PARSHVANATH CHARITABLE TRUST'S
A.P. Shah Institute of Technology
Thane, 400615

Academic Year: 2022-23
Department of Computer Engineering

BUS MANAGEMENT SYSTEM

CSL605 SKILL BASED LAB COURSE: CLOUD COMPUTING

- **Title of Project** : **Bus Management System**
- **Year and Semester** : **T.E. (Sem VI)**

Group Members:
Omkar Nimbalkar(53)
Hrugved Parab(62)
Tejas Pathak(67)

I.ABSTRACT

- Now a day's public local transportation system is still using the traditional ways for ticket booking. People need to stand in queues for long hours. Some people travel via public local transport without purchasing the ticket.
- Hence, our proposed system will give the solution. Our system helps to resolve the disadvantages of the current public local transport ticket booking system.
- Our application will handle the live location of the bus, generate the E-ticket with Quick Response Code, Online ticket booking by scanning the Quick Response code, Validation of the ticket.
- The real-time bus tracking can be done by our system and the relative information will be given to the user. Technologies like QR-Code, Cloud, Global Positioning System are used for the development process.

- Keyword : - Bus tracking , Global Positioning System , Quick Response Code.

II.INTRODUCTION

- The public local transportation system is still using the old-fashion ways for ticketing, the conductor issues the ticket to the user which is inconvenient and time-consuming.
- People stand in queues for a long amount of time waiting for the conductor to issue the ticket. Therefore, it is tiresome and wastage of energy. Some people travel via public local transport without purchasing the ticket and due to this, there is growth in the crowd, exceeding the capacity of the bus.
- Therefore, our proposed system will be able fix the above disadvantages mentioned. Our system will fix the disadvantages of the current public local transport ticket booking system.
- Our proposed application will be able to handle the generation of E-ticket having Quick Response code, the user will have to select the source and destination and then the buses will be displayed according to the route which is quick and efficient.

III.PROBLEM DEFINITION

- Currently, the type of system being used at the counter is an internal system which is manually used in selling the bus tickets.
- The problems facing the company are that customers have to go to the counter to buy bus ticket or ask for bus schedule, customers will also have to queue up for a long time in order to secure a bus ticket and will also need to pay cash when they buy the bus ticket.
- Besides,Passengers are not allowed to buy tickets through online system as well as there is no system for online bus booking.

III.I CLOUD SERVICES USED

- AMAZON WEB SERVICE Lambda Function:All of the business login we have developed in Lambda Function
- DynamoDB: We have used DynamoDB database for storing all the data.
- APPLICATION PROGRAMMING INTERFACE Gateway:All of the APPLICATION PROGRAMMING INTERFACE operations are handled by APPLICATION PROGRAMMING INTERFACE gateway.
- S3 Bucket: We have uploaded UI codes of Bus Ticket Booking System on S3 Bucket
- Cloud Formation:All Deployment of Bus Ticket Booking,we are doing with AMAZON WEB SERVICE Cloud Formation.
- Serverless Framework:We have used Serverless Framework for developing this application.
- Angular:All of the UI Components of Bus Ticket Booking,we have developed in Angular.

III.Ii SOFTWARE REQUIREMENTS

- • Windows Xp, Windows 7(ultimate, enterprise)
- • Sql 2008
- • Visual studio 2012
- • AMAZON WEB SERVICE Services

iii.Iii METHODOLOGY

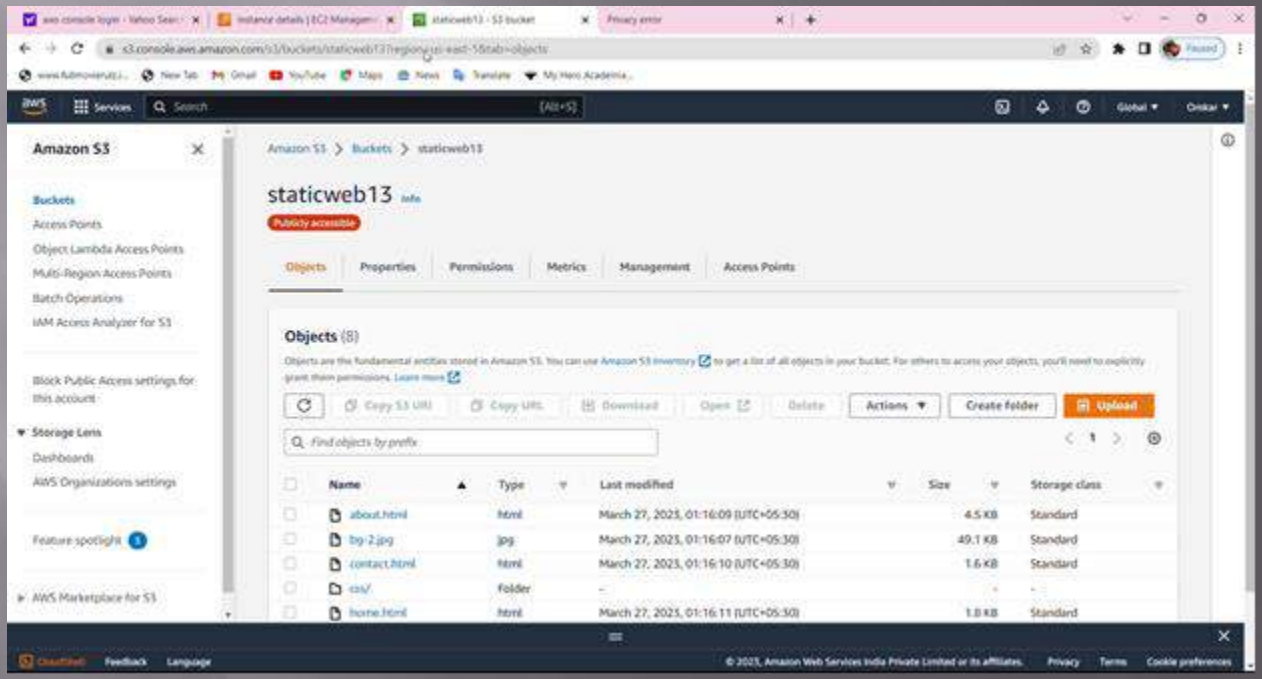
Google APPLICATION PROGRAMMING INTERFACE

- Transport Tracker
- Store Data
- Vehicle Locator
- Backend
- Map
- Administrators overview

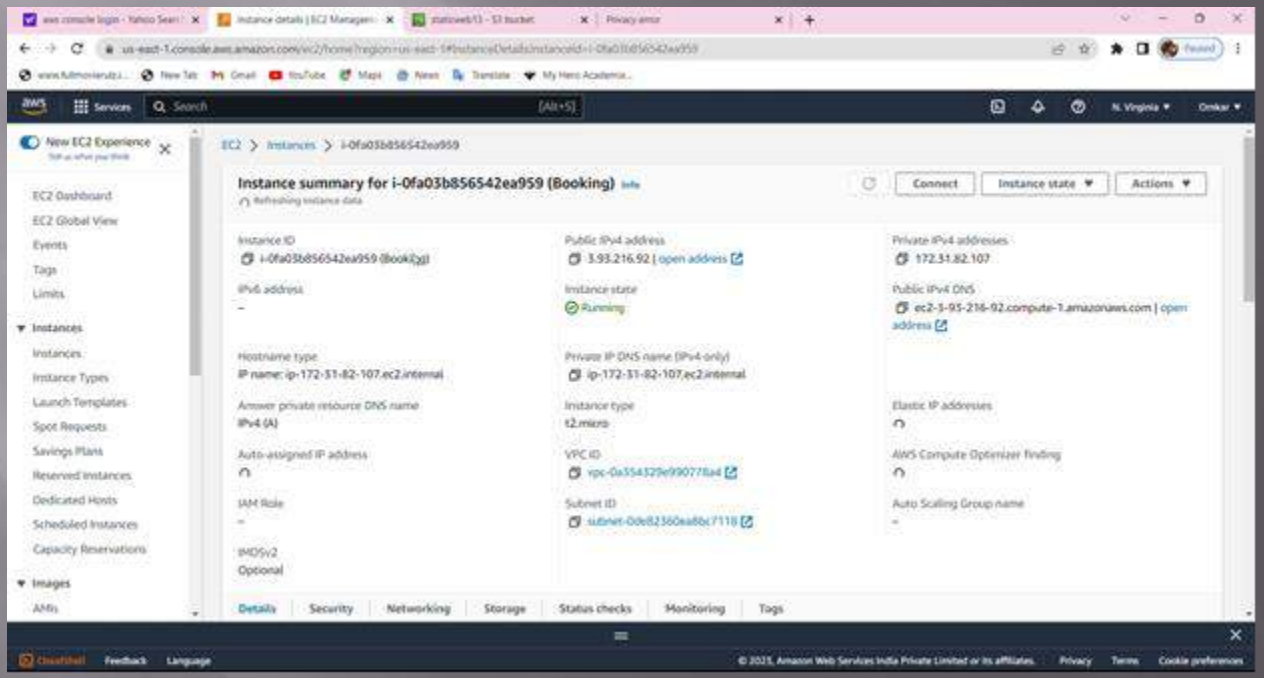
Quick Response Code

- The Quick Response Code stands for ‘quick response’ code. The Quick Response code is same as of the barcode used in supermarkets. Quick Response code is an image which can be scanned using machine or smartphone camera. It contains of numbers of black squares and dots consist of certain information. A Quick Response Code can contain information such as phone number, name , Short Messaging Service or e-mail message or just plain alphanumeric text. The most commonly used Quick Response Code code can encode upto 4,296 characters, which is equivalent to 3 pages of text.

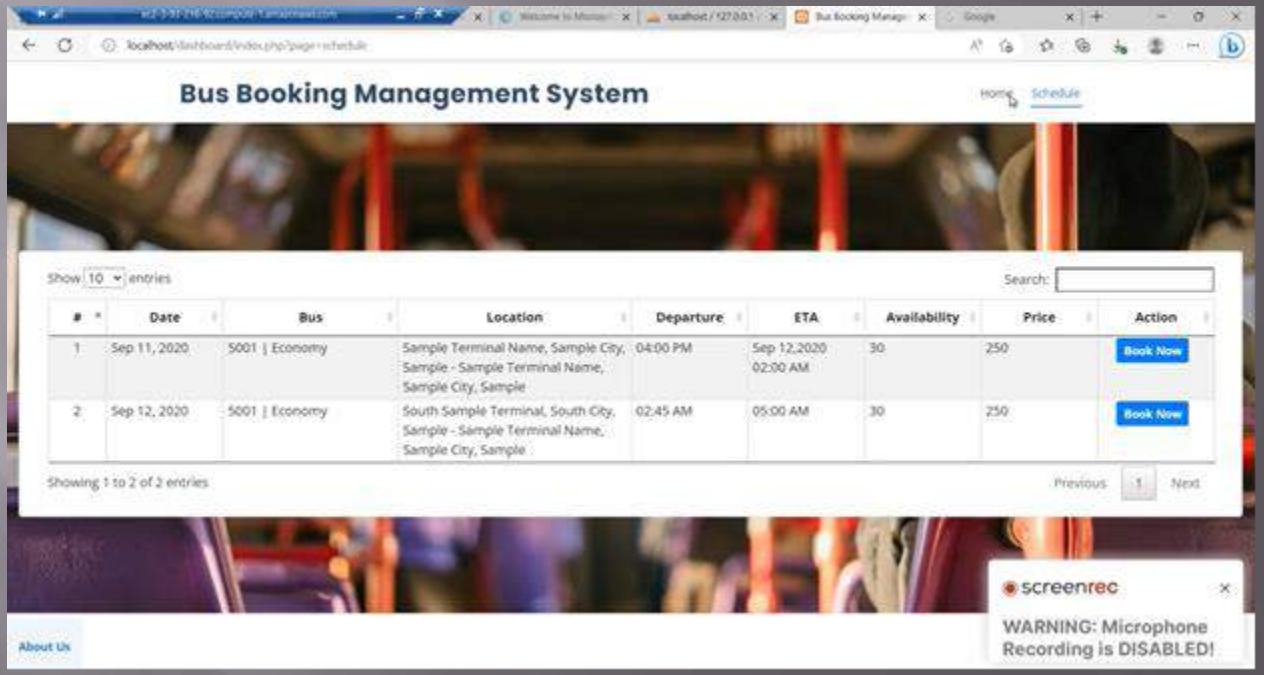
iv.IMPLEMENTATION



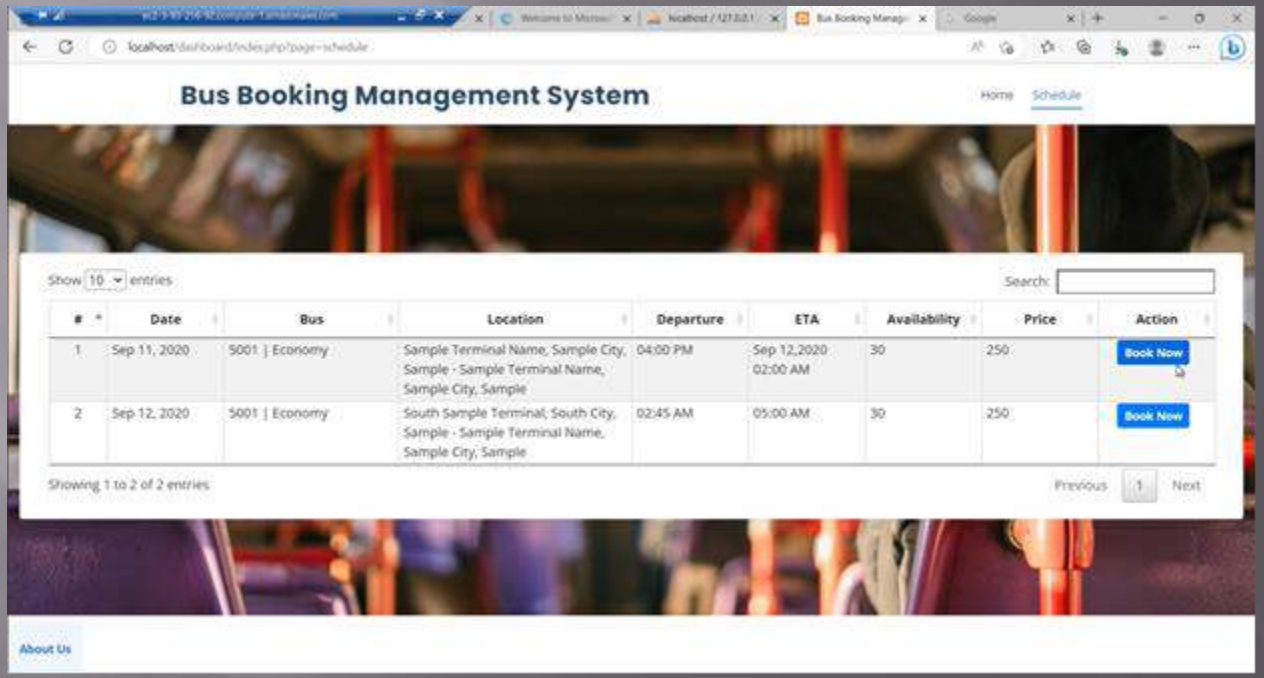
iv.IMPLEMENTATION



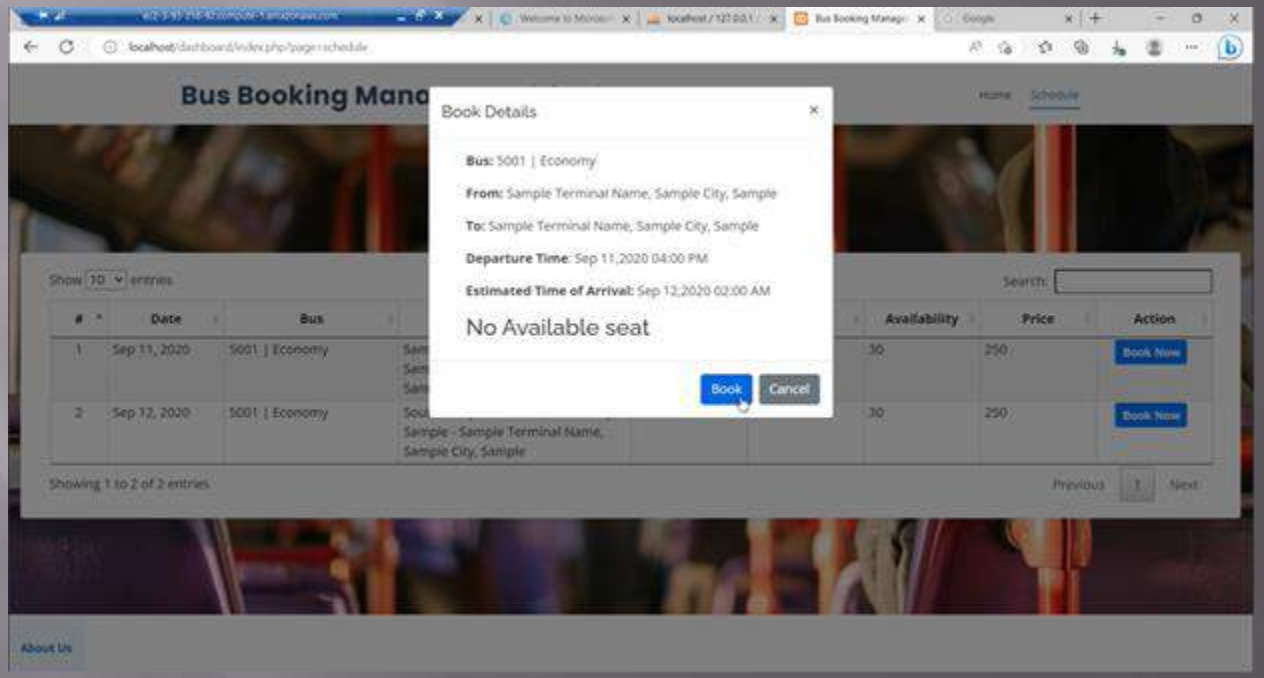
IMPLEMENTATION



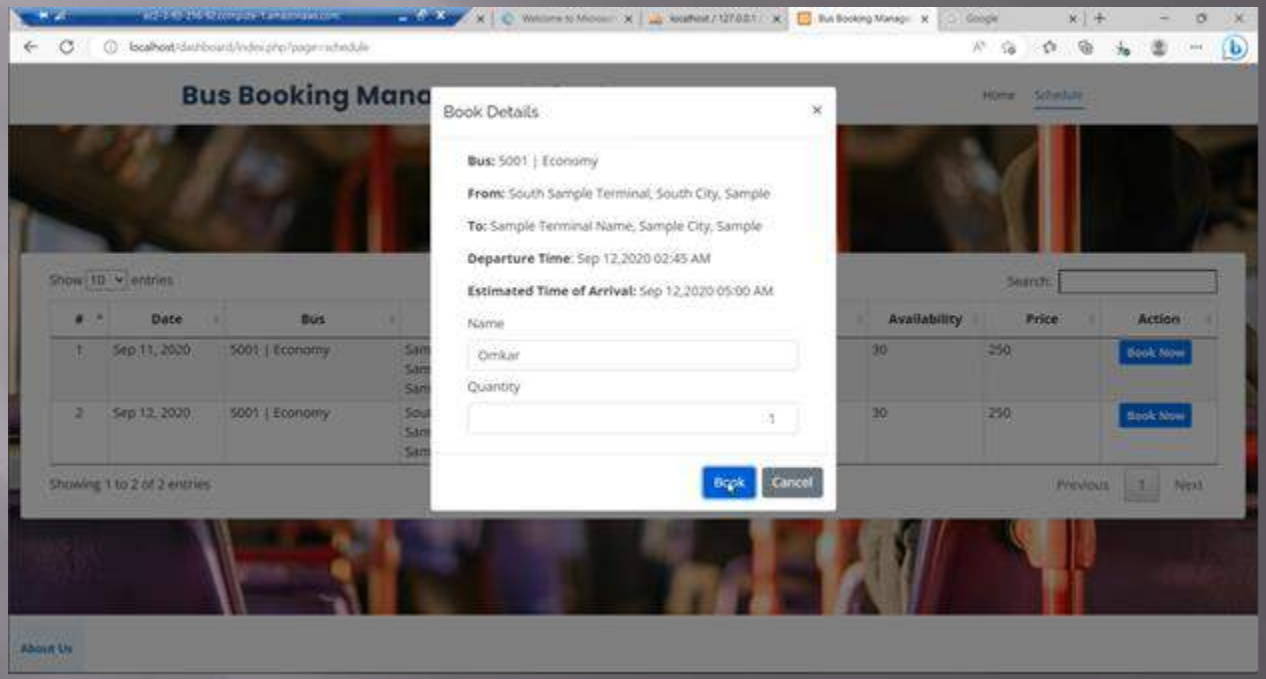
IMPLEMENTATION



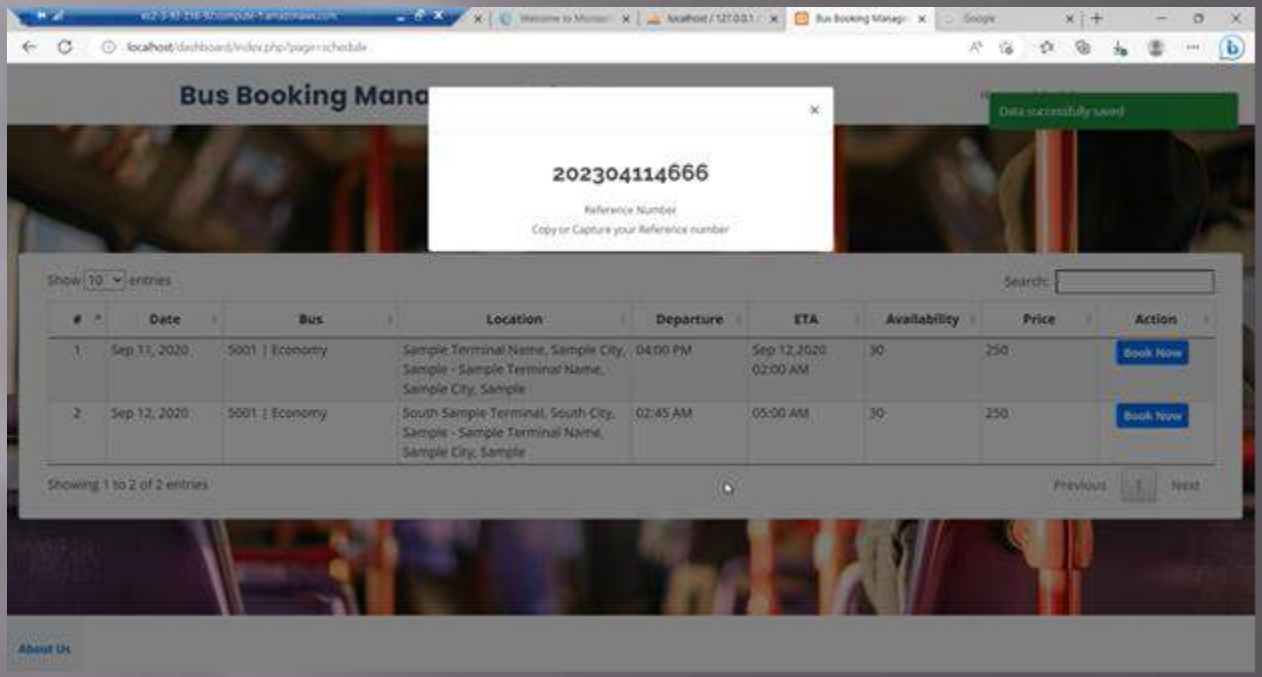
IMPLEMENTATION



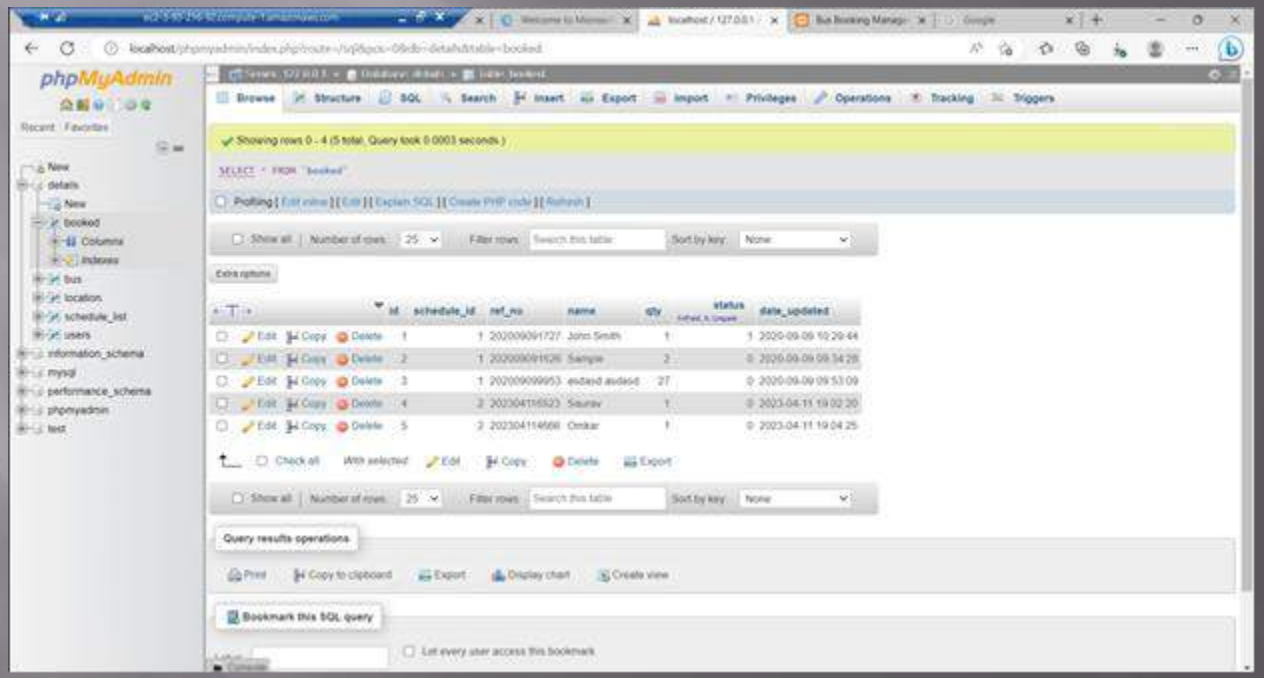
IMPLEMENTATION



IMPLEMENTATION



IMPLEMENTATION



v.LEARNING OUTCOME

- The main purpose of this study is to automate the manual procedures of reserving a bus ticket for any journey made through any Transport Company. This system is said to be an automatic system and customers can select seats by themselves. Specifically, outcomes of this project will consist of:
- 1. Providing a web-based bus ticket reservation function where a customer can buy bus ticket through the online system without a need to queue up at the counter to purchase a bus ticket.
- 2. Enabling customers to check the availability and types of busses online. Customer can check the time departure for every bus through the system.
- 3. Easing bus ticket payment by obtaining a bank pin after payments is made to the various designated banks.
- 4. Admin user privileges in updating and canceling payment, route and vehicle records.

THANK YOU

Thanks a lot!