STUDENT NAME: KAMARAJAN V D
SEAT NO.: 308
PROJECT ID: 28
PROJECT NAME: MoU DATABASE MAINTENANCE

1. Introduction:

1.1 Project Description:

Develop a web-based portal to track activities under each Memorandum of Understanding (MOU). This will provide a central hub for monitoring progress, fostering collaboration, and improving transparency for all involved. By streamlining data collection and reporting, the portal aims to enhance decision-making and ensure successful MOU implementation.

1.2 Technical Components And Stacks:

Components	Tech Stacks
Back End	Spring Boot
Front End	React
Database	Mysql
API	RESTFul API

1.3 Purpose Of The Project:

The main goal of the project is to develop a user-friendly web portal for the maintenance of Memorandums of Understanding (MoUs) for college, empowering users to efficiently manage their MoUs with essential functionalities such as Create, Edit, Renew, and Delete, along with usability options like filtering(by department, company and sorting).

2. Scope Of The Project:

To give web-portal for a users to store the Details of MoU's in database and the portal aims to enhance decision-making and ensure successful MOU implementation:

2.1 Functional Requirements:

- **User Authentication:** Implement secure user authentication using Google mechanisms to ensure that only authorized users can access the portal.
- **MOU Management:** Enable users to create, view, and delete MOUs within the portal. Each MOU should include details such as parties involved, objectives, activities, timelines, and status etc…
- **Renew MoU:** Make sure that Expired MoU can be renewed before deleted from the Database in the period of 30 days.
- **Notification System:** Incorporate a notification system to alert users about upcoming deadlines, changes to activities, or other relevant updates related to MOUs.

2.2 Non-Functional Requirements:

- **Security:** Data transmission and storage should be encrypted to protect sensitive information. Access control mechanisms should be implemented to ensure that users can only modify data relevant to Particular roles.
- **Performance:** The system should be responsive and provide quick loading times for users. Response times for actions such as Filtering and submitting MoU should be minimal.
- **Usability:** The user interface should be intuitive and easy to navigate, with clear instructions and New users can easily adapt to this project.(Here a Inspiration of bip portal UI is used with some better UX modifications)
- **Scalability:** The system should be designed to accommodate an increasing number of data volumes over time, and it should be scalable to support additional features and functionalities as per future requirements.
- **Reliability:** Automated backup and disaster recovery procedures should be implemented to protect against data loss and ensure system integrity in the event of failures.
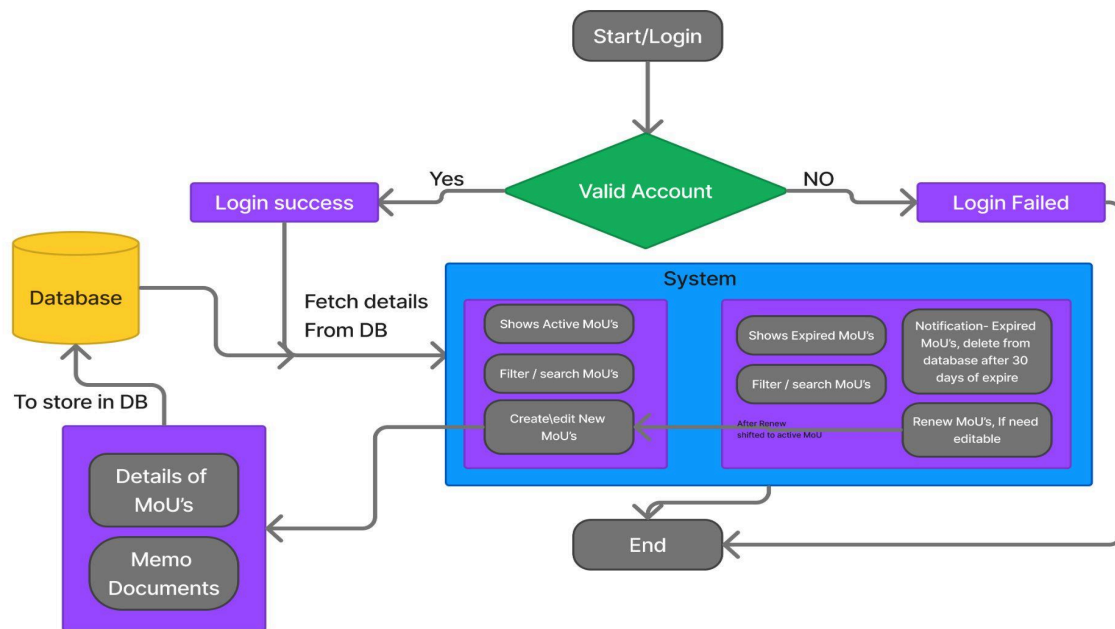
3. Project Flow Overview:

Here is the detailed Work-flow of the project:

3.1 Project Overview:

- **Login:** The User needs to login through the Organisation account that too only Google sign in.
- **Common Section:** Navigation bar with a bit logo and name with Notification section (button) and Profile pic where able to logout the portal.
- **Active MoU's:** This is the home page that has details of Active MoU's, where users are able to view MoU details briefly(On click) and has options like Filter, Search to navigate through the Mou, Create to add new MoU to the database and next page button Expired moU's.
- **Create/Editing MoU:** This is to create a new MoU's to database with details of Partners and entire Mou details must be collected and stored in the database and present in the active page until date expires.
- **Filtering:** The popup section where we can navigate through the MoU and find it easier to get. Here able to navigate by department, company and date within.
- **Expired Mou's:** This is the second important page where expired MoU's are present here up to 30 days after expired. Has filter search option like active MoU page and view ability. Renew page where users can update the MoU's directly.
- **Renew MoU:** The Expired memos can be renewed directly with data changes in pop-up, If they need to update the information like change in assured offering can be done with edit option where it will take to create or edit page.
- **Notification:** Notification of expired MoU's And alerting a day before automatic deleting from database.
- **Search:** The easiest way to get the looking MoU is by searching, Display search results below the search bar and filters, showing relevant MoUs based on the user's input.

4. Flow Charts:
4.1 Users Flow Chart:

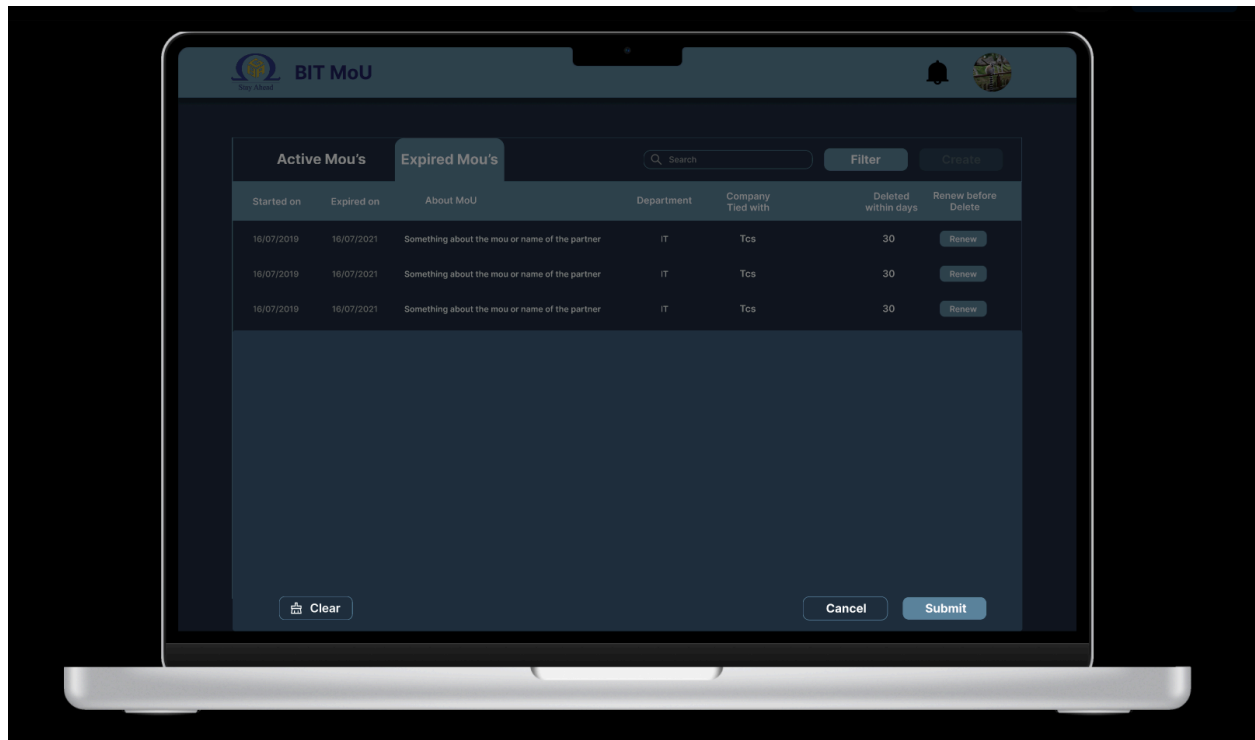# 5. Prototypes Of The Project:
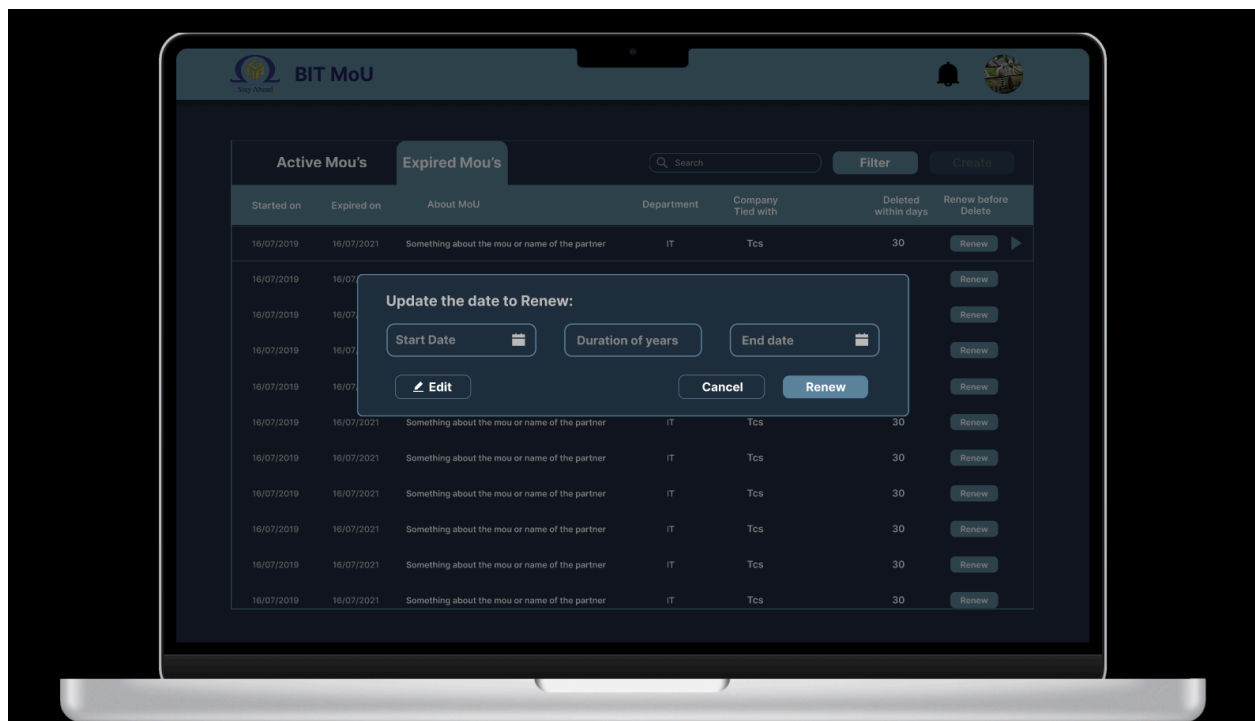## 5.1 Authentication Page:

5.2 Active MoU's Page:

Start Date	End date	About MoU	Department	Company Tied with
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs
16/07/2021	18/07/2024	Something about the mou or name of the partner	IT	Tcs

5.3 Expired MoU's Page:

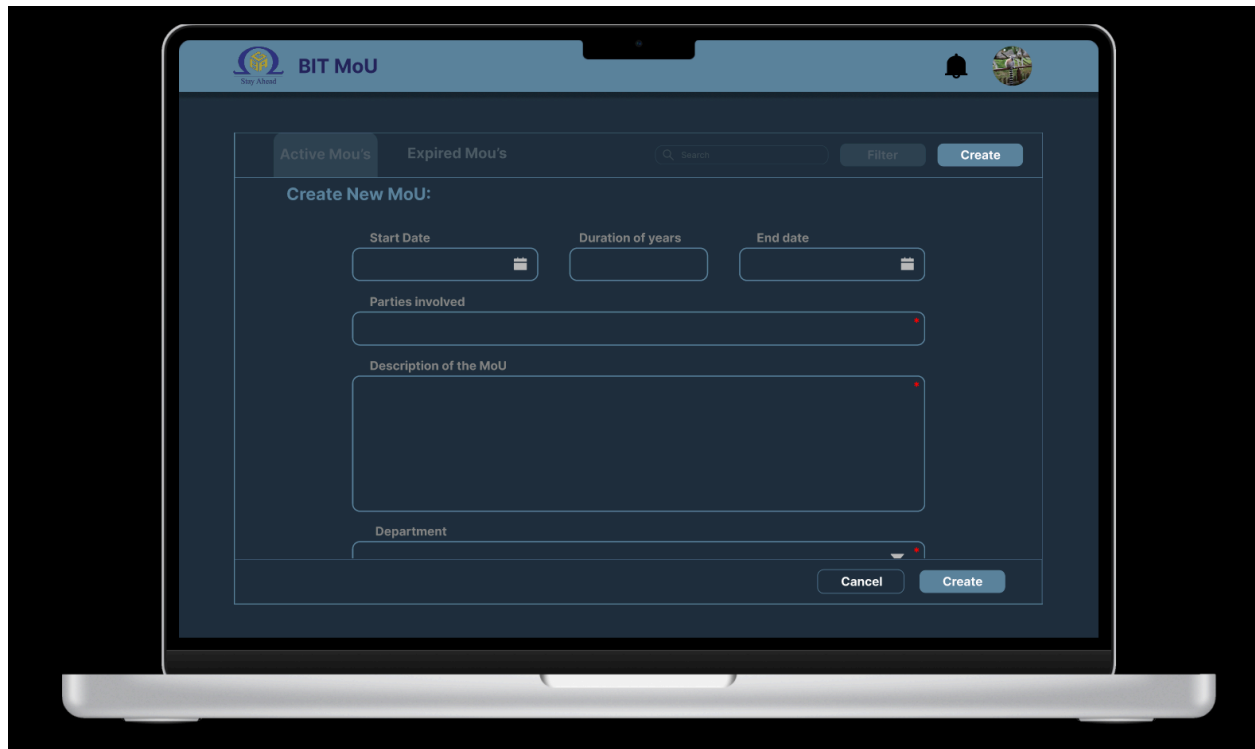| Started on	Expired on	About MoU	Department	Company Tied with	Deleted within days	Renew before Delete
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew
16/07/2019	16/07/2021	Something about the mou or name of the partner	IT	Tcs	30	Renew

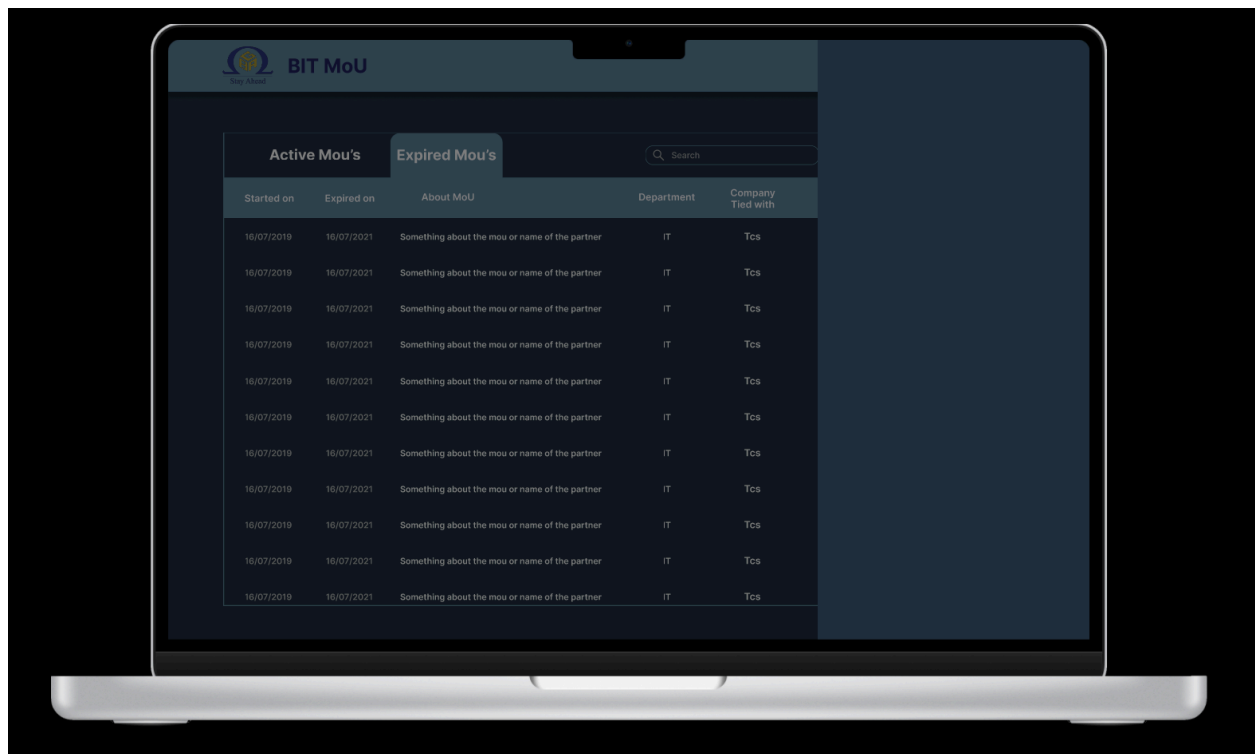## 5.4 Filter The MoU Page:*

5.5 Renewing The Expired MoU:

*Additional editing option at renewing time to change the assured offerings.

5.6 Edit/Create The MoU Page:

5.7 Notification Of The Expiring MoU:*

5.8 View Page Of MoU's:*