A PROJECT REPORT ON

“World Wild Clock ”



**Submitted by:- Team A1**

***Developed by:-***

 ***Mr. Ishwar Bhukele.***

***Miss. Pallavi Gore.***

***Miss. Vaishnavi Dehadary.***

***Miss. Sonali Girje.***

***Miss. Monika Kanse.***

***Mr.Navnath Kate.***

**World Wild Clock**

# Overview

This project is a web-based time management application that integrates multiple time-related utilities, including an Alarm Clock, Stopwatch, Countdown Timer, Pomodoro Timer, and World Clock. The application provides a user-friendly interface to help users manage their time effectively.

# Features

* **Analog and Digital Clock**: Displays the current time in both 12-hour and 24-hour formats.
* **Set Alarm**: Users can set alarms for specific times and receive notifications.
* **Stopwatch**: A stopwatch with start, stop, and reset functionalities.
* **Countdown Timer**: Allows users to set a countdown timer with a circular progress indicator.
* **Pomodoro Timer**: A customizable Pomodoro technique timer for productivity enhancement.
* **World Clock**: Displays the time for different time zones and cities.
* **Responsive Design**: The interface is designed to work across multiple devices.

# File Structure

/ (Root Directory)

│-- index.html # Main HTML file

│-- style.css # Stylesheet for the application

│-- script.js # JavaScript file for handling the logic

│-- assets/ # (Optional) Images, icons, or additional resources

# HTML Structure

1. **Header Section** • Navigation menu for switching between different time utilities.

• Contains links to Clock, Set Alarm, Stopwatch, Countdown Timer, Pomodoro Timer, and World Clock.

1. **Main Sections**

Each feature has a dedicated section:

1. **Clock Section** 
   * Displays an analog clock with hour, minute, and second hands.
   * Digital clock format toggle between 12-hour and 24-hour.
2. **Set Alarm Section** 
   * Dropdowns for selecting hour, minute, and AM/PM format.
   * Button to add an alarm.
   * List of alarms set by the user.
3. **Stopwatch Section** 
   * Displays elapsed time in HH:MM:SS:MS format.
   * Start, Stop, and Reset buttons.
4. **Countdown Timer Section** 
   * Users can enter minutes and seconds for countdown.
   * Displays time remaining with a circular progress bar.
   * Start Countdown button and reset functionality.
5. **Pomodoro Timer Section** 
   * Allows setting a session time (default 25 minutes).
   * Start, Stop, and Reset buttons.
   * Countdown display of the Pomodoro session.
6. **World Clock Section** 
   * Displays an analog world clock.
   * Users can add different time zones and cities.
   * City selector with a search feature.

**3. Footer Section**

* Contains social media links.
* Copyright information.
* Scrolling text for additional information.

# JavaScript Functionality

1. **Clock Function** 
   * Updates the analog and digital clock in real time.
   * Supports 12-hour and 24-hour formats.
2. **Alarm Function** 
   * Allows users to set alarms.
   * Notifies users when the alarm time is reached.
3. **Stopwatch Function** 
   * Uses JavaScript timing functions to track elapsed time.
   * Controls to start, stop, and reset the stopwatch.
4. **Countdown Timer Function** 
   * Allows users to set and start a countdown.
   * Shows remaining time visually using a circular progress bar.
   * Displays a message when the countdown ends.
5. **Pomodoro Timer Function** 
   * Implements the Pomodoro technique with a default 25-minute session.
   * Allows customization of session time.
   * Provides start, stop, and reset functionalities.
6. **World Clock Function** 
   * Displays the current time for different time zones.
   * Allows users to add and search for cities.

# Styling (CSS)

* The project is styled using style.css to provide a visually appealing and responsive interface. • Uses font-awesome for icons.
* Provides structured layouts with proper spacing, buttons, and interactive elements.

# Future Improvements

* **Sound Notifications**: Adding sound alerts for alarms and timers.
* **Dark Mode**: Implementing a toggle for dark mode.
* **Cloud Storage**: Saving user preferences and alarms in local storage or cloud.
* **Mobile App Integration**: Converting the web application into a mobile app for better usability.

# Conclusion

This project provides a comprehensive suite of time management tools. It is designed to be simple yet functional, catering to a variety of user needs from time tracking to productivity enhancement.

