*Problem Domain for Railway Reservation System*

Software has to be developed for automating the manual reservation system of railway. The system should be standalone in nature .It should be designed to provide functionalities like booking of tickets in which a user should be able to apply for tickets of any train and of any class .A limitation is imposed when the number of tickets for which user apply is greater then available seats or no seats are available. If seats are not available then put user transaction in the waiting queue .If the tickets are available then it is issued to the user and it must be updated in the database concurrently. The system generates the receipt for the same .The software takes the current system date and time as the date of issue and calculates the amount to be paid by the use r. It also provide the functionality of cancellation of tickets .If the user wants to cancel the tickets, he/she must enter the details. The system check the records from the database if it is matched with the user entered details, then it cancels the tickets .The system also calculates the amount to be return to the user after deductions. The system must update the database for the same .After that system must check for waiting passenger for that train, if any then these tickets are issued to waiting passenger and update the database. The system displays the details of train of which user enter the name .The information is saved and the corresponding updating take place in the database .In the enquiry, the system should be able to provide information like the availability of tickets of particular train, train schedule. The system should be able to reserve a ticket for a particular user if the tickets are not currently available .The corresponding print outs for each entry (issue/cancel) in the system should be generated.

There should be proper information if the waiting list ticket is confirmed, through mail or via sms. It should tell us as to which all stations it haults and current status of the train should be informed .Security provisions like the login authenticity should be provided. Each user should have a user id and a password. Record of the users of the system should be kept in the log file. Provision should be made for full backup of the system.