**Railway Reservation System**

# Introduction

Railway Reservation System is a ticketing system which provides facility to the railway administration of booking the tickets for passengers digitally using this system. Passenger, want to travel, will come to railway for booking and will be shown detail regarding the train of his interest. By specifying the source and destination his ticket will be booked according to his requirement and he will be given a ticket for reserved seat of coach, if seat available, of the train goes to the destination. Every train contains limited seats for passengers. Service will provide them seat if software shows availability of seat in a train otherwise, rejected. The ticket given to the passenger will contain all the information related to passenger which have been asked and travelling, like which train he will travel in, which coach he have reserved, how much he have paid for the ticket, what is the train arrival and despatcher time at and from the station respectively. The record of each train, each coach of train, each seat of coach and all the passengers who have travelled, who are travelling and who will travel (reserved seat) will be stored in this system.

# Classes in Software

There will be several classes in this software like Train, Passenger, Employee, Seats, Ticket etc. Every class has some attributes and methods in it and there will be relations in the classes which shows inheritance between them. The detail of classes will be covered in the designing process.

Requirements – Design – Coding – Testing

1. Do you think you need mathematical verification of correctness of your system or a part of your system? Why?

Verification of available seats after reservations.

Fair collection according to booking.

Refund amount after ticket cancelation.

1. Can you separate various concerns of your project from functional and quality perspectives? Highlight the concerns and describe how can you handle concerns separately?
2. Identify some functional modules in your system. Discuss coupling and cohesion aspects.
3. Identify the potential future changes in your system. Pick one potential change and discuss how would you address it in your system?

In future, the software will be available online for reservation to passengers.

1. Which increments would you suggest if you are asked to build your system incrementally?