

# Todo App Documentation

## Table of Contents

1. Introduction
2. Features
3. Technology Stack
4. Setup and Installation
5. Usage Guide
6. Code Structure
7. Customization
8. Troubleshooting
9. Future Enhancements

## 1. Introduction

This Web App is a modern, responsive web application designed to help users manage their tasks efficiently. It provides a clean, intuitive interface for adding, completing, and deleting tasks, as well as basic task filtering capabilities.

## 2. Features

- Add new tasks with title, description, and due date/time
- Mark tasks as complete
- Delete individual tasks
- Clear all tasks
- Filter tasks (All/Active/Completed)
- Responsive design for various screen sizes
- Local storage for data persistence
- Modern, visually appealing UI with animations

## 3. Technology Stack

- HTML5
- CSS3
- JavaScript (ES6+)
- Bootstrap 5.3.3
- Font Awesome 6.4.0

## 4. Setup and Installation

1. Ensure you have a modern web browser installed.
2. No additional installation is required as the app uses CDN links for Bootstrap and Font Awesome.

## 5. Usage Guide

### Adding a Task

1. Fill in the task title in the "Task title" field.
2. (Optional) Add a description in the "Task description" field.
3. Set the due date and time using the datetime-local input.
4. Click the "Add Task" button.

### Completing a Task

- Click the check (✓) button next to a task to mark it as complete.

### Deleting a Task

- Click the trash (🗑️) button next to a task to delete it.

### Filtering Tasks

1. Click the "Filter" button.
2. Enter one of the following options when prompted:
  - "all": Show all tasks
  - "active": Show only uncompleted tasks
  - "completed": Show only completed tasks

### Clearing All Tasks

- Click the "Clear All" button to remove all tasks (after confirmation).

## 6. Code Structure

### HTML (index.html)

- Defines the structure of the app
- Includes necessary CSS and JavaScript files
- Contains a template for task items

## CSS (`style.css`)

- Defines the visual styling of the app
- Includes responsive design rules
- Defines animations and transitions

## JavaScript (`script.js`)

- Manages the app's functionality
- Handles task addition, completion, deletion, and filtering
- Manages local storage for data persistence

# 7. Customization

## Changing Colors

- Modify the CSS variables in the `:root` selector in `style.css`.

## Adding New Features

- Extend the JavaScript functions in `script.js`.
- Update the HTML structure in `index.html` as needed.

# 8. Troubleshooting

## Tasks Not Saving

- Ensure local storage is enabled in your browser.
- Clear browser cache and reload the page.

## Styling Issues

- Make sure all CSS files are properly linked.
- Check for any console errors related to CSS loading.

# 9. Future Enhancements

- Implement drag-and-drop for task reordering
- Add categories or tags for tasks
- Implement due date notifications
- Add user accounts and cloud synchronization
- Improve accessibility features

