

SMART BUS SYSTEM

Team members

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Objective:

- To automate the existing method of the bus system to a computerized system.
- To offer comfort by minimizing the problem faced by the passengers and drivers with the help of QR scanning technology.
- To explore the food ordering unit in the bus so that the passenger will get the opportunity to choose any kind of food items, from vegetarian to non veg cuisines.

Market Analysis:

- A market analysis and survey for the smart bus system project would provide valuable insights into the potential demand for the service, the target demographic, and the features that are most important to users.
- The smart bus system is needed to improve the efficiency and convenience of the transportation. This will encourage more people to use technological based GPS tracking, food ordering facilities which will be convenient for the passengers.

PROBLEM STATEMENT:

Time consumption	Passengers on buses often face problems such as overcrowding, long wait times, and difficulty finding their way to their destination.
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Man Power	Existing bus system requires man power
Lack of options	Passengers on long bus journeys often face problems such as limited food options, poor quality food, and high prices. These problems can be challenging for passengers with dietary restrictions or those traveling with young children.

SOLUTION:

Entry unit:

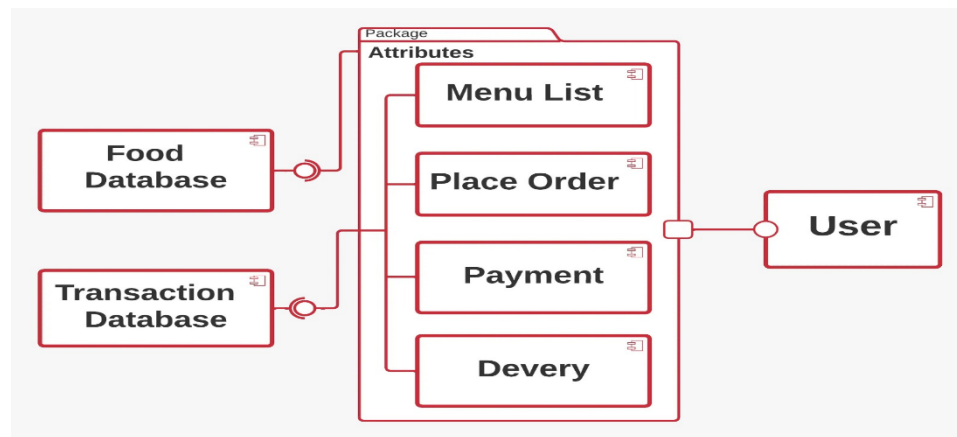
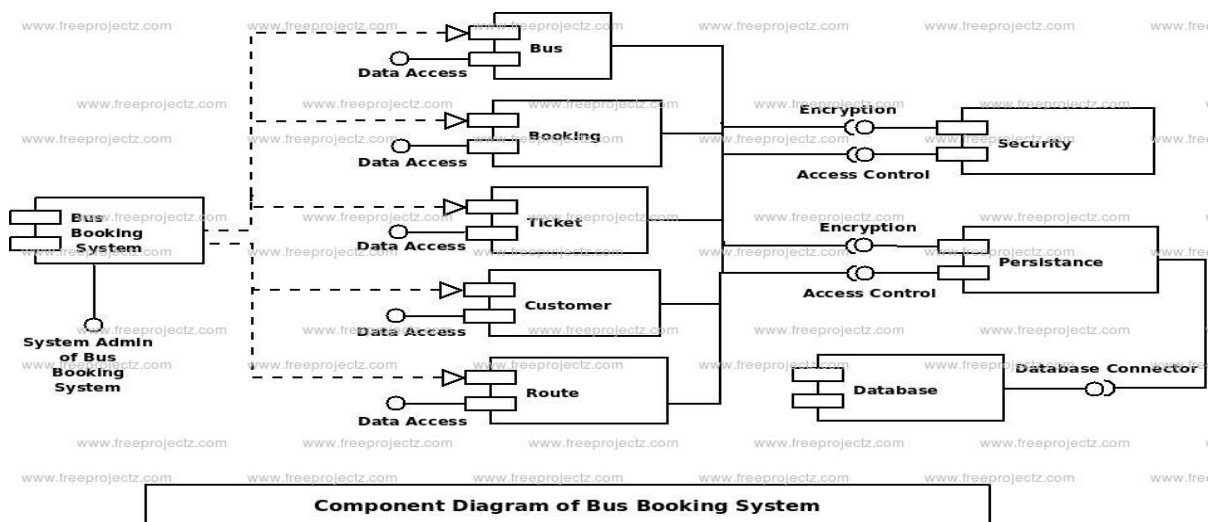
- The entry unit is the scanning of QR code in the scanner present in the bus door.
- If it matches with the QR code in the bus ticket, the door in the bus opens. This monitors the number of passengers entering the bus and also checks it with the total passengers of the bus.
- At once the passenger occupies the seat it will be displayed in the screen present near the driver.

Food ordering unit:

- At once the passenger books the ticket, along with the ticket the food website link will be provided.

- The ordered foods will be provided to the shops which surrounds 10 km from the intermediate stop.
- It ensures that the passenger will get the opportunity to choose any kind of food items, from the vegetarian to non veg foods.
- Food delivery in bus provide healthy and affordable options to better serve the passenger.

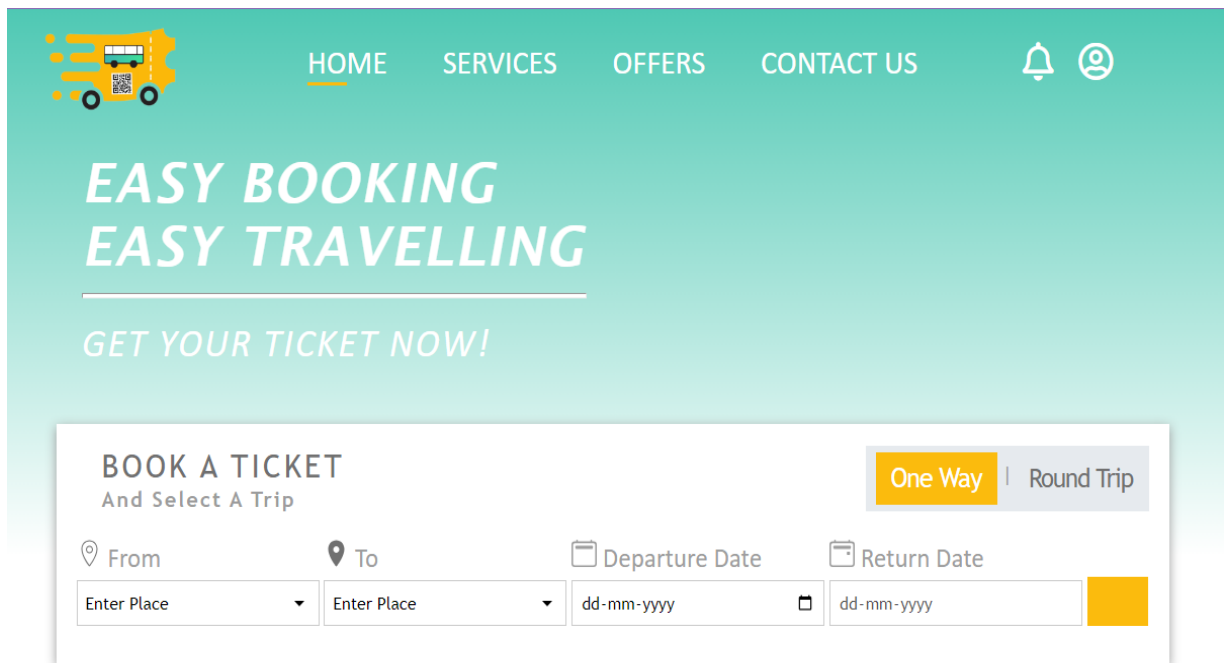
BLOCK DIAGRAM:



TARGET CUSTOMERS:

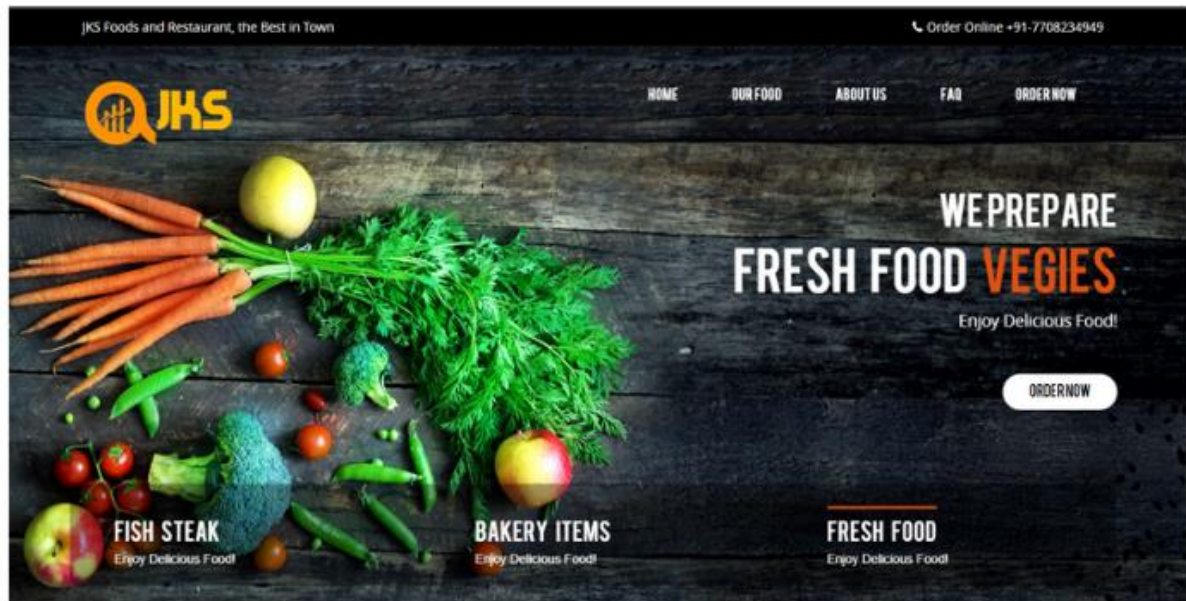
- The smart bus system project would be ideal for anyone who uses transport often and wants a more efficient and convenient experience.
- The smart bus system project will make public transportation more efficient and convenient by providing real-time bus tracking, automated food payment systems, and optimized entry methods.

OUTPUT:

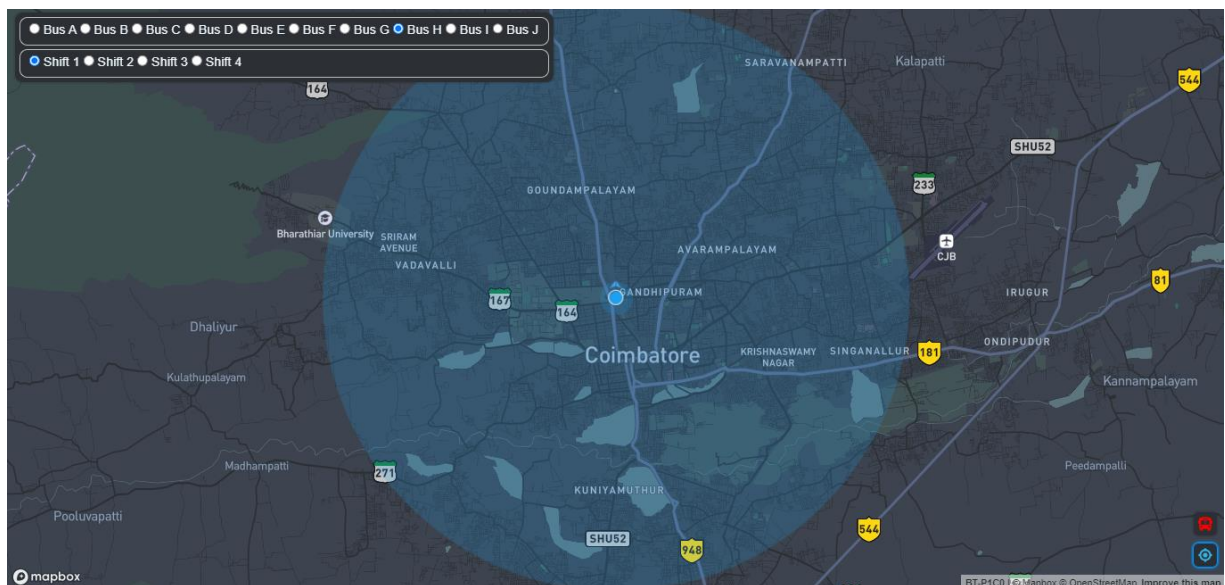


The screenshot displays a web interface for a ticket booking system. At the top, a teal header contains a bus icon with a QR code on the left, and navigation links for HOME, SERVICES, OFFERS, and CONTACT US in the center. On the right side of the header are a bell icon for notifications and a user profile icon. Below the header, the main section has a teal background with the text "EASY BOOKING EASY TRAVELLING" in large white letters, followed by "GET YOUR TICKET NOW!" in a smaller white font. A white booking form is positioned in the lower half of the page. The form is titled "BOOK A TICKET" and "And Select A Trip". It features two tabs: "One Way" (active) and "Round Trip". The form includes fields for "From" and "To" (each with a location pin icon and a dropdown menu), "Departure Date" and "Return Date" (each with a calendar icon and a text input field), and a yellow button to the right of the date fields. The input fields for "From" and "To" contain the placeholder text "Enter Place".

Ticket booking website



Food ordering website



LIVE LOCATION TRACKING

REFERENCES:

- <https://youtu.be/xq5jwxy532A>
- https://youtu.be/7xrAVemB_G8
- www.w3schools.com
- www.googlesheets.com
- www.googleforms.com