**Project Report: To Do List Application**

**Project Overview**

**Introduction**

The To Do List application is a simple web-based task management tool designed to help users organize and keep track of their tasks. The application provides a user-friendly interface to add, delete, and mark tasks as completed.

**Features**

* **Add Task:** Users can add tasks to the list using the input field and "Add Task" button.
* **Delete Task:** Each task has a "Delete" button to remove it from the list.
* **Mark as Completed:** Tasks can be marked as completed by clicking on them, toggling their status.
* **Delete All Tasks:** Users can delete all tasks with a single click on the "Delete all" button.

**Technologies Used**

The project utilizes the following technologies:

* **HTML:** Provides the structure and layout of the web page.
* **CSS:** Styles the HTML elements, enhancing the visual appeal of the application.
* **JavaScript:** Implements dynamic behaviour, handling task addition, deletion, and status updates.
* **Local Storage:** Stores tasks locally to persist data between page reloads.

**Project Files**

1. **HTML File (index.html):**
   * Defines the structure of the web page.
   * Includes references to external CSS and JavaScript files.

Html Copy code

<!-- HTML code goes here -->

1. **CSS File (style.css):**
   * Contains styles for various elements to enhance the user interface.

CSS Copy code

/\* CSS code goes here \*/

1. **JavaScript File (script.js):**
   * Implements the dynamic functionality of the To Do List application.
   * Handles task addition, deletion, and status updates.ipt code goes here \*/

**User Interface**

**Form Section**

* The form section includes an input field for entering task details and an "Add Task" button to add tasks to the list.

**Task List Section**

* The task list section displays added tasks with options to delete individual tasks and mark them as completed.

**Delete All Button**

* The "Delete all" button allows users to clear the entire task list.

**Project Implementation**

**Task Management**

* Tasks are managed using an array (**array Of Tasks**) to store task details such as ID, title, and completion status.
* Local Storage is utilized to persist tasks even after a page reload.

**Task Operations**

* **Add Task:**
  + Users can add tasks by entering task details and clicking the "Add Task" button.
* **Delete Task:**
  + Individual tasks can be deleted by clicking the "Delete" button.
* **Mark as Completed:**
  + Tasks can be marked as completed by clicking on them, toggling their status.

**Project Structure**

* The project follows a modular structure with separate HTML, CSS, and JavaScript files for better organization and maintainability.

**Conclusion**

The To Do List application is a simple yet effective task management tool that provides users with a straightforward way to organize their tasks. The project demonstrates the use of HTML, CSS, and JavaScript to create a responsive and interactive user interface.