# Software Development Assignment

## Problem Statement -1

1. post "/load"
payload:
```
{
        "loadingPoint": "delhi",
        "unloadingPoint": "jaipur",
        "productType": "chemicals",
        "truckType": "canter",
        "noOfTrucks": "1",
        "weight": "100",
        optional:"comment": "",
        "shipperId" : "shipper:<UUID>",
        "Date" : "dd-mm-yyyy"

}
```
Response:loads details added successfully


 2. GET "/load"

Query params - (shipperId)

Response:list of loads with this shipperId

1.  GET "load/{loadId}"
2.  PUT "load/{loadId}"
```
    {
            "loadingPoint": "alwar",
            "unloadingPoint": "jaipur",
            "productType": "chemicals",
            "truckType": "canter",
            "noOfTrucks": "1",
            "weight": "100",
             "comment": "",
            "Date" : "dd-mm-yyyy"
    }
```

3.  DELETE "load/{loadId}"

**Java Springboot Code**


**{* Load Class } :**


```java
package com.logistics.entity;

import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;

@Entity
@Data
@NoArgsConstructor
@AllArgsConstructor

public class Load {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id; // Unique Load ID

    private String loadingPoint;
    private String unloadingPoint;
    private String productType;
    private String truckType;
    private int noOfTrucks;
    private int weight;
    private String comment;
    private String shipperId;
    private String date;
}
```

**{\* Controller Class } :**

```java
package com.logistics.controller;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;

import java.util.*;

@RestController
@RequestMapping("/load")
public class LoadController {

  @Autowired
  private LoadService loadService;

  @PostMapping
  public String addLoad(@RequestBody Load load) {              // For adding new load //
      loadService.addLoad(load);
      return "Load details added successfully";
  }

  @GetMapping
  public List<Load> getLoadsByShipperId(@RequestParam String shipperId) {
      return loadService.getLoadsByShipperId(shipperId);
  }
                                                              // To access load //
  @GetMapping("/{loadId}")
  public Optional<Load> getLoadById(@PathVariable Long loadId) {
      return loadService.getLoadById(loadId);
  }

  @PutMapping("/{loadId}")
  public Load updateLoad(@PathVariable Long loadId, @RequestBody Load
updatedLoad) {                                               // Insert load //
      return loadService.updateLoad(loadId, updatedLoad);
  }

  @DeleteMapping("/{loadId}")
  public String deleteLoad(@PathVariable Long loadId) {
      loadService.deleteLoad(loadId);                         // To delete load //
      return "Load deleted successfully";
  }
}
```