AIGORITHM

Public User Operation

1. User Registration:

Input: User provides name, email, password
> Validate user input
> Check if the email is registered
> If not, insert user data into the ~~imp~~ user_table in the database
> Navigate to orginal page

2. User Login:

Input: User provides email & password
> validate user input
> Check if the provided email & password match a record user-signup table
> If the match is found, allow access the public section
> If not be in the same page

3. Fetch Railway Crossing Details

> Query the database to retrive all railway crossing details
> Display the list of railway crossing on the Frontend

4. Display crossing status

> For each railway crossing, check its status
> Display the status along with crossing details

5. Search Railway Crossings

   Input : user provides a search query

   > Implement a search function to query the database for crossing matching the search query

   > Display the search results on Browser

6. Mark crossing as favorite

   Input : user select a railway crossing

   > Implement a mechanism to associate a user with favorite crossing

   > As soon he marks or click it should store in the Database

   > Display the list of favorite if he/she needed on browser

Admin/Government User Operation

1. Admin Login

   Input : Administrator provides a predefined email & password

   > check if the provided credentials match the predefined admin account

   > If matched, allow access to the Orginal section

   > If not be in the same page

2. Add Railway Crossing

Input: Admin provides crossing details
such as name, address, landmark, schedules
person in charge

> Create an HTML form to input crossing details
> Implement a servlet to handle the form submission
> Insert the new crossing data into the railway-crossing table in the database

3. Delete Railway Crossing

Input: Admin selects a crossing for deletion

> Admin can now update or delete the list
> He have to provide correct id to update

4. Search for specific Crossing

Input: Admin provides a search query

> Implement a search Function to query the database
> Show the result in the same page browser only

5. Navigation Option

> admin can switch to another page i.c
he/she can logout
> along with this he can Go to home page also