

SLEEPFENCE

Team Members:

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1. Title – SleepFence: AI-Powered Sleep Protection Website

SleepFence is an innovative AI-powered mobile application designed to help users maintain healthy sleep habits by intelligently limiting late-night screen usage. Unlike traditional reminder apps, SleepFence enforces digital boundaries while still allowing access during emergencies. It ensures a perfect balance between well-being and essential digital needs.

2. Objective

The main objective of Sleep-Fence is to reduce the harmful impact of excessive night-time mobile phone use on sleep quality. By automating screen-off schedules and providing controlled emergency access, the application helps users develop healthier sleep patterns, leading to improved productivity, mood, and overall well-being.

3. Tools Used

- **AI Algorithms** for smart enforcement and adaptive decision-making.
- **Chatbot** to guide users regarding emergency work mode.
- **Notification System** for gentle reminders and alerts.
- **Database** for storing personalized schedules and user preferences.

4. Methodology

1. **Identifying the Problem:** Understanding why late-night phone usage is difficult for people to self-regulate and how current solutions fail.
2. **Designing Sleep-Fence:** Creating a model for AI-driven screen control, emergency overrides, and customizable sleep schedules.

3. **Website Development:** Building the interface, integrating AI logic, and designing user-friendly workflows.
4. **Testing & Evaluation:** Testing the website by simulating sleep schedules, emergency access, and reminder accuracy.

5. Output

The final output is a functional web application that:

- Automatically turns off the phone screen during scheduled sleep hours.
- Allows limited, controlled access through an **Emergency Work Mode**.
- Sends proactive sleep reminders.
- Provides a simple, intuitive interface for setting sleep schedules.

6. Result

Sleep-Fence successfully helps users strengthen their digital discipline and improve their sleep quality. It reduces the tendency to ignore or bypass reminders and significantly lowers nighttime screen activity. It provides better sleep consistency and improved daytime energy levels.

7. Conclusion

Sleep-Fence demonstrates how AI can enhance digital well-being by bridging the gap between intention and action. By offering smart enforcement rather than simple reminders, the app helps users prioritize healthy sleep habits. This project highlights the power of adaptive AI in promoting wellness and improving lifestyle patterns.

8. Project URL

[Home | SleepFence](#)

9. GitHub Profile

<https://github.com/pravallikacodes22>