

## Code:

### HTML:

```
<!DOCTYPE html>

<html>

<head>

<title>Book Library</title>

</head>

<body>

<!-- HTML structure for displaying tasks -->

<ul id="task-list">

<!-- Tasks will be added here dynamically -->

</ul>

<!-- UI elements for adding tasks -->

<input type="text" id="task-title" placeholder="Task title">

<input type="text" id="task-description" placeholder="Task description">

<input type="date" id="task-dueDate">

<select id="task-priority">

<option value="low">Low</option>

<option value="medium">Medium</option>

<option value="high">High</option>

</select>

<button id="add-task">Add Task</button></body>

<script src="index.js"></script>
```

</html>

### **Script:**

```
function Task(title, description, dueDate, priority) {  
  this.title = title;  
  this.description = description;  
  this.dueDate = dueDate;  
  this.priority = priority;  
  this.completed = false;  
}  
  
let taskList = [];  
  
function addTask(task) {  
  taskList.push(task);  
  displayTasks();  
}  
  
function deleteTask(taskId) {  
  taskList.splice(taskId, 1);  
  displayTasks();  
}  
  
function updateTask(taskId, updatedTask) {  
  taskList[taskId] = updatedTask;  
  displayTasks();  
}  
  
function toggleTaskCompletion(taskId) {  
  taskList[taskId].completed = !taskList[taskId].completed;  
  displayTasks();  
}
```

```

}

const taskListContainer = document.getElementById("task-list");

function displayTasks() {

taskListContainer.innerHTML = "";

taskList.forEach((task, index) => {

const taskItem =

document.createElement("li");

taskItem.innerHTML = `

<input type="checkbox" ${task.completed ? "checked" : ""}

onchange="toggleTaskCompletion(${index})">

${task.title} (Due: ${task.dueDate}, Priority: ${task.priority})

<button onclick="deleteTask(${index})">Delete</button>

`;

taskListContainer.appendChild(taskItem);

});

}const taskTitleInput = document.getElementById("task-title");

const taskDescriptionInput =

document.getElementById("task-description"); const taskDueDateInput =

document.getElementById("task-dueDate"); const taskPriorityInput =

document.getElementById("task-priority");

const addTaskButton = document.getElementById("add-task");

addTaskButton.addEventListener("click", () => {

const title = taskTitleInput.value;

```

```

const description =
taskDescriptionInput.value; const dueDate =
taskDueDateInput.value; const priority =
taskPriorityInput.value;
const task = new Task(title, description, dueDate, priority);
addTask(task);
taskTitleInput.value = "";
taskDescriptionInput.value =
"; taskDueDateInput.value = ";
taskPriorityInput.value = 'low';
});
function saveTasksToLocalStorage() {
localStorage.setItem("taskList", JSON.stringify(taskList));function
loadTasksFromLocalStorage() {
const savedTasks = localStorage.getItem("taskList");
if (savedTasks) {
taskList = JSON.parse(savedTasks);
displayTasks();
}
}
window.addEventListener("beforeunload", saveTasksToLocalStorage);
window.addEventListener("load", loadTasksFromLocalStorage);
try {

```

```
} catch (error) {  
  console.error("An error occurred:", error.message);  
}  
  
displayTasks();
```

## Output:

- ☐ Study (Due: 2023-09-21, Priority: medium) Delete
- ☐ Sleeping (Due: 2023-09-21, Priority: medium) Delete

<input type="text" value="Task title"/>	<input type="text" value="Task description"/>	<input type="text" value="dd - mm - yyyy"/>	<input type="text" value="📅"/>	<input type="text" value="Low"/>	<input type="text" value="▼"/>	<input type="button" value="Add Task"/>
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