**To-Do List Application Project Report**

**1. Introduction**

**1.1 Purpose**

The To-Do List application is a simple web-based task management tool designed to help users organize and track their daily activities.

**1.2 Features**

* **Add Task:** Users can input tasks in the provided text box and add them to the list by clicking the "ADD" button.
* **Check/Uncheck:** Tasks in the list can be marked as completed or incomplete by clicking on them.
* **Delete Task:** Users can delete tasks by clicking on the 'x' icon next to each task.
* **Persistent Storage:** The application uses local storage to persistently store the task list, allowing users to access their tasks even after refreshing the page.

**2. Technologies Used**

* **HTML5:** Used for structuring the web page.
* **CSS3:** Used for styling and layout.
* **JavaScript:** Used for dynamic behavior and interaction.
* **Local Storage:** Utilized for persistently storing the task list on the client side.

**3. User Interface**

**3.1 Layout**

The application features a clean and user-friendly interface. The task input is accompanied by an "ADD" button, and the task list is displayed below.

**3.2 Styling**

The styling is modern and responsive, making the application visually appealing and accessible across different devices.

**4. Functionality**

**4.1 Adding Tasks**

Users can add tasks by entering the task description in the input box and clicking the "ADD" button.

**4.2 Checking/Unchecking Tasks**

Tasks in the list can be marked as completed or incomplete by clicking on them. A line-through indicates a completed task.

**4.3 Deleting Tasks**

Users can delete tasks by clicking on the 'x' icon next to each task.

**4.4 Persistent Storage**

The application utilizes local storage to save and retrieve the task list, ensuring data persistence across page reloads.

**5. Code Structure**

**5.1 HTML**

The HTML file provides the structure of the web page and includes placeholders for the task input, list container, and script references.

**5.2 CSS**

The CSS file defines the styling of the application, making it visually appealing and responsive.

**5.3 JavaScript**

The JavaScript file contains the logic for adding, checking, unchecking, and deleting tasks. It also handles the persistent storage of the task list using local storage.

**6. Conclusion**

The To-Do List application provides a straightforward and effective solution for managing daily tasks. It leverages modern web technologies to deliver a seamless user experience with an intuitive interface. Future enhancements could include additional features such as task categorization, due dates, and user accounts.

**7. Acknowledgments**

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