

# Software Engineering Project

## Team - 08

### Milestone - 1

#### Identifying User Requirements

Deadline by the end of Week 3 [13th October]

#### Tasks

- Identify primary, secondary and tertiary users.
- User stories for the requirements based on SMART guidelines.

#### Identifying Primary, Secondary and Tertiary Users

- **Primary Users**
  - Students
    - Regular Students
    - Working Professionals
- **Secondary Users**
  - Faculty/Instructors
  - Administrators
- **Tertiary Users**
  - Possible Students
  - Developers

#### Writing User Stories

- **Students**

##### Course Selection:

1. As a student, I want to input my academic performance data, so that the system can provide **personalized course recommendations** based on my academic history.
  - As a working professional, I want to receive recommendations for courses related to my current job or desired career path, so that I can enhance my skills and advance in my career.

- As a student pursuing this degree as my sole degree, I want to **filter course recommendations** by subject & difficulty level, so that I can tailor my course selections to my specific needs and preferences.
2. As a student, I want to filter course recommendations by subject and difficulty level, so that I can get a **better insight** about the courses.
  3. As a student, I want to specify my interests and career goals, so that the system can **suggest courses aligning with my aspirations** and help me achieve my educational and professional objectives.
  4. As a student, I want to input the **number of hours** I can devote to the course (per week), so that the system can provide personalized course recommendations.
    - As a working professional, who can't devote their time completely to this degree, so that the system can provide personalized course **recommendations that fit my schedule and workload**.
    - As a student pursuing a regular degree, who can't devote their time completely to this degree, so that the system can provide personalized course **recommendations that fit my schedule** and workload.
    - As a student pursuing this degree as my sole degree, who will devote their time completely to this degree, so that the system can provide **personalized course recommendations** that fit my schedule and workload.
  5. As a student with a specific course in mind, I want to be able to **search for that course** and receive **additional suggestions for similar courses or prerequisites**, so that I can explore related topics and options.
  6. As a student who wants to explore new interests, I want the system to **suggest elective courses outside of my usual areas of study** to broaden my knowledge and also provide the functionality to check-out the course page itself, so that I can expand my horizons and discover new subjects.
  7. As a student I want an option where I can **provide a course beforehand to the system** if I surely want to do it in the next term, so that I can **plan my future course enrollments in advance**.

**Others:**

1. As a student, I want to **provide feedback** on courses I have completed, so that the system can consider my input for future recommendations and improvements.
2. As a student, I want to see **detailed information about each recommended course**, including prerequisites, syllabus, and reviews, so that I can make well-informed choices about the courses I take.
3. As a student, I want to be able to **log in to my account and update my profile information** whenever my interests or academic goals change, so that the system can consider my input for future recommendations and improvements.
4. As a student, I want a feature that can provide an **answer to my queries**, so that I don't have to go someplace else to have my issues cleared.
5. As a student with a limited budget, I want the system to take into account the cost of courses and **suggest affordable options or courses**, so that I can access quality education without financial burden.
6. As a student who may change my mind, I want the ability to **save and compare multiple course recommendations** before making a final decision, so that I can make well-considered choices about my course selections.
7. As a student who wants to **track my progress**, I want the system to keep a record of the courses I've taken and the ones I plan to take, along with their completion status, so that I can stay organized and **monitor my academic journey**.

- **Administrator**

1. As an administrator, I want to **manage user accounts and course content, including registration, authorization and authentication**, so that I can ensure secure access to the system and provide users with a seamless experience.
2. As an administrator, I want to **generate reports** on user activity, course popularity, and system usage, so that I can gain insights into system performance and user behavior, enabling data-driven decision-making for system improvements.
3. As an administrator, I want an **FAQs page**, so that the students can have an answer to their general queries.

- **Faculty/Instructor**

1. As a faculty member, I want to get some **feedback data for each course**, so that I can improve the quality of teaching and the course content.
2. As an instructor, I want to **track the enrollment of students** in my courses, so that I can efficiently manage course materials, and provide a better learning experience for my students.

- **Developers**

1. As a developer, I want to integrate a **robust search functionality** within the system, so that users can quickly find courses and information they need.

- **Possible Student**

1. As a possible student, I want to see **statistics on course success rates and prerequisites**, so that I can make informed decisions about which courses to take.
2. As a possible student, I want to **explore the courses** offered by IITM, so that I can make an informed decision about pursuing a degree here at IITM.

## Optional Functionalities

If time permits, the following user stories will be implemented.

- **Students**

1. As a student, I want to receive **regular notifications** about recommended courses, deadlines, and updates, so that I can stay informed and plan my academic path effectively.
2. As a student with a limited budget, I want to see information on any available **scholarships or financial assistance** for courses, so that I can explore opportunities to reduce the financial burden of my education and make informed decisions about my academic investments.
3. As a student pursuing a regular degree, I want the system to **recommend advanced courses** in my major that will help me meet my degree requirements and prepare for my career, so that I can make informed decisions about my academic path.

- **Administrator**

1. As an administrator, I want to upload enrollment data from previous terms, so that the system can **analyze historical course enrollments for better recommendations**, improving the overall user experience.
2. As an administrator, I want to receive **regular notifications** whenever a student asks any query, so that I can provide an immediate response.

- **Developers**

1. As a developer, I want to implement **a notification system** that informs users about system maintenance and updates, so that users are aware of any potential downtime or changes to the platform.
2. As a developer, I want to **provide an API (Application Programming Interface)** for third-party integrations, so that other educational tools and systems can connect with ours for a seamless user experience.
3. As a developer, I want to **conduct regular usability testing** and gather user feedback to continually improve the user interface and user experience, so that the system remains user-friendly and efficient.