BANNARI AMMAN INSTITUTE OF TECHNOLOGY

Software Requirement Specification for TAC Portal

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Project ID: 38
Project Title: Student Ranking Dashboard

STACK-MEAN

Front End	Angular
Back End	Node.js(Javascript Runtime Environment) Express.js(Web framework for Node.js)
Database	MongoDB(NOSQL Database)
API	RESTFul API / GraphQL APIs

REQUIREMENT BRIEF

Purpose	Student ranking dashboard to analyze students performance in placement preparation.
Scope	This system incorporates user authentication via the Bitsathy Gmail account, assisting students in assessing their performance in placement preparation. It facilitates administrative tasks by streamlining student data management and enables filtering the students based on their knowledge.
Client	Training and Placement cell

FUNCTIONAL REQUIREMENTS:

STUDENT CENTRIC

Features	Description
Personalized Skill	Helps to track progress by showcasing the completion status of different levels in Personalized skill assessment.
Self-Internship	Display the stages finished in self-internship(full stack development).
Moodle FA	Present the percentage score achieved in Moodle formative assessments, providing students with immediate feedback on their understanding of course materials.
Display Rank	Show the student's ranking among peers, fostering healthy competition and motivating students to excel further in their preparation efforts.
Mock Interview or Group Discussion	Log participation in mock interviews or group discussions, allowing students to track their practical experience and refine their communication skills.
Total Number of Company Attended	Showcase the count of companies visited by the student, helping them gauge their exposure to different recruitment processes and industries.
Attendance in T&P Sessions	Display attendance records for training and placement sessions, aiding students in ensuring their active participation and engagement in career development activities.

	ADMIN CENTRIC
Skill result	Enable administrators to upload personalized skill assessment results for students into Excel format.
Create User ID	Empower administrators to generate user IDs for faculty members to access and review allocated students.
Allocating the Students to User ID	Provide administrators with the functionality to allocate students to specific user IDs (faculty members).
Review the students	With the help of User ID the reviewer/faculty members are able to enter the marks or results of students based on criteria.
Top 50 Ranks to be Downloaded	Enable administrators to download the top 50 ranked students' data for further analysis or reporting purposes.

NON-FUNCTIONAL REQUIREMENTS:

User interface:

Designing intuitive user interfaces for easy navigation and data visualization.

Security:

Access controls should be implemented to ensure that students can only view their own data and not that of other students.

Scalability:

Supporting scalability to accommodate increasing data volume and user traffic.

Administrators should be able to easily add or remove users and resources as needed.

Auditability:

The system should maintain logs of administrative actions and system events for auditing purposes.

Reliability:

Data integrity should be maintained to ensure that student rankings and performance metrics are accurate and consistent.

DEPENDENCIES:

Database Management System: To store and manage student data, assessment results, attendance records, etc.
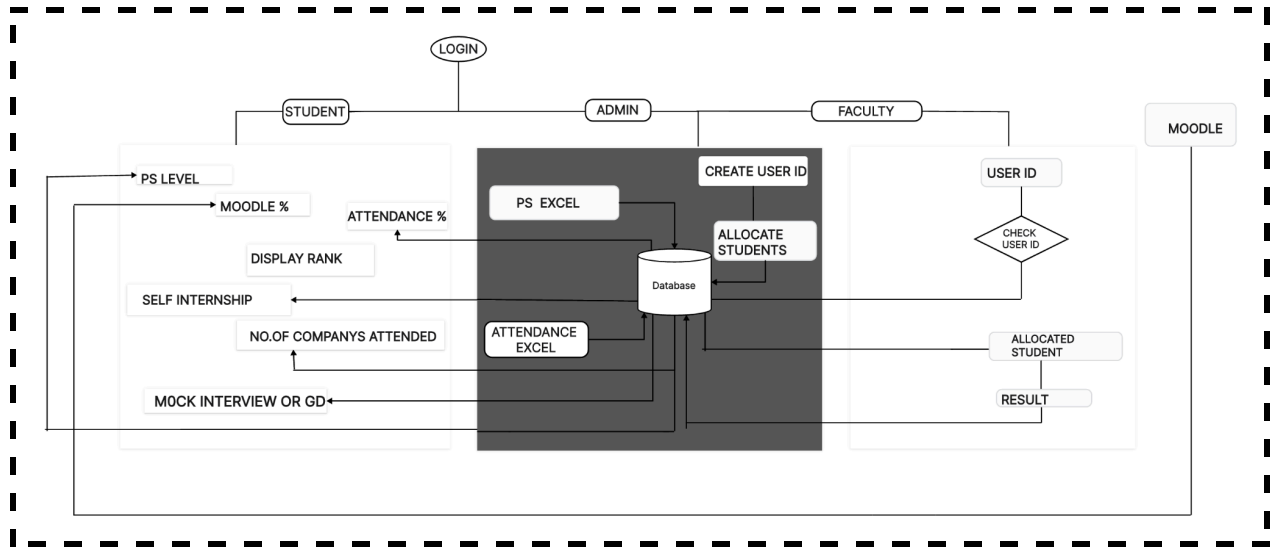
Integration with Moodle: To retrieve assessment scores and other relevant data from Moodle courses.

User Authentication System: To manage user accounts, allocate students to user IDs, and ensure data security.

FEATURES:

- Helps the administrator to create events and to create reviewing criteria and marks for each criteria.

- For uploading attendance proof the admin has to enter a training name ,total number of days,start and end date of training and upload the proof which helps both the admin and the student.

- The rank is based on allocating marks for each placement activities like if attendance is greater than 90 the mark is 50,if ps skill is cleared in first attempt the mark is 50.In this way the admin will able to allocate marks for the activities and at the last the rank is based on mark secured by the student.

FLOWCHART

ER DIAGRAM