



PARSHVANATH CHARITABLE TRUSTS
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:
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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

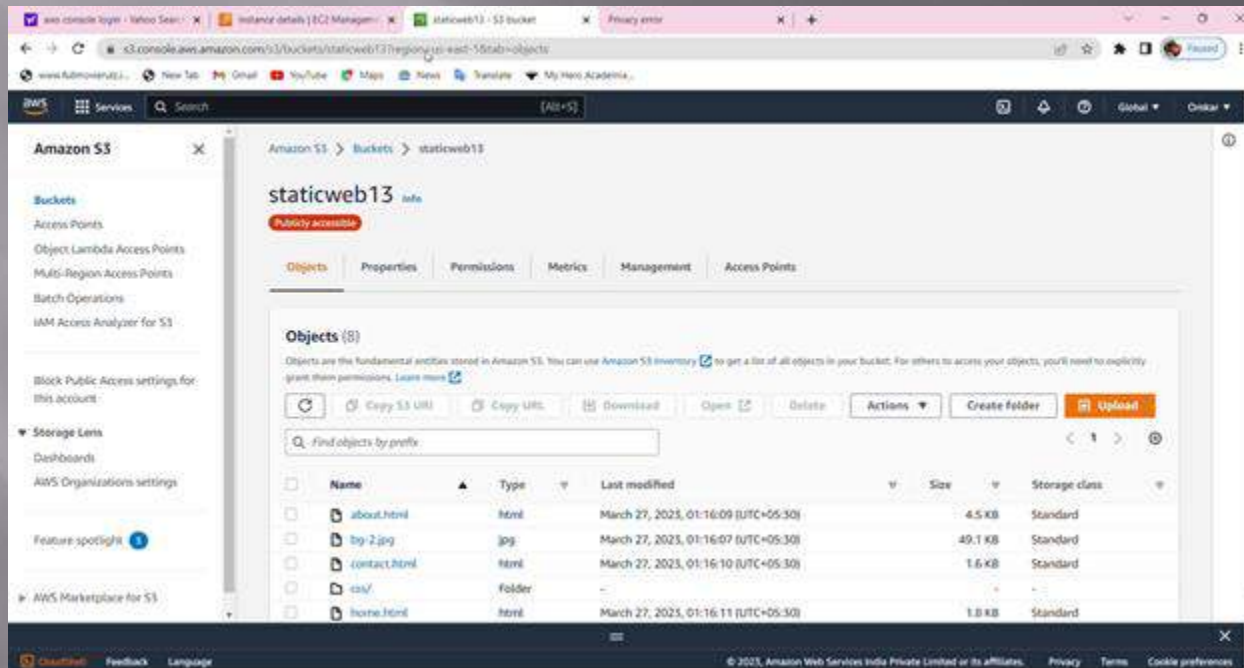
Google APPLICATION PROGRAMMING INTERFACE

- ▣ ☐ 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

The screenshot displays the AWS Management Console interface for an EC2 instance. The browser tabs at the top include 'aws console login - Yahoo Search', 'Instance details | EC2 Manager', 'zshweb/13 - S3 bucket', and 'Privacy error'. The address bar shows the URL: 'us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:InstanceId=i-0fa03b856542ea959'. The console header shows 'BMS', 'Services', a search bar, and the region 'N. Virginia' with the user 'Omkar'.

The left sidebar contains the 'New EC2 Experience' section with links to 'EC2 Dashboard', 'EC2 Global View', 'Events', 'Tags', 'Limits', 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Scheduled Instances', 'Capacity Reservations', 'Images', and 'AMIs'.

The main content area is titled 'Instance summary for i-0fa03b856542ea959 (Booking)' and includes a 'Refresh instance data' link. It features a 'Connect' button, an 'Instance state' dropdown, and an 'Actions' dropdown. The instance details are organized into three columns:

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0fa03b856542ea959 (Booking)	3.93.216.92 open address	172.31.82.107
IPv6 address	Instance state: Running	Public IPv4 DNS: ec2-3-93-216-92.compute-1.amazonaws.com open address
Host name type	Private IP DNS name (IPv4-only): ip-172-31-82-107.ec2.internal	Elastic IP addresses
IP name: ip-172-31-82-107.ec2.internal	Instance type: t2.micro	Amazon Compute Optimizer finding
Amazon private resource DNS name	VPC ID: vpc-0a554329e990778a4	Auto Scaling Group name
IPv4 (A)	Subnet ID: subnet-0de82360a86c7118	
Auto-assigned IP address		
IAM Role		
IMDSv2: Optional		

At the bottom, there are tabs for 'Details', 'Security', 'Networking', 'Storage', 'Status checks', 'Monitoring', and 'Tags'. The footer includes 'AWS', 'Feedback', 'Language', and copyright information: '© 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences'.

IMPLEMENTATION

Bus Booking Management System

Home Schedule

Show 10 entries Search:

#	Date	Bus	Location	Departure	ETA	Availability	Price	Action
1	Sep 11, 2020	5001 Economy	Sample Terminal Name, Sample City, Sample - Sample Terminal Name, Sample City, Sample	04:00 PM	Sep 12, 2020 02:00 AM	30	250	Book Now
2	Sep 12, 2020	5001 Economy	South Sample Terminal, South City, Sample - Sample Terminal Name, Sample City, Sample	02:45 AM	05:00 AM	30	250	Book Now

Showing 1 to 2 of 2 entries Previous 1 Next

About Us

screenrec

WARNING: Microphone Recording is DISABLED!

IMPLEMENTATION

Bus Booking Management System

Home Schedule

Show 10 entries

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#	Date	Bus	Location	Departure	ETA	Availability	Price	Action
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2	Sep 12, 2020	5001 Economy	South Sample Terminal, South City, Sample - Sample Terminal Name, Sample City, Sample	02:45 AM	05:00 AM	30	250	Book Now

Showing 1 to 2 of 2 entries

Previous 1 Next

[About Us](#)

IMPLEMENTATION

The screenshot displays a web application titled "Bus Booking Manager" running on a localhost. A modal window titled "Book Details" is open, showing information for a bus booking. The modal includes fields for "Bus: 5001 | Economy", "From: Sample Terminal Name, Sample City, Sample", "To: Sample Terminal Name, Sample City, Sample", "Departure Time: Sep 11, 2020 04:00 PM", and "Estimated Time of Arrival: Sep 12, 2020 02:00 AM". Below this information, it states "No Available seat" and provides "Book" and "Cancel" buttons. In the background, a table lists bus schedules. The table has columns for "#", "Date", "Bus", "Availability", "Price", and "Action". Two entries are visible: one for Sep 11, 2020, and another for Sep 12, 2020, both for bus 5001 | Economy. The "Action" column contains a "Book Now" button for each entry. The page also includes a search bar, pagination controls, and an "About Us" link at the bottom.

Book Details

Bus: 5001 | Economy
From: Sample Terminal Name, Sample City, Sample
To: Sample Terminal Name, Sample City, Sample
Departure Time: Sep 11, 2020 04:00 PM
Estimated Time of Arrival: Sep 12, 2020 02:00 AM
No Available seat

Bus Schedule Table:

#	Date	Bus	Availability	Price	Action
1	Sep 11, 2020	5001 Economy	30	250	Book Now
2	Sep 12, 2020	5001 Economy	30	250	Book Now

Showing 1 to 2 of 2 entries

[About Us](#)

IMPLEMENTATION

The screenshot displays a web application titled "Bus Booking Manager" running on a local host. A modal window titled "Book Details" is open, showing the following information:

- Bus:** 5001 | Economy
- From:** South Sample Terminal, South City, Sample
- To:** Sample Terminal Name, Sample City, Sample
- Departure Time:** Sep 12, 2020 02:45 AM
- Estimated Time of Arrival:** Sep 12, 2020 05:00 AM

Below the details, there are input fields for "Name" (containing "Omkar") and "Quantity" (set to "1"). At the bottom of the modal are "Book" and "Cancel" buttons.

The background interface includes a table with the following data:

#	Date	Bus	Availability	Price	Action
1	Sep 11, 2020	5001 Economy	30	250	Book Now
2	Sep 12, 2020	5001 Economy	30	250	Book Now

At the bottom left, there is an "About Us" link. At the bottom right, there are "Previous", "1", and "Next" navigation controls.

IMPLEMENTATION

602-741-2162 www.602-741-2162.com

Welcome to Mon... | localhost / 127.0.0.1 | Bus Booking Manager | Google

localhost/dashboard/index.php/page/schedule

Bus Booking Manager

Data successfully saved!

202304114666

Reference Number

Copy or Capture your Reference number

Show 10 entries

Search:

#	Date	Bus	Location	Departure	ETA	Availability	Price	Action
1	Sep 11, 2020	5001 Economy	Sample Terminal Name, Sample City, Sample - Sample Terminal Name, Sample City, Sample	04:00 PM	Sep 12, 2020 02:00 AM	30	250	Book Now
2	Sep 12, 2020	5001 Economy	South Sample Terminal, South City, Sample - Sample Terminal Name, Sample City, Sample	02:45 AM	05:00 AM	30	250	Book Now

Showing 1 to 2 of 2 entries

Previous 1 Next

[About Us](#)

IMPLEMENTATION

The screenshot displays the phpMyAdmin interface for a database named 'bookings'. The 'booked' table is selected, and its data is shown in a table format. The table has 5 rows and 7 columns: id, schedule_id, ref_no, name, qty, status, and date_updated. The status column has a tooltip that says 'Insert & Update'. The data is as follows:

id	schedule_id	ref_no	name	qty	status	date_updated
1	202009091727	1	John Smith	1		2020-09-09 10:29:44
2	202009091626	1	Sangee	2		2020-09-09 09:34:28
3	202009090953	1	extended audited	27		2020-09-09 09:53:09
4	202004116023	2	Saurav	1		2023-04-11 19:02:30
5	202304114668	2	Omkar	1		2023-04-11 19:04:25

Below the table, there are options to 'Check all', 'With selected', 'Edit', 'Copy', 'Delete', and 'Export'. At the bottom, there is a 'Query results operations' section with links for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'. There is also a 'Bookmark this SQL query' section with a text input field and a checkbox labeled 'Let every user access this bookmark'.

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!