ASSIGNMENT - 6 JIGYASU PATEL - 22CS3031

index.HTML

```
<!DOCTYPF html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Shopping List</title>
 <link rel="stylesheet" href="styles.css">
</head>
<body>
 <h1>Shopping List</h1>
 <div id="items-container"></div>
 <form id="add-item-form">
   <input type="text" id="new-item" placeholder="Add new item">
    <input type="text" id="item-image-url" placeholder="Enter image URL">
    <button type="submit">Add</button>
 </form>
 <script src="shoppingList.js"></script>
 <script src="shoppingListView.js"></script>
 <script src="shoppingListController.js"></script>
 <script>
   const model = new ShoppingListModel();
   const view = new ShoppingListView();
```

```
const controller = new ShoppingListController(model, view);
  </script>
</body>
</html>
styles.css
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
}
h1 {
  text-align: center;
}
#items-container {
  margin-top: 20px;
}
.item {
  display: flex;
  align-items: center;
  margin-bottom: 5px;
}
```

.item input[type="checkbox"] {

```
margin-right: 10px;
}
.completed {
    text-decoration: line-through;
}
.item img {
    width: 100px;
    height: 100px;
    object-fit: cover; /* Ensures image maintains aspect ratio and fills the specified dimensions */
}
```

shoppingList.js

```
class ShoppingListModel {
  constructor() {
    this.items = [];
  }

addItem(itemName, imageUrl) {
    this.items.push({
      name: itemName,
      imageUrl: imageUrl,
      completed: false
  });
}
```

```
toggleItemCompletion(index) {
    this.items[index].completed = !this.items[index].completed;
}
```

shoppingListView.js

```
class ShoppingListView {
 constructor() {
   this.itemsContainer = document.getElementById('items-container');
 }
 addItem(item, index, toggleItemCompletion) {
   const itemDiv = document.createElement('div');
   itemDiv.classList.add('item');
   const checkbox = document.createElement('input');
   checkbox.type = 'checkbox';
    checkbox.checked = item.completed;
   checkbox.addEventListener('change', () => {
     toggleItemCompletion(index);
   });
   const label = document.createElement('label');
   label.textContent = item.name;
    label.classList.toggle('completed', item.completed);
```

```
const img = document.createElement('img');
img.src = item.imageUrl;
img.onerror = function() {
    img.src = 'placeholder.jpg'; // Placeholder image if provided image URL fails to load
};
itemDiv.appendChild(checkbox);
itemDiv.appendChild(label);
itemDiv.appendChild(img);
this.itemsContainer.appendChild(itemDiv);
}
```

shoppingListController.js

```
class ShoppingListController {
  constructor(model, view) {
    this.model = model;
    this.view = view;

  this.view.addItem = this.view.addItem.bind(this.view);
    this.model.toggleItemCompletion = this.model.toggleItemCompletion.bind(this.model);
    this.init();
}
```

```
init() {
```

}

}

}

```
document.getElementById('add-item-form').addEventListener('submit', (event) => {
    event.preventDefault();
    const newItemInput = document.getElementById('new-item');
    const newItemValue = newItemInput.value.trim();
    const itemImageUrlInput = document.getElementById('item-image-url');
    const itemImageUrl = itemImageUrlInput.value.trim();
    if (newItemValue !== '') {
      this.model.addItem(newItemValue, itemImageUrl);
      newItemInput.value = ";
      itemImageUrlInput.value = ";
     this.updateView();
   }
 });
  this.updateView();
updateView() {
  this.view.itemsContainer.innerHTML = ";
  this.model.items.forEach((item, index) => {
    this.view.addItem(item, index, this.model.toggleItemCompletion);
 });
```

