**Name of the Project** – Bus Ticket Booking Application.

**Objectives/Vision**

Develop a web application where users can see various available options for travel on a bus.

This application shows various categories of buses and fares based on distance and routes.

Users can see various routes available in this application.

**Functional Requirements**

1. Application should have a home page having information about buses and available routes
2. Complete registration process: We need to develop user registration, login, and forgotten passwords. Reset password and forgot password should implement with the registered email id of the user.
3. Once the user provides the correct login credential, the user will lend into the user dashboard. The dashboard should have all necessary features available to the specific user.
4. Here we have the application owner.
5. Admin: Here bus owner registers as admin and adds their bus routes and fares with timings.
6. User Dashboard: Can see various routes and buses available and their fares.
7. Discount: Discounts and offers can also be seen under the dashboard.
8. Proper cart should be implemented and all discounts and offers can be applied to the cart feature.
9. Discount: Discounts and offers can also be seen under the user dashboard.
10. Application owner can see the feedback coming from the user.
11. Application owner can control and manages promotional activities on this application.

**Non-Function Requirement:**

1. Build and Test Responsive and Interactive Webpages
2. Proper authentication should be implemented using OAuth 2.0 / JWT.
3. Application should have proper validation implementation with all required forms.
4. Appropriate cloud service should be incorporated / can be used for deployment, developing features based on project or use case.
5. Proper front-end unit testing should be part of the implementation.
6. Junit test coverage should also be part of development.
7. Implement proper CI and CD pipeline.
8. Deploy application on AWS cloud. (like Deploy Java Microservices on Amazon ECS using AWS Fargate).

**Tools and Technologies to be used**

- VCS: Gitlab

- Front End: HTML, CSS, JavaScript, Bootstrap and REACT.

- Backend: Java 8, Spring Boot, Microservices, RSET API.

- Database: MySQL/MongoDB

- Testing: Mocha/Chai, Junit.

-Deployment: AWS Cloud services