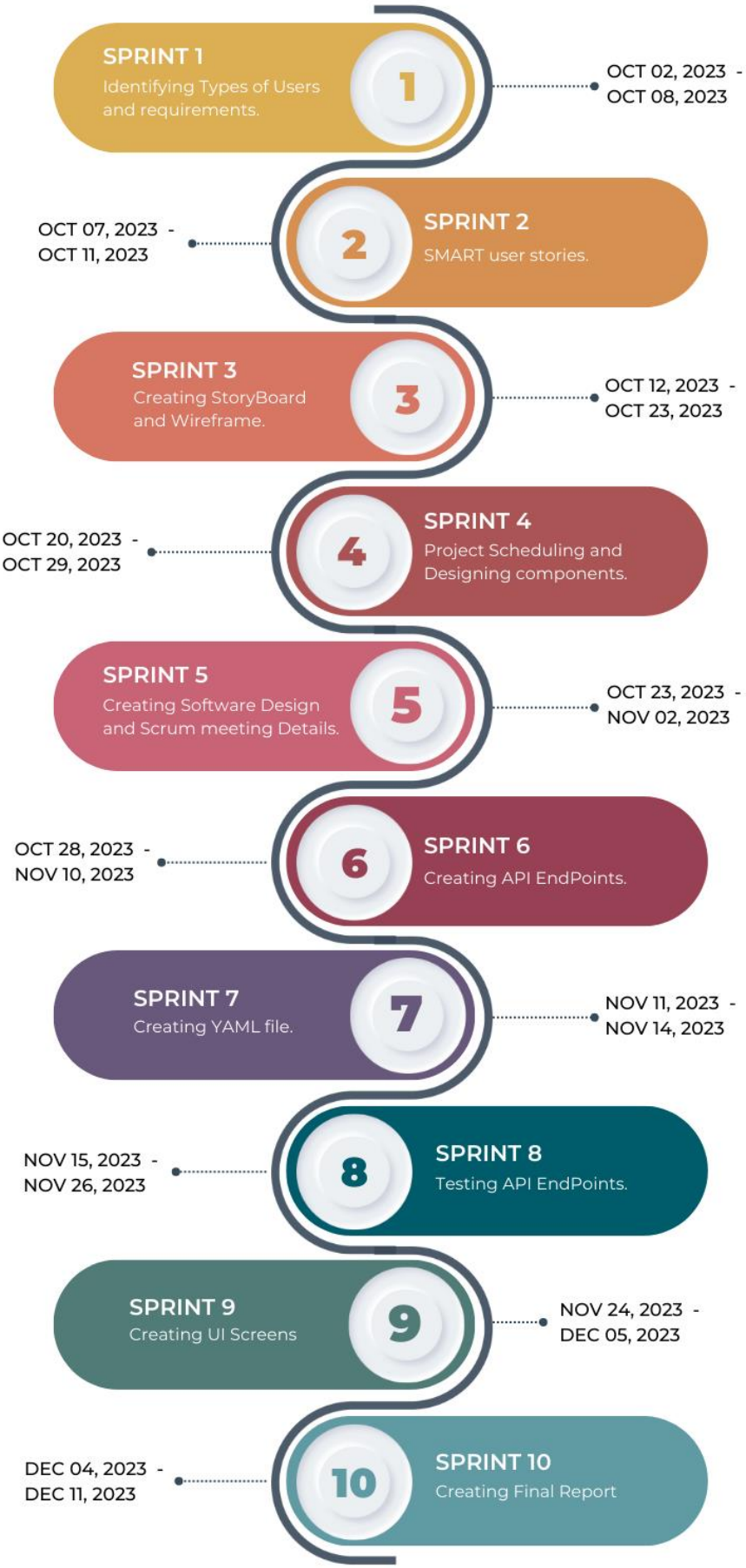
SOFTWARE ENGINEERING PROJECT

TEAM - 08

Milestone - 03

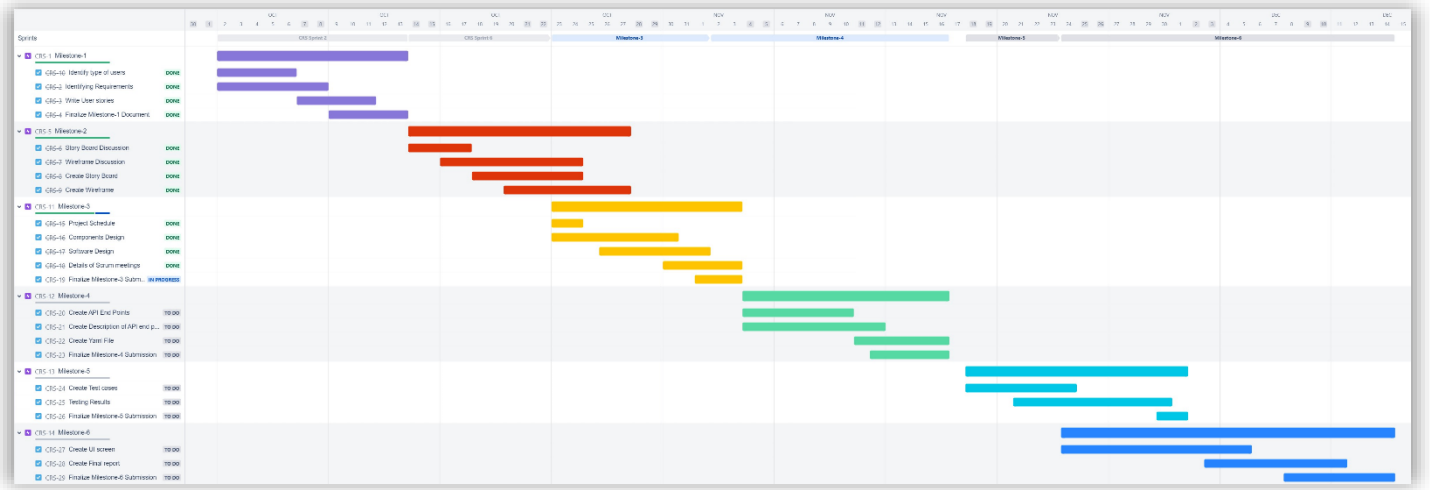
Scheduling and Design

SPRINT SCHEDULE

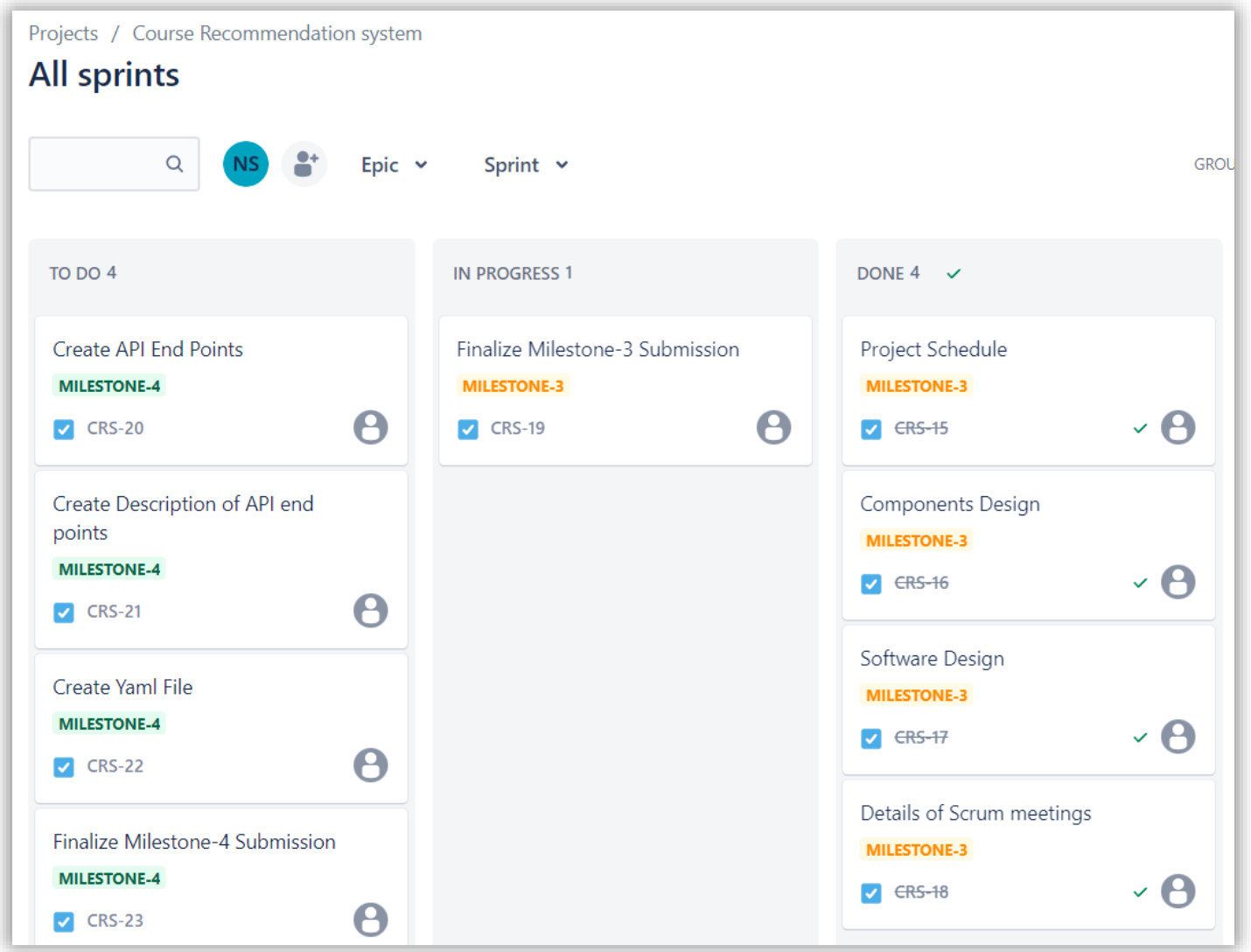


PROJECT SCHEDULING TOOL: Jira

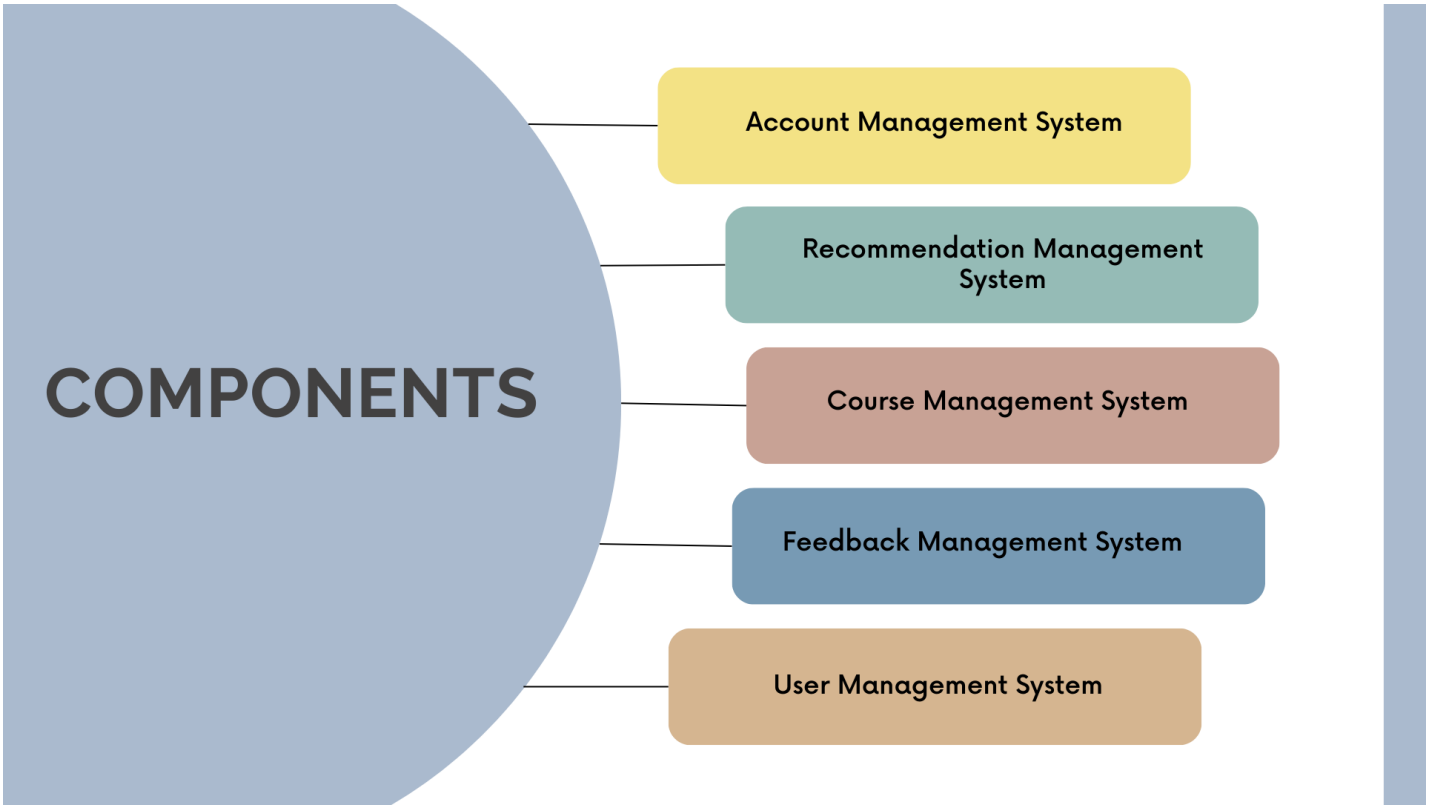
GANTT CHART



KANBAN BOARD



DESIGN OF COMPONENTS



Account Management System

User Registration:

The account management system allows new users to register by providing necessary information such as name, email, and password. It verifies the uniqueness of usernames or email addresses to prevent duplicate accounts. Users receive a confirmation email after the registration process.

Profile Management:

Registered users can update their profile information, including personal details, contact information. Users have the ability to set preferences, such as notification settings and communication preferences.

Password Reset:

The system provides a secure mechanism for users to reset their passwords if forgotten.

Account Deletion:

Users can request to delete their accounts, which involves confirming their decision and complying with data retention policies.

Role-Based Access Control:

The account management system implements role-based access control (RBAC) to manage user permissions. Different user roles (e.g., regular user, admin, moderator) have distinct access rights and privileges within the system.

Recommendation Management System

Personalized Course Recommendations:

The Recommendation Management System should offer personalized course recommendations for both students and working professionals based on their academic performance data, career goals, and interests. This would allow users to make informed choices for their education and career advancement.

Filtering by Subject and Difficulty:

The system should allow students to filter course recommendations by subject and difficulty level, providing them with a better understanding of the available courses and helping them tailor their selections to their specific needs and preferences.

Course Planning and Scheduling:

The system should accommodate various user schedules and workloads, allowing them to input the number of hours they can devote to a course per week. It should also support students who can commit to their degree full-time, providing personalized course recommendations that fit their schedule and workload.

Course Search and Exploration:

Users should be able to search for specific courses and receive additional suggestions for similar courses or prerequisites. Additionally, the system should recommend elective courses outside the user's usual areas of study to encourage the exploration of new interests and broaden their knowledge.

Future Course Planning:

The system should offer an option for students to pre-select courses they intend to take in upcoming terms, facilitating advanced course enrolment planning and helping students stay on track with their educational goals.

Course Management System

Comprehensive Course Information:

The system should provide detailed information about each recommended course, including prerequisites, syllabus, and user reviews. This enables students to make well-informed decisions about their course selections.

Budget-Friendly Course Recommendations:

For students on a limited budget, the system should consider the cost of courses and suggest affordable options, ensuring that quality education is accessible without causing financial burden.

Course Tracking and Progress Monitoring:

The system should keep a record of the courses a student has taken, as well as those they plan to take, along with their completion status. This feature helps students stay organized and monitor their academic journey.

Faculty Feedback and Instructor Tools:

Faculty members should have access to feedback data for each course to improve teaching and course content.

Feedback Management System

User Feedback Collection and Organization:

We implement a platform for users, primarily students, to submit feedback on various aspects of the system.

User Query Resolution:

The system will include a feature that allows students to submit queries or seek assistance within the system.

Notifications and Communication:

We implement a notification system to facilitate communication between administrators and students, particularly in response to queries. The system will also notify administrators when students ask questions or provide feedback, ensuring prompt responses and effective user support.

User Management System

STUDENTS

User Registration and Profile Management:

Students can create and manage their user accounts by registering with their academic information and personal details. They can update their profiles, including academic interests, goals, and contact information.

Search and Exploration:

They have the option to explore elective courses outside their usual areas of study.

Feedback and Information:

Students have access to a FAQ system for general queries.

FACULTY/ INSTRUCTORS

Feedback and Data Analysis:

Faculty members can access feedback data for each course to improve teaching quality and course content. They can track student enrolments in their courses to manage materials effectively.

ADMINISTRATORS

User Account Management:

Administrators can manage user accounts, including registration, authorization, and authentication.

Reporting and Insights:

Generate reports on user activity, course popularity, and system usage.

User Support and FAQs:

Administrators can create and manage an FAQs page to address general queries.

Immediate Query Response:

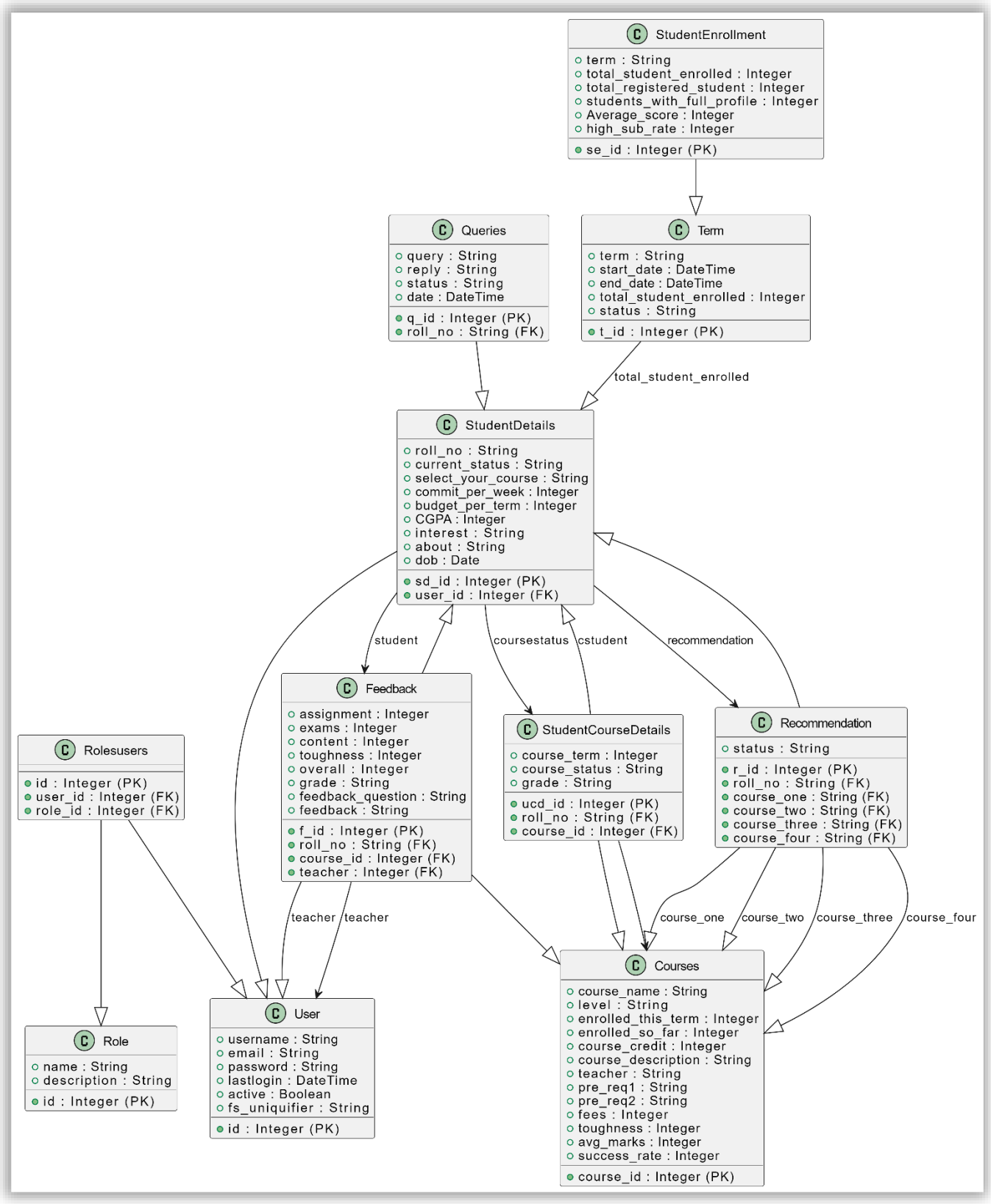
Receive notifications when students ask queries and provide immediate responses.

POSSIBLE STUDENTS

Information and Exploration:

Possible students can access statistics on course success rates and prerequisites. They can explore the courses offered by the institution to make informed decisions about pursuing a degree.

CLASS DIAGRAM



SCRUM MEETINGS

Timings: Sunday and Wednesday, 8:30pm – 10:30 pm. Additional meetings, if required.

Scrum Team Meeting Minutes 1

Meeting Details

DATE	Wednesday, September 27, 2023
TIME	08:30 PM - 10:00 PM

Meeting Attendees

- Nikita Sharma, 21f1000637@ds.study.iitm.ac.in
- Ashrey, 21f2000448@ds.study.iitm.ac.in
- Sahil Rajpal, 21f1006804@ds.study.iitm.ac.in
- Satyam Thakur, 22f1001116@ds.study.iitm.ac.in
- Arunrajan R V, 22f1000888@ds.study.iitm.ac.in

Agenda

- Identification of primary, secondary and tertiary users
- Brainstorming user stories for the Course Recommendation System
- Assigning the task of user stories to the team members

Minutes

- As per the instruction given in Milestone-1, different types of users for the Course Recommendation System were identified
- The team discussed the basic functionalities to be implemented in the system
- Discussion on potential user stories which are essential for the system
- The team collectively agreed to come up with different user stories until the next meeting where the user stories will be reviewed

Action Items

- To come up with more primary and secondary user stories

Next Meeting Agenda

- Review of user stories for the Course Recommendation System
- Planning for Scheduling the project

Scrum Team Meeting Minutes

2

Meeting Details

DATE	Sunday, October 01, 2023
TIME	08:30 PM - 10:30 PM

Meeting Attendees

- Nikita Sharma, 21f1000637@ds.study.iitm.ac.in
- Ashrey, 21f2000448@ds.study.iitm.ac.in
- Sahil Rajpal, 21f1006804@ds.study.iitm.ac.in
- Satyam Thakur, 22f1001116@ds.study.iitm.ac.in
- Arunrajan R V, 22f1000888@ds.study.iitm.ac.in

Agenda

- Review of user stories
- Scheduling of the project

Minutes

- User stories were reviewed based on SMART guidelines
- Some of the user stories were modified in-order to make them achievable
- Other user stories were changed based on the functionalities suggested initially
- Some of the identified user stories were moved aside for future prospects or removed completely
- Initial discussion about the scheduling like the timelines and the deadlines

Action Items

- To make the changes in the user stories to make them follow SMART guidelines
- To create the timelines on Jira

Next Meeting Agenda

- Finalization of scheduling for Course Recommendation System
- Discussion over Milestone-2

Scrum Team Meeting Minutes

3

Meeting Details

DATE	Wednesday, October 04, 2023
TIME	08:30 PM - 10:30 PM

Meeting Attendees

- Nikita Sharma, 21f1000637@ds.study.iitm.ac.in
- Ashrey, 21f2000448@ds.study.iitm.ac.in
- Sahil Rajpal, 21f1006804@ds.study.iitm.ac.in
- Satyam Thakur, 22f1001116@ds.study.iitm.ac.in
- Arunrajan R V, 22f1000888@ds.study.iitm.ac.in

Agenda

- Finalization of scheduling for Course Recommendation System
- Discussion over Milestone-2 i.e. wireframes and storyboard

Minutes

- Some of the user stories were categorized into optional/additional functionalities that would be implemented if time permits
- Other user stories were finalized
- Initial timelines and schedules were made on Jira
- The team decided on the workflow of the Course Recommendation System
- Came up with ideas for the wireframe based in the written user stories
- Discussed the important components required in the wireframe

Action Items

- Finalizing the user story document & to commit it to the allocated GitHub repository
- To create the presentation for the storyboard and drawing the wireframe

Next Meeting Agenda

- Finalization of the wireframe and storyboard

Scrum Team Meeting Minutes

4

Meeting Details

DATE	Sunday, October 15, 2023
TIME	08:30 PM - 10:30 PM

Meeting Attendees

- Nikita Sharma, 21f1000637@ds.study.iitm.ac.in
- Ashrey, 21f2000448@ds.study.iitm.ac.in
- Sahil Rajpal, 21f1006804@ds.study.iitm.ac.in
- Satyam Thakur, 22f1001116@ds.study.iitm.ac.in
- Arunrajan R V, 22f1000888@ds.study.iitm.ac.in

Agenda

- Finalization of the wireframe and storyboard
- Discussion over any changes the wireframe requires
- Initial discussion about the database design

Minutes

- Low-fidelity wireframe was drawn for login page, signup page, dashboard, profile page, recommendation page and course page on Excalidraw
- The team decided that explanation for each wireframe should be written for easy understanding of the workflow
- A few important changes in the wireframe were discussed upon

Action Items

- Finalizing the storyboard and making required changes in the wireframe
- After completing the above, commit it to the allocated GitHub repository

Next Meeting Agenda

- Final discussion and completion of the database design based on the user stories

Scrum Team Meeting Minutes

5

Meeting Details

DATE	Sunday, October 22, 2023
TIME	08:30 PM - 10:30 PM

Meeting Attendees

- Nikita Sharma, 21f1000637@ds.study.iitm.ac.in
- Ashrey, 21f2000448@ds.study.iitm.ac.in
- Sahil Rajpal, 21f1006804@ds.study.iitm.ac.in
- Satyam Thakur, 22f1001116@ds.study.iitm.ac.in
- Arunrajan R V, 22f1000888@ds.study.iitm.ac.in

Agenda

- Final discussion and completion of the database design based on the user stories
- Discussion over Milestone-3

Minutes

- The rough database structure was made using DrawSQL for the Course Recommendation System.
- Each table was carefully designed based on the user stories written.
- Much more efficient methods were citied to store the data effectively.
- Documentation of every module of the system was discussed.

Action Items

- To create the classes in VS Code for the database design
- To create the documentation of every module of the system, explaining their purpose and use

Next Meeting Agenda

- Submission of the Milestone-3 document
- Discussion over Milestone-4