#### Description

This use case explains the process of an advisor which approves the registrations to courses for each student through the system and outlines how this process will operate.

#### Stakeholders and Interests

- **Student**: The student wants to register for selected courses, check the suitability and prerequisites of the courses, view their course schedule, and access an updated transcript.
- Course Registration System: The system aims to securely verify student identities and accurately process course registrations and updates.
- Academic Advisors: Advisors play a role in approving or guiding students in their course selections. They want to assist students in making appropriate course choices and review and approve course registration requests.

#### **Actors**

- Primary Actor: Advisor
- Supporting Actors: Course Registration System, Database (JSON files)

#### **Preconditions**

- The advisor must be registered and an active advisor within the system.
- The advisor must be able to log in to the system with a username and password.
- The course registration period must be open for approval.
- The advisor must check the necessary conditions for registration for each students registration request.

#### **Postconditions**

• The advisor's course registration approvals is successfully completed and transcript has updated.

#### **Basic Flow**

### 1. System Login:

- **1.1.** The advisor logs into the system by using their username and password.
- 1.2. The system authenticates the advisor's identity and redirects to the homepage if the login is successful.

#### 2. Viewing Student List and Student Selection:

- 2.1. The advisor selects the "Student List" module selects student(s) from student list.
- **2.2.** The system displays a list of students which advisor responsible for current term.

### 3. Checking and Confirmation:

- **3.1.** The system checks for any time conflicts between selected courses and prerequisite information against the student's academic history for selected student.
- **3.2.** If no conflicts or prerequisite issues are detected, the system is going to prompt a approve button to advisor's screen to confirm student's each course selection.

#### 4. Registration Approval Process:

- **4.1.** The advisor approves or deny each student's course registration requests.
- **4.2.** The system processes the registration and updates the records in the JSON database.

#### 5. Registration Outcome and Transcript Update:

- **5.1.** The system sends a successful approval message to the advisor.
- **5.2.** The advisor updates student's transcript.

#### Alternative Flows

#### 1.1.a) The advisor uses unwanted special characters in the username.

- 1.1.a.1) The system detects unwanted special characters in the username and informs the advisor with an error message.
- 1.1.a.2) The advisor realizes that a valid username is required and retries with a corrected username.
  - 1.1.a.3) The system accepts the corrected username and proceeds to the password request step.

# 1.2.a) If the system detects an incorrect username or password, it displays an error message and redirects to the login screen.

- 1.2.a.1) The system identifies an incorrect username or password combination and informs the student with an error message.
- 1.2.a.2) The advisor understands that they need to enter the correct username and password and retries with corrected information.
- 1.2.a.3) The system accepts the correct username and password and proceeds to the course list viewing step.

# 2.2.a) If the courses for the term have not opened yet or the student list is empty, it displays an error message :

- 2.1.a.1) The system detects that the term has not started or student list is empty and informs the advisor with an error message.
  - 2.1.a.2) The advisor understands that they should check the student list again later on.

# 3.2.a) If one or more of the selected courses do not match prerequisites or there is a time conflict, it displays and error message.

- 3.1.a.1) The system identifies that one or more registration request do not match with the prerequisites and informs the advisor with an error message.
- 3.2.a.2) The advisor understands that students request got denied by system and returns to student list.

#### 4.2.a) If error occurs during approval process, the system displays an error message.

- 4.2.a.1) The system detects an error during approval process and informs the advisor with an error message.
  - 4.2.a.2) The advisor understands the what causes an error message and denies the requests.
  - 4.2.a.3) The system accepts advisor's feedback and updates the transcript.

## **Special Requirements**

• The system must perform securely and swiftly during user login and course registration processes.

### Frequency

• This process will occur at the beginning of each academic term and during designated registration periods.