**Week 13 Day 1 Lab Coding Challenges**

# **Question 1:**

You are working as a developer in a MultiNational Car Company and developing a java project.

Below are the Project Details.

The project is to develop a web application where you can see the various car models, their specifications and price. There will be more details disclosed going further into the project.

As we know the project is to show various car models in a web application, we need to first see the prototype. Here are the tasks that you need to get on first.

1. As there will be various car models, pick 3 models where all of them should give the specifications of car (specs are **model\_name, length, width, height, groundClearence**).
2. We also need to display the Car price.
3. We also need to display the expected delivery Date if the order is placed today (90 days as default).

You are asked to use IoC (Spring IoC) to encapsulate and manage the classes to print all the model details on the website in the console. And you'll be configuring the components and their dependencies using XML files.

*Note: The car model details need to be saved in its own file.*

| **Interface:** Car |
| --- |
| **Method:** getSpecs() |
| **Method:** getPrize() |
| **Method:** deliveryDate() |

| Class: XUV700 |
| --- |
| **Method:** getSpecs() |
| **Method:** getPrize() |
| **Method:** deliveryDate() |

| Class: XUV300 |
| --- |
| **Method:** getSpecs() |
| **Method:** getPrize() |
| **Method:** deliveryDate() |

| Class: Thar |
| --- |
| **Method:** getSpecs() |
| **Method:** getPrize() |
| **Method:** deliveryDate() |

| **Driver Class:** MahindraMotors |
| --- |
| **Method:** getSpecs() |
| **Method:** getPrize() |
| **Method:** deliveryDate() |

# Question 2: (Optional)

You are working as a Freelancer and you develop Full Stack Java Projects for your clients. One of your clients has sent a mail to you with the below Project Details.

The project is to develop a web application where one can take customers' food orders digitally. The place order will go to the chef in the kitchen directly.

Upon discussion with the client you have taken up the project for an undisclosed 5 digit sum.

Below are the tasks you decided to start with.

1. As any order at a restaurant contains **Starters, Main Courses and Desserts**, you want to use IoC (Spring IoC) to encapsulate and manage the classes to show the options for every course.
2. Take user input for and then print order in the console as of now.
3. You'll be configuring the components and their dependencies using XML files.

*Note: The various course details need to be saved in its own file.*

| **Interface:** CustomFoods |
| --- |
| **Method:** getFood() |

| Class: Starters |
| --- |
| **Method:** getFood() |

| Class: XUV300 |
| --- |
| **Method:** getFood() |

| Class: Thar |
| --- |
| **Method:** getFood() |

| **Driver Class:** MyApp |
| --- |
| **ArrayList:** finalOrder |

**Expected Output**

