

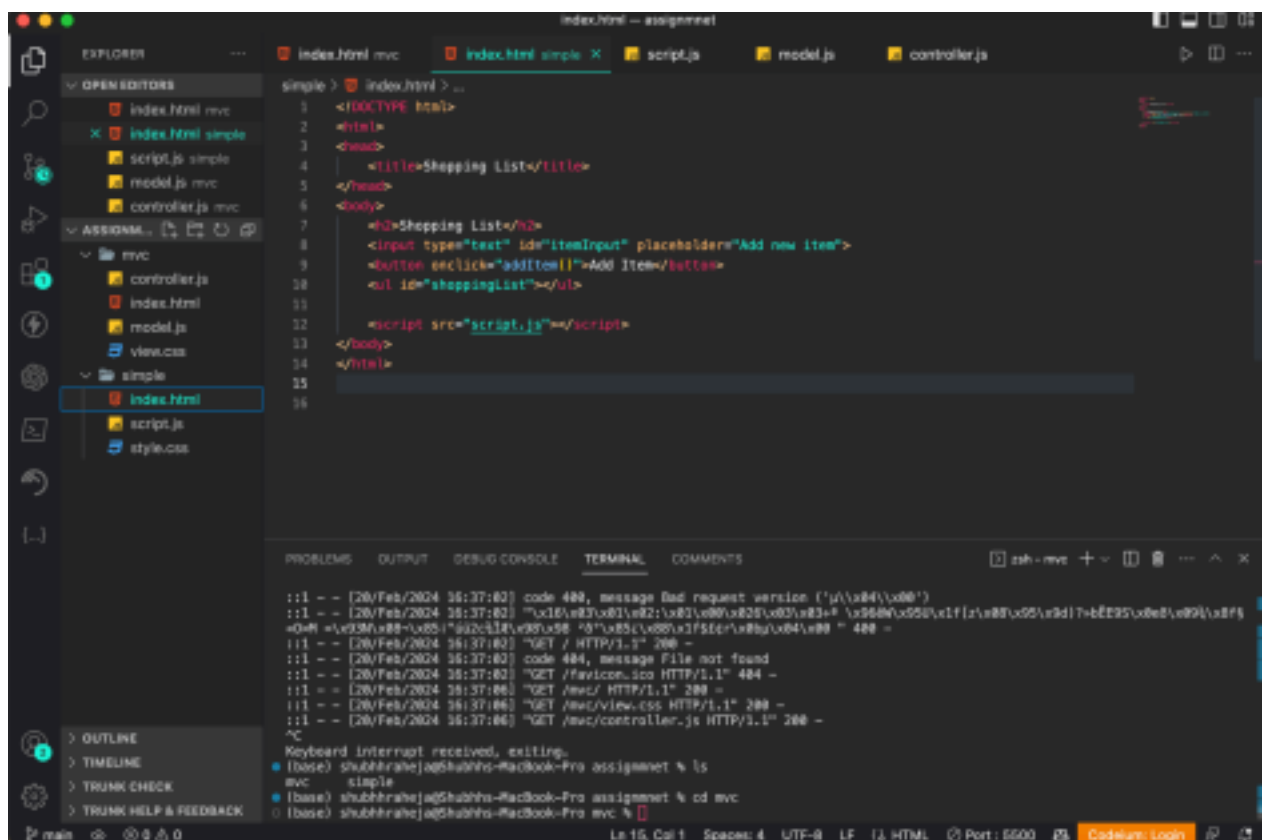
# Web technology lab 6

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T1. Develop a single page application for Shopping List. First develop a simple prototype using html and javascript. Gradually develop a MVC based prototype.

## SIMPLE APP

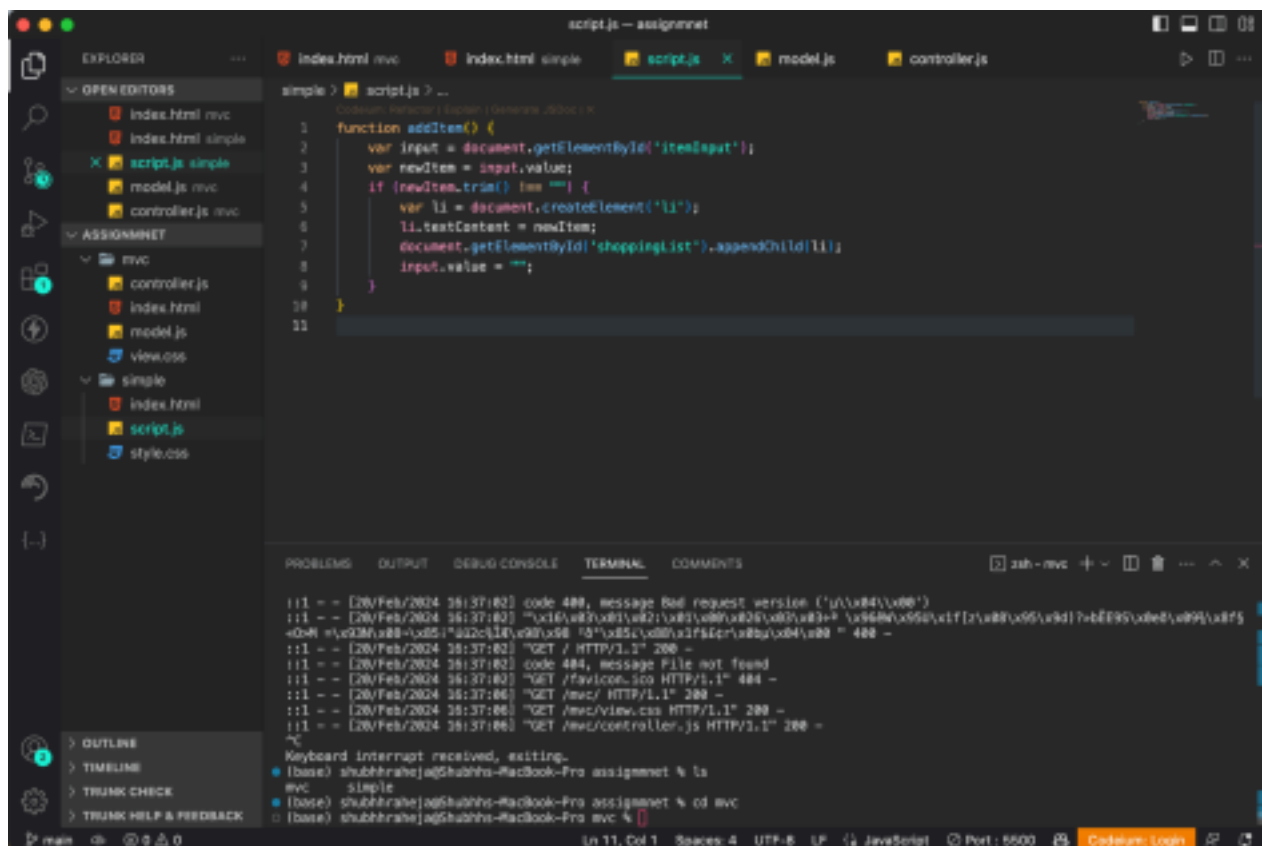


The screenshot shows a web development IDE with a dark theme. The Explorer panel on the left shows a project structure with folders for 'mvc' and 'simple', and files for 'index.html', 'script.js', 'model.js', and 'controller.js'. The main editor displays the 'index.html' file, which contains the following HTML code:

```
<!DOCTYPE html>
<html>
<head>
<title>Shopping List</title>
</head>
<body>
<div>Shopping List</div>
<input type="text" id="itemInput" placeholder="Add new item">
<button onclick="addItem()">Add Item</button>
<ul id="shoppingList"></ul>
<script src="script.js"></script>
</body>
</html>
```

The bottom panel shows the terminal output, which includes the following commands and their results:

```
La 15, Col 1, Spaces: 4, UTF-8, LF, HTML, Port: 5600, Codemirror: Login
```



## Shopping List

- tea
- milk
- clothes

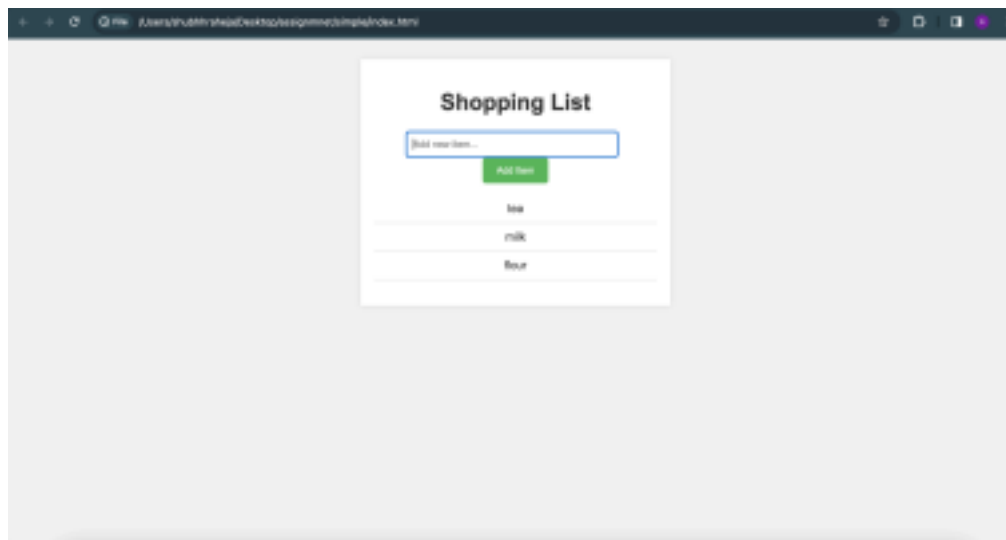
## Shopping List

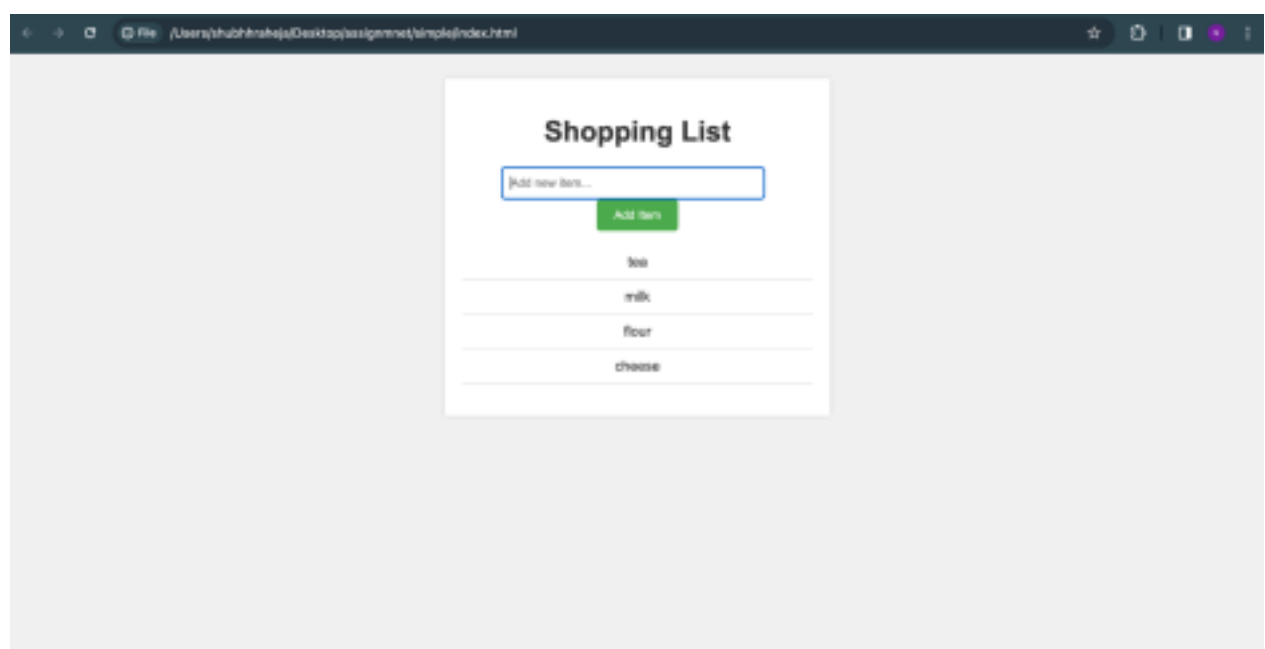
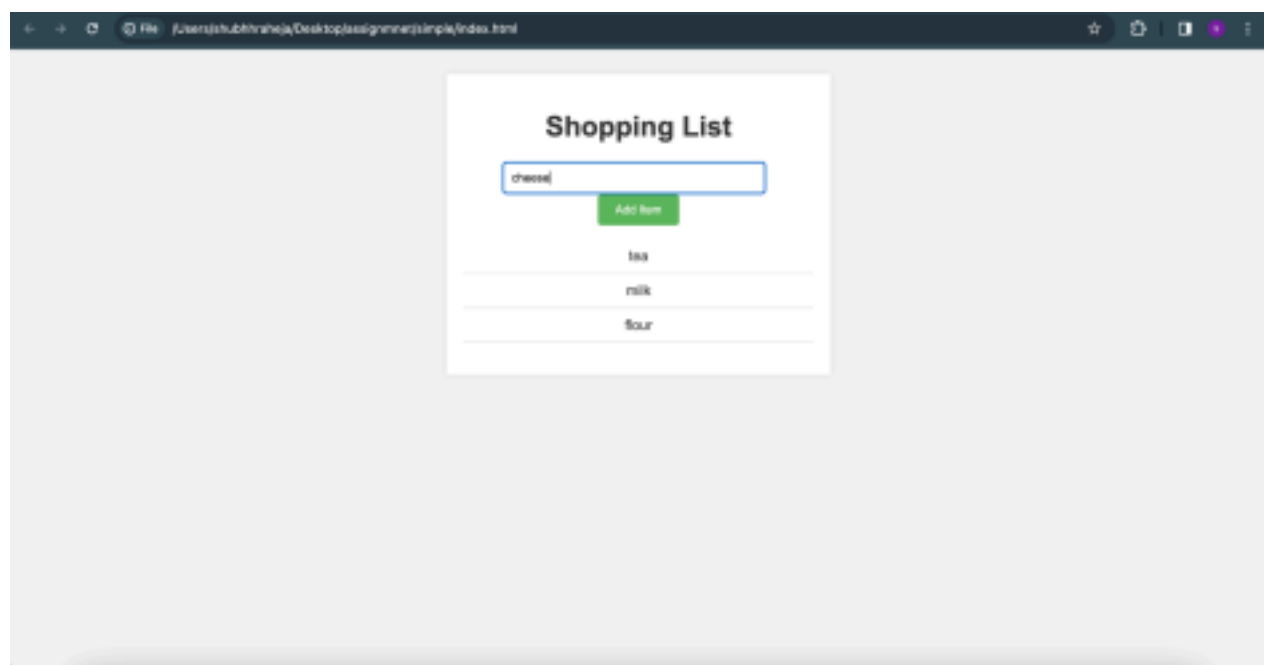
Add new item

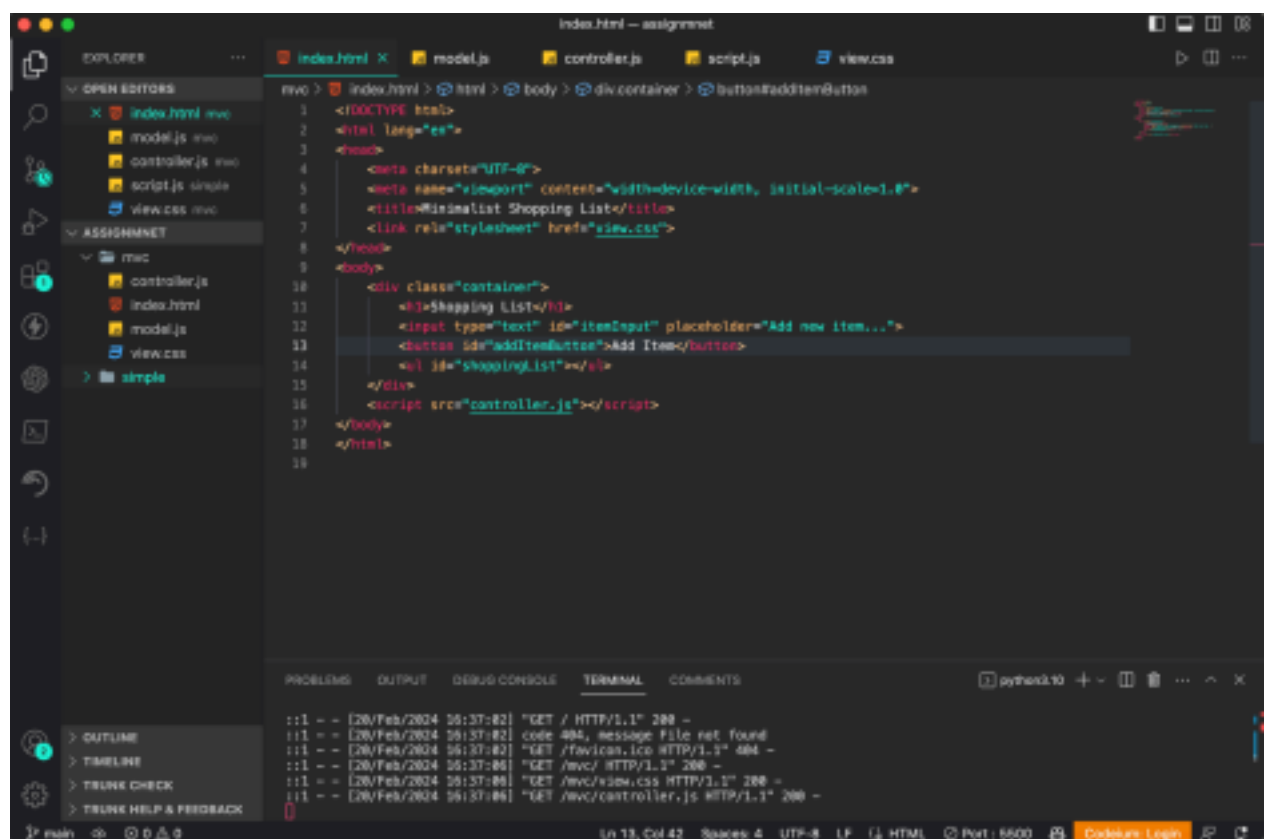
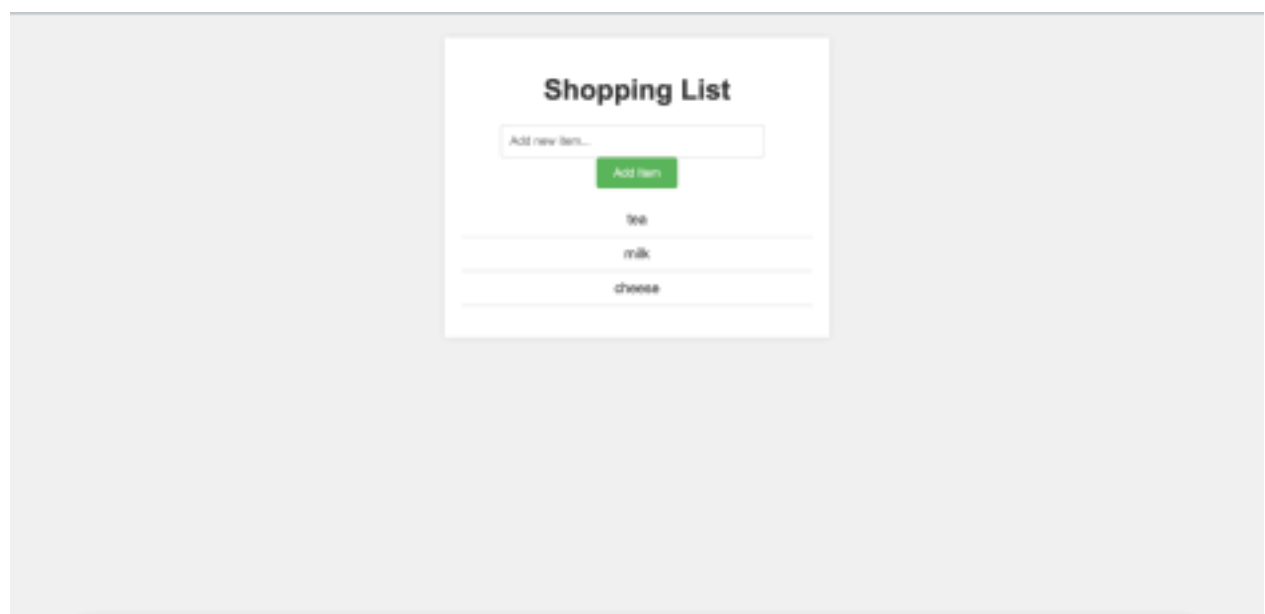
Add item

- tea
- milk
- clothes
- sugar

# MVC







model.js - assignment

EXPLORER

- index.html mvc
- model.js mvc
- controller.js mvc
- script.js simple
- view.css mvc

ASSIGNMENT

- model.js
- view.css
- simple

```
1 class ListModel {
2   constructor() {
3     this.items = JSON.parse(localStorage.getItem('shoppingList')) || [];
4   }
5
6   addItem(item) {
7     this.items.push(item);
8     this.updateLocalStorage();
9   }
10
11  removeItem(index) {
12    this.items.splice(index, 1);
13    this.updateLocalStorage();
14  }
15
16  updateLocalStorage() {
17    localStorage.setItem('shoppingList', JSON.stringify(this.items));
18  }
19
20  getItems() {
21    return this.items;
22  }
23 }
24
```

TERMINAL

```
11:11 -- [20/Feb/2024 16:37:02] "GET / HTTP/1.1" 200 -
11:11 -- [20/Feb/2024 16:37:02] code 404, message File not found
11:11 -- [20/Feb/2024 16:37:02] "GET /favicon.ico HTTP/1.1" 404 -
11:11 -- [20/Feb/2024 16:37:06] "GET /mvc/ HTTP/1.1" 200 -
11:11 -- [20/Feb/2024 16:37:06] "GET /mvc/view.css HTTP/1.1" 200 -
11:11 -- [20/Feb/2024 16:37:06] "GET /mvc/controller.js HTTP/1.1" 200 -
```

controller.js - assignment

EXPLORER

- index.html mvc
- model.js mvc
- controller.js mvc
- script.js simple
- view.css mvc

ASSIGNMENT

- controller.js
- index.html
- model.js
- view.css
- simple

```
1 document.addEventListener('DOMContentLoaded', function () {
2   const model = new ListModel();
3   const addButton = document.getElementById('addItemButton');
4   const inputField = document.getElementById('itemInput');
5   const shoppingList = document.getElementById('shoppingList');
6
7   function updateView() {
8     shoppingList.innerHTML = '';
9     model.getItems().forEach((item, index) => {
10       let li = document.createElement('li');
11       li.textContent = item;
12       li.addEventListener('click', function () {
13         model.removeItem(index);
14         updateView();
15       });
16       shoppingList.appendChild(li);
17     });
18   }
19
20   addButton.addEventListener('click', function () {
21     let itemText = inputField.value.trim();
22     if (itemText) {
23       model.addItem(itemText);
24       inputField.value = '';
25       updateView();
26     }
27   });
28 }
```

TERMINAL

```
11:11 -- [20/Feb/2024 16:37:02] "GET / HTTP/1.1" 200 -
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```

