Title: College Program Registration Web App

Problem Description and Domain:
The domain focuses on the challenges students face in navigating and evaluating the vast amount of academic programs available across U.S. colleges. Existing platforms often lack comprehensive, user-driven insights and the ability to register new programs independently. Students require a streamlined platform to search, add, rate, and review U.S. college programs without administrative barriers, fostering a more dynamic and accessible database.

Solution:

This will be a web-based application that simplifies the process of discovering, registering, and reviewing U.S. college programs.

User Interfaces:

1. Login Interface - Secure system for users to access their personalized accounts.
2. Search Interface - Allows students to:
    - Efficiently search for programs using various criteria such as program type, college name, and location.
    - Access descriptions and reviews of each program.
3. Registration Interface - Enables students to:
    - Directly add new programs to the database, which become available after a basic validation check (e.g., checking for duplicates or incomplete entries).
4. Rating and Review Interface - Allows students to:
    - Rate programs on a scale of 1 to 5 stars.
    - Leave detailed reviews sharing their experiences with specific programs.

Preliminary ER
- User (UserID, Name, Email, Password) – to manage login credentials and user profiles.
- Program (ProgramID, Name, CollegeID, Description, Type) – to store details about college programs.
- College (CollegeID, Name, Location) – to catalog colleges offering these programs.
- Registration (RegistrationID, UserID, ProgramID, Date) – to track programs added by users.
- Review (ReviewID, ProgramID, UserID, Rating, Comment) – to manage user reviews.

Relationships:

- Users *register* Programs.
- Programs *are reviewed by* Users.

- Programs *are linked to* Colleges

Technology Used:

- Spring Boot: Utilized for its robust backend services and ease of integration with other technologies.
- Java: Employed for backend logic, ensuring a secure and scalable application.
- MySQL: Chosen for the database to manage detailed records efficiently.
- React.js: Used to create a responsive and interactive front-end that enhances user experience.
- Bootstrap: Applied for designing a visually appealing and mobile-responsive interface.