# DHARAMSINH DESAI UNIVERSITY, NADIAD

# FACULTY OF TECHNOLOGY

**COMPUTER ENGINEERING**

**B.TECH SEM – 4**

**SUB :** SOFTWARE PROJECT


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# Abstract :

In India train is the preferred mode of transport most widely used by all class of people. The present system needs much advancement in railway communication system in the area of journey reservation, catering, safety and rescue operations. It is pertinent to bring out here the present expectation of passenger should be of interactive mode and user friendly. This paper technically brings out a visible solution for modernising the railway system. By listing the priorities it is seen that there is a need for display of seat layout for passenger selection during reservation. The present static reservation chart displayed on the train lacks updated information for the usage of enroute passengers. Also there is no facility for finding out details such as actual arrival and departure timing for onboard passengers, catering arrangements and rescue operations for intimation and immediate action

# Introduction :

Before booking a ticket, a new user has to Sign Up, after that a user has to do Login. When a user successfully logged in, he/she can able to see train searching page. On this page, he/she has to choose Source and Destination of his/her choice. And then a user will redirect to booking page to book his or her tickets to the train with preferable timings and number of seats.

After that once a tickets will be available, user will have to pay and bookings will be shown to him.

A user can also able to watch about us, this project and feed back page. User may able to log out after whole process.

There can be variation in actual diagrams and diagram which are given below, since it's a first time we are working on web project there may be some changes.

# Software Requirement Specifications:

## Railway Management System

**1. Account management.**

R.1.1: Having account.

R.1.1.1: Login.

Description: Person will login through username and password.

Input: Enter username and password.

Output: You are logged in.

R.1.1.2: Make change in your account. **(This functionality will be available with update.)**

Description: Person can change account detail: password, mobile no. linked with account.

Input: User selection.

Output: Changes have been done.

R.1.2: New user.

Description: System will make new account for user.

Input: Enter details which are required.

Output: account has created.

**2.Searching.**

R.2.1: Train information:

Description: Person can get details of any train by entering PNR No.

Input: Enter PNR No.

Output: Details of train.

R.2.2: Train at particular day:

Description: Person can find the train for any day by giving date and person have to give source and destination.

Input: Enter source, destination and date.

Output: Display all trains on that day as per source and destination

**3. Ticket booking.**

R.3.1: train selection:

R.3.1.1: Quota selection:

Description: A person can select quota type as he/she want from General, Tatkal.

Input: User selection.

Output: option will be selected.

R.3.1.2: Class selection: Description: A Person can select class from SL, 1A, 2A.

Input: User selection.

Output: option will be selected.

R.3.2: Give information.

R.3.2.1: No. of tickets.

Description: Person will give the number how many tickets he/she want to buy.

Input: enter the no. of tickets.

Output: process will be continued.

R.3.2.2: Personal information.

Description: Person have to give these information: name, age, mobile no, email.

Input: Enter information

Output: Information is saved of each person as per no. of tickets.

R.3.3: Confirm tickets:

Description: If person has selected all options which he/she want person will click on book button.

Input: User will click book button

Output: Tickets are confirmed.

**4. Payment:**

R.4.1: Person will get options for payment.

Description: Person can pay the amount by different methods: Google pay, credit card, debit card, paytm.

Input: User selection.

Output: process will be continued.

R.4.2: Confirm payment:

Description: Person will confirm the payment and pay the amount.

Input: click pay button.

Output: your payment is done.

R.4.3: print of tickets.

Description: Person can have soft copy of tickets.

Input: Click on print to download your tickets.

Output: Your tickets have downloaded

**5. Status checking: (This functionality will be available with update.)**

R.5.1: Check current status:

Description: Person can check whether his ticket(s) is/are confirmed or not.

Input: User Selection.

Output: showing status.

**6. Cancelling and Refund. (This functionality will be available with update.)**

R.6.1: Ticket cancelling:

Description: Person can cancel his/her ticket if there is less chances of ticket will be confirmed.

Input: User selection.

Output: your ticket is cancelled.

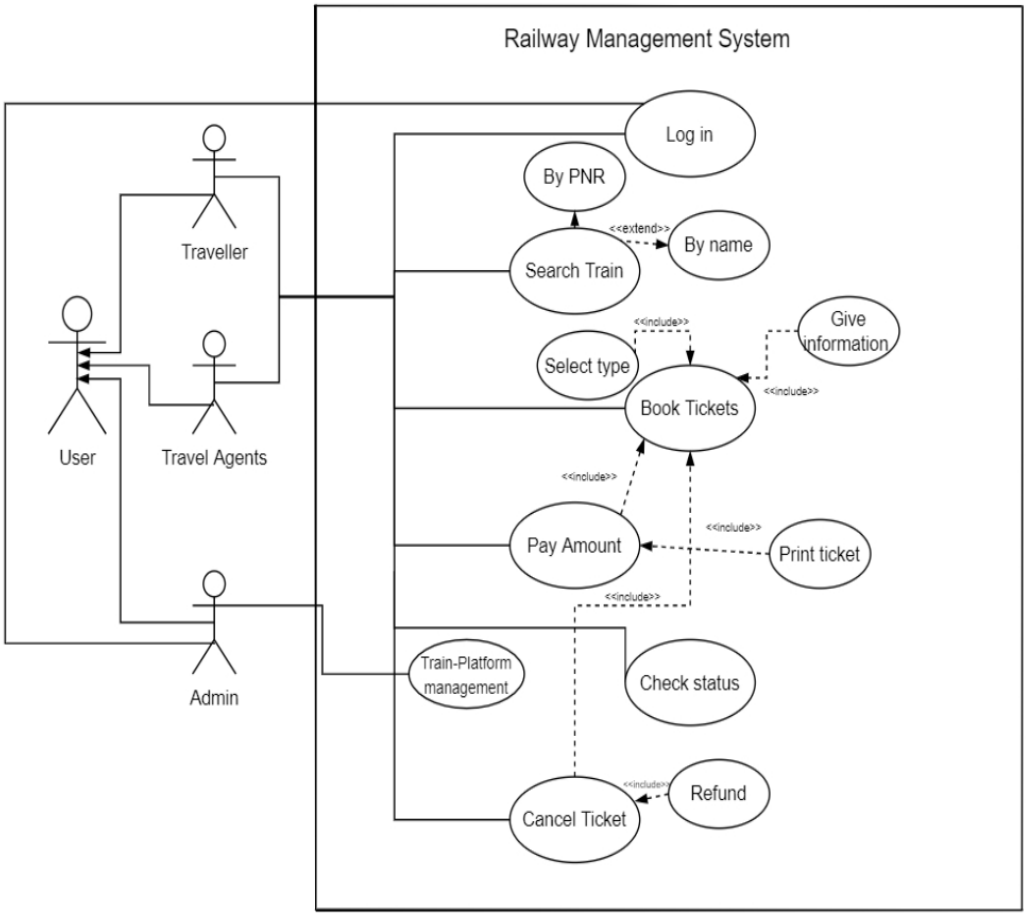
R.6.2: Refund

Description: If person want to cancel tickets then he/she will get refund 60% of payment.

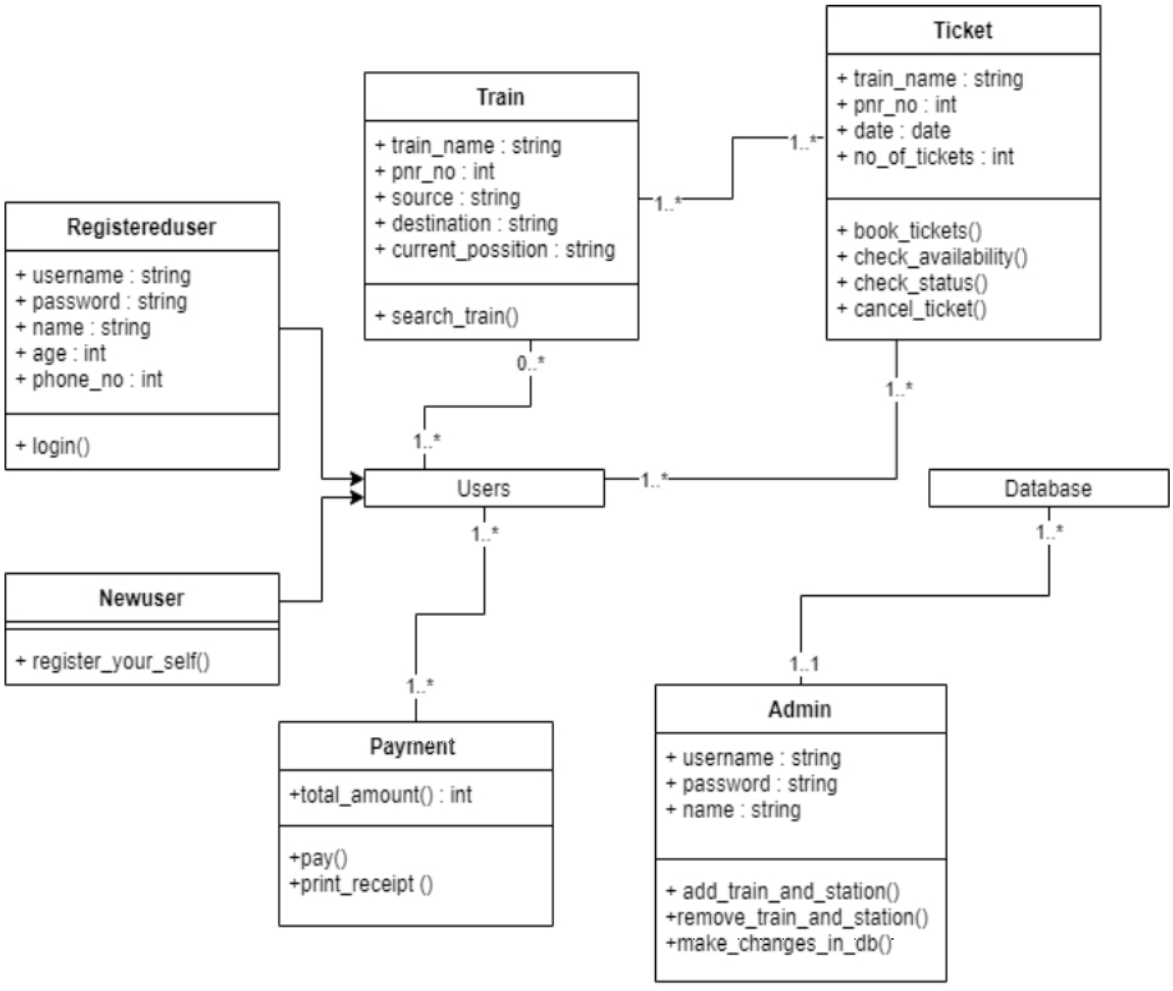
Input: User Selection. Output: Your ticket

# Design :

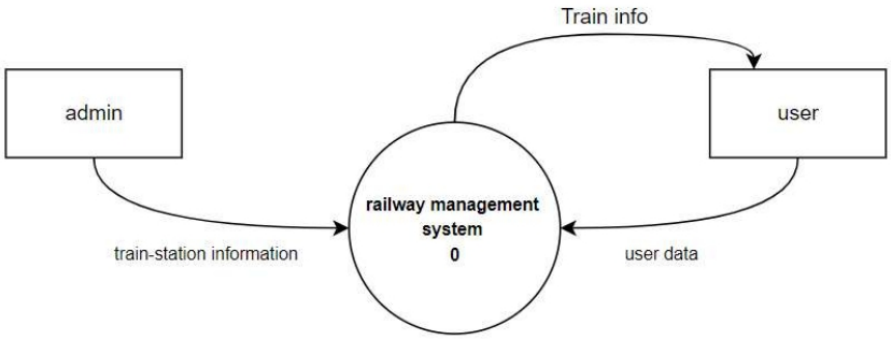
## Use Case Diagram



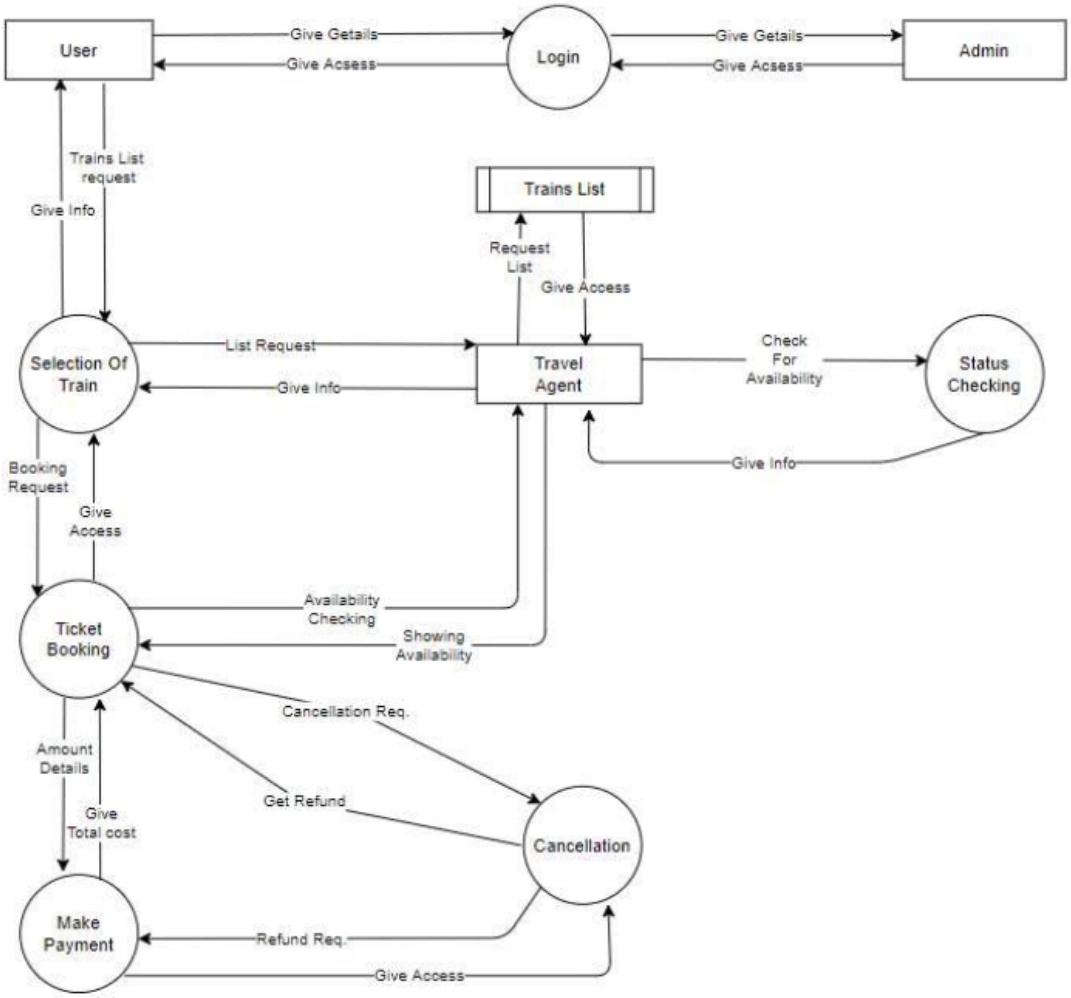
## Class Diagram



# Data Flow Diagram



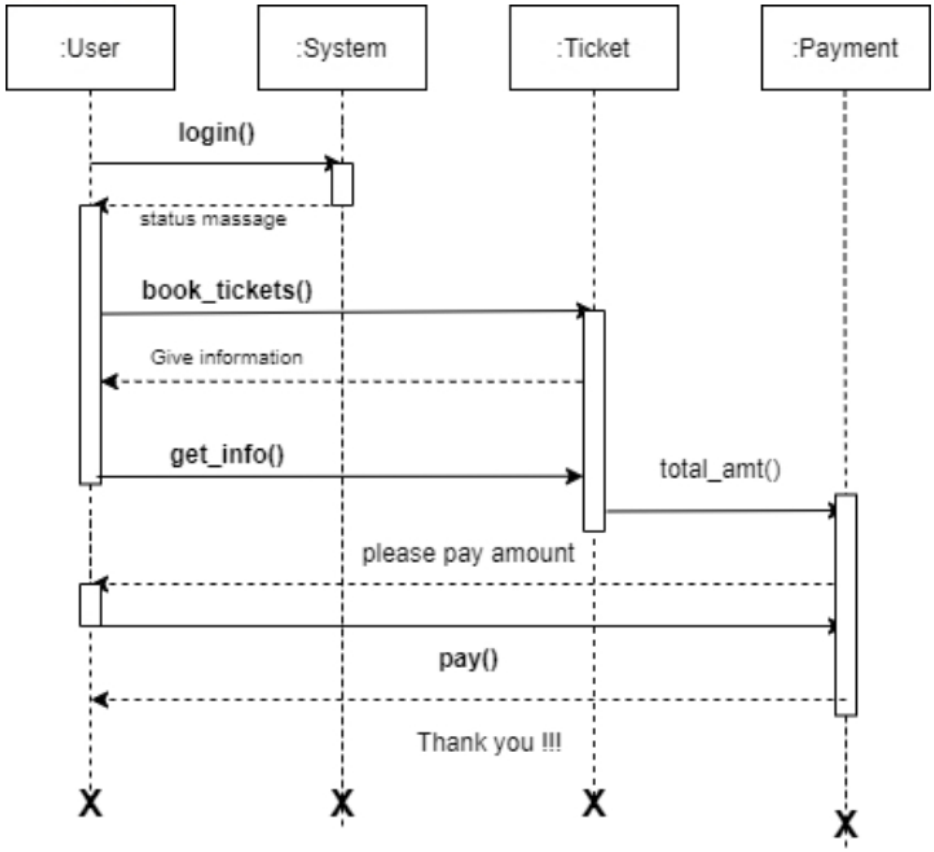

LEVEL 0


User
Give Getails
Give Acsess
Login
Give Getails
Give Acsess
Admin
Trains List request
Give Info
Trains List
Request List
Give Access
Selection Of Train
List Request
Give Info
Travel Agent
Check For Availability
Status Checking
Give Info
Booking Request
Give Access
Availability Checking
Showing Availability
Ticket Booking
Cancellation Req.
Amount Details
Get Refund
Give Total cost
Cancellation
Make Payment
Refund Req.
Give Access

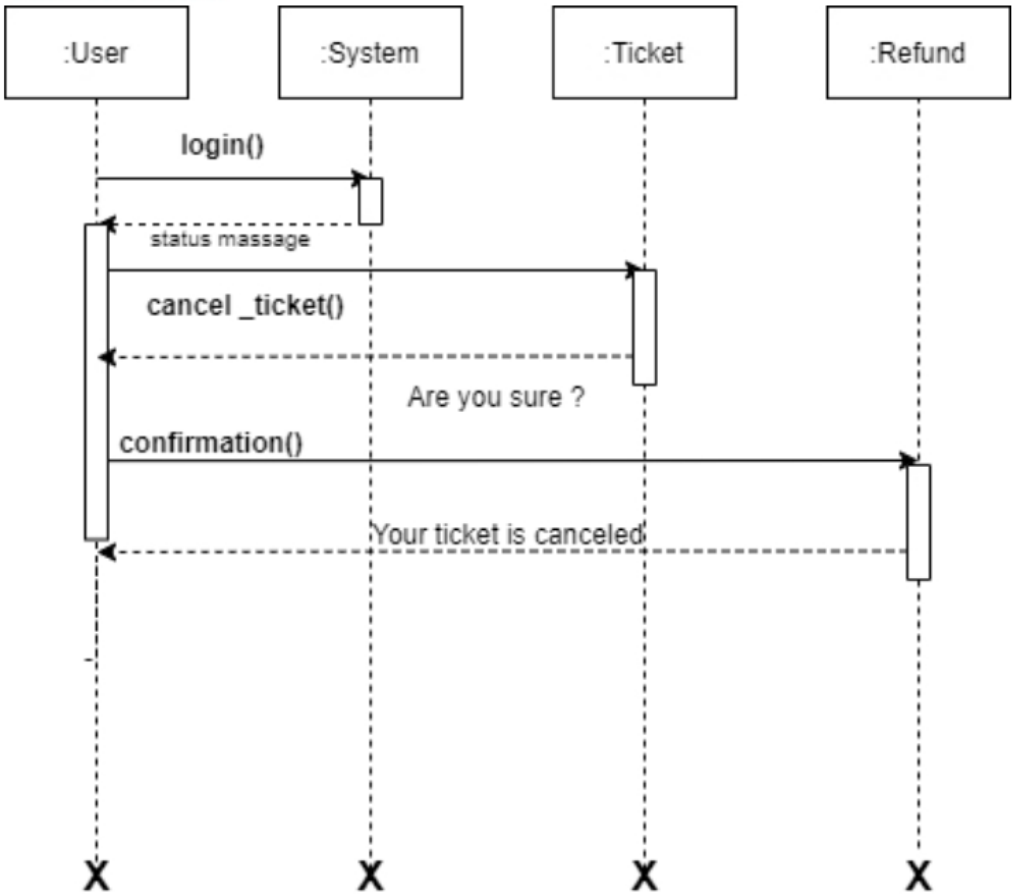
**LEVEL 1**

## Sequence Diagram:

### 1) Book ticket:

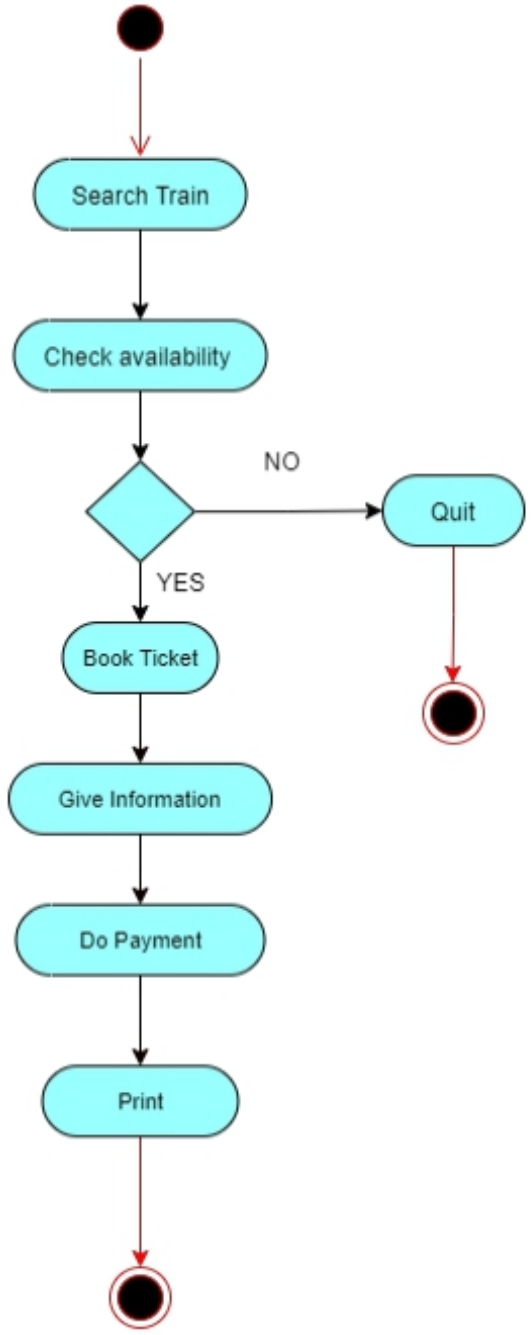


## 2) Cancel Ticket:

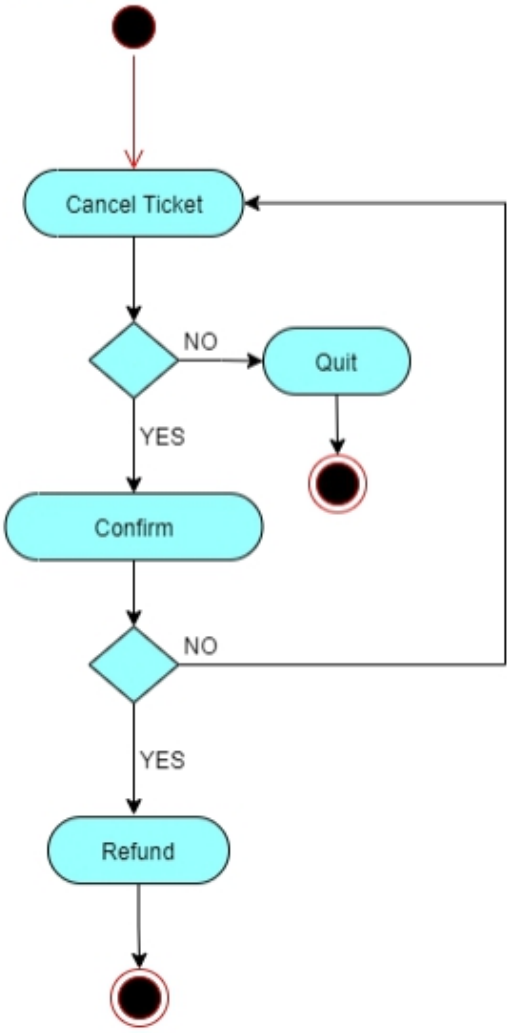


## Activity Diagram:

### 1) Book Ticket:



2) **Cancel Ticket:**



# Implementation Details :

## 1. Modules :

a) Register – User can register himself by Signing Up. User's data will be stored in database.

b) Home – User will redirect to searching page.

c) Login – After Sign Up process , user can enter into website by Login.

d) Display – User will able to enter source and destination information to database.

e) Info – User will able to enter his details like name, age, number of tickets and will able to book tickets.

f) Seats – this is for admin. Admin can set tickets no.

g) Feedback – For giving feedback

h) Log out – For user to close this site.

## 2. Major functionalities :

a) Searching :

A user will able to search Trains between two cities by entering data (Source and Destination) and Date of journey.

b) Booking :

After entering source and destination, he/she will be redirected to bookings page and then he will enter data.

c) Display ticket :

Once a user will confirm, then a user will able to see booking information and have all data regarding his journey.

## Conclusion :

With the help of Railway management site, it is easy to book tickets of Trains between two cities. User friendly site always helps user to find a good train with two classes. He/She can able to give feed back of services. We can add more functionalities with newer updates.

## Limitations :

1) User will find less number of Trains between two cities.

2) There is only once in a week that user can book tickets of same source and destination.

3) There will no option to books all tickets.

4) There is no refund if user can’t able to cancel tickets.

5) Site looks too simple.

## Future Extensions:

1) More trains will be added.
2) There will be option for refunds.
3) User will get some discount on booking of 4 tickets at once.
4) Feed back system will improve properly.

# Bibliography :

References/resources used for developing project:

- Django Docs
- Geeksforgeeks
- Youtube
- W3schools
- Stackoverflow