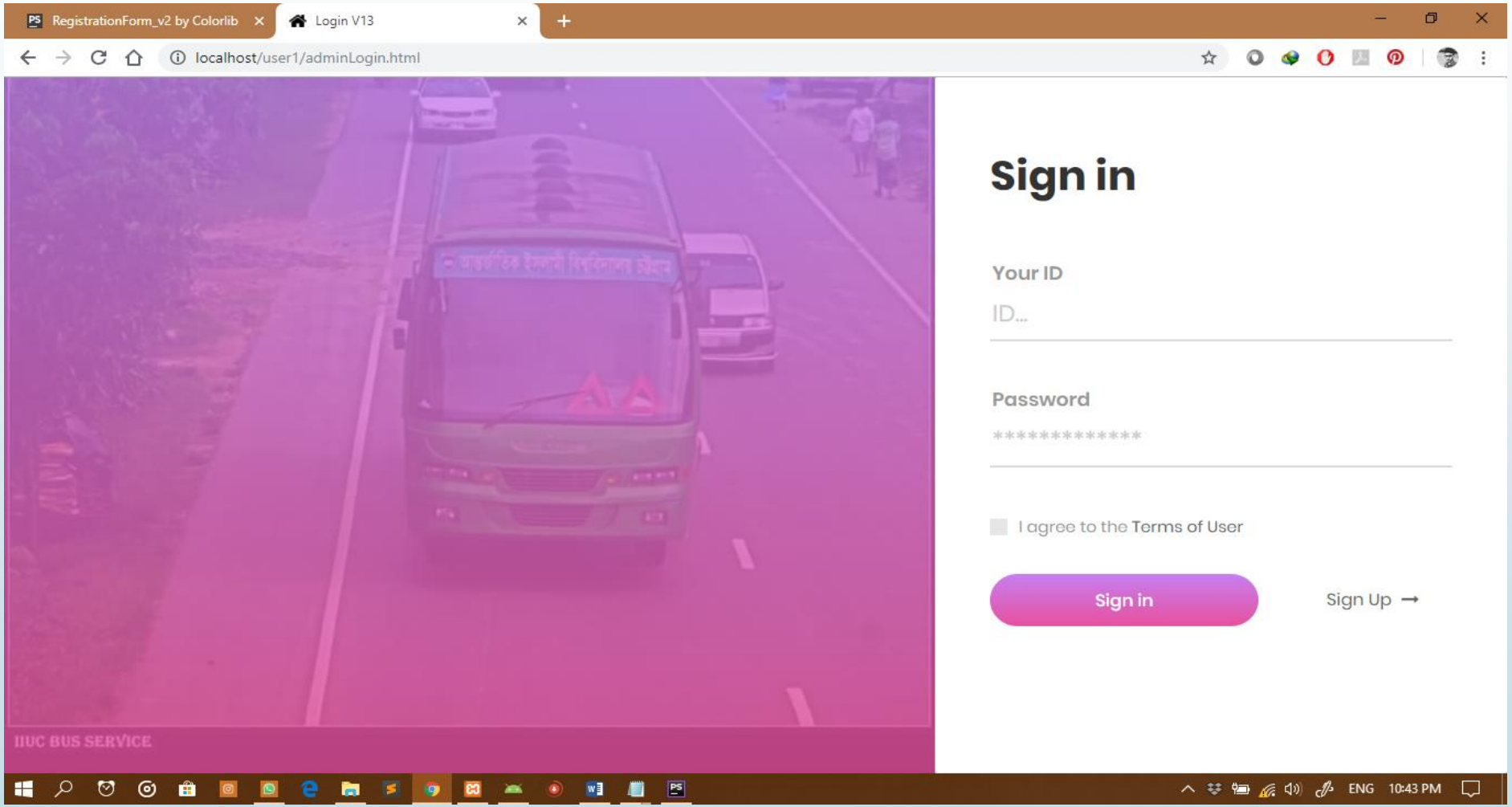


Figure 5: admin sign in

CAPABILITY OF ADMIN

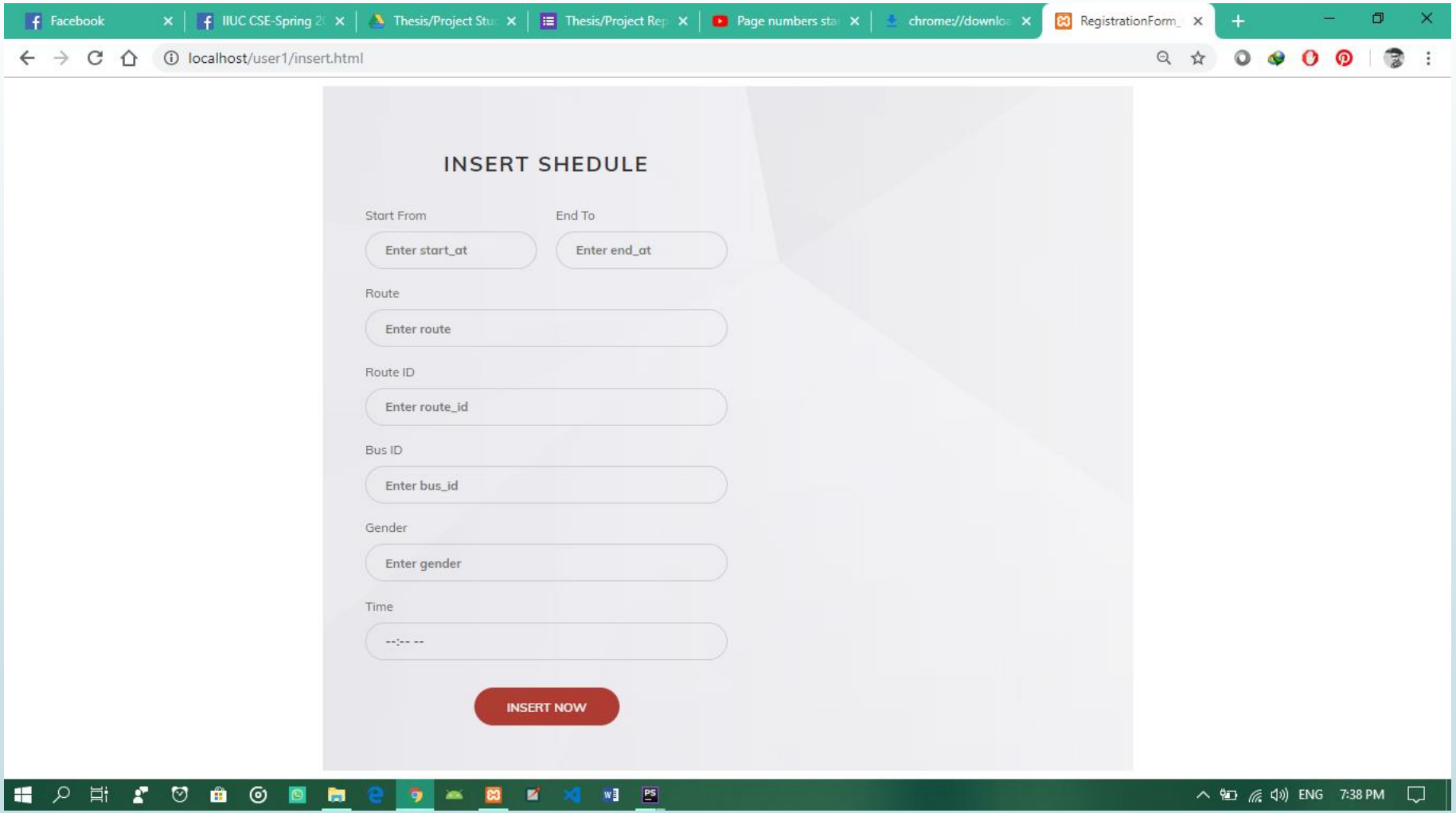


Figure 6: insert bus schedule by admin

BUS ALLOCATION LIST

Figure 7: Bus allocation list

DATABASE/SQL

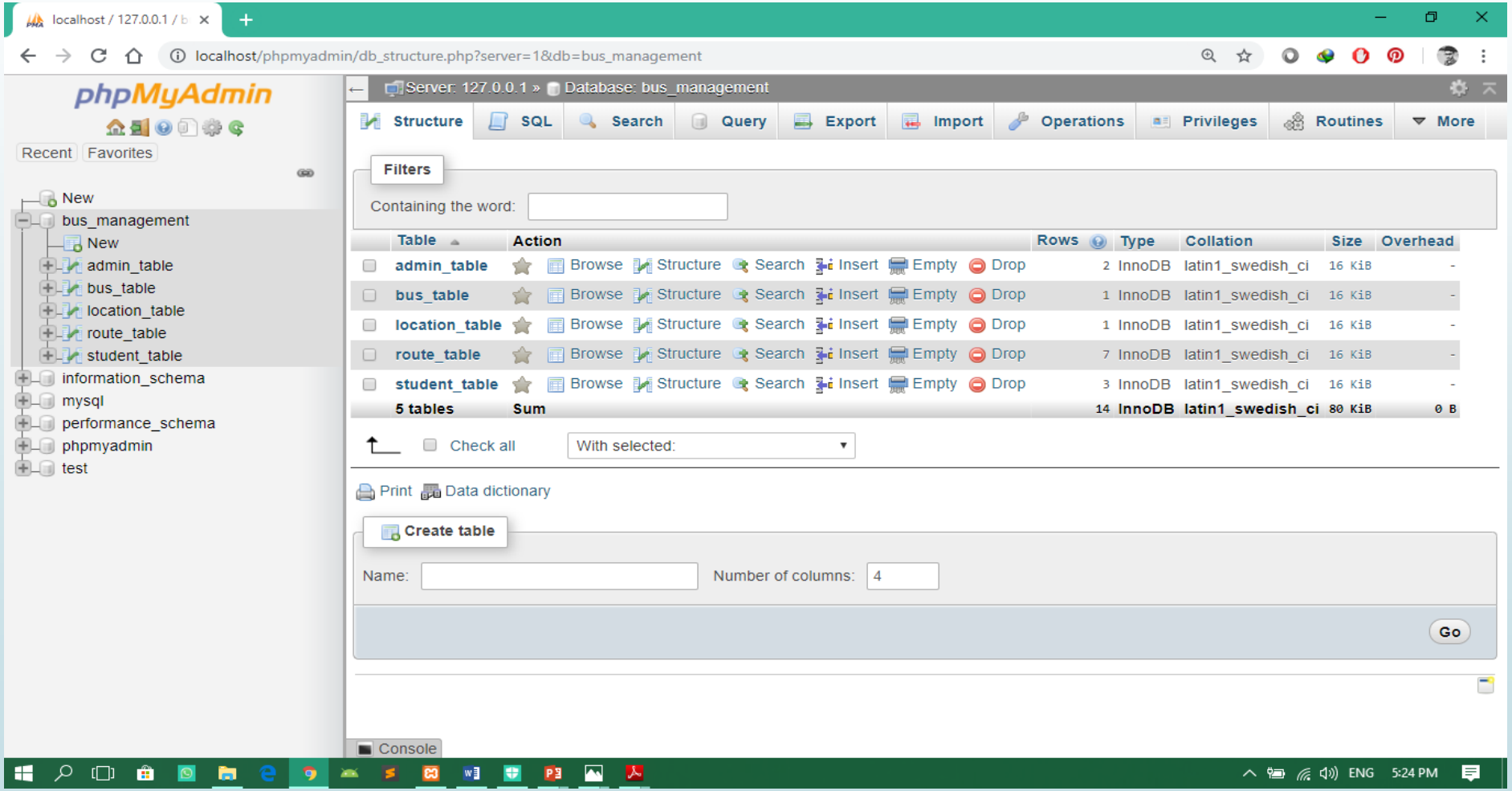


Figure 8: Database Table

TECHNOLOGY USED

- Platform : Windows 10 Education
- Front-end : HTML5,CSS3, Bootstrap, JavaScript (JQuery)
- Back-end : PHP, MySQL
- Web server : XAMPP (Apache, MySQL, PHP)
- Designing tool : Integrated tools
- Code editor : Phpstrom, VS code

PROJECT VIEW

Android platform

USER REGISTRATION ACTIVITY

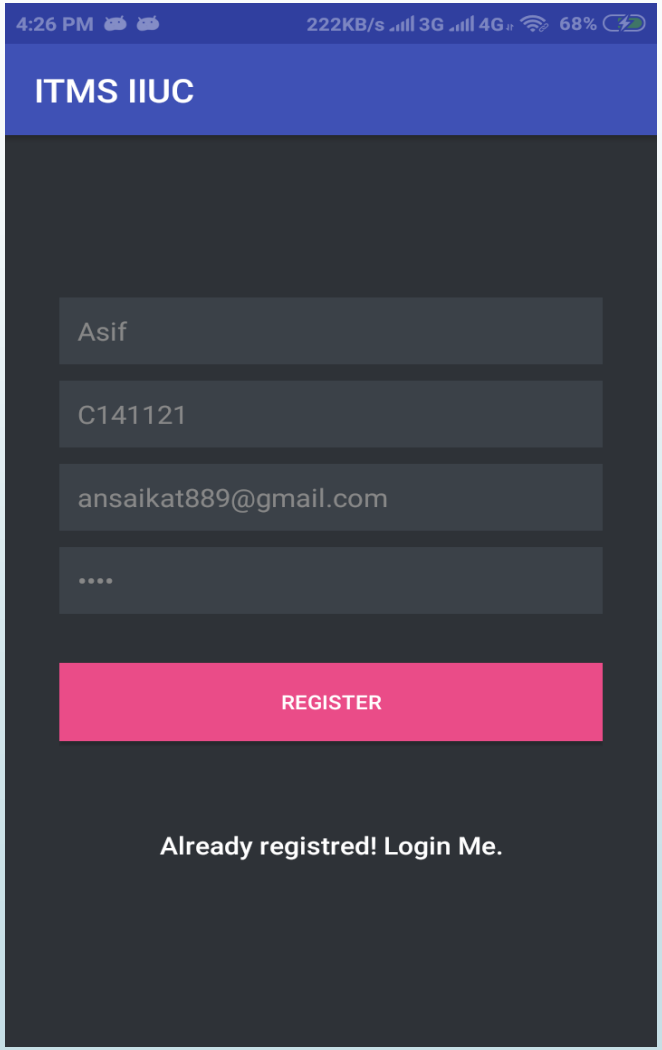


Figure 9 : User registration activity

USER LOGIN ACTIVITY

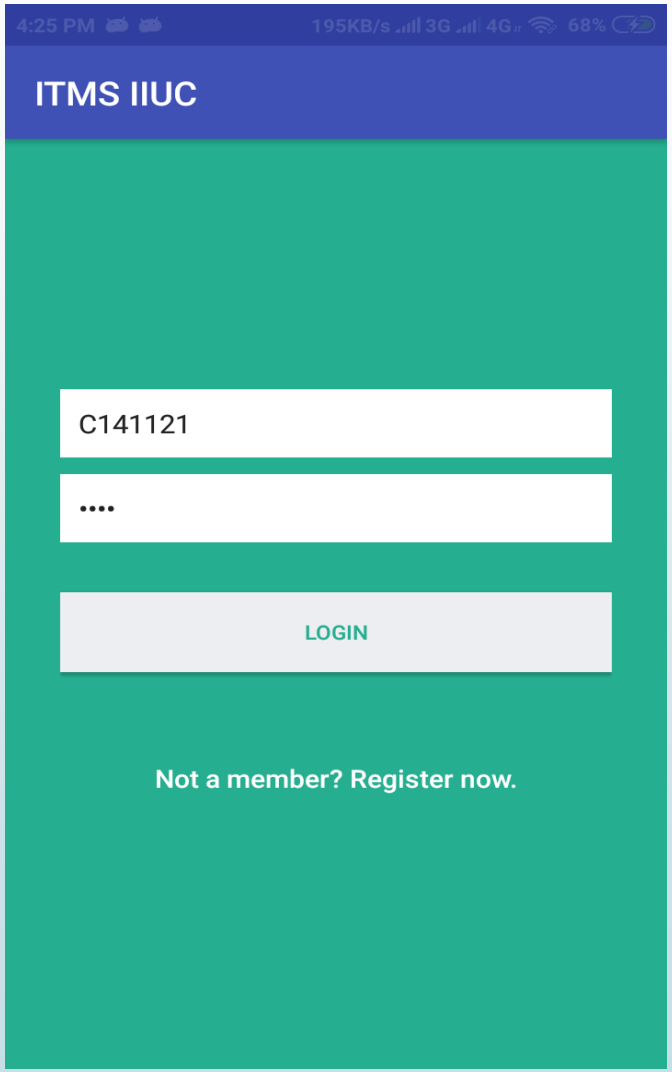


Figure 10 : User Login Activity

SCHEDULE PAGE AFTER LOGIN

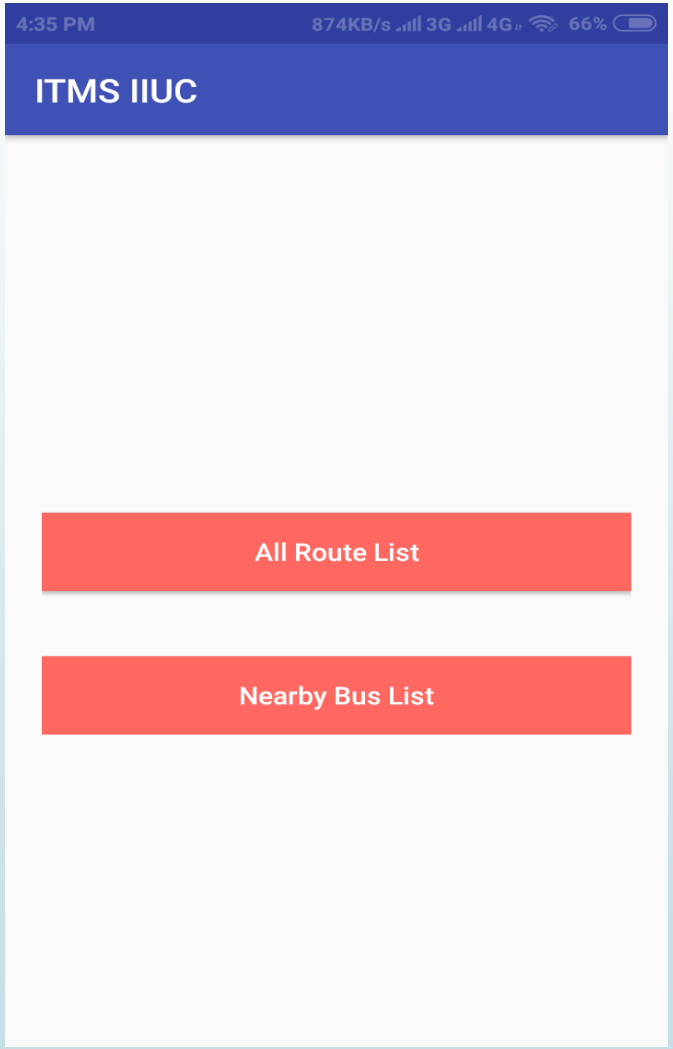


Figure 11 : schedule page after log in

All Route Buses

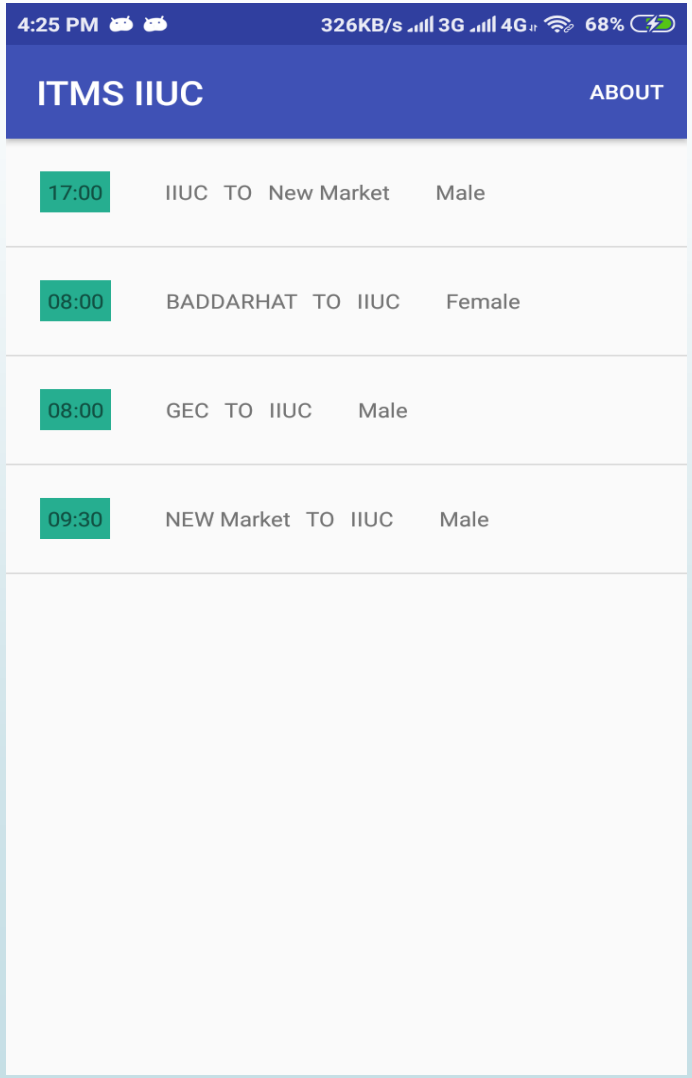


Fig 12: all route list

Show Nearby Bus

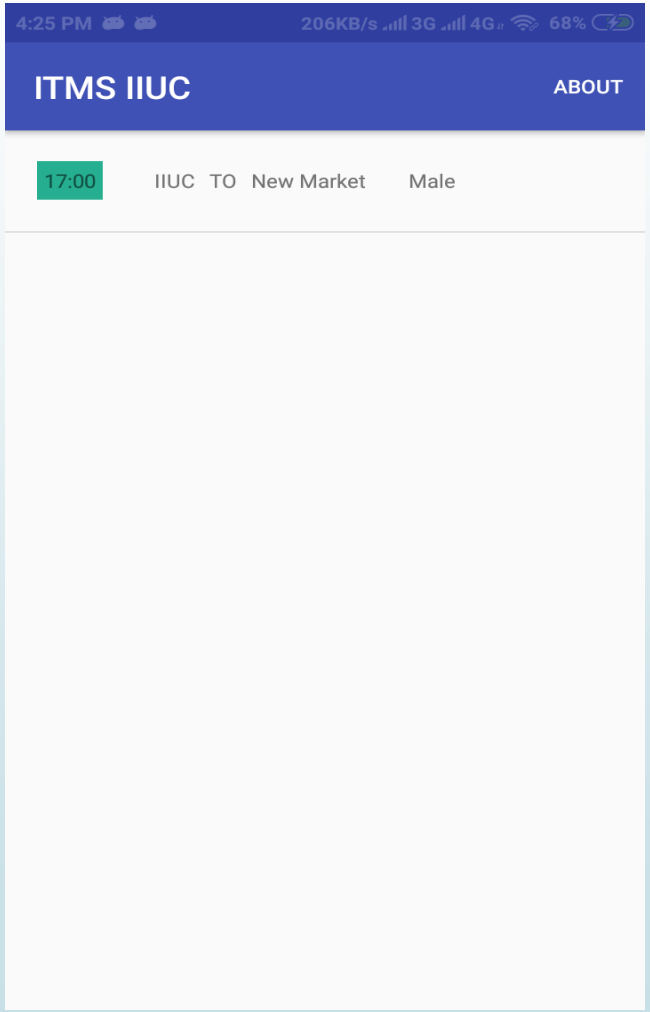
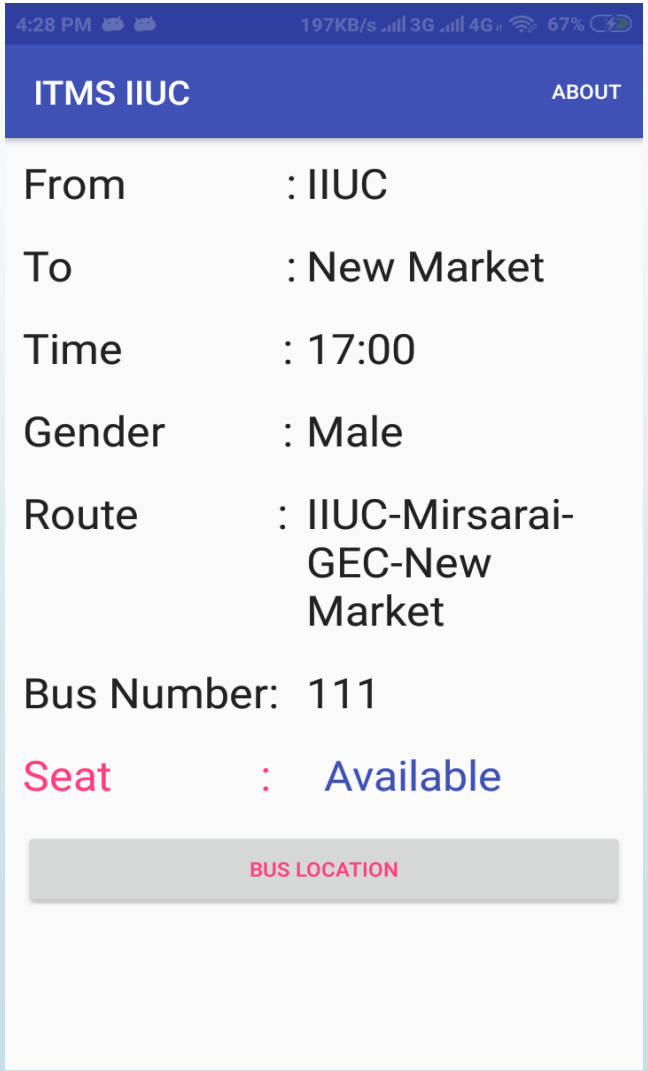


Fig 13: nearby buses

ROUTE & BUS INFORMATION



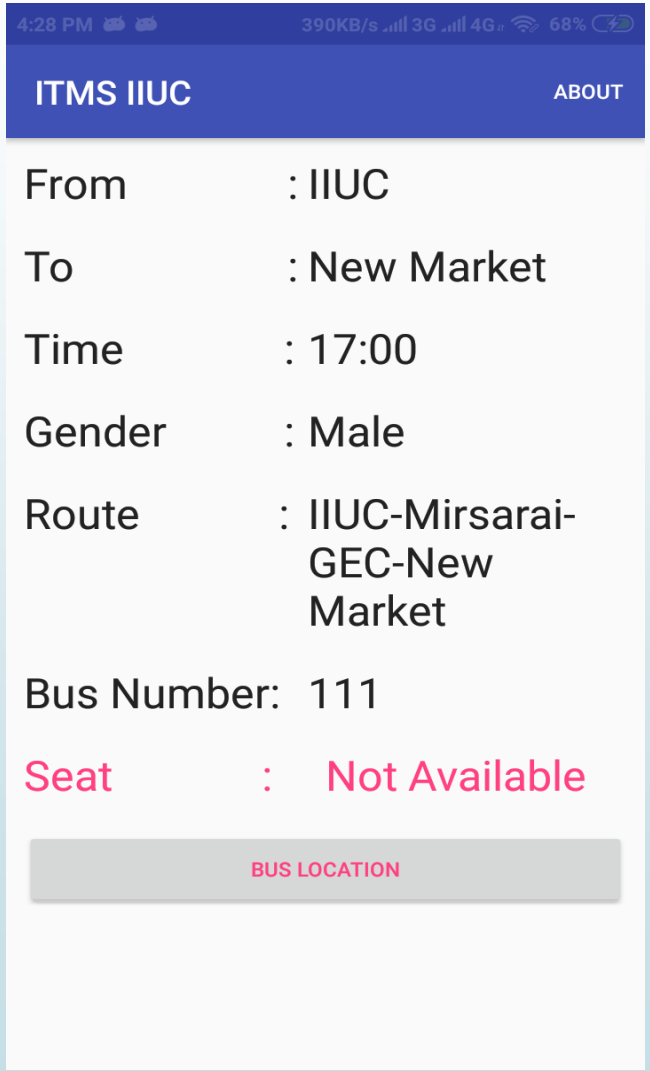


Figure 12: Route & bus information

LOCATION(ZOOM OUT)

LOCATION(ZOOM IN)

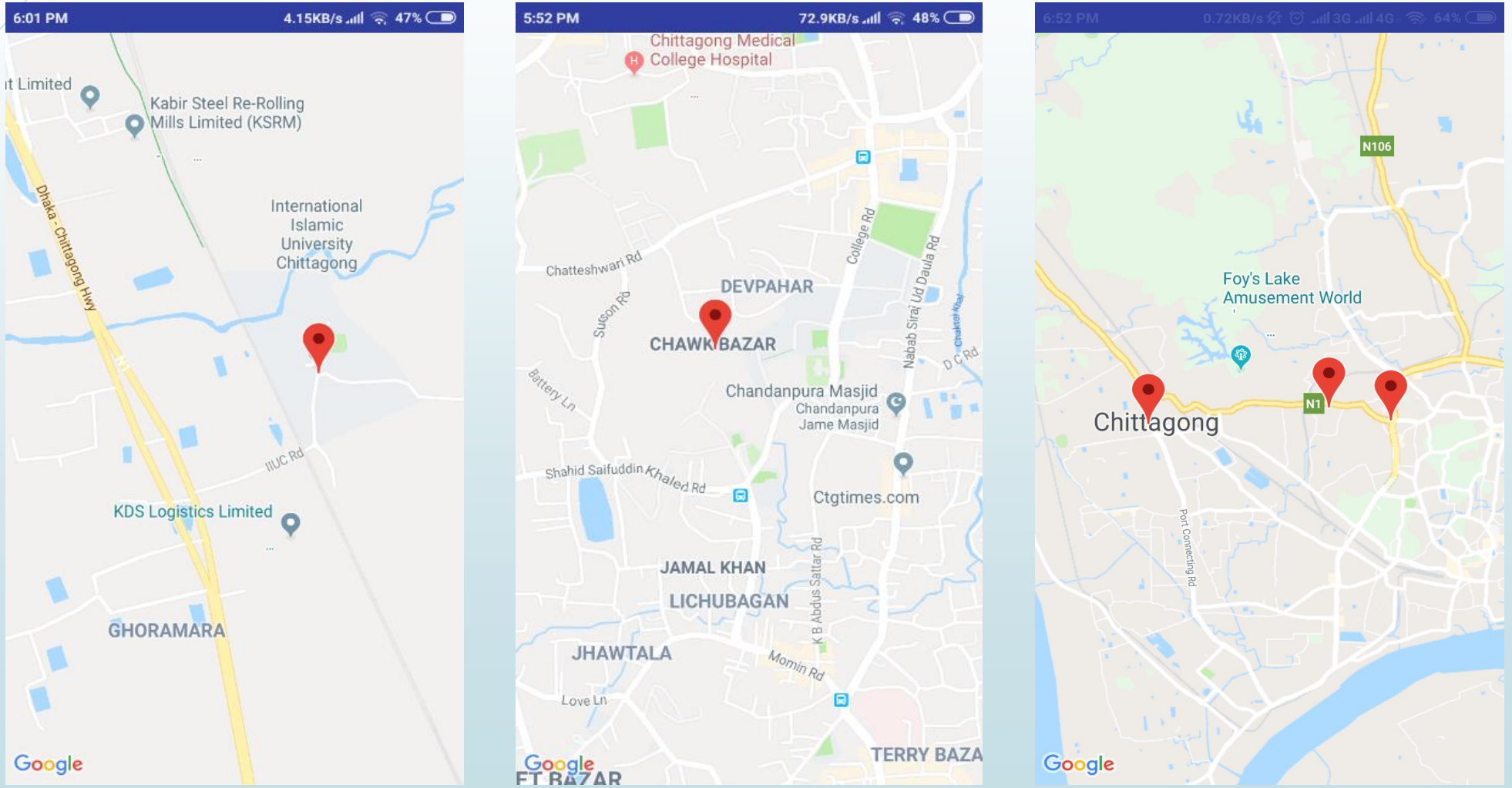


Figure 13: location

Driver Beacon Entry

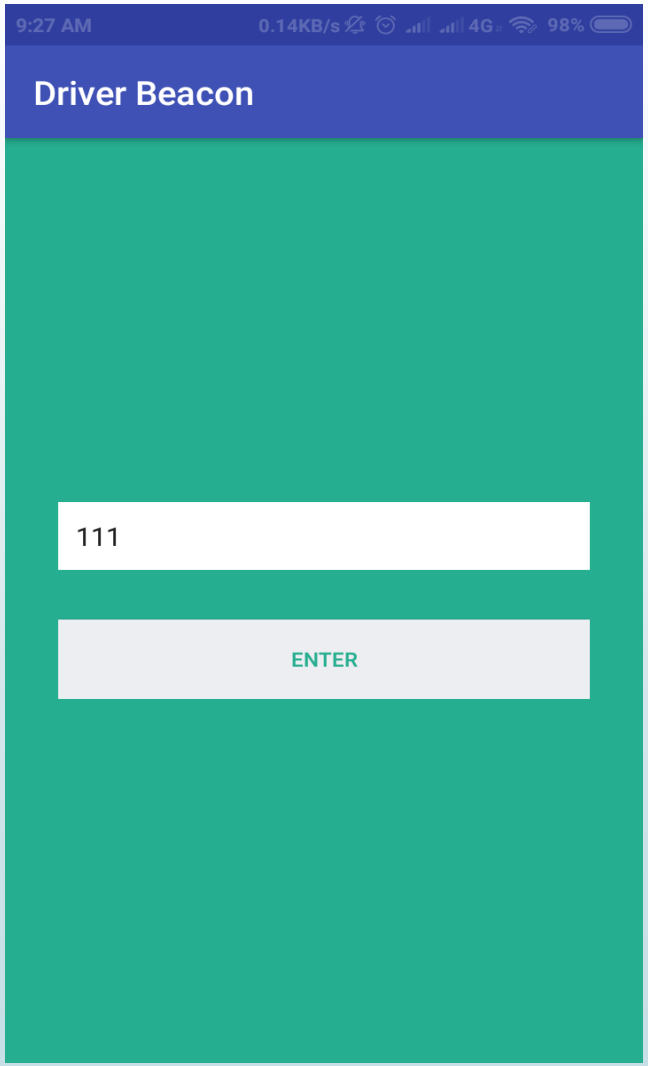


Fig 14: driver beacon entry

Driver Beacon Seat available

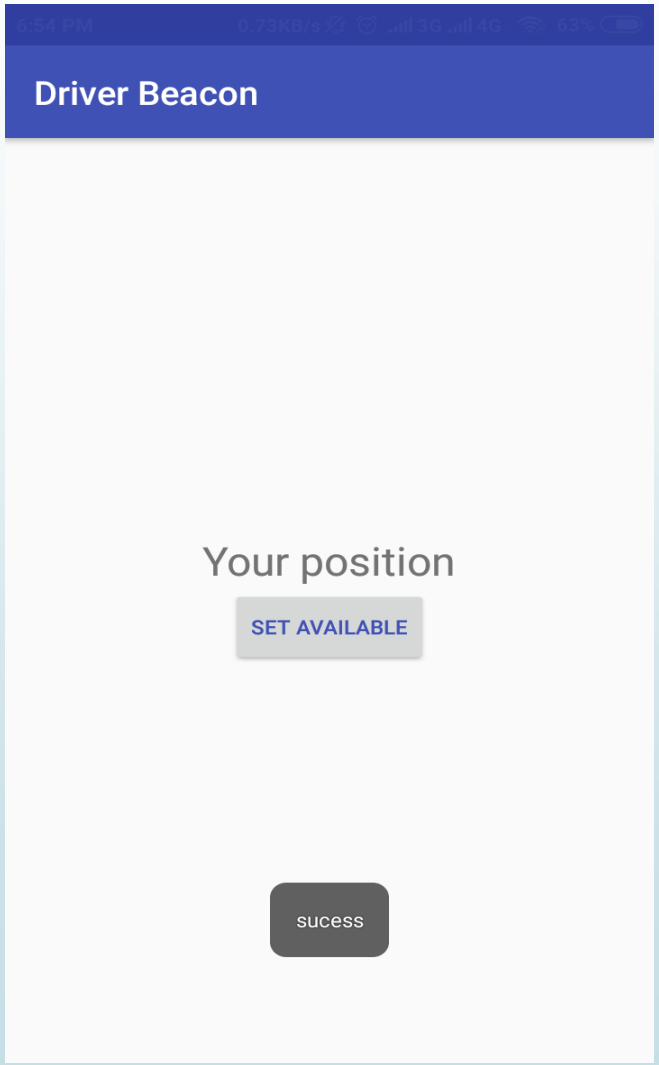


Fig 14: driver beacon entry

Driver Beacon Seat Booking

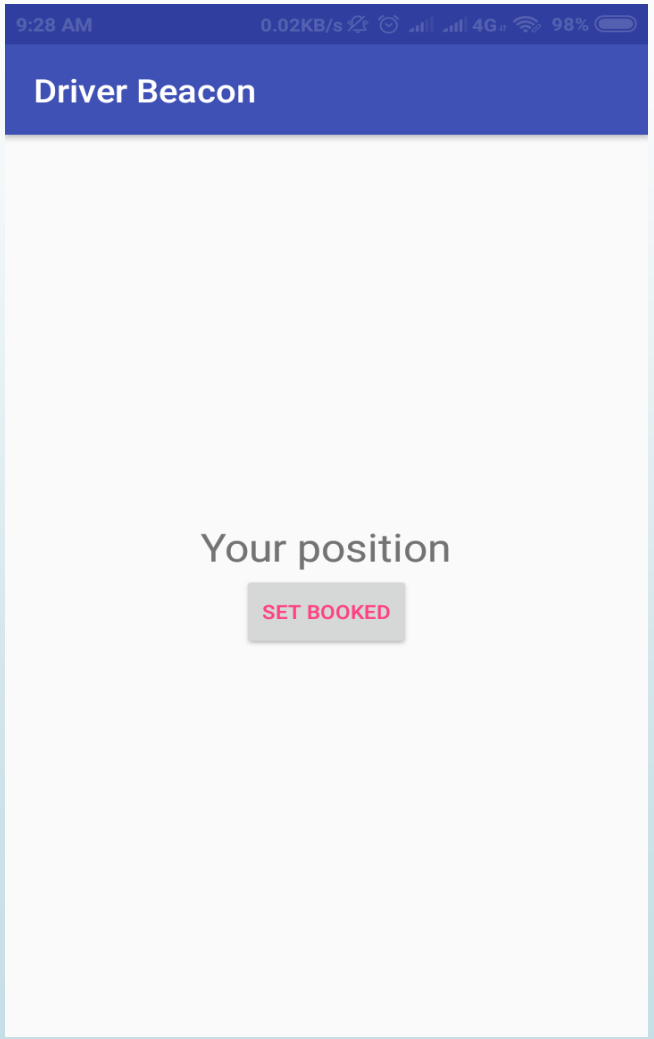


Fig 14: driver beacon entry

TECHNOLOGY USED

- Platform : Windows 10 Education
- Development Language : JAVA
- Designing Language : XML
- Web server : XAMPP
- Designing tool : Integrated tool
- Code editor : Android studio

IMPACT

- Reduce Transportation Difficulties
- Save Time
- Tracking Transporter
- Seat Allocate Information

CONCLUTION

- Our goal is to develop an interactive system for students
- Reduce harassment of students
- This may be a revolutionary improvement in IIUC transport management system
- Decrease working pressure of TMD employers

FUTURE ENHANCEMENT

- More features that cope and compete with real field
- Include Teachers and staff bus
- Report box for both admin & user
- Automated emergency part
- Measuring speed

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[2] Latest Android Version

[https://www.android.com/versions/pie-9-0]

[3] Design and Developing Real Time Interactive IIUC Bus Tracking System

[authored by Md Borhan Azad (C133065), Fazlul Hoque (C133069)]

Submitted previous defence in IIUC

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Virtualize overview

THANK YOU

Questions are welcome