**SYSTEM REQUIRMENT SPECIFICATION.**

System Requirements Specification:

1. **Functional Requirements:**

a. Reservation Form - Collect passenger journey details (e.g., destination, date, time, class).

b. Check Seat Availability:

- Verify seat availability for the requested journey.

c. Register Entries:

- Enter passenger details, journey information, and payment data in a reservation register.

d. Ticket Preparation:

- Generate tickets with journey details and passenger information.

e. Amount Calculation:

- Compute the fare based on the journey details and class.

f. Payment Collection:

- Accept cash payment from the passenger.

2. **Non-Functional Requirements:**

a. User Interface:

- User-friendly forms for passengers and clerks.

b. Performance:

- Quick seat availability checks and ticket generation.

c. Reliability:

- Accurate tracking of seat availability and financial transactions.

d. Security:

- Secure payment handling and passenger data privacy.

**System Specification:**

1. Reservation System Components:

a. Reservation Form Interface:

- Collects passenger journey details.

b. Seat Availability Module:

- Checks seat availability for the given journey.

c. Reservation Register:

- Stores passenger details, journey info, and payment data.

d. Ticket Generation System:

- Generates tickets with all necessary details.

e. Payment Handling System:

- Calculates fare, accepts cash payments, and issues receipts.

2. Data Flow:

a. Passenger Data:

- Stored in the reservation register.

b. Ticket Information:

- Generated from the reservation register and provided to passengers.

c. Cash Statements:

- Generated at the end of each shift for accounting purposes.

3. Technology Requirements:

a. Database System:

- To store passenger and journey information.

b. User Interface:

- Application for clerks to input passenger data and generate tickets.

c. Payment Handling System:

- Should securely handle cash transactions.

Prototype Design:

Components:

1. Reservation Form Interface: A simple form for passengers to input journey details.

2. Seat Availability Module: A system to check seat availability based on the entered journey data.

3. Reservation Register: A database to store passenger details and journey information.

4. Ticket Generation System: Generates tickets based on the reservation register entries.

5. Payment Handling System: Calculates fare, accepts cash payments, and issues receipts.

User Interface:

- A user-friendly interface for the clerk to input passenger data and generate tickets.

- Simple and intuitive forms for passengers to input journey details.

Process Flow:

1. Passenger fills in journey details on the form.

2. Clerk checks seat availability and enters the data into the reservation register.

3. Ticket is generated and handed over to the passenger.

4. Cash is accepted, and receipts are provided.

5. At the end of each shift, a cash statement is generated for accounting purposes.

The prototype should showcase a seamless flow from passenger input to ticket generation, including the backend processes for data storage, availability checks, and financial transactions. Additionally, security measures for payment handling and data privacy should be integrated into the prototype.