SOFTWARE REQUIREMENT SPECIFICATION

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Project ID: 30

Project title: IRP VISIT-DBMS

Technical components

Component	Tech Stack
Frontend	Html,css,js
Backend	Python,Django
Database	MySql,PostgreSQL
API	OPEN API

Problem Statement:

The lack of a proper database management system (DBMS) for industry visit data leads to several issues:

Data Fragmentation: Data regarding industry visits is scattered across various sources such as emails, spreadsheets, and paper records. This fragmentation makes it difficult to access and analyze the information effectively.

Data Loss: Important details about industry visits, including dates, companies visited, purpose, and feedback, are frequently lost or misplaced due to the absence of a centralized system.

Inefficiency in Analysis: Without a centralized system, analyzing trends, identifying patterns, and evaluating the effectiveness of industry visits becomes time-consuming and challenging.

Lack of Accountability: There is no clear accountability for managing industry visit data, leading to inconsistencies and errors in the information stored.

Solution:

Design and develop a dashboard website for college management to manage and view statistics and details of industry visits to the college for an industrial relations program.

1.Project flow:

1.1.Purpose:

The purpose of the project is to:

- Provide college management with a centralized platform to manage and view industry visit data.
- Facilitate better decision-making and planning related to industry relations.
- Improve transparency and efficiency in managing industry visit programs.

1.2.Scope:

The scope of this project includes:

- ❖ Designing and developing a database schema to store industry visit data.

- Implementing a web-based interface for data entry, retrieval, and analysis.
- Integrating authentication and authorization mechanisms to control access to the system.
- Providing functionalities for adding, editing, deleting, and querying industry visit records.
- Ensuring data security, integrity, and confidentiality.

2.System overview:

2.1.Users:

Admin or IIPC team: Has access to view and manage data related to industry visits.

Faculty: Can view data but may have limited management capabilities.

Student: Has no access to view or manage data.

2.2.Dashboard Features:

Implement features to display statistics and details of industry visits. This may include:

Overall statistics: Total visits, most visited sectors, etc.

Detailed visit information: Date,duration, company details, purpose, topics covered, etc.

Charts and graphs: Representing data visually for better understanding.

Search and filter options: To search for visits by date, company name, sector, etc.

User authentication: If required, allow users(administrators, faculty) to log in and manage data.

3.Functional Requirements:

3.1.User Authentication: Users should be able to log in using their credentials. Users should be redirected to the login page if not authenticated.

3.2.Dashboard View: Display overall statistics of industry visits. Display detailed information of each visit. Provide search and filter options.

3.4.Visit Management: Add new visit records. Edit existing visit records. Delete visit records. These actions should be accessible only to authorized users.

3.5.Logout: Users should be able to log out from the dashboard.

4.Non-Functional Requirements:

4.1.Security:

- The website should implement secure user authentication and authorization mechanisms.
- Data transmission should be encrypted using HTTPS.

4.2.Performance:

- The website should load quickly and respond promptly to user interactions.
- Database queries should be optimized for efficiency.

4.3.Usability:

- The user interface should be intuitive and easy to navigate.
- Proper error handling and informative messages should be provided.

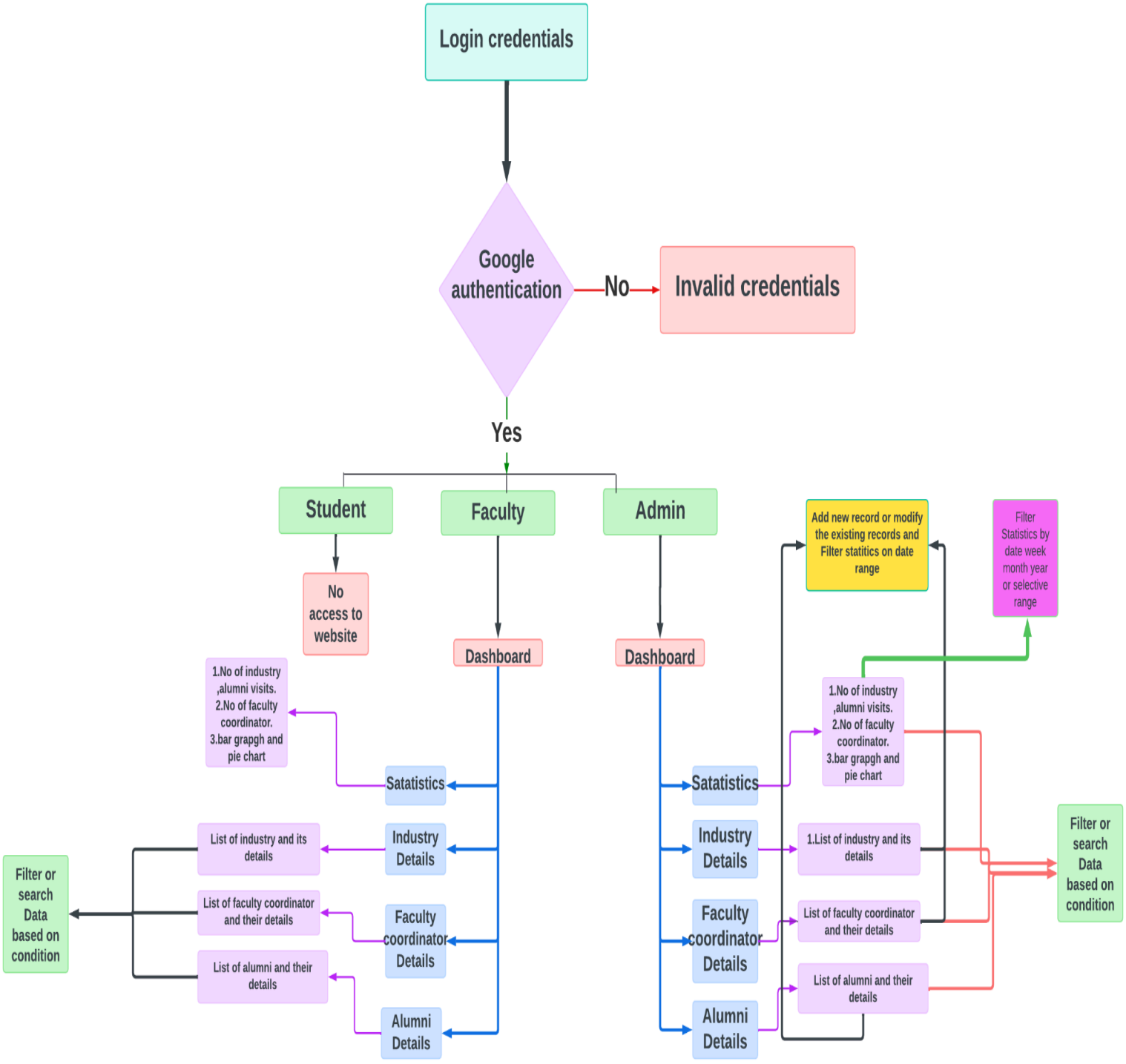
4.5.Reliability:

- The website should be stable and reliable, with minimal downtime.
- Regular backups of the database should be maintained.

4.6.Scalability:

- The website should be designed to accommodate future growth in data and user traffic.
- Scalable architecture should be used to handle increased load if necessary.

Flowchart:


Login credentials
Google authentication
No
Invalid credentials
Yes
Student
Faculty
Admin
No access to website
Dashboard
Dashboard
1.No of industry ,alumni visits. 2.No of faculty coordinator. 3.bar grapgh and pie chart
Satatistics
List of industry and its details
Industry Details
List of faculty coordinator and their details
Faculty coordinator Details
List of alumni and their details
Alumni Details
Filter or search Data based on condition
Add new record or modify the existing records and Filter statitics on date range
Filter Statistics by date week month year or selective range
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Industry Details
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Faculty coordinator Details
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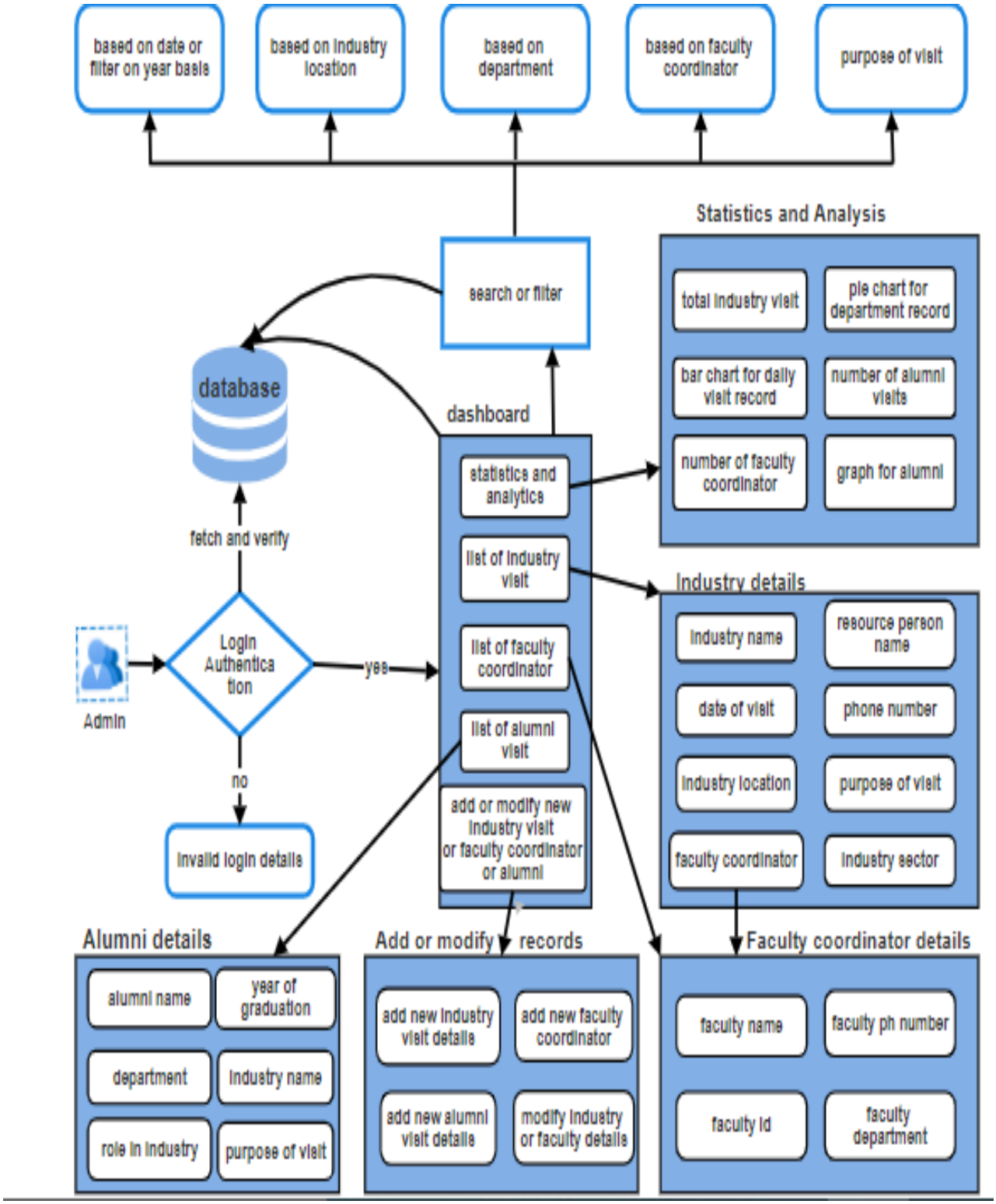
Filter or search Data based on condition

Admin interface:



Faculty interface: