Design Focus (team)
Architecture and System Design Process

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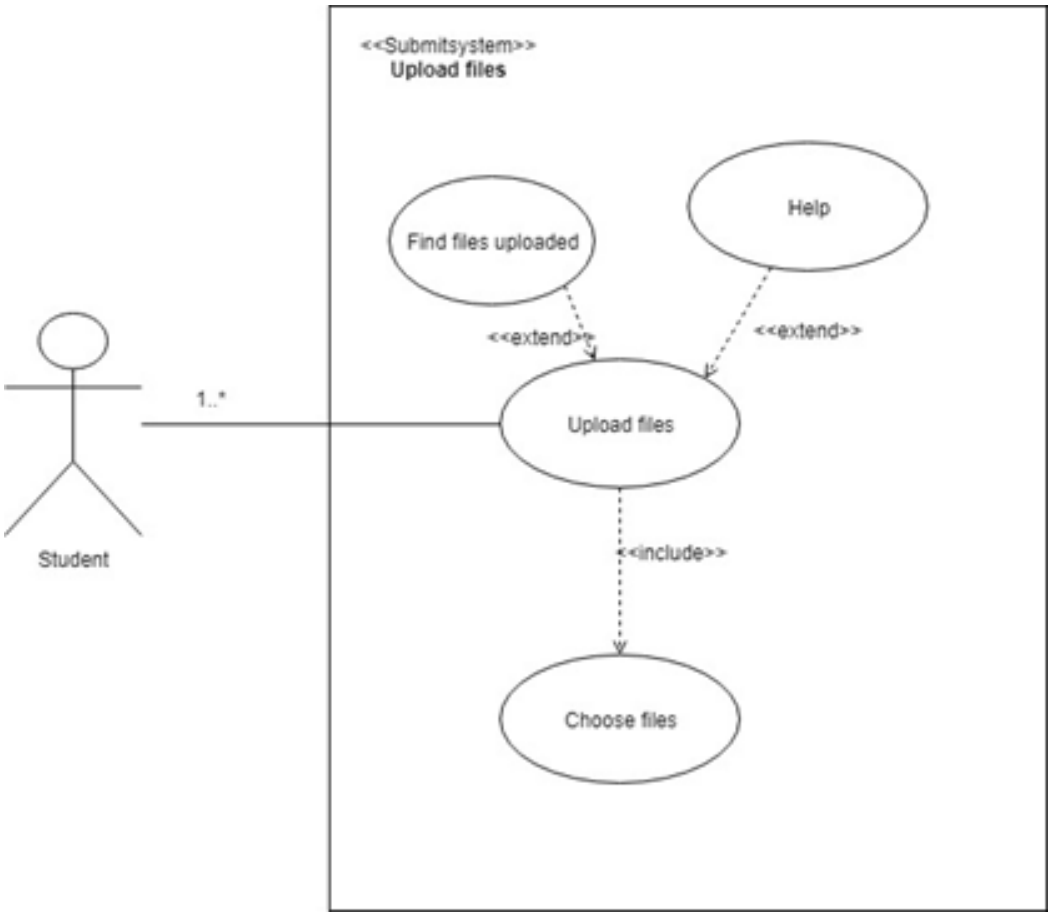
1. Use Case Diagram



a) **Title**
Upload files to the system

b) **Caption**
Look the use case description

c) **Contribution**
Xiaoyi Li

a. Use Case Description

Name: Upload files to the system

Descriptions: When students want to submit or resubmit their programming assignment, they need to upload the files on the system. Student can choose new files to upload. It's a required function, so "Choose files" is included in "Upload files". The file must be right type, otherwise the system will hint "Error with file type". Student also can find the files which they uploaded before to submit or resubmit. This is an optional function, so the relationship is "extend". If there are something wrong, students can ask for help. For example, student choose right type file but cannot upload it. This is also an optional function, so the relationship is "extend".

Triggers: Student click on the "Submit" or "Resubmit" button.

Actor: Student

Level: User goal

Preconditions: Student has already logged into the system successfully.

Main Success Scenario (Goals): Student

Failed End Condition: Student choose wrong type files.

Extension:

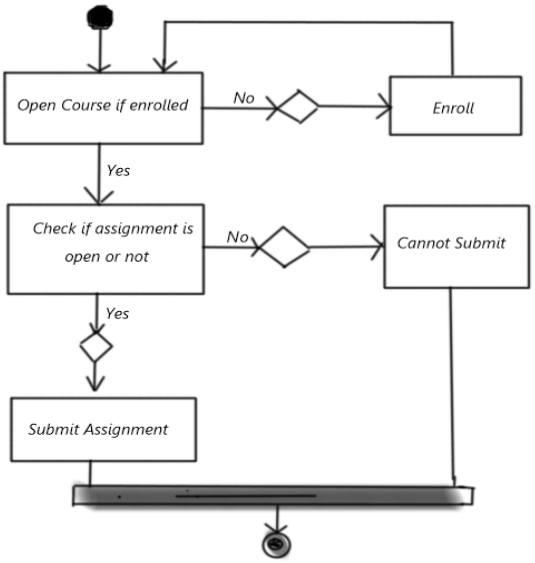
1. Student can click the “Help” button to ask for help.
2. Students can click the “Click here to find a file you’re already upload” to find the files they uploaded files before.

Steps of Execution:

1. Student click on the “Submit” or “Resubmit” button.
2. Student click on the “Choose files” button.
3. Student choose a file to upload.
4. System check the type of the file. If it’s right, then doing the next step. If it’s wrong, then showing “Error with file type”, until student change to the right file type.
   Upload the file chosen by the student.

2. Activity Diagrams

a. Student can select assignment they want to submit



a) Title

Student can select assignment they want to submit

b) Description

This diagram gives details about how a student submits an assignment if its open.

c) Contribution

Naga Ramya Bhamidipati

b. Student submitting files

Student Submission System

a) Title

Student submitting files

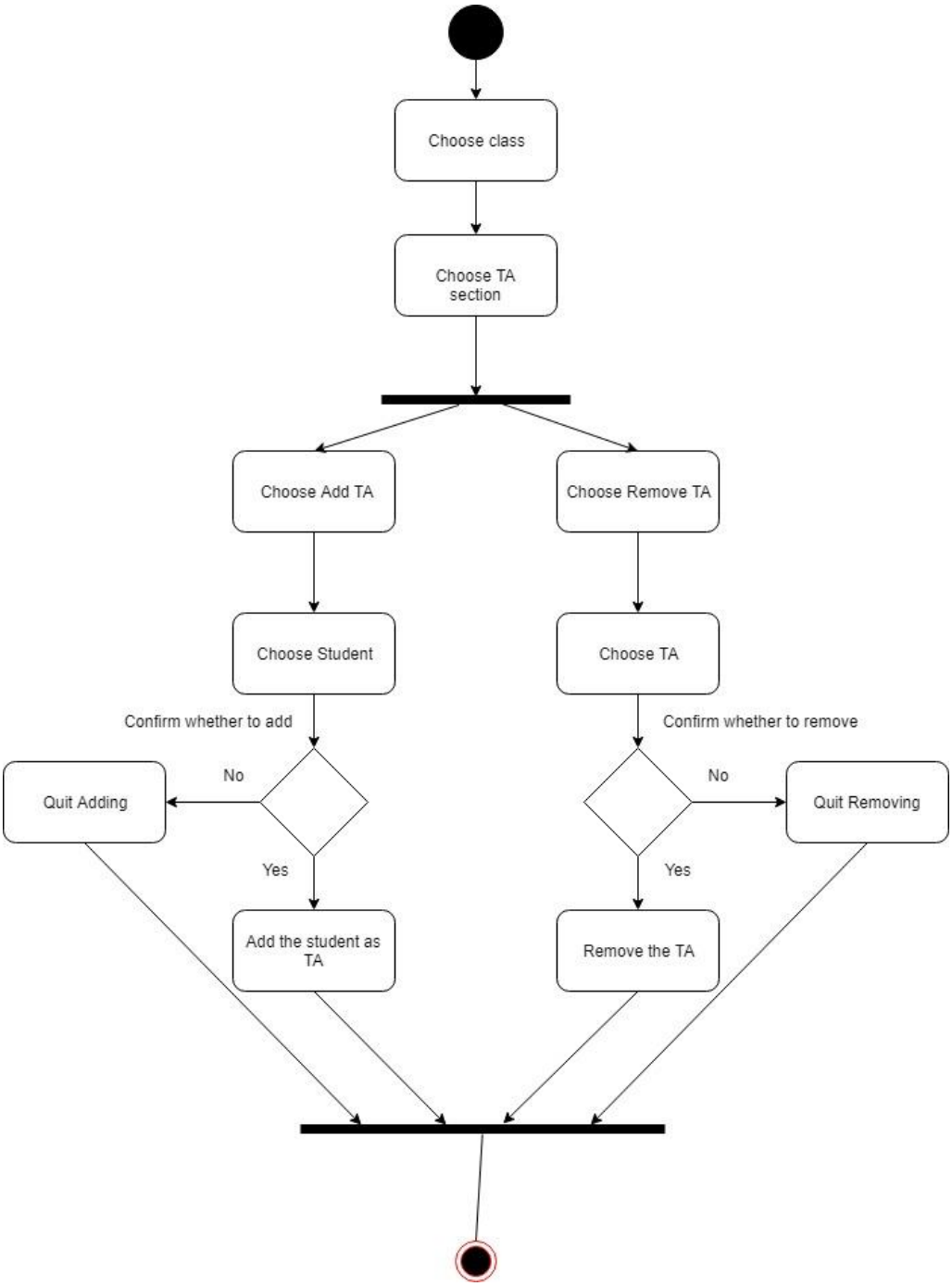
b) Description

This diagram is meant to showcase how a student would go about submitting an assignment. It includes file type checking for both the submit and resubmit functions and will give error messages if it is of the wrong type.

c) Contribution

Nicholas Engelhard

c. Instructor add/remove TAs



a) Title

Instructor add/remove TAs

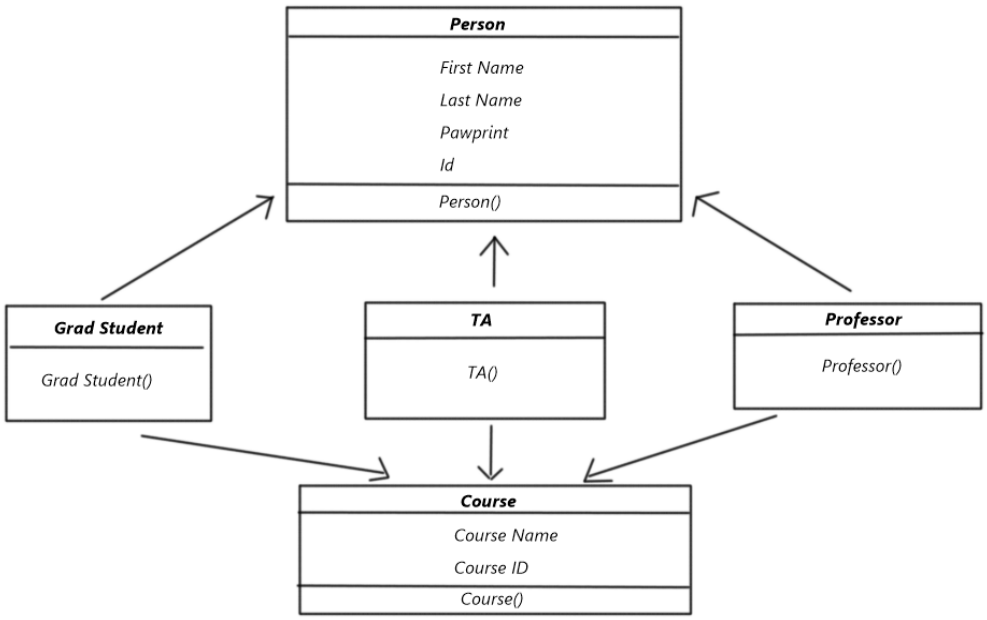
b) Caption

This diagram is showing how the instructor add or remove the TA from his/her class section. To confirm is the important step of the activity.

c) Contribution

Xiaoyi Li

3. Class Diagram



a. Title

Login/Logout

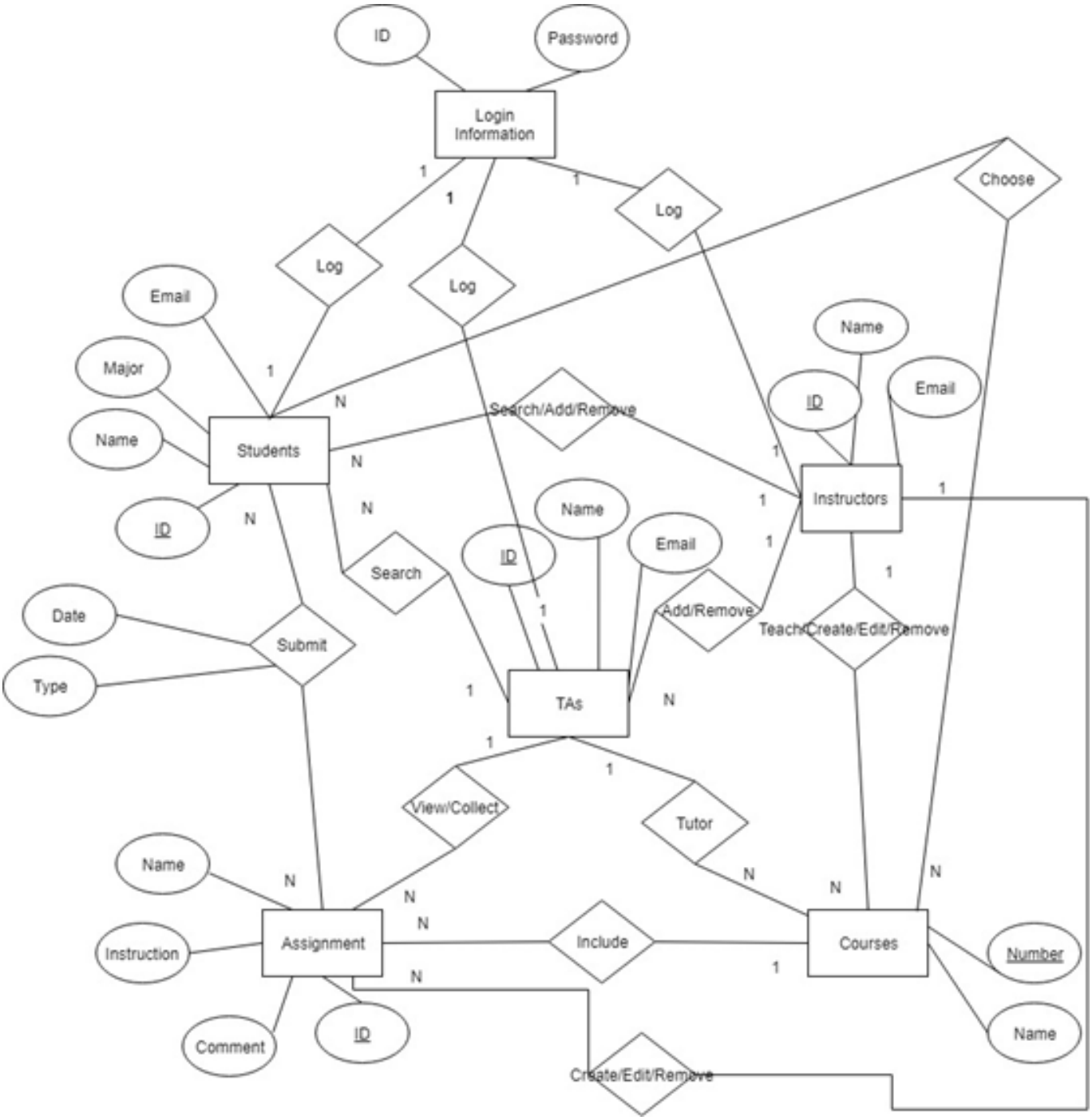
b. Caption

This diagram is for showcasing the class diagram for the activity of Student,TA and professor login/logout.

c. Contribution

Naga Ramya Bhamidipati

4. Entity Relationship Diagram



a. Title

Whole system

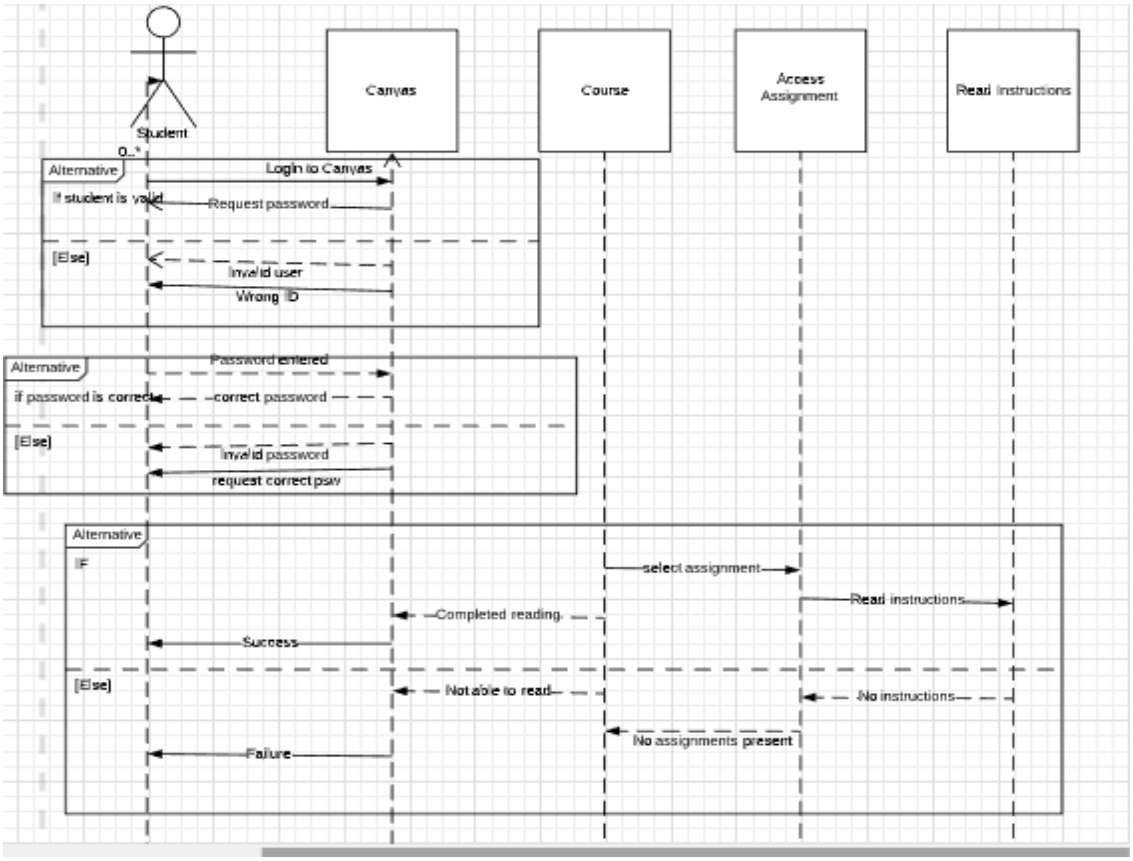
b. Caption

Our entity relationship diagram shows what each of the users of the system can do, along with the attributes that they call upon.

c. Contribution

Nicholas Engelhard: Doing the student, login, Assignment, TA part.
Xiaoyi Li: Doing other parts and integrating the diagram.

5. Sequence Diagram



a. Title

Student should be able to read assignment instructions

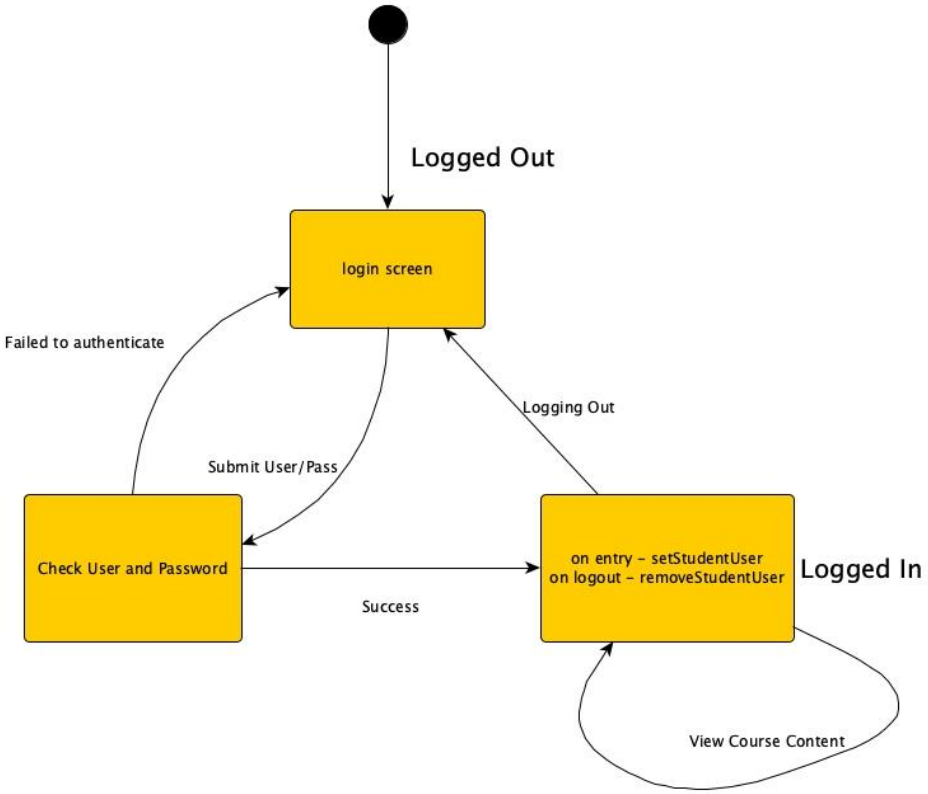
b. Caption

Activity Diagrams to illustrate the flow of control in a system

c. Contribution

Naga Ramya Bhamidipati

6. Stata Machine Diagram



a. Title

State Machine Diagram of Login/Logout

b. Caption

This state machine diagram details what happens during the login process and how the system plans to take on the actions of the users.

c. Contribution

Nicholas Engelhard