BANNARI AMMAN INSTITUTE OF TECHNOLOGY

An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade

Sathyamangalam - 638401 Erode District, Tamil Nadu, India

STUDENT NAME: KAVEYAN B
SEAT NO   : 242
PROJECT ID   : 2
PROJECT TITLE : TRAINING PERFORMANCE TRACKER

TECHNICAL COMPONENTS

COMPONENTS	TECH STACK
Frontend	REACT JS
Backend	NODE JS EXPRESS JS
Database	MONGODB

IMPLEMENTATION TIMELINE

PHASE	DEADLINE	STATUS	NOTES
STAGE 1	2/5/2024		Planning and Requirement gathering
STAGE 2			Design and Prototyping Stage
STAGE 3			DBDesigning
STAGE 4			Backend Implementation
STAGE 5			Testing& Implementation

PROBLEM STATEMENT:

In educational institutions, tracking the performance and progress of students in various training programs poses several challenges. These include:

1.	**disjointed tracking:** Currently, students have to manually upload their training details and achievements across different platforms, leading to inefficiencies and data discrepancies.
2.	**Lack of verification and validation**: There is no streamlined process for faculty to verify and validate the training details uploaded by students, leading to potential inaccuracies and misrepresentation.
3.	**Limited visibility and accessibility**: Parents often lack visibility into their child's training progress, making it challenging for them to provide support and guidance.
4.	**Administrative burden**: Admin staff are burdened with the task of managing and overseeing the training performance tracking process manually, leading to inefficiencies and delays.

PROJECT-FLOW:

Purpose:

The purpose of this project is to develop a comprehensive training performance tracking system that **automates the process of recording,** verifying, and **monitoring student training data** to ensure accuracy, transparency, and accessibility.

Scope:

This system will include features such as **user authentication**, a student training profile, faculty verification workflows, parent access, and an administrative dashboard for oversight and management

Business Context:

The training performance tracking system aims to enhance transparency, accuracy, and accessibility in monitoring student training progress, thereby **facilitating better support and guidance for students** and fostering a culture of accountability. Primary stakeholders include **students, faculty, parents, and administrative staff**

Consideration:

Utilization of the **MERN** (MongoDB, Express.js, React.js, Node.js) stack for development.

Integration with **authentication systems** for user login and role-based access control.

Ensuring data security and privacy compliance with relevant regulations

User persona:

Student: Needs a platform to upload and track their training details and achievements.

Faculty: Responsible for verifying and validating student training data.

Parent: Requires access to monitor their child's training progress and provide support accordingly.

Admin Staff: Manages and oversees the training performance tracking system, ensuring its smooth operation and compliance.

User Stories:

As a student, I want to easily upload my training details an achievements, including certificates and proof of completion, for validation by faculty.

As a faculty member, I need a streamlined process to verify and validate student training data, ensuring its accuracy and reliability.

As a parent, I want access to a platform where I can monitor my child's training progress and provide support and guidance as needed.

As an admin staff member, I require a comprehensive dashboard to oversee the training performance tracking process, manage user roles and permissions, and generate reports for analysis and decision-making.

Functional Requirements:

User Authentication: Secure login using role-based access control.

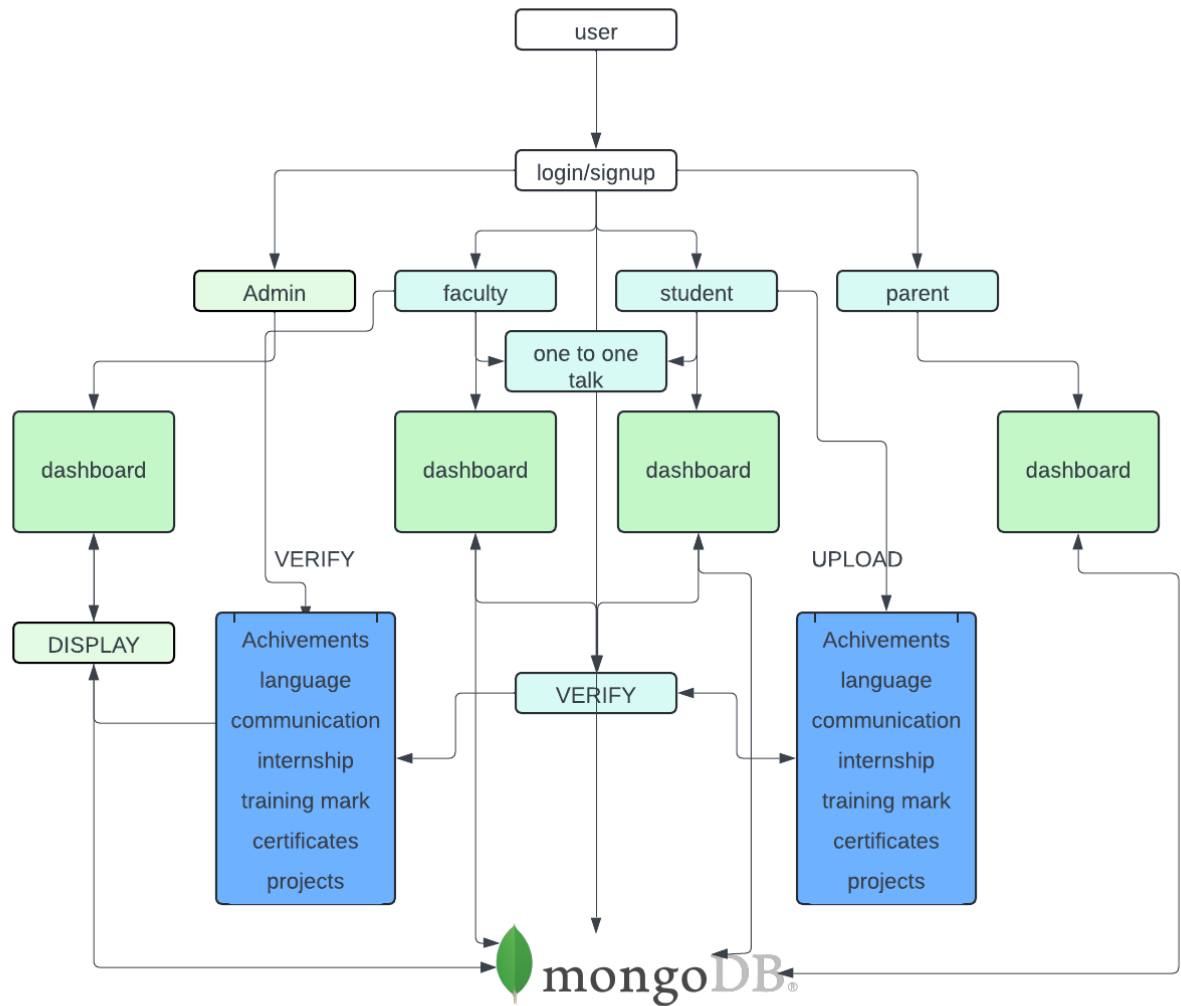**Student Training Profile**: A platform for students to upload and manage their training details and achievements.

Faculty Verification Workflow: Automated workflows for faculty to verify and validate student training data.

Parent Access: A separate dashboard or portal for parents to monitor their child's training progress.

Administrative Dashboard: A centralized dashboard for admin staff to oversee the entire tracking process, manage user roles, and generate reports.

Data Security and Privacy: Implementation of robust security measures to protect student data and ensure compliance with relevant regulations.

FLOW CHART:

ER DIAGRAM (DB DESIGN):