**TODO LIST APP CODE**

**HTML CODE:**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous" />**

**<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj" crossorigin="anonymous"></script>**

**<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity="sha384-9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></script>**

**<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></script>**

**<script src="https://kit.fontawesome.com/5f59ca6ad3.js" crossorigin="anonymous"></script>**

**</head>**

**<body>**

**<div class="todos-bg-container">**

**<div class="container">**

**<div class="row">**

**<div class="col-12">**

**<h1 class="todos-heading">Todos</h1>**

**<h1 class="create-task-heading">**

**Create <span class="create-task-heading-subpart">Task</span>**

**</h1>**

**<input type="text" id="todoUserInput" class="todo-user-input" placeholder="What needs to be done?" />**

**<button class="button" id="addTodoButton">Add</button>**

**<h1 class="todo-items-heading">**

**My <span class="todo-items-heading-subpart">Tasks</span>**

**</h1>**

**<ul class="todo-items-container" id="todoItemsContainer"></ul>**

**<button class="button" id="saveTodoButton">Save</button>**

**</div>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**CSS CODE:**

**.todos-bg-container {**

**background-color: #f9fbfe;**

**height: 100vh;**

**}**

**.todos-heading {**

**text-align: center;**

**font-family: "Roboto";**

**font-size: 46px;**

**font-weight: 500;**

**margin-top: 20px;**

**margin-bottom: 20px;**

**}**

**.create-task-heading {**

**font-family: "Roboto";**

**font-size: 32px;**

**font-weight: 700;**

**}**

**.create-task-heading-subpart {**

**font-family: "Roboto";**

**font-size: 32px;**

**font-weight: 500;**

**}**

**.todo-items-heading {**

**font-family: "Roboto";**

**font-size: 32px;**

**font-weight: 700;**

**}**

**.todo-items-heading-subpart {**

**font-family: "Roboto";**

**font-size: 32px;**

**font-weight: 500;**

**}**

**.todo-items-container {**

**margin: 0px;**

**padding: 0px;**

**}**

**.todo-item-container {**

**margin-top: 15px;**

**}**

**.todo-user-input {**

**background-color: white;**

**width: 100%;**

**border-style: solid;**

**border-width: 1px;**

**border-color: #e4e7eb;**

**border-radius: 10px;**

**margin-top: 10px;**

**padding: 15px;**

**}**

**.button {**

**color: white;**

**background-color: #4c63b6;**

**font-family: "Roboto";**

**font-size: 18px;**

**border-width: 0px;**

**border-radius: 4px;**

**margin-top: 20px;**

**margin-bottom: 50px;**

**padding-top: 5px;**

**padding-bottom: 5px;**

**padding-right: 20px;**

**padding-left: 20px;**

**}**

**.label-container {**

**background-color: #e6f6ff;**

**width: 100%;**

**border-style: solid;**

**border-width: 5px;**

**border-color: #096f92;**

**border-right: none;**

**border-top: none;**

**border-bottom: none;**

**border-radius: 4px;**

**}**

**.checkbox-input {**

**width: 20px;**

**height: 20px;**

**margin-top: 12px;**

**margin-right: 12px;**

**}**

**.checkbox-label {**

**font-family: "Roboto";**

**font-size: 16px;**

**font-weight: 400;**

**width: 82%;**

**margin: 0px;**

**padding-top: 10px;**

**padding-bottom: 10px;**

**padding-left: 20px;**

**padding-right: 20px;**

**border-radius: 5px;**

**}**

**.delete-icon-container {**

**text-align: right;**

**width: 18%;**

**}**

**.delete-icon {**

**padding: 15px;**

**}**

**.checked {**

**text-decoration: line-through;**

**}**

**JAVASCRIPT CODE:**

**let todoItemsContainer = document.getElementById("todoItemsContainer");**

**let addTodoButton = document.getElementById("addTodoButton");**

**let saveTodoButton = document.getElementById("saveTodoButton");**

**function getTodoListFromLocalStorage() {**

**let stringifiedTodoList = localStorage.getItem("todoList");**

**let parsedTodoList = JSON.parse(stringifiedTodoList);**

**if (parsedTodoList === null) {**

**return [];**

**} else {**

**return parsedTodoList;**

**}**

**}**

**let todoList = getTodoListFromLocalStorage();**

**let todosCount = todoList.length;**

**saveTodoButton.onclick = function() {**

**localStorage.setItem("todoList", JSON.stringify(todoList));**

**};**

**function onAddTodo() {**

**let userInputElement = document.getElementById("todoUserInput");**

**let userInputValue = userInputElement.value;**

**if (userInputValue === "") {**

**alert("Enter Valid Text");**

**return;**

**}**

**todosCount = todosCount + 1;**

**let newTodo = {**

**text: userInputValue,**

**uniqueNo: todosCount,**

**};**

**todoList.push(newTodo);**

**createAndAppendTodo(newTodo);**

**userInputElement.value = "";**

**}**

**addTodoButton.onclick = function() {**

**onAddTodo();**

**};**

**function onDeleteTodo(todoId) {**

**let todoElement = document.getElementById(todoId);**

**todoItemsContainer.removeChild(todoElement);**

**let deleteElementIndex = todoList.findIndex(function(eachTodo) {**

**let eachTodoId = "todo" + eachTodo.uniqueNo;**

**if (eachTodoId === todoId) {**

**return true;**

**} else {**

**return false;**

**}**

**});**

**todoList.splice(deleteElementIndex, 1);**

**}**

**function onTodoStatusChange(checkboxId, labelId) {**

**let checkboxElement = document.getElementById(checkboxId);**

**let labelElement = document.getElementById(labelId);**

**labelElement.classList.toggle("checked");**

**}**

**function createAndAppendTodo(todo) {**

**let todoId = "todo" + todo.uniqueNo;**

**let checkboxId = "checkbox" + todo.uniqueNo;**

**let labelId = "label" + todo.uniqueNo;**

**let todoElement = document.createElement("li");**

**todoElement.classList.add("todo-item-container", "d-flex", "flex-row");**

**todoElement.id = todoId;**

**todoItemsContainer.appendChild(todoElement);**

**let inputElement = document.createElement("input");**

**inputElement.type = "checkbox";**

**inputElement.id = checkboxId;**

**inputElement.onclick = function() {**

**onTodoStatusChange(checkboxId, labelId);**

**};**

**inputElement.classList.add("checkbox-input");**

**todoElement.appendChild(inputElement);**

**let labelContainer = document.createElement("div");**

**labelContainer.classList.add("label-container", "d-flex", "flex-row");**

**todoElement.appendChild(labelContainer);**

**let labelElement = document.createElement("label");**

**labelElement.setAttribute("for", checkboxId);**

**labelElement.id = labelId;**

**labelElement.classList.add("checkbox-label");**

**labelElement.textContent = todo.text;**

**labelContainer.appendChild(labelElement);**

**let deleteIconContainer = document.createElement("div");**

**deleteIconContainer.classList.add("delete-icon-container");**

**labelContainer.appendChild(deleteIconContainer);**

**let deleteIcon = document.createElement("i");**

**deleteIcon.classList.add("far", "fa-trash-alt", "delete-icon");**

**deleteIcon.onclick = function() {**

**onDeleteTodo(todoId);**

**};**

**deleteIconContainer.appendChild(deleteIcon);**

**}**

**for (let todo of todoList) {**

**createAndAppendTodo(todo);**

**}**