MINI PROJECT

EMPLOYEE STRESS MANAGEMENT SYSTEM





BATCH D31

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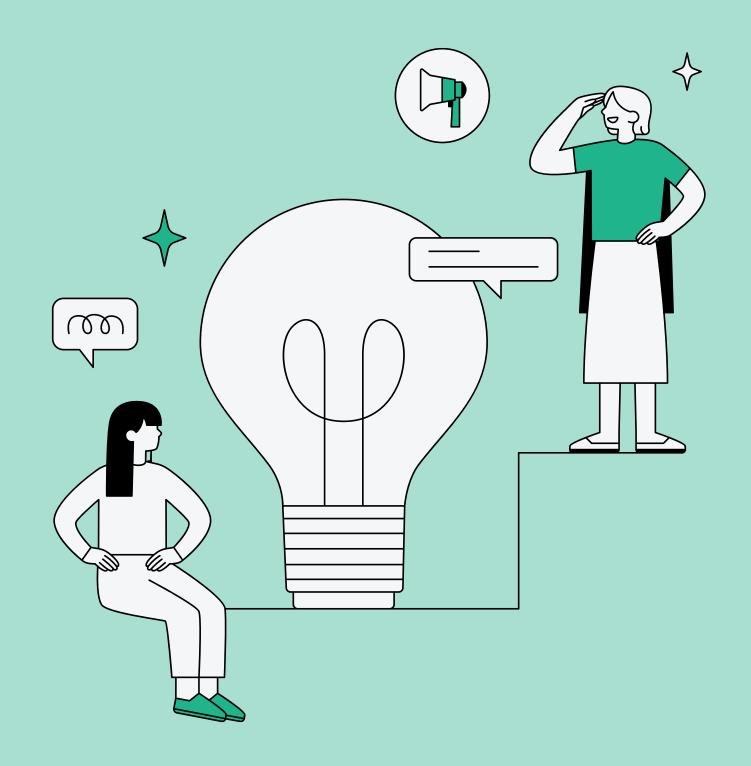
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DOMAIN: DATA SCIENCE



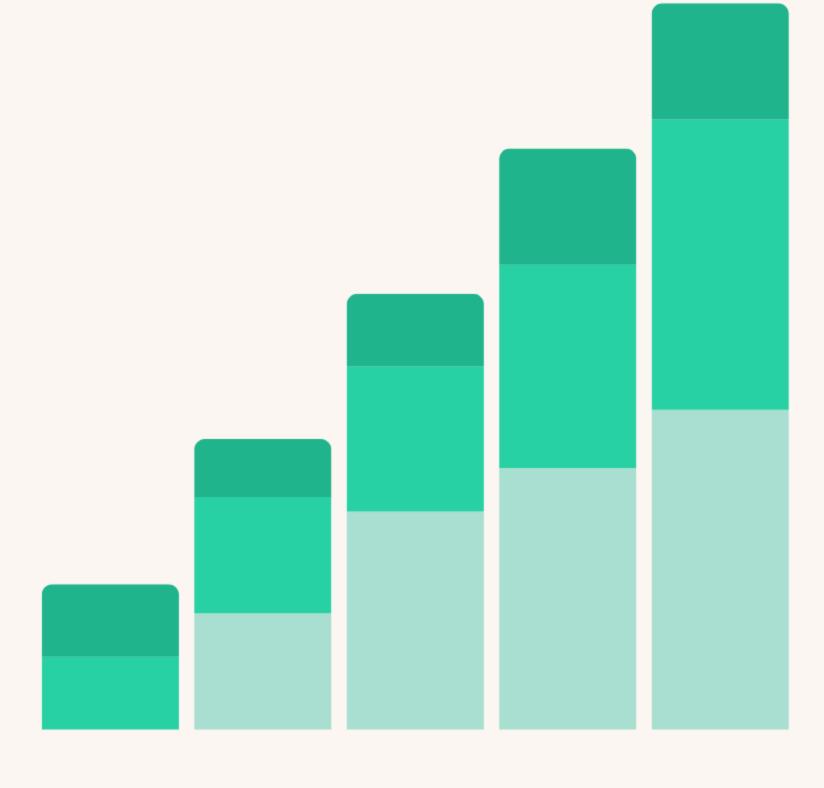
ABSTRACT

The Employee Stress Management System is designed to help organizations monitor and manage employee stress levels effectively. With the rise of technology and the demand for efficiency, maintaining employee well-being is crucial. This system leverages data analytics, using Power BI, to track employee login and logout times, identifying potential stress points. Based on these patterns, it recommends scheduled leaves to ensure balanced workloads and reduce burnout. Data is stored centrally using MS-SQL Server, and userfriendly dashboards provide HR managers with actionable insights for better decision-making, ensuring both productivity and employee satisfaction.



OBJECTIVE

- Monitor and manage employee stress levels by tracking daily login and logout times.
- Provide real-time insights into employee workload patterns for HR managers.
- Recommend scheduled leaves when high stress levels are detected to promote work-life balance.
- Reduce employee burnout and enhance overall productivity.
- Utilize Power BI dashboards for visual analytics and SQL Server for secure data storage.
- Support HR departments in making informed decisions on workload management and stress reduction.
- Foster a healthier, more balanced work environment through a proactive, data-driven approach.



PROBLEM STATEMENT

Problem:

- 1. No Real-Time Monitoring: HR managers struggle to track employee stress levels in real-time, leading to delayed identification of overwork.
- 2. Manual Processes: Existing stress management methods rely on manual surveys and reports, which are time-consuming and often inaccurate.
- 3. Reactive Approach: Stress is usually addressed after employees report issues, making the process reactive rather than proactive.
- 4.Lack of Data-Driven Insights: Decisions on employee well-being are made without using comprehensive data analytics, resulting in inefficiency.

<u>Solution:</u> The solution is an Employee Stress Management System that provides real-time monitoring of employee stress levels, generates data-driven insights, and recommends scheduled leaves to manage stress proactively.

EXISTINGSYSTEM

- <u>Manual Tracking:</u> HR managers rely on manual reports or surveys to assess employee stress levels.
- Reactive Approach: Stress is usually addressed only after employees report issues or show visible signs of burnout.
- <u>Lack of Real-Time Data</u>: No real-time monitoring of employee work hours or stress indicators.
- <u>Limited Use of Analytics</u>: Minimal use of data analytics, leading to subjective decision-making.
- <u>Delayed Interventions</u>: Interventions are often delayed due to lack of proactive monitoring tools.



PROPOSED WORK

The proposed system for the **Employee Stress Management System** aims to help HR managers monitor and manage employee stress levels efficiently. The system tracks login and logout times to assess workload and identify stress levels among employees. Based on this data, it recommends scheduled leaves to manage stress more effectively. HR managers are provided with real-time insights and visual dashboards via Power BI, allowing for proactive stress management. This system enables companies to foster a healthier work environment, reduce burnout, and improve overall productivity by offering tailored solutions to manage stress.



HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirements:

- Processor: At least Pentium 4 or above.
- Processor Speed: Minimum of 1 GHz or above.
- RAM: 2 GB or greater.
- Storage: 10 GB of available disk space.

Software Requirements:

- Operating System: Windows 7, Windows 10, or Windows 11.
- Browser: Google Chrome, Mozilla Firefox, Microsoft Edge.
- Power BI Desktop: For creating and managing dashboards.
- MS SQL Server: For database management.
- Programming Language: DAX (Power BI) and SQL for queries.

MODULES

The major modules for the Employee Stress Management System:

Employee Module:

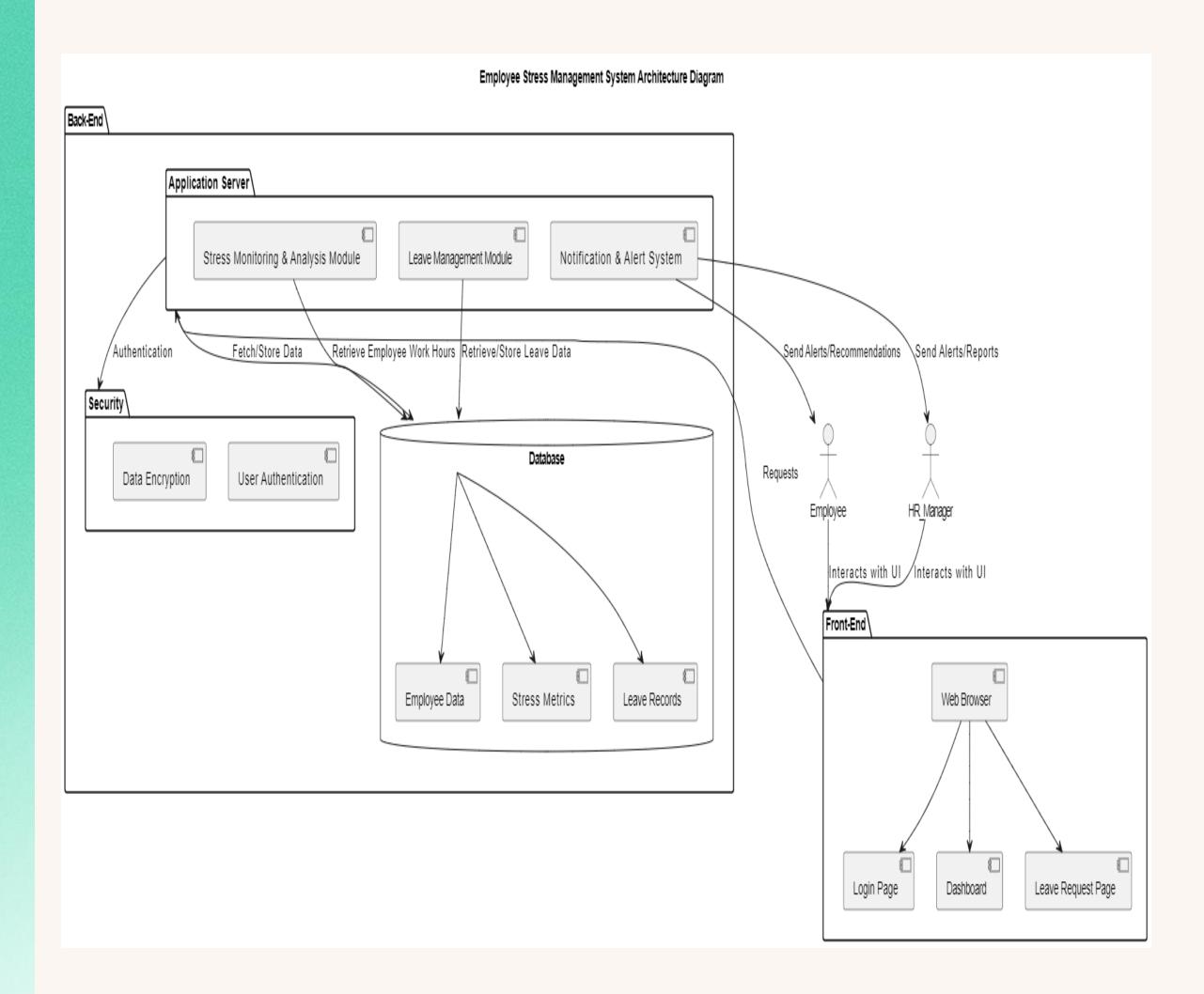
- Employees can view their workload history (based on login and logout times) to track their working hours and stress levels.
- Employees receive automated alerts when their stress levels exceed a certain threshold, recommending scheduled leaves.
- Employees can view leave suggestions and request additional leaves through the system.
- Employees have access to personalized dashboards showing their workload trends and stress patterns.

MODULES

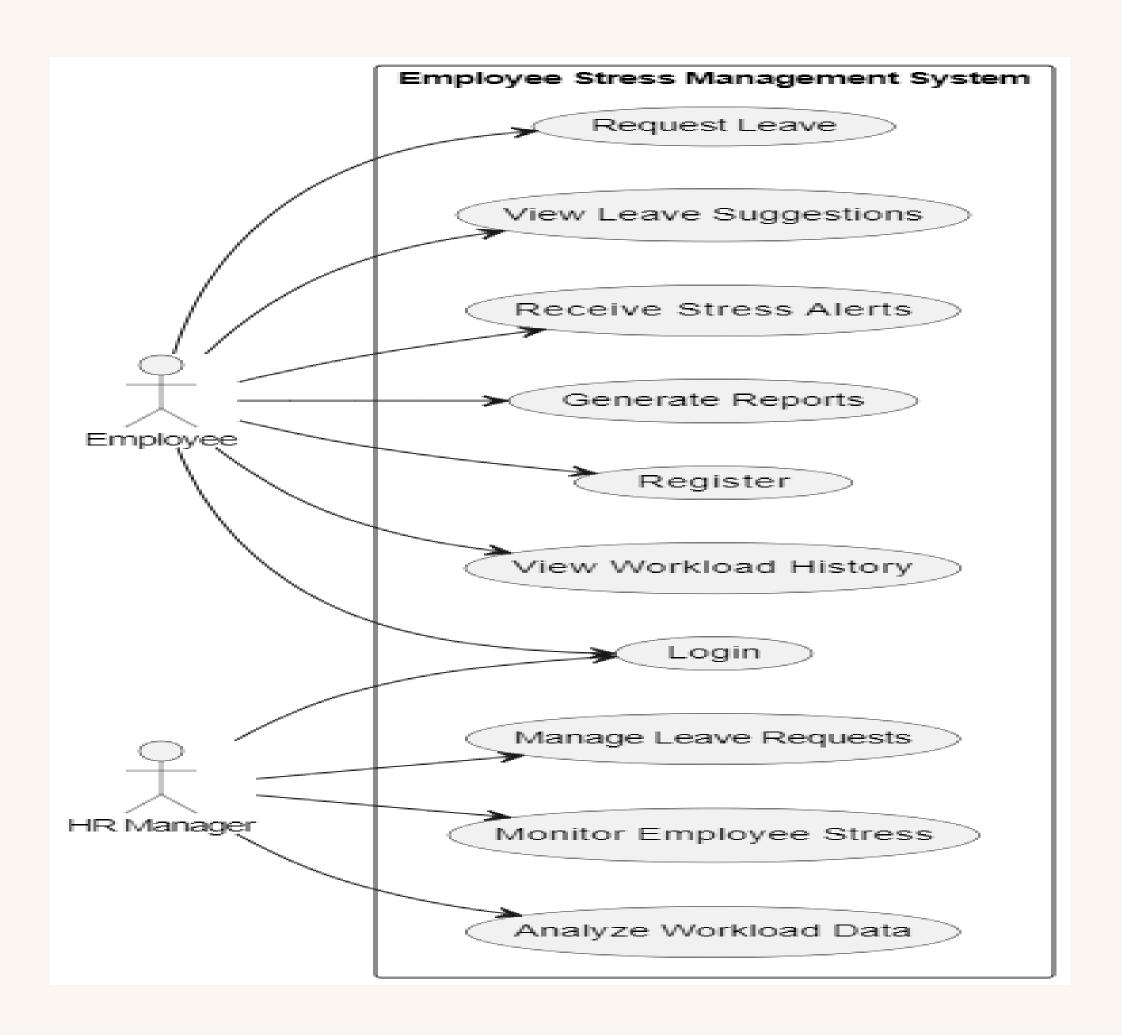
HR Manager Module:

- HR managers can monitor employee stress levels in real time via Power BI dashboards.
- HR can view recommendations for scheduled leaves based on employee working hours and stress patterns.
- Managers can analyze workload trends across departments and track overall employee well-being.
- HR can manage and approve leaves, ensuring employees maintain a healthy work-life balance.

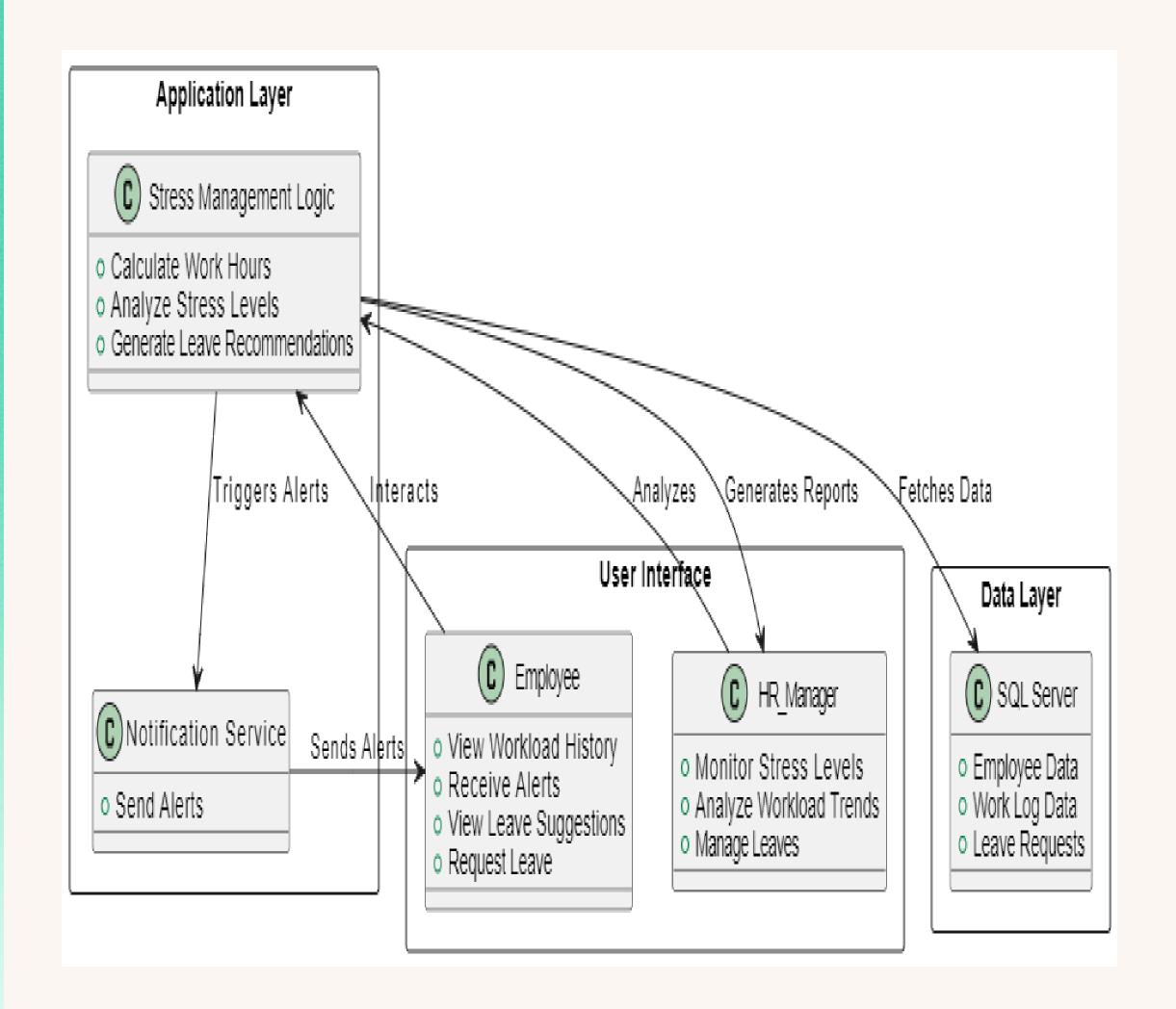
ARCHITECTURE DIAGRAM



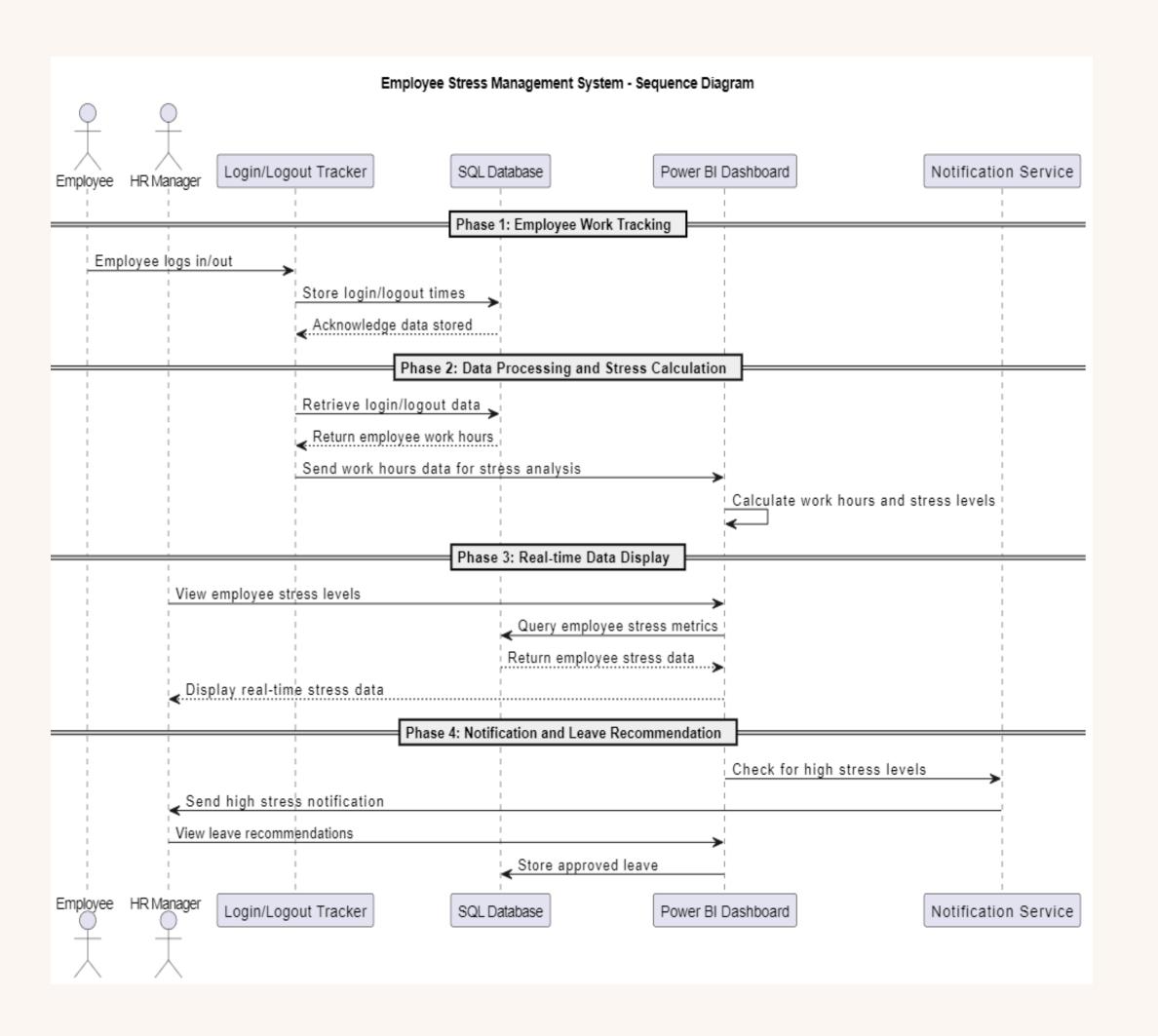
USE CASE DIAGRAM



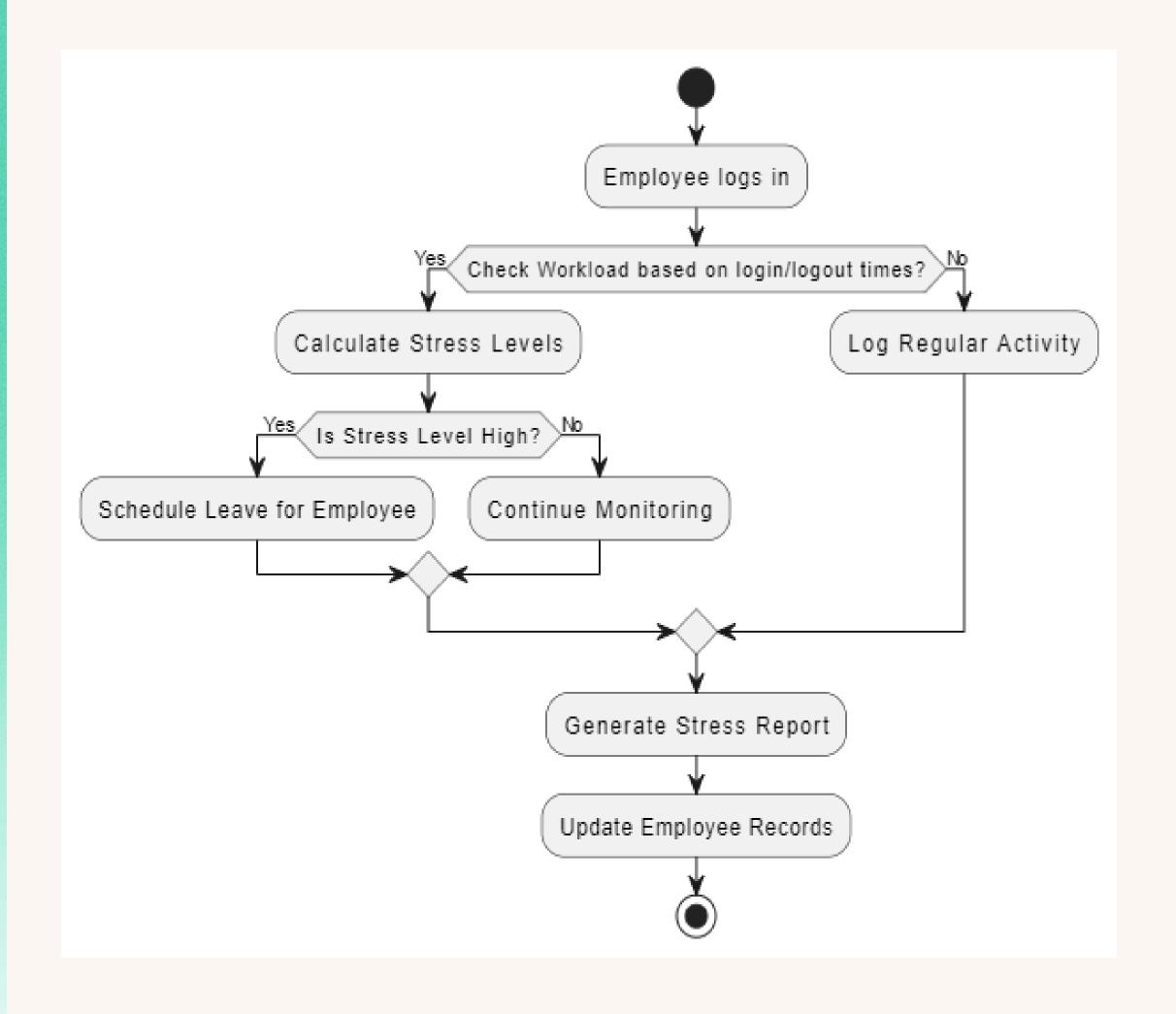
CLASS DIAGRAM



SEQUENCE DIAGRAM



ACTIVITY DIAGRAM





EMPLOYEE OVERTIME ANALYSIS





OVERTIME EMPLOYEES NOTIFICATION

Overtime	Employees	Notification

Alice

Hours Worked: 180

Bob

Hours Worked: 175

David

Hours Worked: 190

Send Email Notification





EMAIL NOTIFICATION

Email Notification Sent

Your email notifications have been successfully sent to employees who have worked overtime.

Go Back



THANK YOU!

