

## Assignment

### Instructions:

- Build an application using HTML, CSS, Javascript, or even you can use React.js.
- The application should be able to create, display, update, delete Scenario and Vehicle, a scenario can have multiple vehicles, and vehicles should be able move when user click a button based on the scenario and vehicles parameters.
- The **scenario** should have following fields:
  - Scenario id
  - Scenario name
  - Time
- The **Vehicle** should have following fields:
  - Vehicle id
  - Vehicle name
  - Initial Position X
  - Initial Position Y
  - Speed
  - Direction (can have only Towards, Backwards, Upwards and Downwards).
- For storing data use **localStorage**.
- You have to create sidebar like displayed in the below images.
- Inside **Home page** user can be able select the scenario whichever scenarios he has created and start simulation, when user click **start simulation** vehicles should start moving based to the direction and speed, till the scenario time, if the vehicles is going outside the container then vehicles should hide.
- While adding the Vehicle do proper validation like user should not be able to add the positions greater than the Home page's graph container size.
- After Completion of this project you have upload it to your github account's public repository, and write a proper **README.MD** file explaining how to install your project and what you have done in this project.

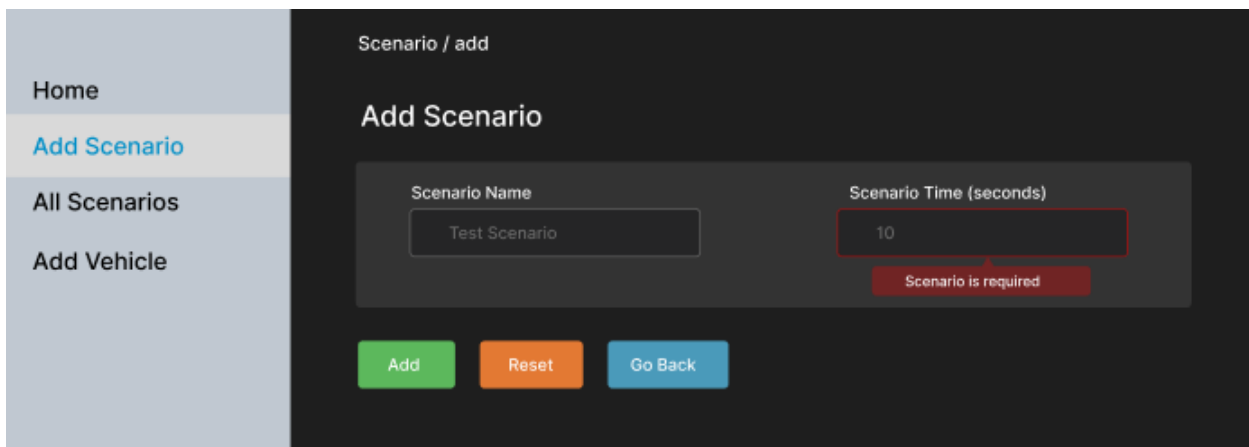


Figure 1: Add Scenario Page

Home  
Add Scenario  
All Scenarios  
Add Vehicle

### All Scenarios

New Scenario Add Vehicle Delete All

Scenario Id	Scenario Name	Scenario Time	Number of Vehicles	Add Vehicle	Edit	Delete
1	Test Scenario	2s	1	+		
2	My Scenario	10s	3	+		
3	Scenario ABC	12s	0	+		

Figure 2: All Scenarios Page

Home  
Add Scenario  
All Scenarios  
Add Vehicle

### Vehicle / add

#### Add Vehicle

Scenarios List  
Select Scenario

Vehicle Name  
Target abc

Speed  
2

Position X  
1000  
Position X should not be > 800 and < 0

Position Y  
20

Direction  
Select Direction  
Towards  
Backwards  
Upwards  
Downwards

Add Reset Go Back

Figure 3: Add Vehicle Page

Home  
Add Scenario  
All Scenarios  
Add Vehicle

### Scenario

Test Scenario

Test Scenario My Scenario

Vehicle Id	Vehicle Name	Position X	Position Y	Speed	Direction	Edit	Delete
1	Bus	30	215	3	Towards		
2	Car	500	500	5	Upwards		

Start Simulation Stop Simulation

Figure 4: Home Page