

Nirma University

Institute of Technology

COMPUTER ENGINEERING / INFORMATION TECHNOLOGY Department

MCA Major Project

Proposal for Topic of Major Project

Name of Student	: Thakkar Akash Ajitbhai
Roll No.	: 22MCA066
Programme	: MCA
Department	: CSE
Topic of Major Project	: Intelligent Employee Productivity and Wellness Dashboard
Analytical/Experimental	: Experimental
Faculty Guide	: Dr. Saurin Parikh
Objective of the Project	: The project aims to develop an intelligent dashboard for organizations to monitor and improve employee productivity and wellness along with the employee routine working data. The platform will integrate data from various sources to provide insights into employee check-in, checkout, leaves, work assignments, projects, work patterns, stress levels, and overall well-being.
Scope of the Work	: Key Components and Features: 1. Employee Data Aggregation: <ul style="list-style-type: none">• Integrate a fresh new system and collaboration tools to aggregate data related to work hours, project contributions, meeting schedules, and communication patterns. 2. Leaves: <ul style="list-style-type: none">• Add/Update/Delete Employee Leaves 3. Role-based different dashboard 4. Regular surveys to collect the employee's mindset data and working patterns. 5. Projects/Tasks Assignment. 6. Charts: <ul style="list-style-type: none">• Burndown charts• Key metrics• KPI measurements• Employee well-being charts. 7. Productivity Metrics: <ul style="list-style-type: none">• Create visualizations and metrics to track individual and team productivity, including

project completion rates, task completion times, and overall efficiency.

- Provide personalized productivity recommendations based on historical data.

8. Wellness Tracking:

- Integrate wellness-related data such as physical activity, sleep patterns, and health-related surveys to gauge and monitor employee well-being.
- Provide insights into potential correlations between wellness and productivity.

9. Customizable Dashboards:

- Allow organizations to customize dashboards based on their specific metrics and key performance indicators (KPIs) for productivity and employee well-being.
- Implement role-based access controls to ensure data privacy.

10. Intelligent Alerts and Recommendations:

- Implement an intelligent alert system that notifies managers and employees of potential burnout risks or low productivity periods.
- Provide personalized recommendations for improving wellness and productivity.

Admin panel to manage the backend data that can be processed and used at user panel

Methodology to be adopted :

Frontend: React.js for building the user interface
Backend: Node.js with Express.js for server-side development

Database: MongoDB for storing aggregated employee data

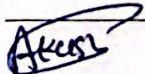
Data Visualization: Libraries such as Chart.js or D3.js for creating interactive charts

Expected Outcome :

- Front-end user panel & admin panel
- Dashboard where employees can put their routine working data in the system.
- Manage projects/tasks assignments.
- Generate advanced reports that can help analyze the organization and employee improvement.
- A comprehensive dashboard providing insights into employee productivity and well-being.
- Increased awareness and proactive management of employee well-being.

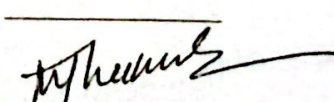
Requirement of Fund :

NA

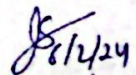


Signature of Student




Signature of Guide*

*(Signature of Industry / External guide as well as Institute Guide in case of project outside the Institute)


9/8/24
Institute Guide