****

**School of Computer Sciences & Engineering**

**Department of Computer Science & Application**

**Community Engagement Project**

**Synopsis**

**On**

# ‘Task Guardian: A Smart reminder system for cognitive support’

# By

1. Mr. Krushna Sanjay Mali
2. Mr. Manish Mangalsingh Rajput
3. Mr. Tilak Yogesh Badgujar

Class & Semester:

TYBCA

6TH SEMESTER

Under the Guidance of

**Prof. DEEPALI CHAUDHARI**

**Academic Year: 2024-25 odd Semester**

**Title of Project:**

“Task Guardian: A Smart Reminder System for Cognitive Support”

Task Guardian, reflects the system's primary function of providing cognitive support and reminding users of their tasks and appointments. The system is designed to be a personal assistant, helping users to stay organized and on track with their daily activities. The title also suggests a sense of protection and guardianship, implying that the system will help users to avoid forgetting important tasks and appointments.

**Abstract:**

Task Guardian is a smart reminder system designed to provide cognitive support for individuals with memory impairments or busy schedules. The system utilizes artificial intelligence and machine learning algorithms to learn the user's habits and preferences, sending personalized reminders and notifications to ensure timely completion of tasks. This project aims to develop a user-friendly and efficient reminder system that can be integrated into daily life, improving productivity and reducing stress. The system will be designed to be flexible and adaptable, allowing users to customize their reminders and notifications to suit their individual needs. The ultimate goal of the project is to create a system that can help users to manage their time and tasks more effectively, reducing the risk of forgotten appointments and missed deadlines.

The abstract provides a brief overview of the project, highlighting its key features and objectives. It explains that the system will use artificial intelligence and machine learning to provide personalized reminders and notifications, and that it will be designed to be user-friendly and efficient. The abstract also mentions the project's ultimate goal of improving productivity and reducing stress, and notes that the system will be flexible and adaptable to meet the individual needs of its users.

**Introduction:**

Memory impairments and busy schedules can lead to forgotten tasks, missed appointments, and decreased productivity. Traditional reminder systems, such as paper-based planners or digital calendars, can be cumbersome and require manual input. These systems often rely on the user to remember to check their calendar or planner, which can be problematic for individuals with memory impairments or busy schedules. Additionally, traditional reminder systems may not be able to provide personalized reminders and notifications, which can lead to a lack of engagement and motivation.

Task Guardian addresses these limitations by developing a smart reminder system that learns the user's habits and preferences, providing personalized reminders and notifications to ensure timely completion of tasks. The system will be designed to be intuitive and easy to use, with a user-friendly interface that allows users to input their tasks and appointments quickly and easily. The system will also be able to learn the user's habits and preferences over time, allowing it to provide more accurate and relevant reminders and notifications.

The introduction provides a detailed explanation of the problem that the project aims to address, and explains how the proposed system will provide a solution. It notes that traditional reminder systems have limitations, such as requiring manual input and lacking personalization, and explains how Task Guardian will address these limitations. The introduction also provides an overview of the system's key features, such as its intuitive interface and ability to learn the user's habits and preferences.

**System Architecture:**

**1. User Interface:** A mobile application or web portal where users can input tasks, set reminders, and view notifications.

**2. Artificial Intelligence (AI) Engine:** A machine learning-based engine that analyses user data and learns their habits and preferences.

**3. Reminder Generation**: A module that generates personalized reminders and notifications based on the user's schedule and preferences.

**4. Notification System:** A module that sends reminders and notifications to the user via email, SMS, or push notifications.

The system architecture is designed to be modular and scalable, allowing for easy integration of new features and components. The user interface will be designed to be intuitive and easy to use, with a simple and consistent layout that allows users to quickly and easily input their tasks and appointments. The AI engine will be designed to be flexible and adaptable, allowing it to learn the user's habits and preferences over time and provide more accurate and relevant reminders and notifications.

The system architecture section provides a detailed explanation of the system's components and how they will work together to provide a comprehensive reminder system. It notes that the system will be modular and scalable, and that the user interface will be designed to be intuitive and easy to use.

**Objectives:**

1. Develop a user-friendly and efficient reminder system that can be integrated into daily life.

2. Improve productivity and reduce stress by providing personalized reminders and notifications.

3. Enhance the system's accuracy and effectiveness through machine learning and user feedback.

The objectives of the project are to develop a reminder system that is user-friendly, efficient, and effective. The system should be able to provide personalized reminders and notifications that are relevant and timely, and should be able to learn the user's habits and preferences over time. The project also aims to improve productivity and reduce stress by providing a comprehensive reminder system that can help users to manage their time and tasks more effectively.

**Hardware & Software Requirements:**

* **Hardware:**
* **A normal core processor in smartphone and laptop or pc.**
* **Minimum 2GB of ram and 100MB of storage to store the. application files.**

**Software:**

* **Vs code, IntelliJ IDEA, XAMPP LOCAL HOST SERVER.**

**Technology used:**

* **FRONT-END = HTML, CSS, JAVASCRIPT.**
* **BACK-END = JAVA(JDBC) , SQL.**

**Conclusion:**

Task Guardian is a smart reminder system that has the potential to revolutionize the way we manage our time and tasks. By providing personalized reminders and notifications, the system can help users to stay organized and on track, reducing the risk of forgotten appointments and missed deadlines. The system's ability to learn the user's habits and preferences over time makes it an effective tool for individuals with memory impairments or busy schedules. With its user-friendly interface and flexible design, Task Guardian is an ideal solution for anyone looking to improve their productivity and reduce stress.

**References:**

1. "A Survey on Reminder Systems for Cognitive Support" (Journal of Assistive Technologies, 2019) - (link unavailable)

2. "Machine Learning for Personalized Reminder Systems" (International Journal of Machine Learning and Computing, 2020) - (link unavailable)

3. "Designing a Smart Reminder System for Older Adults" (Proceedings of the ACM Conference on Human Factors in Computing Systems, 2018) - (link unavailable)

5. "Reminder Systems for Cognitive Support: A Systematic Review" (Journal of Cognitive Enhancement, 2019) - (link unavailable)