## **Capstone Projects: JavaScript**

**Capstone Projects: Introduction** 

### **Capstone Projects:**

Capstone project implementation enables you to enrich your coding skill in JavaScript by solving projects with various requirements. Solve the capstone projects included in this module which helps you to understand and well-versed with the concepts.

## **Manufacturing Domain: AutoMob-Mechanic App**

**AutoMob-Mechanic** is a web application for an Automobile service/repair company. The application provides different services to get the car repaired or serviced. The user can book a service on their convenient date and then the company representatives will take care of everything on their own.

### Following are the user stories:

- home: Displays information about the company.
- login: Consists of a simple form, which can be used to validate username and password and populate appropriate messages on the screen.
- reports: Displays the booking information of the customers.
- services: Displays services provided by the company.
- preventive maintenance service: Displays about the preventive maintenance services.
- body repair service: Displays about the body repair services.
- car care service: Displays about the car care services.
- booking: Consists of a form that is used to book and schedule a service.
- booking-success: Displays confirmation message on booking.
- logout: Logout from the application.

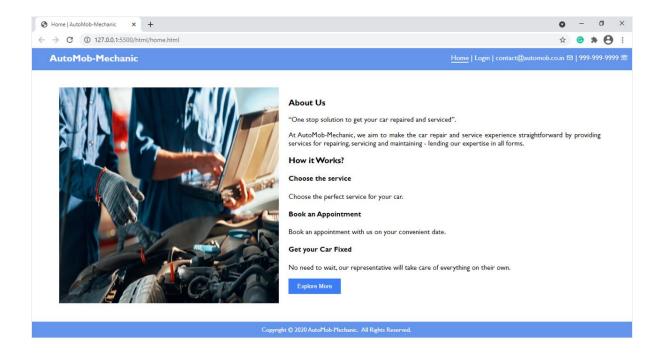
### **Softwares Required:**

- Editor (Visual Studio Code IDE recommended)
- Browser (Google Chrome recommended)

**Note:** Follow the steps mentioned at the beginning of the course to install the required software.

#### 1. home.html

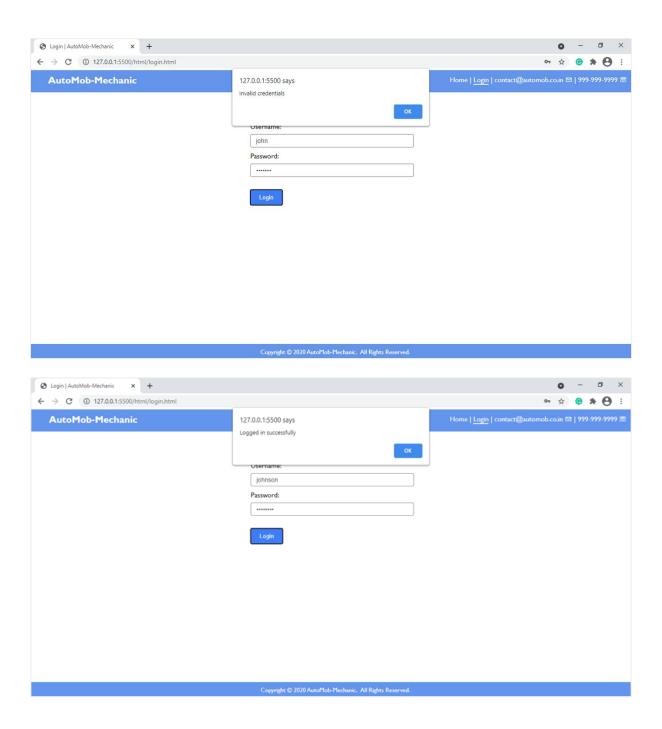
This page renders the information about the company. It has a 'Explore More' button when clicked should take the user to services.html.



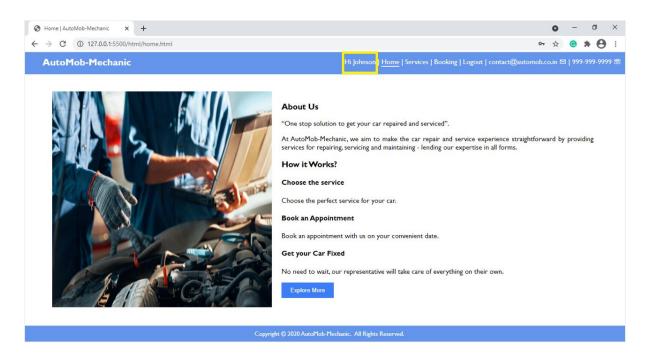
Hint: onclick event, location.assign()

## 2. login.html

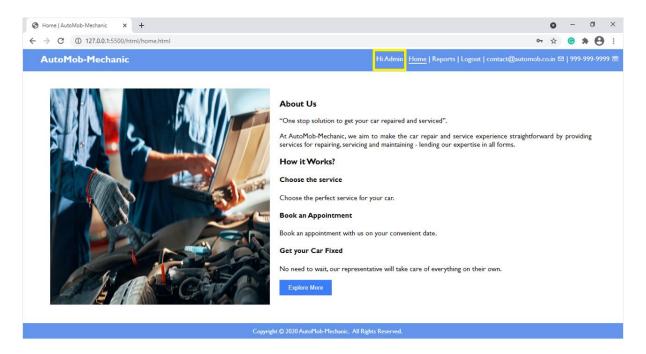
This page renders a login form. It accepts username and password from the user and these inputs are validated with the values in a JSON array. Upon validation, the browser will display appropriate messages. If entered correct credentials, the user should be navigated to the home page.



After successful login, the name of the user should be displayed in the navbar as shown below. Also, the services, booking, and logout menu should be visible in the navbar.



If the user is logged in as admin, the navbar of the home page should be displayed as below. Also, the reports and logout menu should be visible in the navbar.



**Hint:** fetch() to fetch the JSON array from the users.json, onclick event, location.assign(), alert(), sessionStorage, DOM methods and switch case to display navbar based on different user roles.

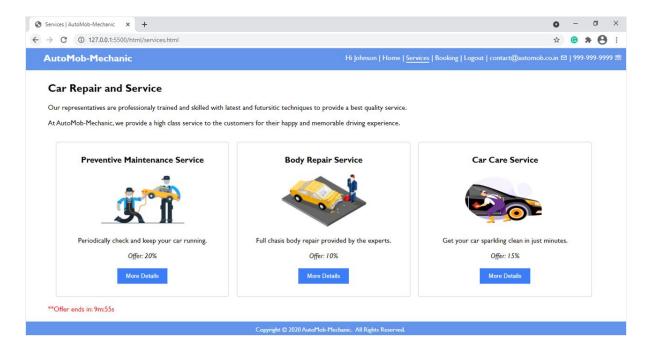
### 3. reports.html

This page displays service booking information of the customers and can be accessed only if logged in to the application as an admin.



#### 4. services.html:

This page displays the list of services provided by the company. Each service has a "More Details" button. On click of this button, it will take the user to the appropriate service page. It also displays a countdown timer of 10 mins which shows the offer expiration time.

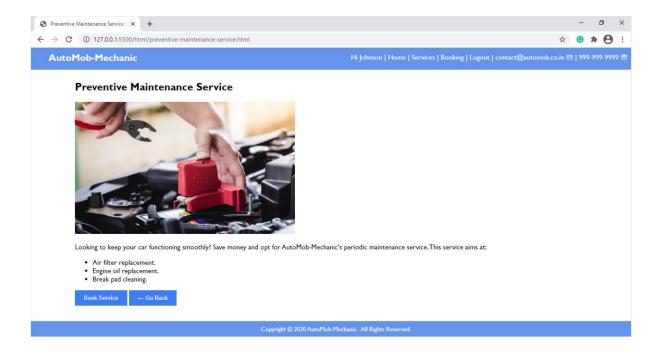


Hint: onclick event, location.assign(), setInterval(), Date object methods

### 5. preventive-maintenance-service.html:

This page renders the details about preventive maintenance service. It has a "Book Service" button when clicked takes the user to booking.html. In booking.html, the 'Preventive maintenance service' option should be selected for the drop-down 'Select service' by default.

This page also has a "Go Back" button which should navigate the user to the previous page.



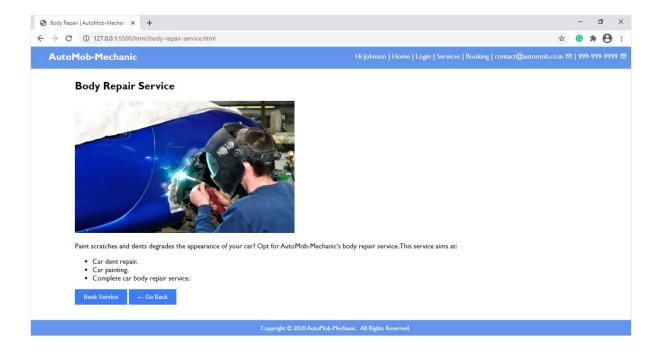
**Hint:** onclick event, location localStorage.setItem()

location.assign(), history.url(),

## 6. body-repair-service.html:

This page renders the details about body repair service. It has a "Book Service" button when clicked take the user to booking.html. In booking.html, the 'Body Repair Service' option should be selected for the drop-down 'Select service' by default.

This page also has a "Go Back" button which should navigate the user to the previous page.

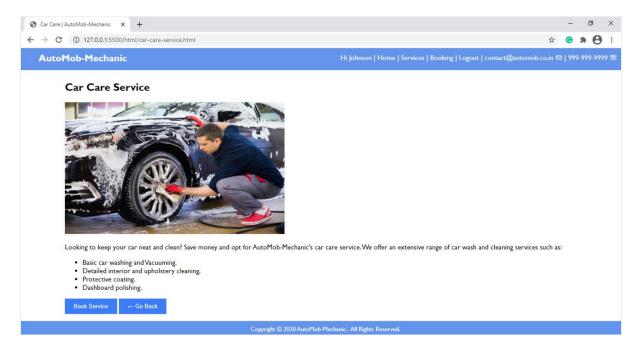


**Hint:** onclick event, location.assign(), history.url(), localStorage.setItem()

#### 7. car-care-service.html

This page renders the details about car care service. It has a "Book Service" button when clicked take the user to booking.html. In booking.html, the 'Car Care Service' option should be selected for the drop-down 'Select service' by default.

This page also has a "Go Back" button which should navigate the user to the previous page.



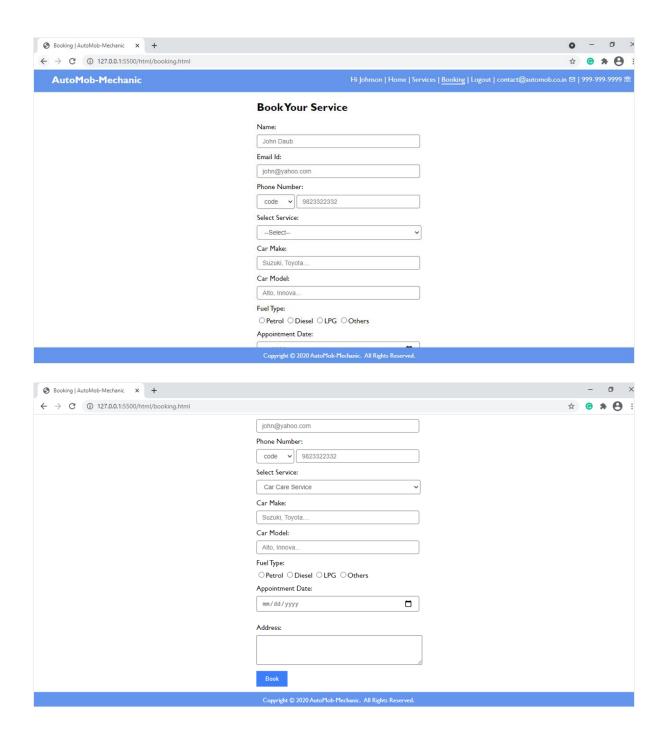
**Hint:** onclick event, location.assign(), history.url(), localStorage.setItem()

# 8. booking.html:

This page displays a booking form that takes various inputs from the user. The form is submitted to booking-success.html using HTTP method POST when the user clicks on the "Book" button.

In booking.html, an appropriate option should be selected for the drop-down 'Select service' by default depending upon the service chosen by the user.

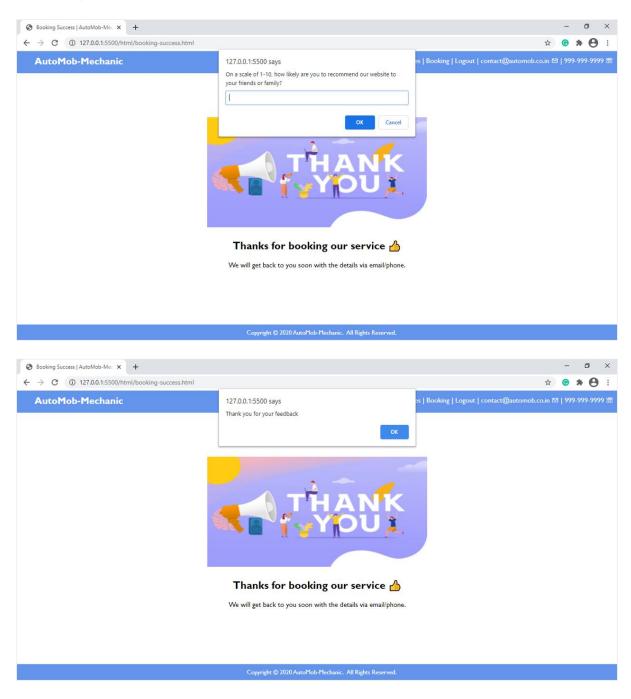
The appointment date entered by the user should be validated. If the user enters a past date, it should display an error message.



Hint: oninput event, localStorage.getItem(), DOM properties

### 9. booking-success.html

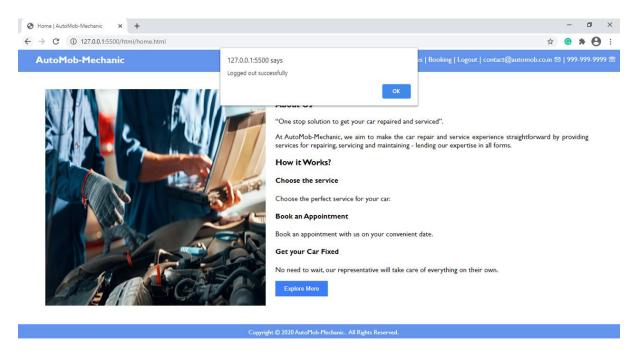
This page will display a message once the booking is done. After a minute, the user will be prompted to provide a rating. Once the user provides the rating, the browser should display an appropriate message.



Hint: setTimeout(), prompt(), alert()

## 10. logout

After clicking on logout, the browser should display a pop-up that says, 'Logged out successfully' and it should clear the sessionStorage and navigate the user to home.html.



Hint: onclick event, sessionStorage.clear(), alert(), location.assign()

Refer to the below rubric for getting the project evaluated by your SMEs from the project or account.

Concepts	Marks
Event Handling	5
Browser Object Model	20
Functions	10
Built-in Global objects	5
Fetch API	5
Linting	5