

# Todos Application

```
<!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/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYIFhbGU+6BZp6G7niu735Sk7IN" 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/d1c2ea8b80.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>
```

```
</div>  
</body>  
</html>
```

## STYLE.CSS

```
@import  
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");  
  
.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;
}

```

## JS

```

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,

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```
uniqueNo: todosCount,
isChecked: false
};

todoList.push(newTodo);
createAndAppendTodo(newTodo);
userInputElement.value = "";
}

addTodoButton.onclick = function() {
onAddTodo();
};

function onTodoStatusChange(checkboxId, labelId, todoid) {
let checkboxElement = document.getElementById(checkboxId);
let labelElement = document.getElementById(labelId);
labelElement.classList.toggle("checked");

let todoObjectIndex = todoList.findIndex(function(eachTodo) {
let eachTodoid = "todo" + eachTodo.uniqueNo;

if (eachTodoid === todoid) {
return true;
} else {
return false;
}
});

let todoObject = todoList[todoObjectIndex];

if(todoObject.isChecked === true){
todoObject.isChecked = false;
} else {
todoObject.isChecked = true;
}

}

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 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.checked = todo.isChecked;

inputElement.onclick = function () {
    onTodoStatusChange(checkboxId, labelId, todoid);
};

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;
if (todo.isChecked === true) {
    labelElement.classList.add("checked");
}
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);
}
```