## **Toll Management Application - Interview Task**

The toll management application provides a user interface for managing tollgates.

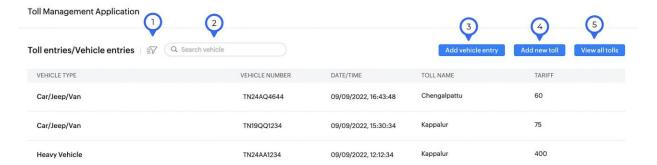
This application has 4 main pages: Add Toll page, Add Vehicle Page, Toll list page and Vehicle Logs page.

Below are the following operations within the application:

- ✓ Adding a new toll
- ✓ Adding a new vehicle entry
- ✓ Viewing toll list
- ✓ Viewing added vehicle logs
- ✓ Searching vehicles by vehicle number
- ✓ Filtering vehicles by toll names

In the upcoming pages, a brief explanation about each page has been given.

Please read the instructions given in the document completely before starting thetask.

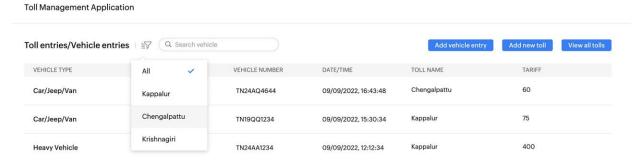


**Vehicles List Page - Home Page(image 1)** 

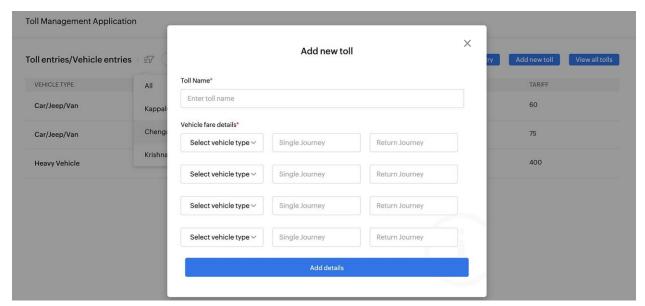
- This page acts as the home page.
- The Vehicle List page displays a tabular view of vehicle logs for all available toll locations.

## Following functionalities are to be addressed

- 1. Filter entries by toll name.
- 2. Search vehicle by vehicle number
- 3. Adding a new vehicle option
- 4. Adding a new toll option
- 5. View all tolls option To view the toll locations added by the user.

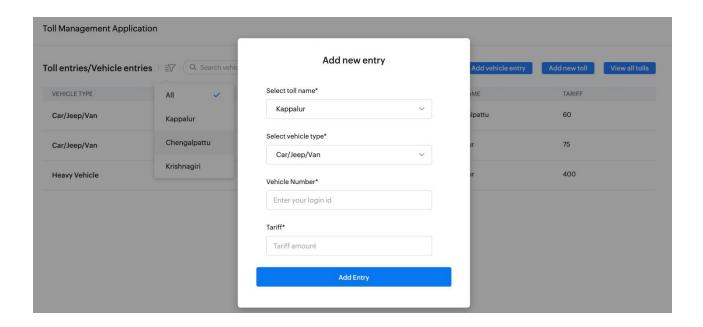


Filter vehicle logs by toll name(image 2)



Add New Toll(image 3)

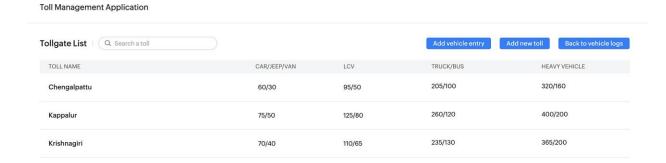
- On clicking 'Add new toll', a dialog box should appear, which will allow the adminto add new toll locations.
- For every new toll location, a toll name and a vehicle fare list are required.
- For every vehicle fare entry, there must be a vehicle type, single journey rate andreturn journey rate.
- Required vehicle types:
  - o Car/Jeep/Van
  - o LCV
  - Truck/Bus
  - Heavy vehicle
- Single journey Number
- Return journey Number



Add New Vehicle Entry (image 4)

On clicking "Add vehicle entry", a dialog should be created with below fields

- **Select Vehicle Type(type dropdown)**: A dropdown that contains all types of vehicles.
- Vehicle Number(type text) : Allows vehicle number as alphanumeric
- **Tariff(type text: disabled)**: The tariff amount should be shown automatically on selecting a vehicle type and vehicle number.
- If a vehicle returns to the same toll within **1 hour**, discounted toll rate (ie., Return journey rate) should be applied for that toll entry alone. Else single journey rate will be taken for return journey tariff calculation.
- Add Entry: Adds the entry to the toll list only after all fields are filled.



**View Toll List Page(Image 5)** 

On clicking "View all tolls" (refer image1), the above page should appear.

- This page should have the following functionalities:
  - Searching a toll by toll name
  - Deleting a toll.
- For each toll, the fare amount for single and return journey for all types of vehicles should be shown.
- Eg: Car/Jeep/Van 60/30. For single journey: Rs.60 and return journey: Rs.30.
- Search a toll option should show 'Toll not found' in the case of no such tolls available.

## **Instructions:**

- 1. We are more concerned with the functionality and UX cases rather than the UIpart.
- 2. Avoid using third party libraries for designing UI like Bootstrap.
- 3. Icons can be downloaded from fontawesome site. In case no appropriate iconsare found then any similar icons can be used.
- 4. Vue/React/Vanilla JS can be used to implement this task ( No third partylibraries except store/router should be used ).
- 5. Need not fetch data from backend. All data and applied filters should be persisted in browser storage for faster access.
- 6. Functionalities/Components should be reused across the task wherever possible
- 7. UX cases should be brought out with own creativity.
- 8. For further clarification, do contact

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