

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 the task.

Toll Management Application

1 2 3 4 5

Toll entries/Vehicle entries | 

[Add vehicle entry](#) [Add new toll](#) [View all tolls](#)

VEHICLE TYPE	VEHICLE NUMBER	DATE/TIME	TOLL NAME	TARIFF
Car/Jeep/Van	TN24AQ4644	09/09/2022, 16:43:48	Chengalpattu	60
Car/Jeep/Van	TN19QQ1234	09/09/2022, 15:30:34	Kappalur	75
Heavy Vehicle	TN24AA1234	09/09/2022, 12:12:34	Kappalur	400


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.

Toll Management Application

Toll entries/Vehicle entries | 

[Add vehicle entry](#) [Add new toll](#) [View all tolls](#)

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Filter vehicle logs by toll name(image 2)

Toll Management Application

Toll entries/Vehicle entries

VEHICLE TYPE

Car/Jeep/Van

Car/Jeep/Van

Heavy Vehicle

All

Kappal

Cheng

Krishna

ry

Add new toll

View all tolls

TARIFF

60

75

400

Add new toll

Toll Name*

Enter toll name

Vehicle fare details*

Select vehicle type ▾

Single Journey

Return Journey

Select vehicle type ▾

Single Journey

Return Journey

Select vehicle type ▾

Single Journey

Return Journey

Select vehicle type ▾

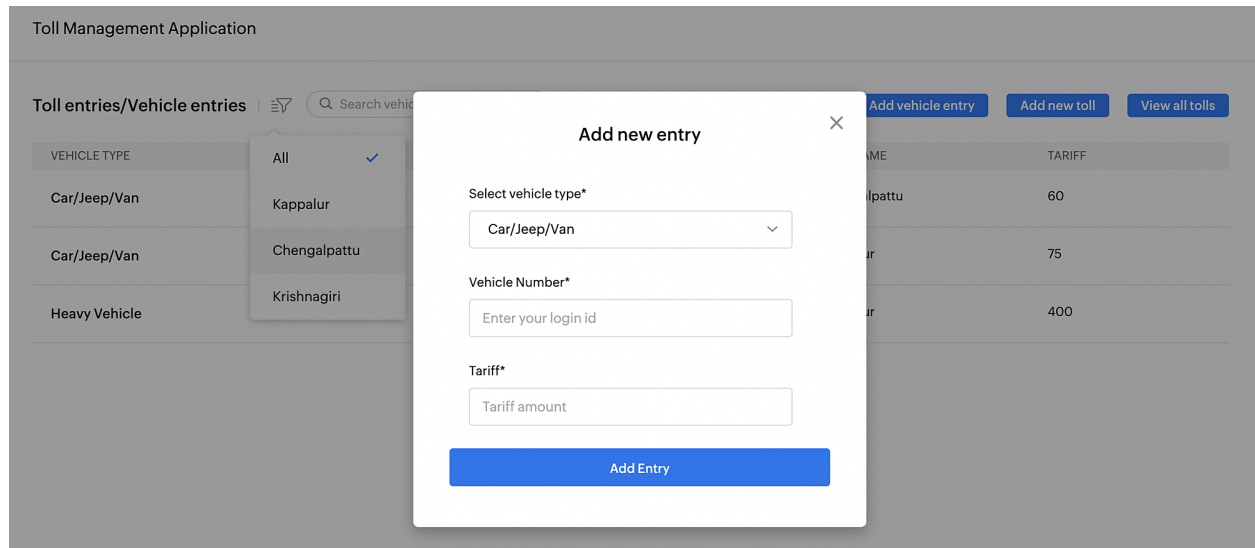
Single Journey

Return Journey

Add details

Add New Toll(image 3)

- On clicking '**Add new toll**', a dialog box should appear, which will allow the admin to 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 and return journey rate.
- Required vehicle types :
 - **Car/Jeep/Van**
 - **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.

Tollgate List <input type="text" value="Search a toll"/>		Add vehicle entry Add new toll Back to vehicle logs		
TOLL NAME	CAR/JEEP/VAN	LCV	TRUCK/BUS	HEAVY VEHICLE
Chengalpattu	60/30	95/50	205/100	320/160
Kappalur	75/50	125/80	260/120	400/200
Krishnagiri	70/40	110/65	235/130	365/200

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 UI part.
2. Avoid using third party libraries for designing UI like Bootstrap.
3. Icons can be downloaded from fontawesome site. In case no appropriate icons are found then any similar icons can be used.
4. Vue/React/Vanilla JS can be used to implement this task (No third party libraries 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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