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APROJECT REPORT ON "Task Guardian: A Smart Reminder System for Cognitive Support"

UNDER THE FACULTY OF COMPUTER SCIENCE & APPLICATION

Submitted by

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Guide

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> BCA Sem-VI Academic Year 2024- 2025



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CERTIFICATE

This is to certify that **Mr. Manish Rajput**, PRN No. **220105011100** Student of BCA Semester-VI has successfully completed the Project work on Title "Task Guardian: A Smart Reminder System for Cognitive Support" under my guidance. This report submitted to Department of Computer Science and Application, School of Computer Sciences and Engineering, Sandip University, Nashik in the AY 2024-25 for partial fulfillment and requirement for the End Semester Examination.

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DECLARATION

I here by declare that the Project work titled "Task Guardian: A Smart Reminder System for Cognitive Support" submitted to Sandip University, Nashik is a record of an original work done by me under the guidance of **Dr. Deepali Chaudhari** Department of Computer Science and Application, School of Computer Sciences and Engineering, Sandip University in the AY 2024-25 for a partial fulfillment of requirement for the Completion of End Semester Examination.

This report has not been submitted to any other University or Institute for the award of any degree or diploma.

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Abstract

The Task Guardian: A Smart Reminder System for Cognitive Support is an open-source, fully customizable solution designed to streamline personal task management through the use of smart reminders and intelligent scheduling techniques. This project eliminates the inefficiencies of traditional task tracking by offering individuals, professionals, and developers a robust, reusable platform focused on cognitive assistance, deadline management, and user engagement. By leveraging modern technologies such as Flask, JavaScript, and PostgreSQL, the system delivers high accuracy, scalability, and a clean user interface tailored to modern productivity needs.

At its core, the project features a powerful smart task management engine that supports dynamic creation, categorization, and prioritization of tasks. With built-in features for intelligent reminders and user-based task recommendations, Task Guardian adapts to the user's routine and helps optimize daily workflows. The solution integrates seamlessly with frontend technologies like HTML, CSS, and JavaScript, ensuring a responsive and interactive web experience across devices.

Developers can set up the system easily by cloning the repository, installing Python dependencies, configuring the PostgreSQL database, and launching the Flask server locally. With an intuitive interface that allows users to create, edit, and track tasks while receiving timely cognitive reminders, the system enhances productivity and reduces mental clutter.

Furthermore, the project embraces community-driven development. Comprehensive documentation and an open contribution model invite users to report issues, suggest new features, or improve the task management logic—fostering an evolving ecosystem around personal productivity enhancement.

Overall, the Task Guardian project represents a complete, extensible toolkit for students, professionals, and productivity enthusiasts. It offers a flexible, smart, and feature-rich platform that simplifies task scheduling and encourages better organization, all while upholding high standards of usability and reliability.

Keywords: (Flask API, PostgreSQL, Smart Reminders, Task Scheduling, Cognitive Support, JavaScript, HTML, CSS)

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