Software Requirement Specification for Contact Management

Name	**Monisa K**
Roll no	**7376222BT162**
Seat no	**157**
Project id	**28**
Problem statement	**Contact Management**

1. Problem Statement:

The hiring data and industrial visit contacts are currently managed using disorganised ways (spreadsheets, emails, and notes). This results in a loss of information, inefficiency, and trouble following up with prospects. To facilitate industrial visit coordination and streamline the hiring process, we require a centralised application that stores and arranges contact details, visit reports, and candidate information.

2. Project Flow:

- **Collect Requirements:** Have a meeting with stakeholders to find out how they presently handle employment information and contacts. Determine their requirements and areas of discomfort.
- **Describe the data model:** Make a list of all the data you wish to keep, including contact information, appointment schedules, business details, and applicant qualifications.
- **Identification of Entity and Attribute:** Divide the data model into its fundamental components, such as Contacts, Companies, Visits, and Candidates. Describe each entity's attributes (information) (e.g., name, email, visit report, resume).
- **Keys & Relationships:** Determine the relationships between entities (e.g., a Contact may attend several Visits). Establish a distinct identity (Primary Key) for every table (Contact ID, for example).

- **Design with logic:** To represent entities, properties, and relationships visually, create an entity-relationship diagram (ERD).
- **Normalisation:** Optimise the design by reducing redundant data and increasing efficiency (e.g., by deleting recurring groupings).
- **Physical Design:** Convert the logical model to the particular database platform (PostgreSQL, MySQL, etc.) that you plan to utilise. For every attribute, specify the data type (text, date, etc.).
- **Database Creation:** Based on the physical design, create the database structure using the selected platform.
- **Validation and Testing:** Add example data to the database and test adding, editing, and retrieving information functions.
- **Documentation:** For future reference, keep a record of the whole database design process, including the ERD and data dictionary.

3. Functional Requirements:

Contact Management:

- Add, edit, and delete contact details (name, email, organization, etc.).
- Organize contacts by category (e.g., industry, university).
- Search and filter contacts based on various criteria.

Industrial Visit Management:

- Schedule and track industrial visits.
- Store and manage visit reports, including notes and takeaways.
- Link visit reports to relevant contacts and companies.

Hiring Management:

- Create and manage job postings for positions arising from visits.
- Store and manage candidate applications (resumes, cover letters).
- Track candidate progress through the hiring pipeline.

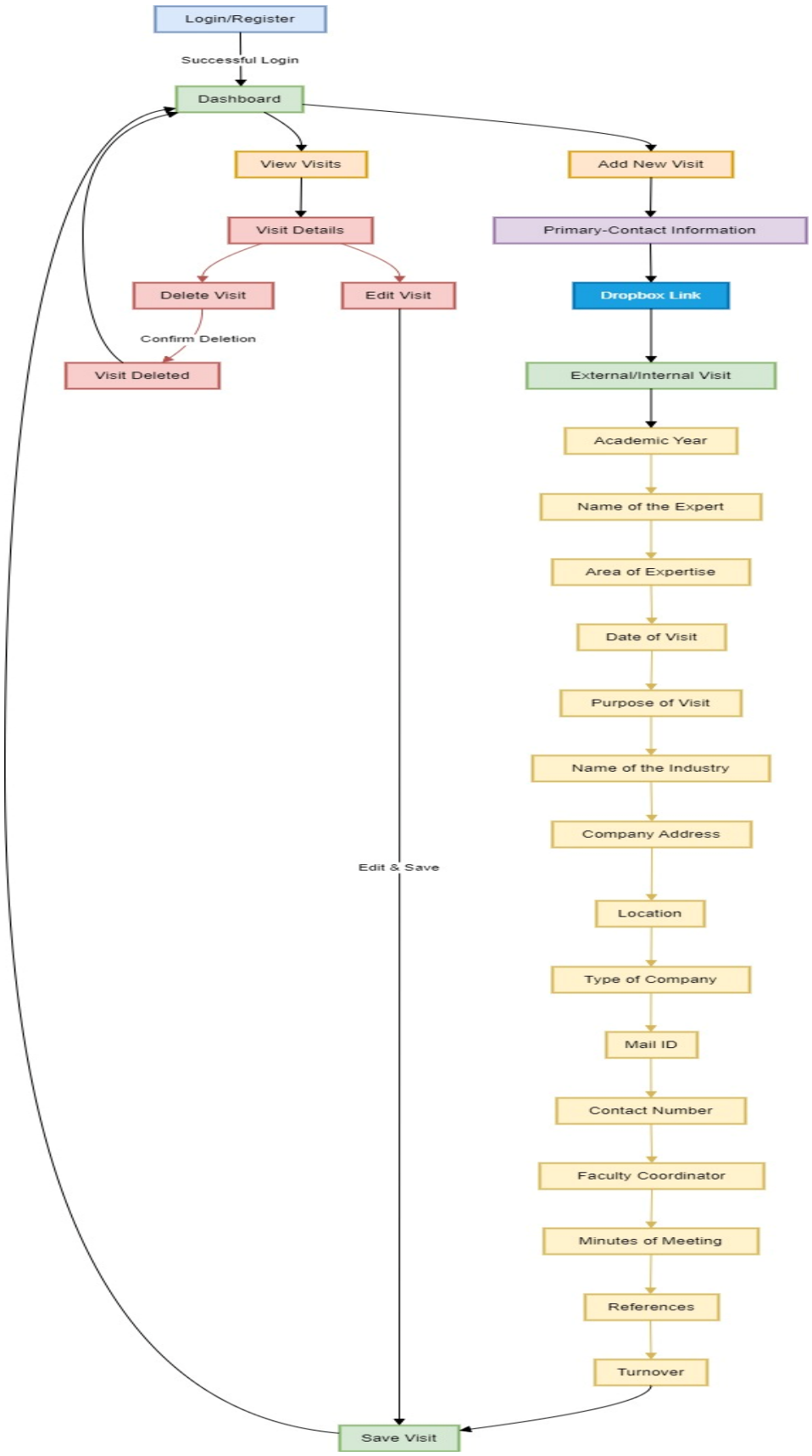
4. Non-Functional Requirements:

- **Security:** Protect user identity and permission to access data. Put safeguards in place to stop illegal access and data breaches.
- **Performance:** Even with a lot of data, the app should be responsive and load quickly.
- Data retrieval and queries must to be effective.
- **Scalability:** An expanding user, contact, or visitation count should not be a problem for the database.
- **Usability:** All parties involved in the app—faculty, students, and industry personnel—should find the interface easy to use and intuitive.
- Give users precise instructions and direction on how to use the features of the app.
- **Availability:** There should be little downtime and constant access to the app.
- Establish a plan for data backup and recovery in the event that the system fails.

5. Technical Requirements:

Front End	• React (JS Library for building user interfaces)
Back End	• Node.js with Express.js
Database	• MongoDB(NOSQL Database)
API	• OpenAPI

6. Flowchart: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Visit Details
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Delete Visit
Edit Visit
Dropbox Link
Confirm Deletion
Visit Deleted
External/Internal Visit
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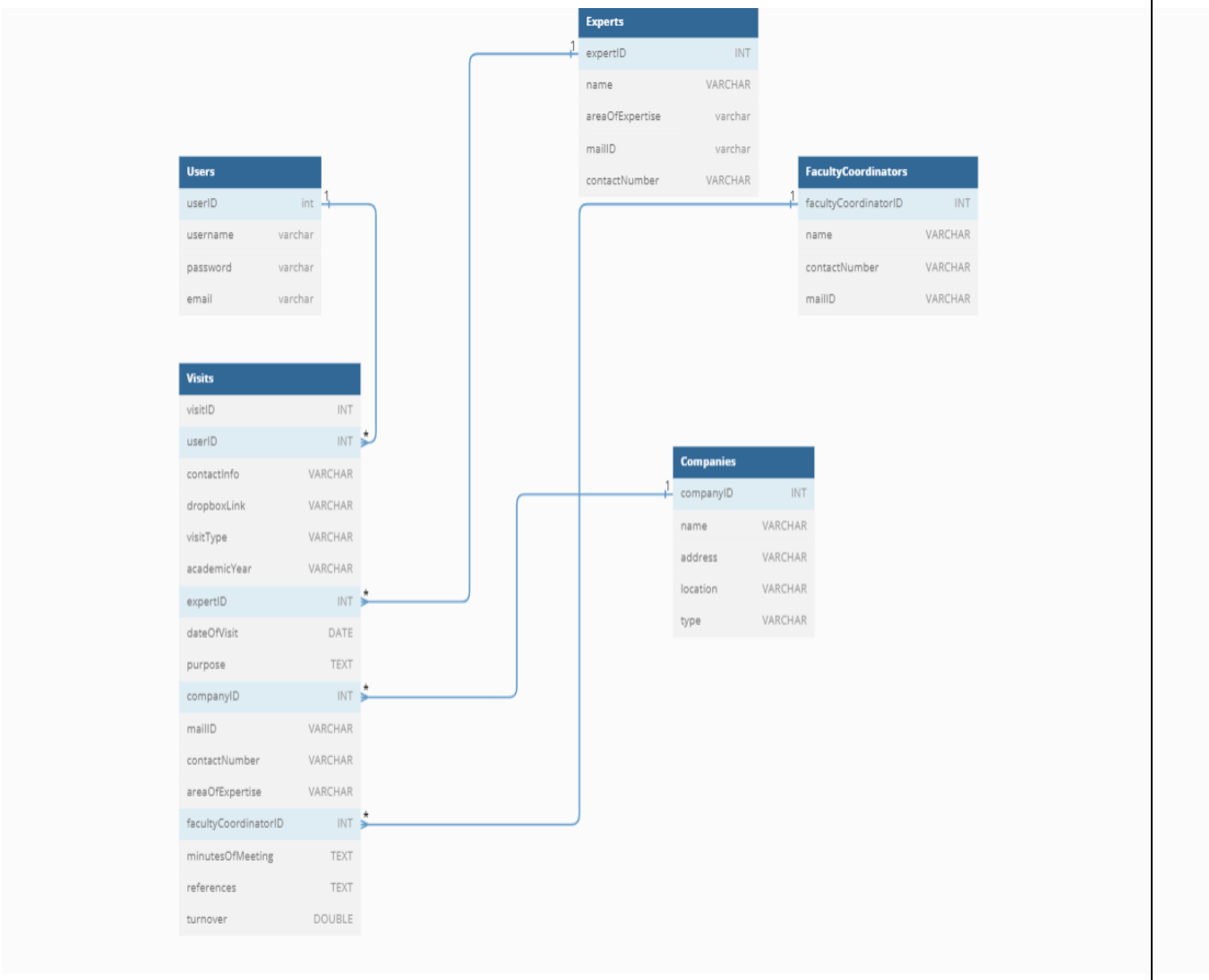
Name of the Expert
Area of Expertise
Date of Visit
Purpose of Visit
Name of the Industry
Company Address
Edit & Save
Location
Type of Company
Mail ID
Contact Number
Faculty Coordinator
Minutes of Meeting
References
Turnover
Save Visit

7. ER diagram: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