**Functional Requirements**

**Students:**

1. The student should be able to register and log in using their university email address.
2. The student should be able to create and update their profile, including information such as major, class standing, skills, hobbies, languages, and availability.
3. The student should be able to view their assigned teams and team member profiles.
4. The student should be able to accept or reject the team assignment. If rejecting, they should be able to provide feedback or reasons to the professor.

**Professors:**

1. The professor should be able to register and log in using their university email address.
2. The professor should be able to create and update their profile.
3. The professor should be able to view all students in a class and their profiles.
4. The professor should be able to request the formation of teams from the machine learning system and receive two team options.
5. The professor should be able to review, adjust, and finalize the teams based on the machine learning suggestions and student feedback.

**System:**

1. The system should be able to authenticate users securely based on their university email addresses.
2. The system should be able to store and manage user profiles in a secure and efficient manner.
3. The system should be able to process team formation requests using a machine learning algorithm that considers various student attributes.
4. The system should be able to generate and present two sets of team options to the professor for review.
5. The system should be able to handle feedback and communication between students and professors regarding team assignments.

**Nonfunctional Requirements**

1. The system should be user-friendly and intuitive, ensuring that students and professors can easily navigate and use its features.
2. The system should offer high performance and quick response times, particularly during the team formation process and while handling user queries.
3. The system should be scalable, capable of handling a large and growing number of users and data without performance degradation.
4. The system should ensure data security and privacy, protecting sensitive personal and academic information in compliance with university policies and legal standards.
5. The system should be accessible, meeting the needs of users with different abilities and providing an inclusive experience for all.