

# **Final Report**

## **Online Learning Platform**

**Group Number: 12**

**Group Members:**

<b>Student ID</b>	<b>Student Name</b>
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## System request for Online Learning Platform

Project Sponsor	Jihan Alam
Business Need	<ul style="list-style-type: none"> <li>-To solve online based learning system</li> <li>- Spread knowledge</li> <li>-Making remote examination secure and easier.</li> <li>-Making submissions Easier</li> <li>-Tracking Grade</li> </ul>
Business Requirements	<ul style="list-style-type: none"> <li>- User can Login/Registration using email and password</li> <li>- User can view course and topic</li> <li>- User can Enroll into a course</li> <li>- User can watch videos to the respective course</li> <li>- User can participate in the Quiz</li> <li>- User can submit Assignment</li> <li>- User can monitor progress</li> <li>- Faculty can upload videos to respective course</li> <li>- Faculty can offer Quiz</li> <li>- Faculty can offer Assignments</li> <li>- Admin can add course to user</li> <li>- Admin can assign faculty to a course</li> <li>- Admin can make grade sheet from progress</li> </ul>
Business Values	<ul style="list-style-type: none"> <li>- Advertisement - 100000</li> <li>- Income respective learning org - 500000</li> </ul>
Special Constraints	User's privacy protection (User can be fully anonymous while using the site)

## Requirement Analysis

### Functional Requirement:

#### 1. Registration:

If a user wants to get access full functionality of the platform, he needs to register first

- Valid email
- Unique username
- String password

#### 2. Login:

Users can login by entering valid user id and password.

- Valid username and password

#### 3. Maintain Dashboard:

User can maintain dashboard.

- Edit Profile
- Change password
- Search and Enroll into course
- View course details
- Watch weekly videos for respective course

#### 4. Taking quiz test:

Users can take course tests weekly and the test will measure their progress based on the topic they covered

- View questions provided by the faculty
- Input answer of the questions
- Measurement based on users input
- Record progress

#### 5. Submit Assignment:

Users can submit assignment by the site

- Faculty will post Assignment question
- Submission link will be provided followed by a deadline
- User have to submit assignment within the deadline
- Faculty will evaluate the assignment and provide result
- Progress for assignment will be recorded

#### 6. Progress:

User can monitor Progress

- User can monitor progress daily
- User can see the result for quiz
- User can see the result for assignments

## 7. Tracking

Faculty and administration can

- Faculty can track a student progress
- Admin can create grade sheet from student progress
- Academy can keep track of every student's grade record

## **Non - Functional Requirement:**

### 1. Operational:

- There will be a web admin interface to add new course and student and update teacher student database.
- Currently the client app is only in web, in future it will be available in mobile platforms like android and ios.

### 2. Performance:

- When giving quiz system should record progress precisely.
- While submitting one quiz the data should not manipulate other quiz. Also quiz of other students.
- Progress should update as soon as the quiz is done submission.

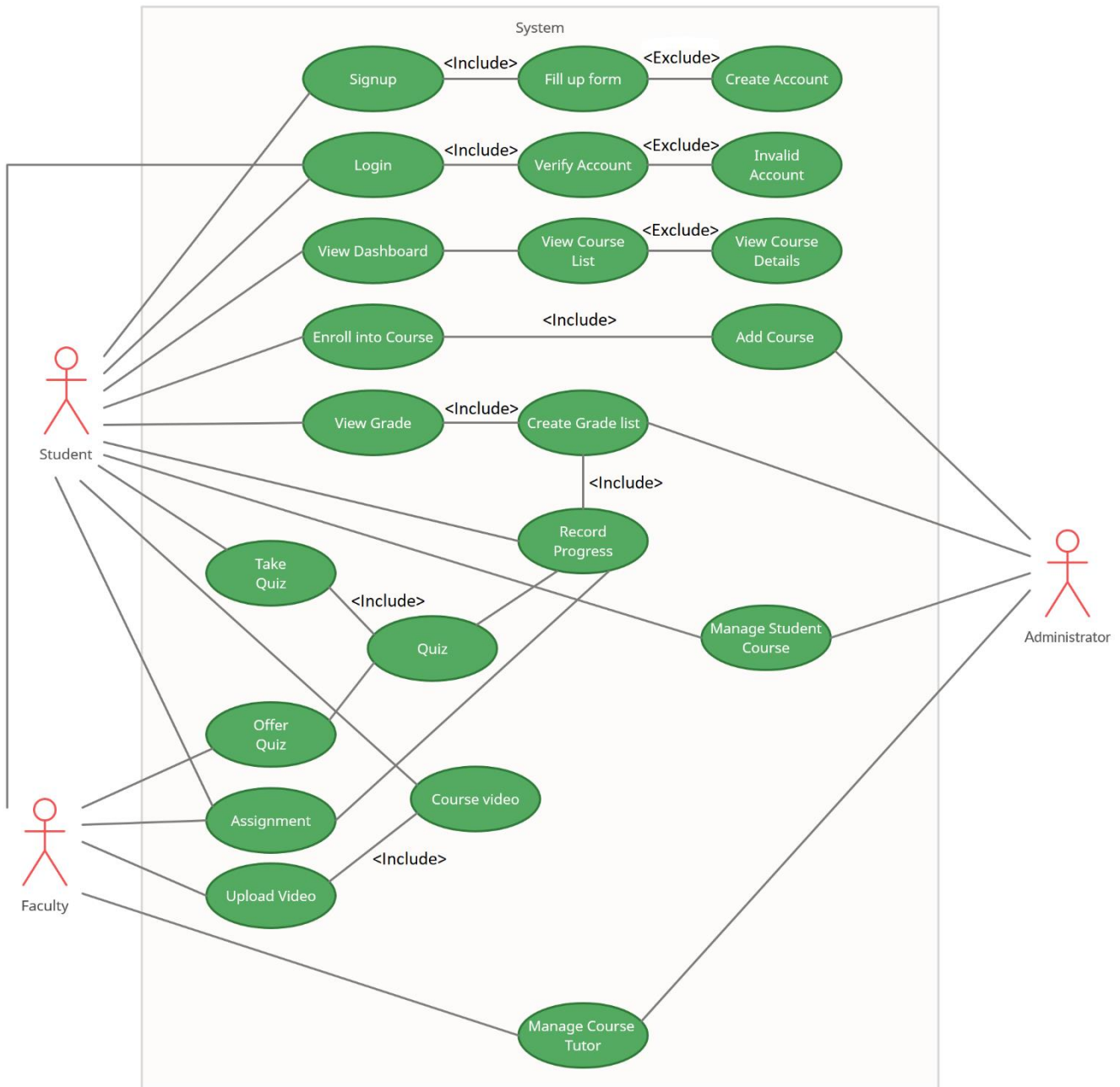
### 3. Security:

- User should only track the dashboard. They should not interact with the database directly.
- As the product contains sensitive information, We need to ensure users' data security.

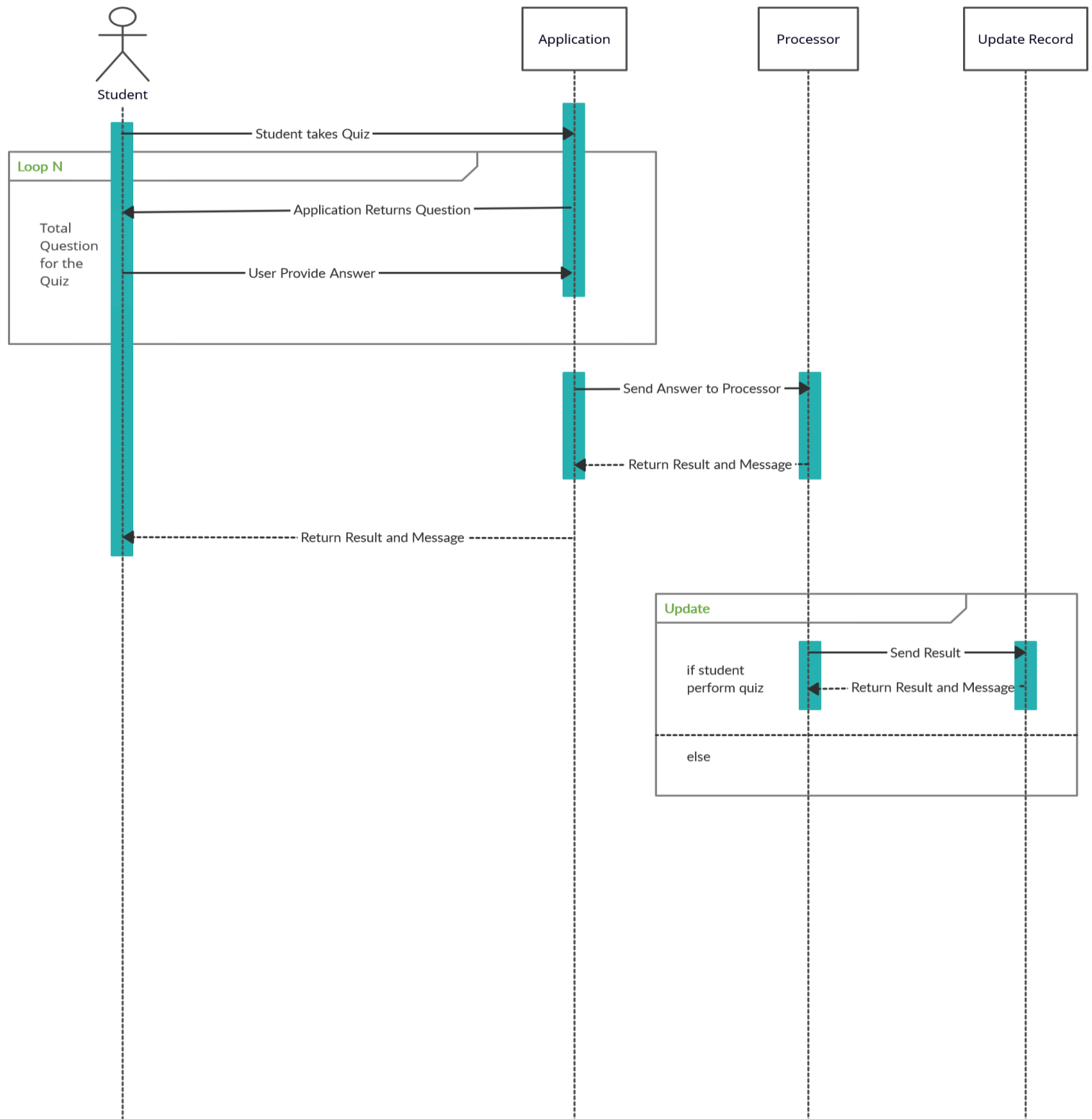
### 4. Cultural and Political:

- Personal information is protected by the country's data protection law.
- Any kind of content a user should be bound by the country's digital act law.

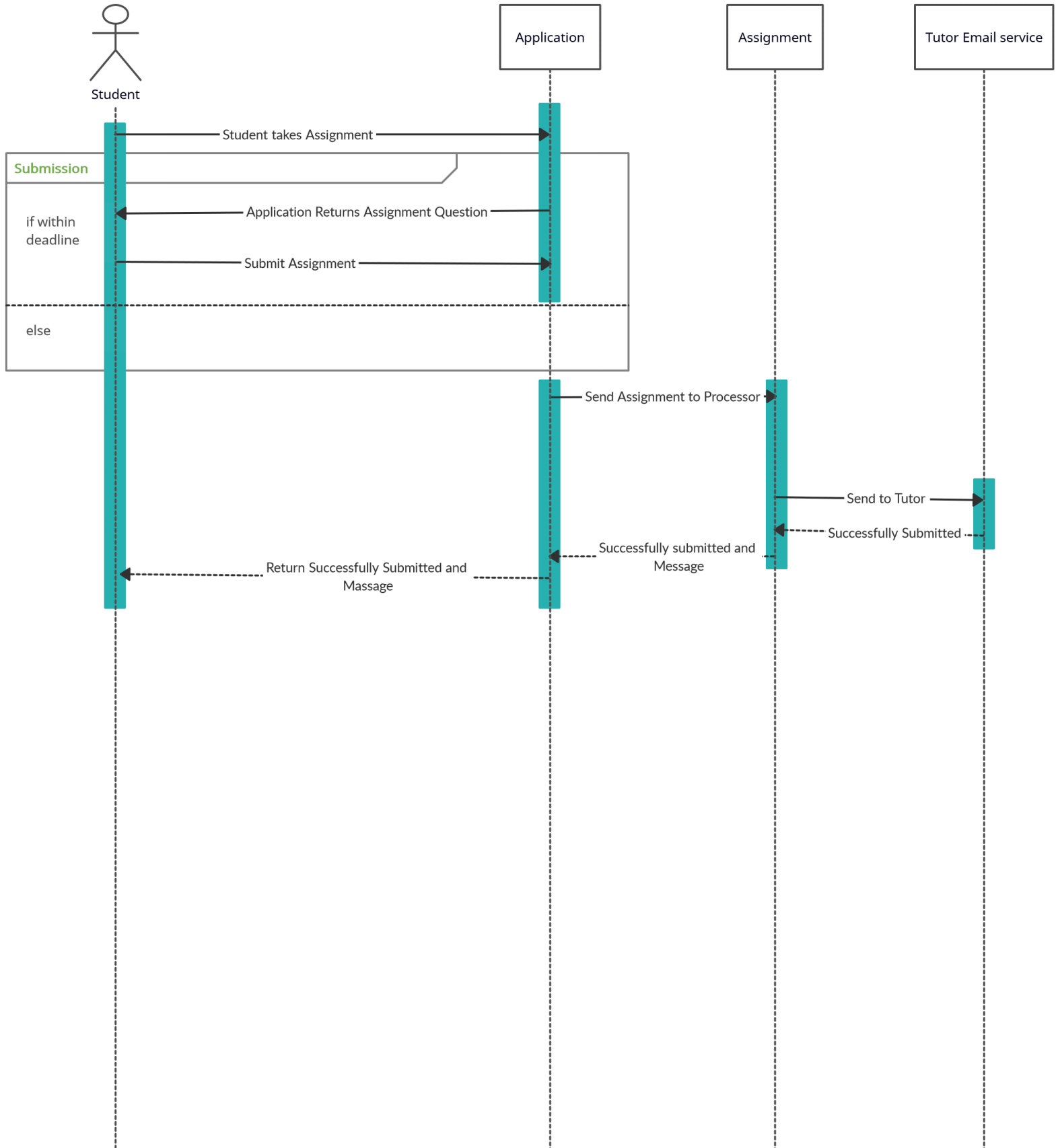
## Use Case Diagram



## Sequence Diagram for Quiz

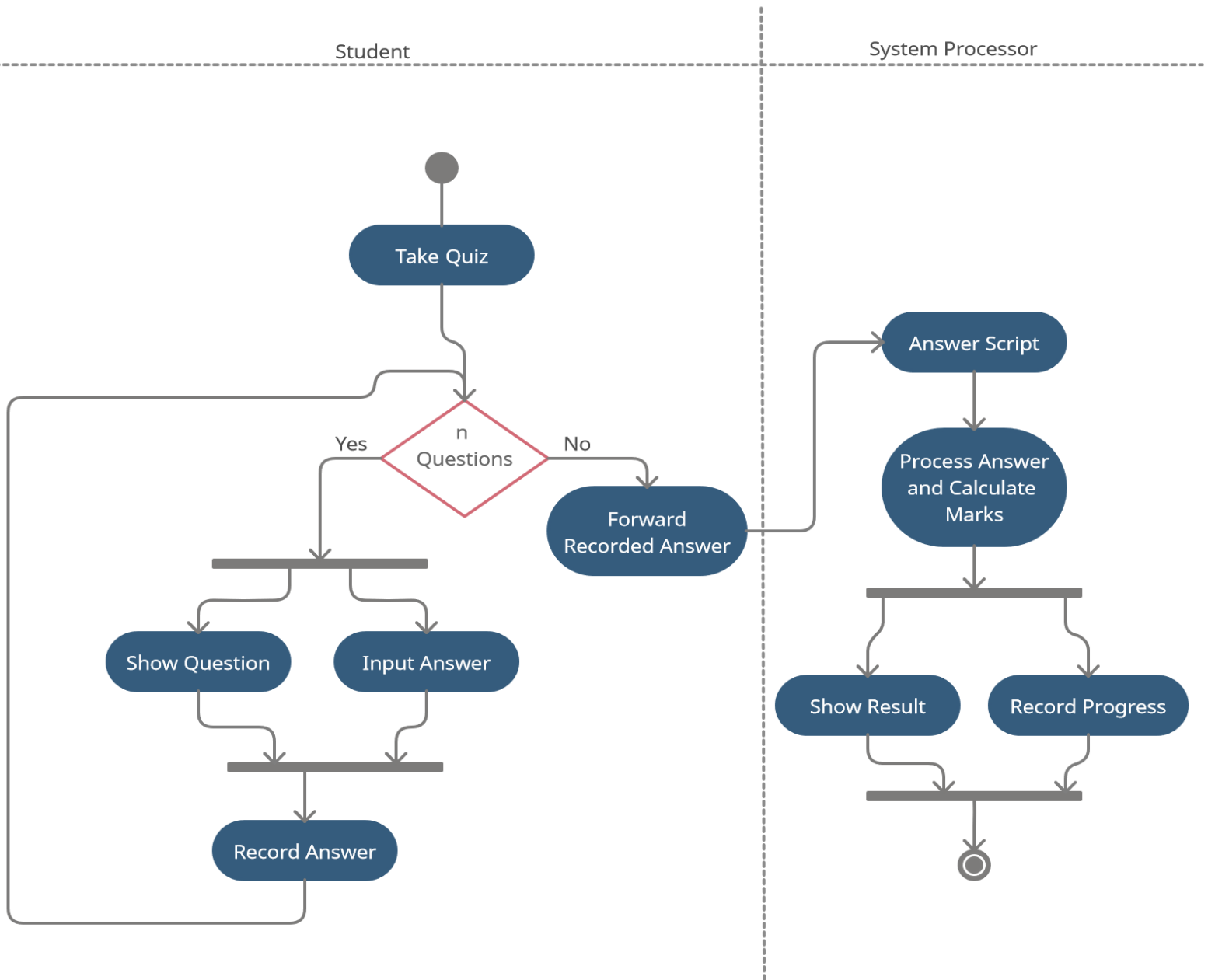


## Sequence diagram for Assignment



# Activity Diagram

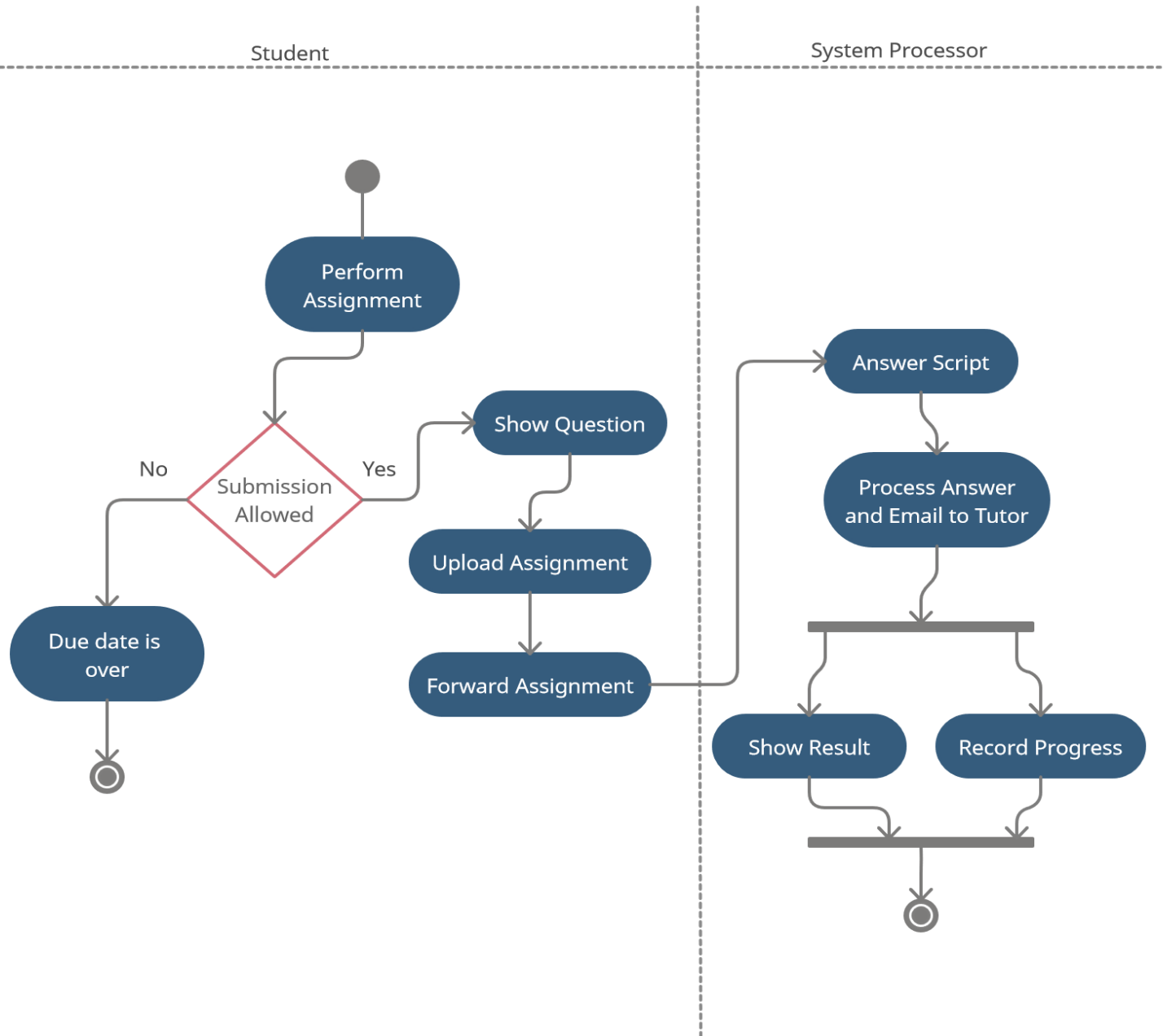
## Quiz processing



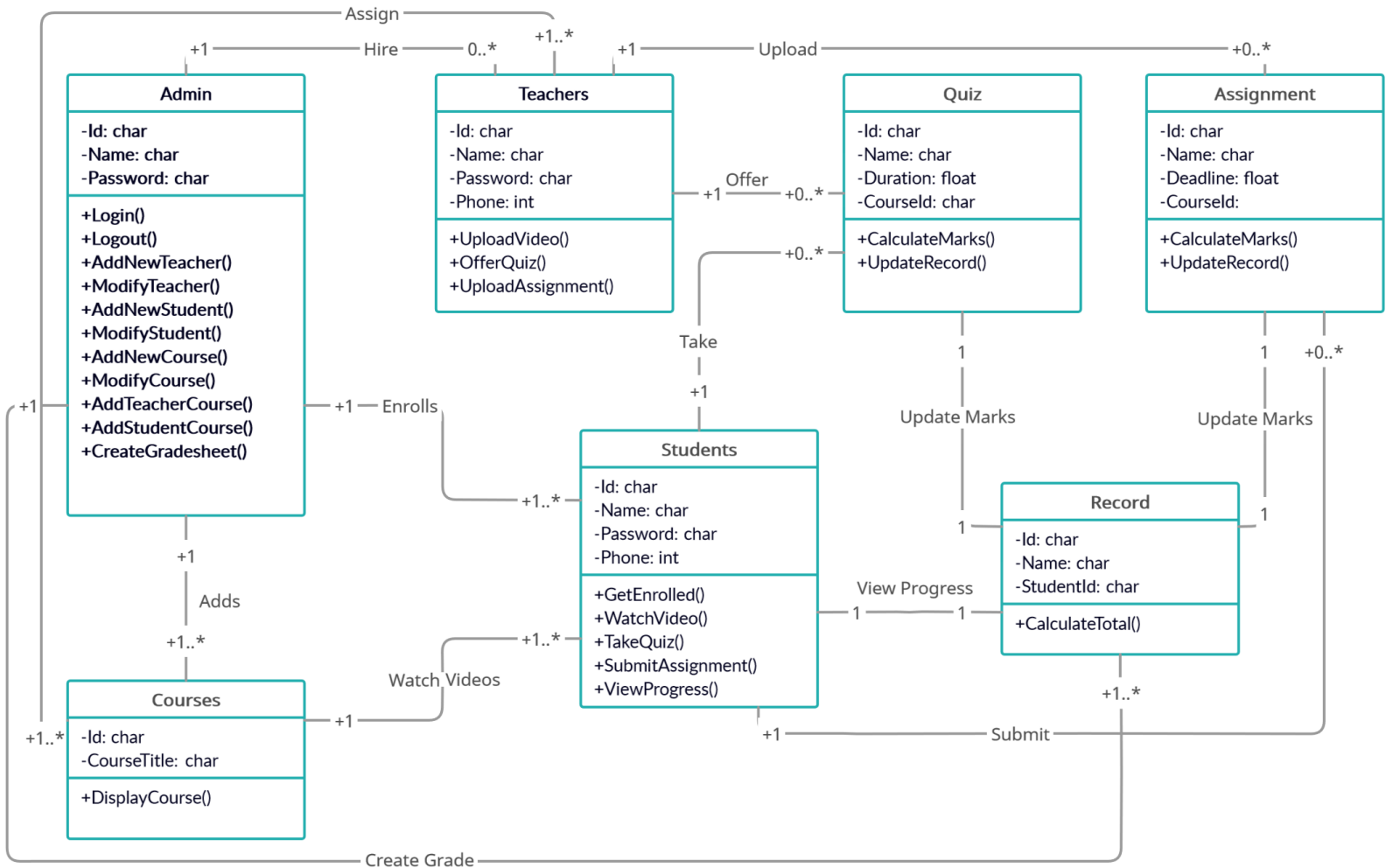


## Activity Diagram

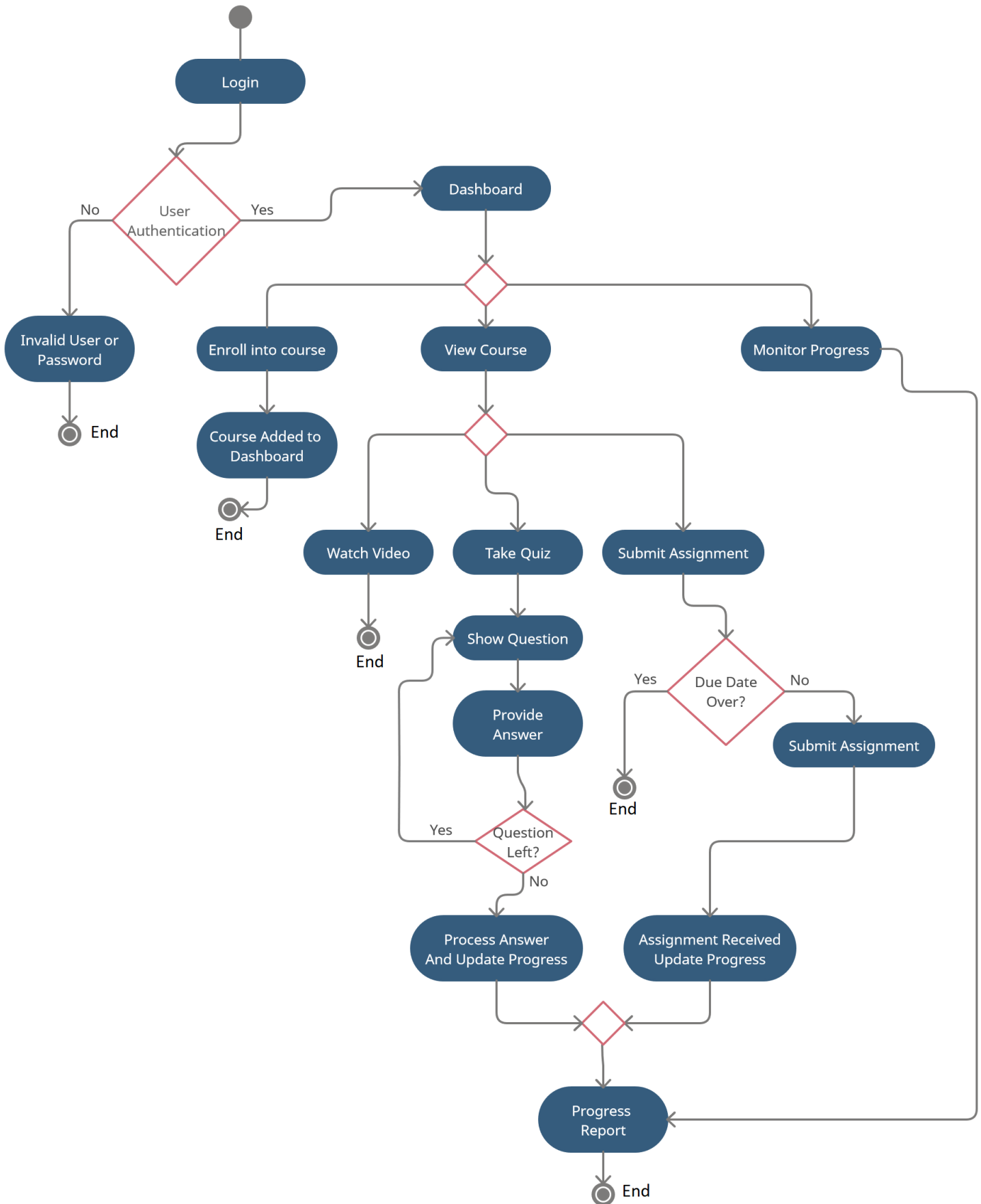
### Assignment Submission



# Class Diagram



## State Machine Diagram



## Data Flow Diagram

