

# Web Technology

## LAB Assignment - 6

### Question 1

#### Code :

#### Simple prototype using HTML & Javascript

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Shopping List</title>
<style>
  /* Some basic styling for the shopping list */
  body {
    font-family: Arial, sans-serif;
  }
  #container {
    width: 300px;
    margin: 20px auto;
  }
  ul {
    list-style-type: none;
    padding: 0;
  }
  li {
    margin-bottom: 5px;
  }
  .purchased {
    text-decoration: line-through;
  }
</style>
</head>
<body>
<div id="container">
  <h1>Shopping List</h1>
  <input type="text" id="item" placeholder="Enter item...">
  <button onclick="addItem()">Add Item</button>
  <ul id="shopping-list"></ul>
</div>
```

```

<script>
    function addItem() {
        var itemInput = document.getElementById("item");
        var itemName = itemInput.value.trim();

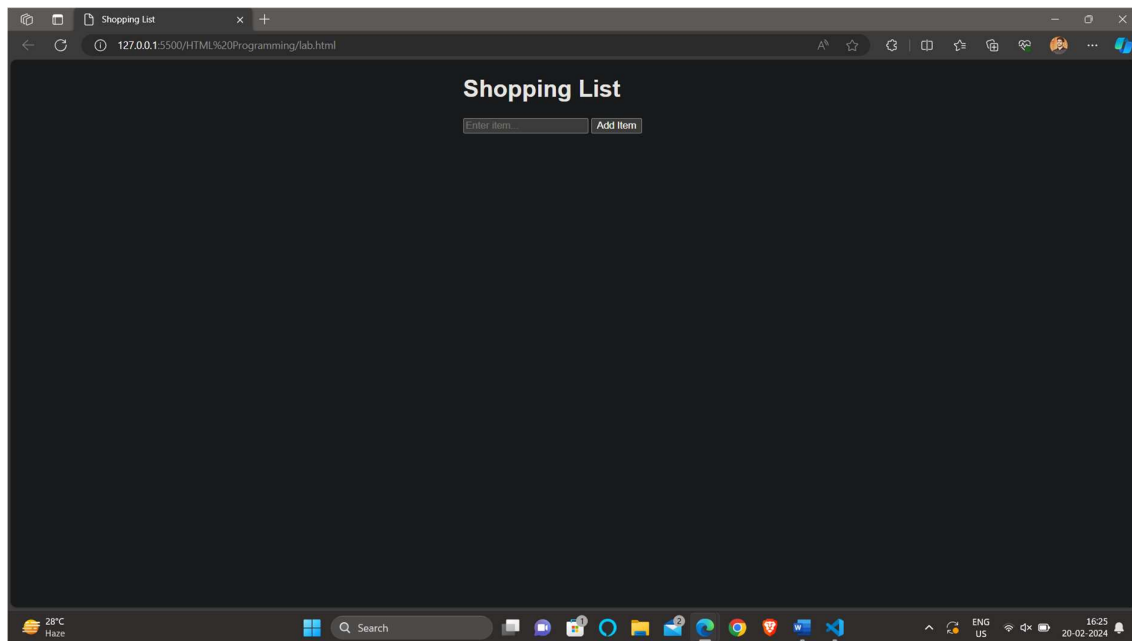
        if (itemName !== "") {
            var listItem = document.createElement("li");
            listItem.textContent = itemName;

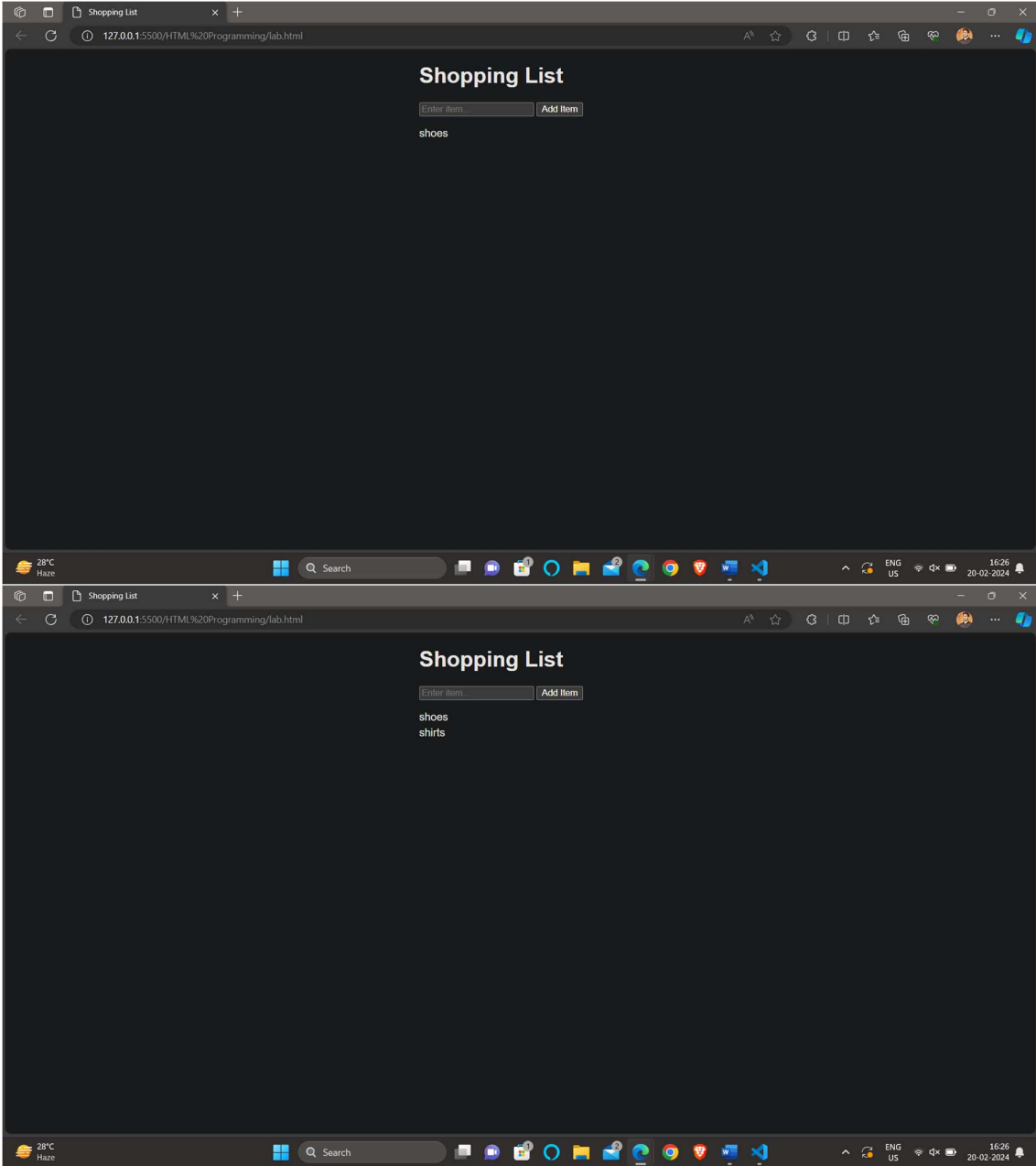
            listItem.onclick = function() {
                listItem.classList.toggle("purchased");
            };

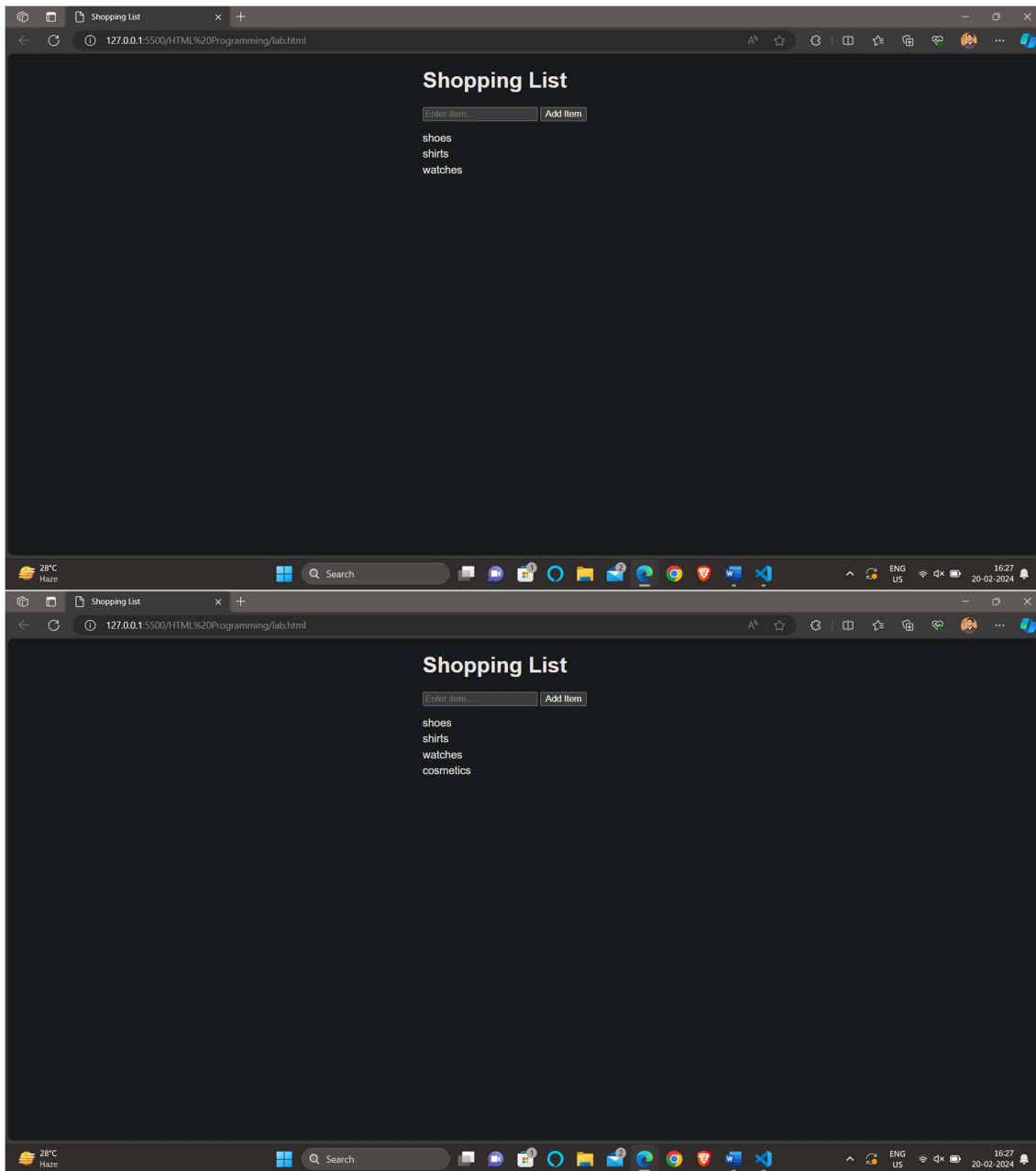
            document.getElementById("shopping-list").appendChild(listItem);
            itemInput.value = "";
        }
    }
</script>
</body>
</html>

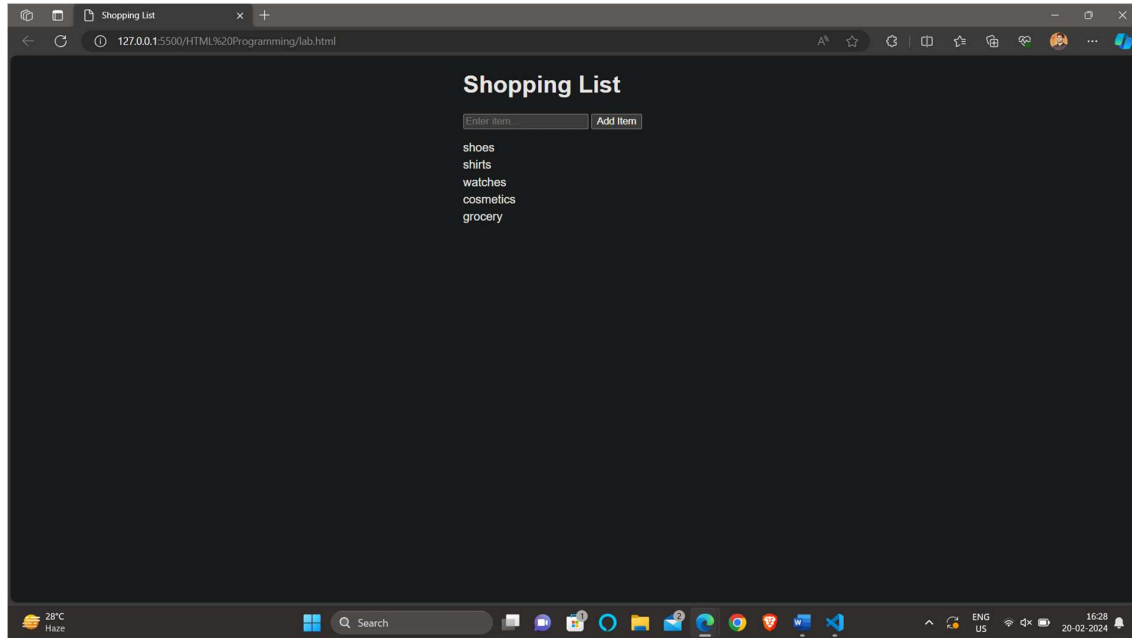
```

## Output :









## Code :

### MVC Based prototype :

### HTML Structure for our MVC Prototype:

In this HTML file, I have removed the JavaScript code and added a reference to a controller.js file, which will contain our controller logic.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Shopping List MVC</title>
<style>
  /* Some basic styling for the shopping list */
  body {
    font-family: Arial, sans-serif;
  }
  #container {
    width: 300px;
    margin: 20px auto;
  }
  ul {
    list-style-type: none;
    padding: 0;
  }
}
```

```

    li {
        margin-bottom: 5px;
    }
    .purchased {
        text-decoration: line-through;
    }
</style>
</head>
<body>
<div id="container">
    <h1>Shopping List MVC</h1>
    <input type="text" id="item" placeholder="Enter item...">
    <button id="addItemBtn">Add Item</button>
    <ul id="shopping-list"></ul>
</div>

<script src="controller.js"></script>
</body>
</html>

```

### controller.js file:

```

// Controller Logic

// Initialize the shopping list model
var shoppingList = [];

// Function to add item to the shopping list
function addItem(itemName) {
    if (itemName.trim() !== "") {
        shoppingList.push({
            name: itemName,
            purchased: false
        });
    }
}

// Function to toggle item's purchased status
function togglePurchased(index) {
    shoppingList[index].purchased = !shoppingList[index].purchased;
}

// Function to render the shopping list
function renderShoppingList() {
    var shoppingListElement = document.getElementById("shopping-list");
    shoppingListElement.innerHTML = "";
}

```

```
shoppingList.forEach(function(item, index) {
    var listItem = document.createElement("li");
    listItem.textContent = item.name;
    if (item.purchased) {
        listItem.classList.add("purchased");
    }

    listItem.onclick = function() {
        togglePurchased(index);
        renderShoppingList();
    };

    shoppingListElement.appendChild(listItem);
});

// Function to handle adding item event
function handleAddItem() {
    var itemInput = document.getElementById("item");
    var itemName = itemInput.value;
    addItem(itemName);
    renderShoppingList();
    itemInput.value = "";
}

// Event listener for adding item button click
document.getElementById("addItemBtn").addEventListener("click",
handleAddItem);

// Initial rendering of the shopping list
renderShoppingList();
```

**Output :**

