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TASK PULSE

Ms. Rajashree Sutrawe(Assoc.Prof), Erra Abhinav, Galakatla Thanusha

CSE, Guru Nanak Institutions Technical Campus, Hyderabad, Telangana, India

ABSTRACT

Effective workforce management is essential in today's fast-paced work environment. Task Pulse is a mobile-based solution designed to address common workforce management challenges. It offers real-time project and task tracking, a skill development tracker, and seamless integration with productivity tools. The app's features promote employee growth and align organizational objectives. Planned enhancements aim to further optimize workflows and foster a culture of continuous improvement.

Keywords: Employee Management, Workforce Analytics, Task Tracking, Mobile Solutions, Skill Development

INTRODUCTION

Workforce management in modern organizations requires robust tools to track projects, assign tasks, and measure employee growth. Existing systems often lack real-time tracking and skill alignment features. Task Pulse bridges this gap with a streamlined mobile interface. This paper explores the development of Task Pulse, highlighting its core features, execution, and potential impact on workforce efficiency.

METHODOLOGIES

Modules:

1. User: Employees log in to view assigned tasks, track progress, and provide feedback.

2.Admin: Managers add developers, assign projects, and monitor tasks and issues.

3. Bug and Complaint Tracking: Real-time tracking of bugs and employee complaints for resolution.

FEATURES AND EXECUTION:

The app's main page offers features such as:

Add Developer

Add Projects

Assign Projects

View Complaints

View Bugs

View Developers

LITERATURE REVIEW

• Design and Implementation of an Automatic Staff Availability

Tracking System Kyle Stone, Jan Spies Computer Systems

Engineering Tshwane University of Technology Pretoria, South

Africa-2020

• "Activity Tracking of Employees in Industries Using Computer

Vision" by Hussain et al., 2022 – This study explores activity tracking

in industrial environments through computer vision, enhancing real time monitoring (IEEE Xplore)

SYSTEM ARCHITECTURE

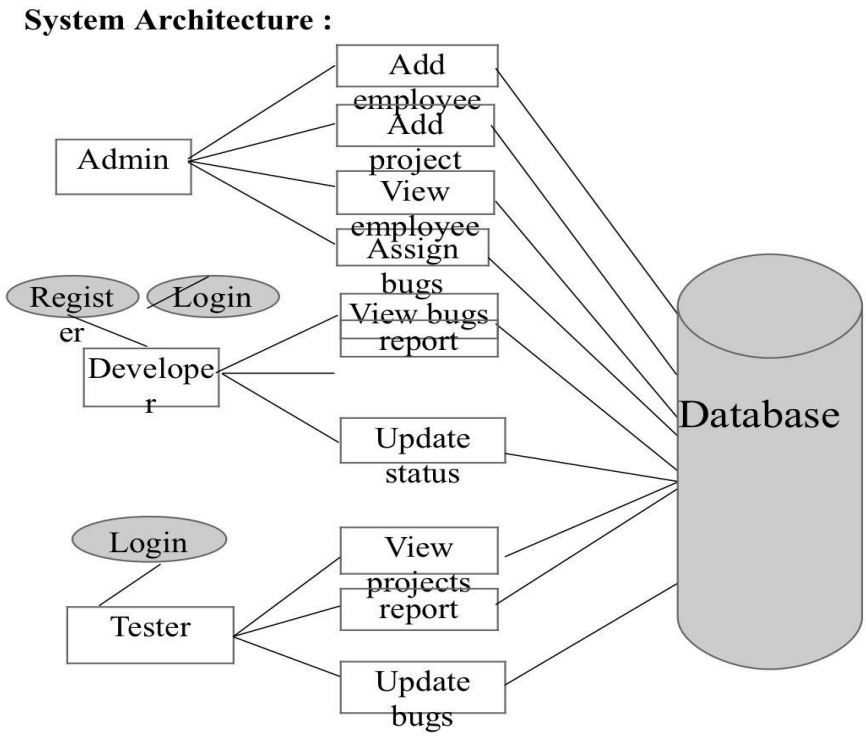
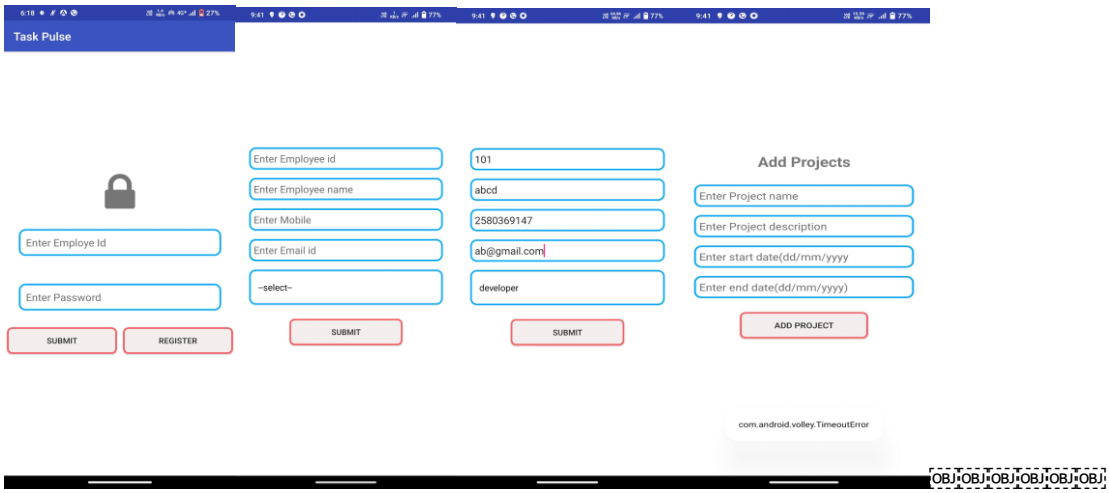


Fig: System Architecture



CONCLUSION

Task Pulse provides an innovative solution for workforce management by integrating task tracking, real-time monitoring, and skill development features. Its scalable design ensures adaptability for diverse organizational needs. Future enhancements aim to optimize workflows and further improve employee engagement and performance tracking.

FUTURE ENHANCEMENT

To enhance Task Pulse, several features can be added:

• Analytics Dashboard: Visualize project progress, developer performance, and bug trends.

• Automated Notifications: Alerts for task deadlines and bug updates.

• Role-Based Access Control: Secure data with role-specific permissions.

• Bug Severity Classification: Prioritize issues for efficient resolution.

• Integrated Chat Feature: Streamline communication between team members.

• Performance Metrics: Track developer progress and skill growth.

• Feedback System: Allow users to report issues or suggest improvements.

REFERENCE

1. R. Singh, A. Kumar, and P. Singh, "A Study on Efficient Bug Tracking and Workflow Automation in Software Development," IEEE Access, vol. 8, pp. 30205–30220, 2020.

Focus: Automating bug tracking and resolving workflow bottlenecks.

2. S. Gupta and M. Rani, "Implementing Agile-Based Bug Tracking Systems for Improved Collaboration," IEEE Software, vol. 37, no. 6, pp. 50–56, 2020.

Focus: Agile methodology in tracking and resolving bugs.

3. P. Kumar and D. Prakash, "Enhancing Bug Management in Cloud-Based Applications Using AI," IEEE Cloud Computing, vol. 7, no. 4, pp. 65–74, 2020.

Focus: AI-driven bug prioritization and tracking.

4. A. Silva et al., "Integrated Issue Tracking with Employee Performance Metrics in DevOps," IEEE Transactions on Software Engineering, vol. 48, no. 2, pp. 352–366, 2022.

Focus: Linking bug resolution tasks with employee growth metrics.