AUTO ATTENDANCE IT 314 SOFTWARE ENGINEERING GROUP 6 LAB 6

Domain Analysis Model

Entities:

- 1. <u>Students</u>: The individuals who attend the classes and whose attendance is being tracked.
- 2. <u>Instructors</u>: The individuals who are responsible for taking attendance and managing the courses.
- 3. <u>Courses</u>: The courses that are being taught and the specific sessions that students attend.

4. Attendance records: The data that is collected about each student's attendance for each class session.

Processes:

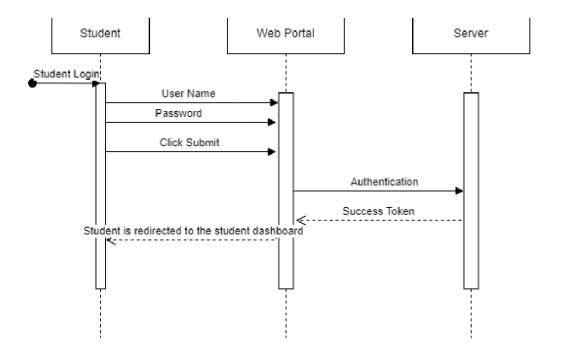
- 1. <u>Taking attendance</u>: The process by which instructors record the attendance of each student in a given class session.
- 2. Automatic attendance: The process by which the system automatically detects and records the attendance of students using methods such as facial recognition or geolocation.
- 3. Managing attendance records: The process by which instructors and administrators access and manage the attendance records for each class session.

Relationships:

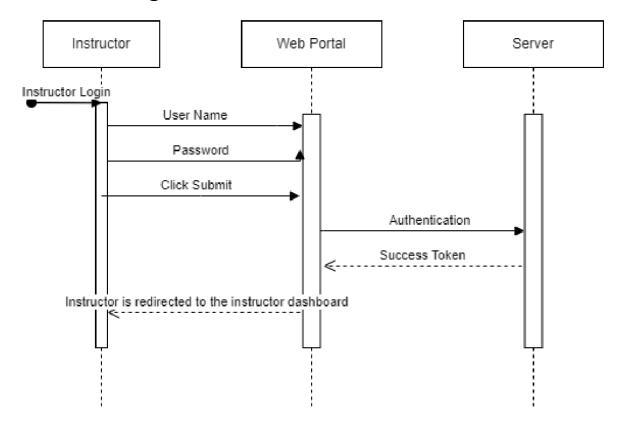
- 1. Students are enrolled in classes and attend specific class sessions.
- 2.Instructors are responsible for taking attendance and managing class sessions.
- 3. Attendance records are associated with specific class sessions and students.

Sequence Diagram

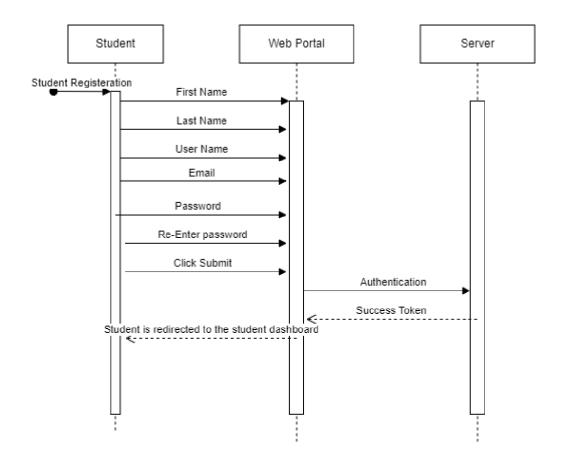
Student Login



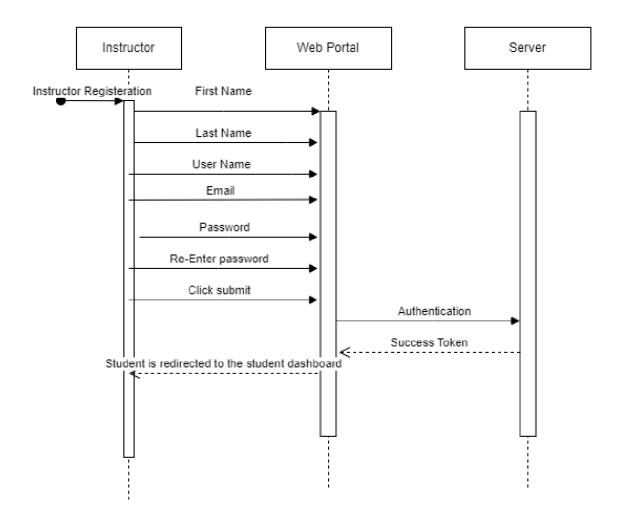
Instructor Login



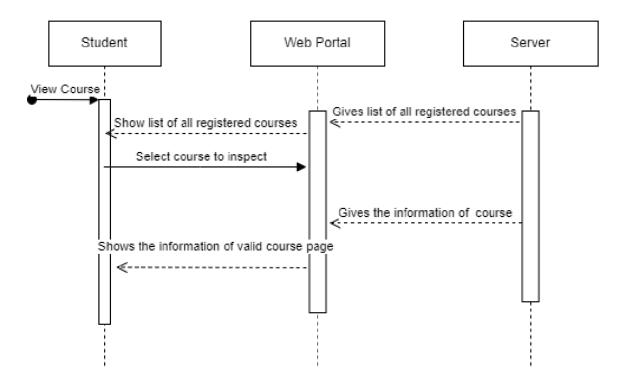
Create a new account for the student.



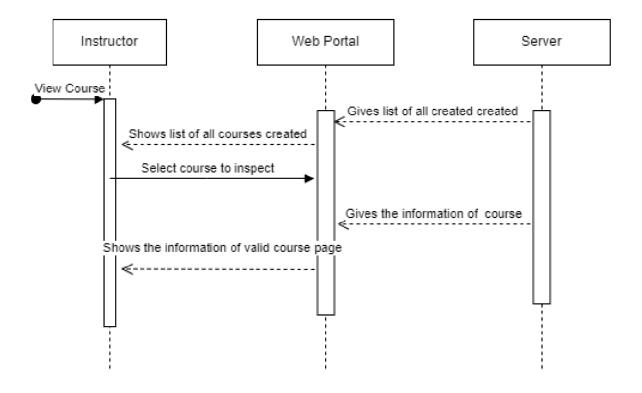
Create a new account for the instructor.



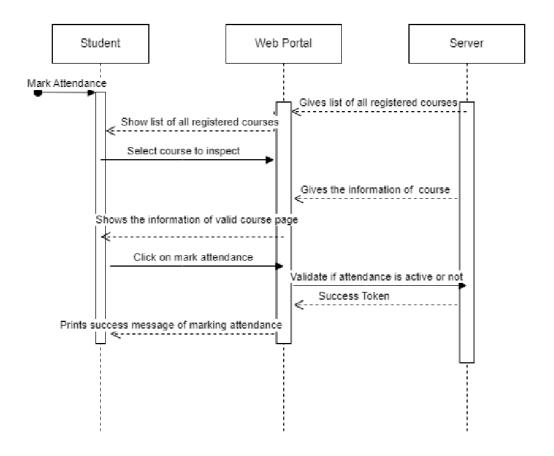
View course for student



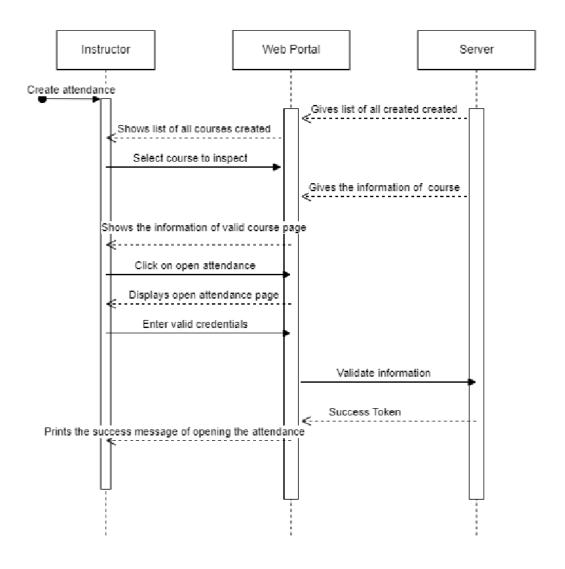
View the course for the instructor.



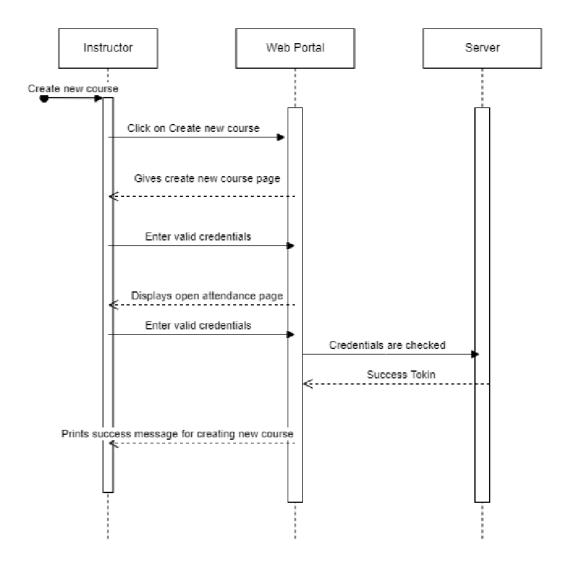
Mark attendance for the student.



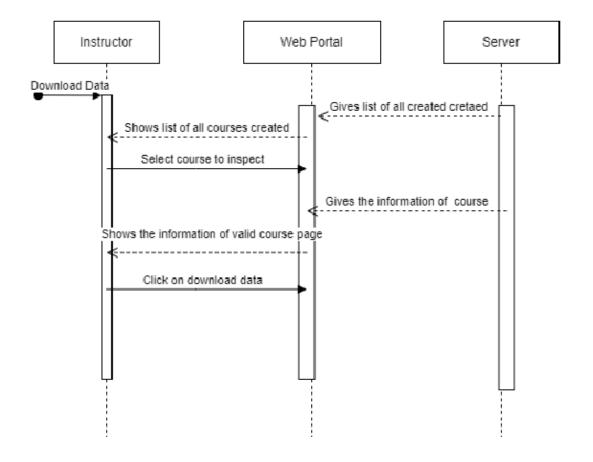
Create new attendance for instructor.



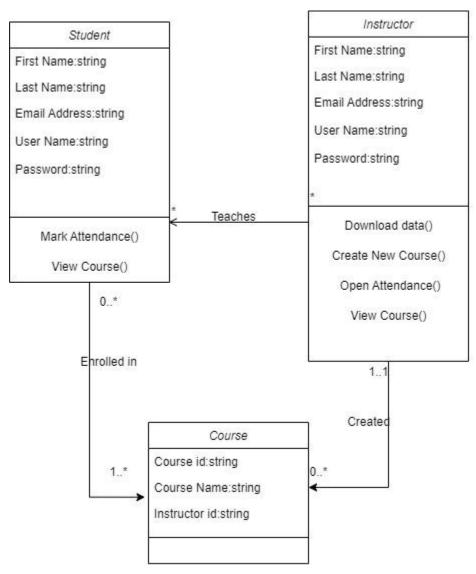
Create new course for the instructor



Download the data for the instructor.



Class Diagram:



High Level System Design

1. User interface: The system should have a user-friendly interface that is easy to use and navigate. Users should be

- able to view attendance records, add or remove students/employees, and generate reports.
- 2. Data storage: The system should store all attendance data in a secure and reliable database. The database should be scalable, with the ability to handle a large number of records.
- 3. Attendance tracking: The system should track attendance in real-time by sending emails.
- 4. Notifications: The system should send automatic notifications to students for marking their attendance.
- 5. Reporting: The system should provide a variety of reports, such as attendance summaries, individual attendance records, and trends over