

SWE 4304: SOFTWARE PROJECT LAB 1

EASY TICKET

Easy Solution to your bus booking hassle

Team Members:

Moshiur Rahman
ID: 190042101

Md Samin Yasar Islam
ID: 190042110

Arafat Kabir Khan
ID: 190042146

Supervised by:

Sabbir Ahmed
Lecturer, Department of Computer Science and Engineering
Islamic University of Technology

Project Overview:

Easy Ticket is an online ticket booking app/e-ticketing service. Through this app, users can see available tickets to their desired destinations on all dates, and book their preferred ones. The users can book bus tickets for domestic travel.

During demanding periods like admissions, Eid and Puja holidays in our country, travelers face many challenges regarding transportation like booking tickets for long-distance travel, wasting time by going to the stations physically to book tickets, payment issues, etc. As this is a common scenario in our country, we came with the idea of this app to solve this problem. With the Easy Ticket app, it is possible to book tickets for bus travel any time from one's own home.

Problem Statement:

A ticket is required for all forms of travel. It's a big hassle for users to physically buy a ticket from bus stations, because-

Often most travelers remain concerned about the availability of the ticket.

The ticket has to be bought a few days before the day of the travel.

The ticket has to be bought physically from stations. So, the traveler has to go to the bus station twice. Hence, the process is quite time-consuming.

Sometimes, payment issues also arise.

Features:

→ Core features:

☐ Make a trip!

- Seat and Location (Pickup and drop-off) selection
- Search option
- Reschedule booking
- Cancel booking

☐ User accounts:

- Registration and login details
- Client features:
 - ★ Travel history
- Admin features:
 - ★ Add/Remove bus
 - ★ Add/Remove schedule
 - ★ Add/Remove supervisor
 - ★ Add/Remove bus route
 - ★ Remove client
 - ★ Remove booking
- Supervisor features:
 - ★ Check passenger details
 - ★ Check own bus details

☐ Printable ticket (with booking details)

→ Additional features (Will be implemented if time permits after core features have been implemented and tested):

- ☐ Promo codes
- ☐ SMS notifications
- ☐ Email notifications
- ☐ Increase application scope to other transportation media
- ☐ Log in using Google Account

Technologies:

Platform: Web

Front-end: HTML5, CSS3, JavaScript, Bootstrap

Back-end: JavaScript, Node.js

Database: PostgreSQL

Version Control: Git, GitHub

IDE/Editor: Visual Studio Code, Atom

Timeline:

Considering 14 weeks available for the project, the timeline may be as follows:

- **4 weeks** for requirement analysis and learning required technologies.
- **2 weeks** for designing the software and prototyping the GUI.
- **6 weeks** for development.
- **2 weeks** for testing, review, and deployment.