# Project Report

# FRONTEND DEVELOPMENT INTERSHIP

NAME – MINI GUPTA
INTERNSHIP DURATION – 3 MONTH
COMPANY NAME – UNIFIED MENTOR

# To-Do List App

# Project Details

- Project Type: Frontend Development
- Contribution: Individual
- Frontend Technologies: HTML, CSS, JavaScript
- Development IDE: Visual Studio Code(VS Code)

# Project Summary

This project is a responsive To-Do List application built with HTML, CSS, and JavaScript. It offers a modern, intuitive interface that enables users to seamlessly add, edit, delete, and mark tasks as complete. Core functionality includes client-side data persistence using local storage and built-in input validation to prevent the addition of empty tasks. The application was developed and tested within Visual Studio Code, ensuring a streamlined workflow for debugging, optimization, and future scalability.

# Project Objective

This project aims to develop a responsive, web-based to-do list application using HTML, CSS, and JavaScript. The core objectives are to implement a user-friendly interface for seamless task management—including adding, editing, and deleting tasks—and to ensure persistent data storage using the browser's local storage, allowing tasks to remain intact across page refreshes and browser sessions.

# Tools Used

- **Core:** HTML5, CSS3, JavaScript
- **Version Control:** Git, GitHub
- **Deployment/Hosting:** GitHub
- **Code Editor:** Visual Studio Code(VS Code)

# Development & Coding

- Wrote clean, semantic HTML5 for structure.
- Styled with modular, responsive CSS3 using Flexbox .
- Implemented all logic and interactivity using vanilla JavaScript (ES6).

# Technical Deep Dive: The Core Stack

- HTML5: The foundation. I focused on using semantic tags like <nav> ,<main> ,<section> , and <article> to improve SEO and accessibility.
- CSS3: The visual design. I heavily utilized modern layout modules like ‘Flexbox’ and ‘CSS Grid’ to build responsive designs, along with transitions and animations for a premium user experience.
- JavaScript (ES6): The engine. I used it to bring the static pages to life through ‘DOM Manipulation, ‘Event Handling, and using the ; Local Storage API’ for data persistence

# Working

- This To-Do List application operates through an integrated workflow combining front-end technologies with client-side data persistence. Upon initialization, the app loads existing tasks from the browser's local storage and renders them within a responsive interface built with HTML and CSS.
- Users can add new tasks via an input field protected by validation that prevents empty submissions.
- Each task is dynamically created as a DOM element containing interactive controls to mark completion, edit content, or delete the item.
- Event delegation efficiently manages these interactions, updating both the visual interface and the underlying JavaScript task array in real time.
- Crucially, all user actions trigger immediate synchronization with local storage, ensuring tasks persist across page refreshes and browser sessions.

# Output

- The application delivers a persistent task management experience by leveraging client-side local storage for automatic data preservation. The user interface renders each task as a distinct component featuring:
- A functional checkbox to toggle completion status, with a clear visual indicator (strikethrough text).
- Explicitly labeled **Edit** and **Delete** action buttons, providing users with direct control to modify or remove tasks seamlessly.

**GitHub Link:** https://github.com/mg-0521/Second-Repo

# Thank You & Q/A

Thank you for your time and attention.

I am eager to apply the skills and passion I've developed during this internship to a full-time role.

Open to Questions*