Todos Application

```html
<!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/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>

   </body>

</html>
```

STYLE.CSS

```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;0,70
0;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&f
amily=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=sw
ap");


.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;
```

```css
  }

  .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;
```

```css
  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

```javascript
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,
```

```javascript
    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;
```

```javascript
    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);
}
```

DIFFUSION BOMB

```html
<!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>
  </head>
  <body>
    <div class="timer-container">
      <input type="text" class="user-input" id="defuser" />
      <br />
      <img src="https://d2clawv67efefq.cloudfront.net/ccbp-dynamic-webapps/time-bomb-img.png" class="bomb-image"/>
      <p class="timer-display" id="timer">10</p>
    </div>
  </body>
</html>
```

STYLE.CSS

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

.timer-container {
  text-align: center;
  background-color: #00bafc;
  height: 100vh;
  padding: 20px;
}

.timer-display {
```

```css
  color: white;
  font-size: 50px;
}

.user-input {
  text-align: center;
  border-width: 0px;
  border-radius: 4px;
  padding: 6px;
}

.bomb-image {
  width: 150px;
  margin-top: 40px;
}
```

JS

```js
let timerEl = document.getElementById("timer");
let defuserEl = document.getElementById("defuser");
let countdown = 10;

let intervalId = setInterval(function() {
  countdown = countdown - 1;
  timerEl.textContent = countdown;
  if (countdown === 0) {
    timerEl.textContent = "BOOM";
    clearInterval(intervalId);
  }
}, 1000);

defuserEl.addEventListener("keydown", function(event) {
  let bombDefuserText = defuserEl.value;
  if (event.key === "Enter" && bombDefuserText === "defuse" && countdown !== 0) {
    timerEl.textContent = "You did it!";
    clearInterval(intervalId);
  }
});
```