

Architecture and System Design Process

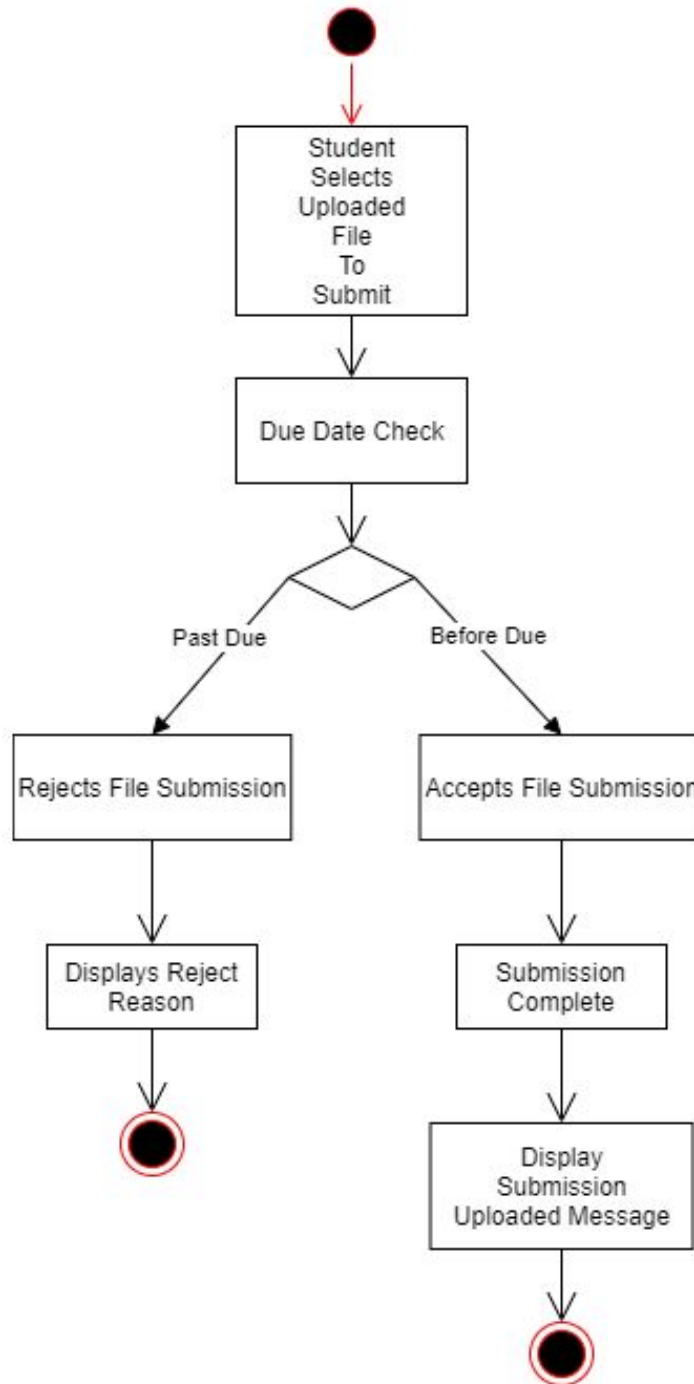
Assignment 4

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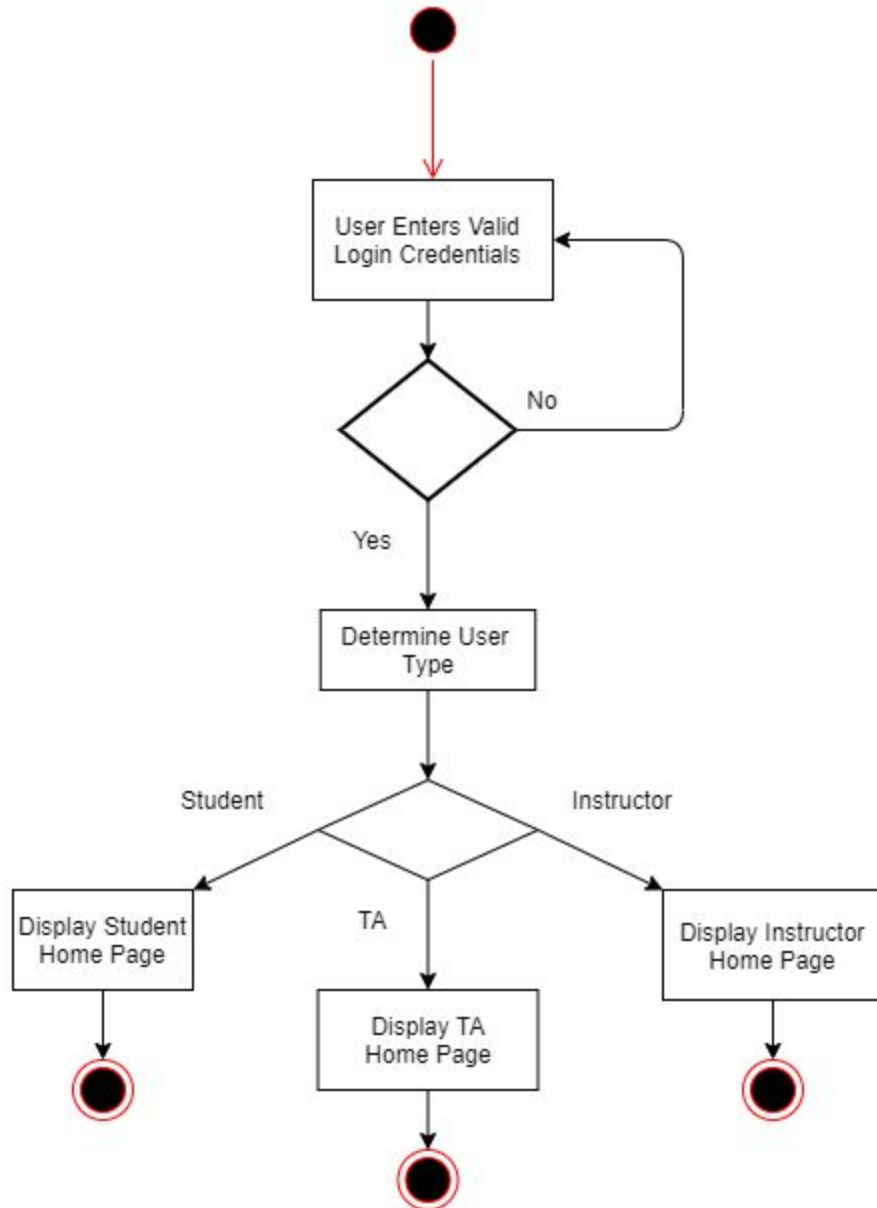
Activity Diagram: Student Submission



This is for the activity of “Student can submit/re-submit already uploaded file”

For this diagram it is implied that in a resubmit case the file is being overwritten

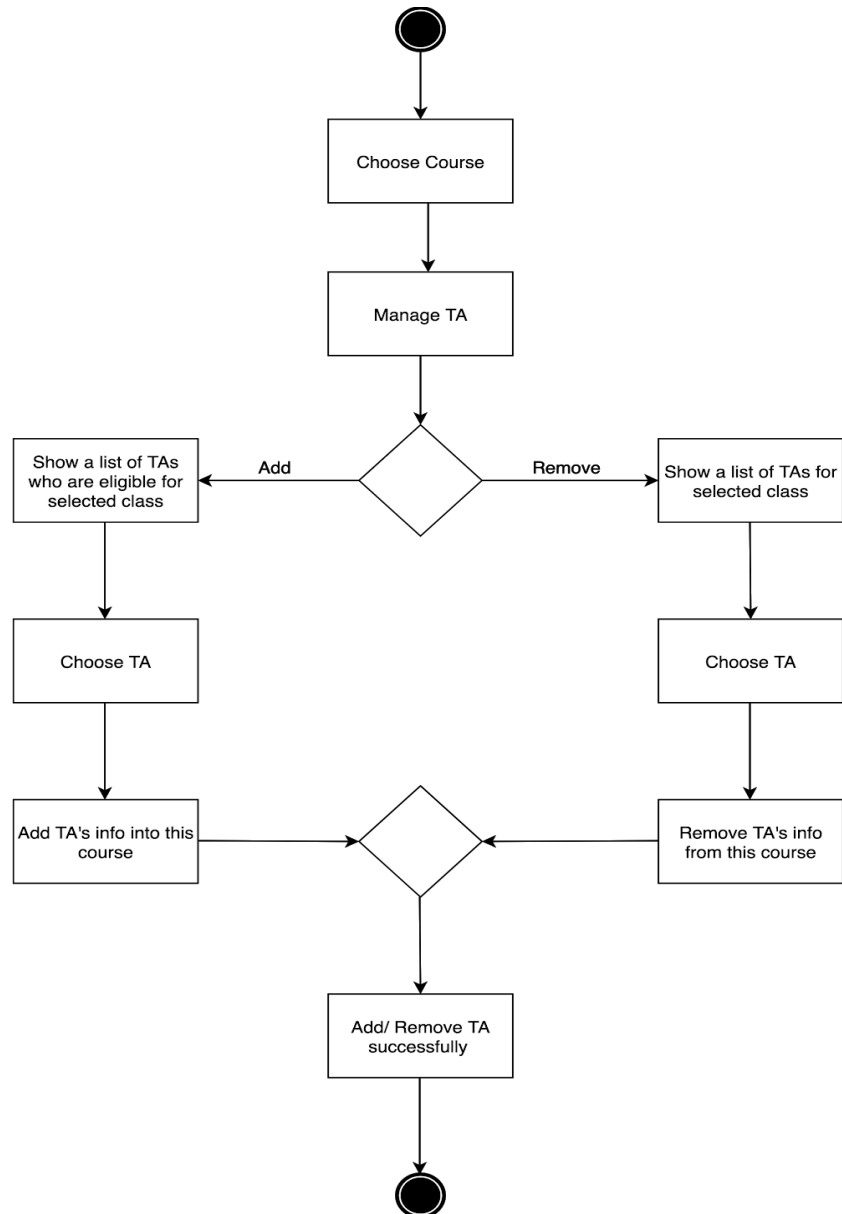
Activity Diagram: User Login



This is the activity diagram for the login functionality for each type of user with login ability. It is implied that the respective home page for each user contains the specified functions and fits to the constraints of each user type.

Creator: David Hannan

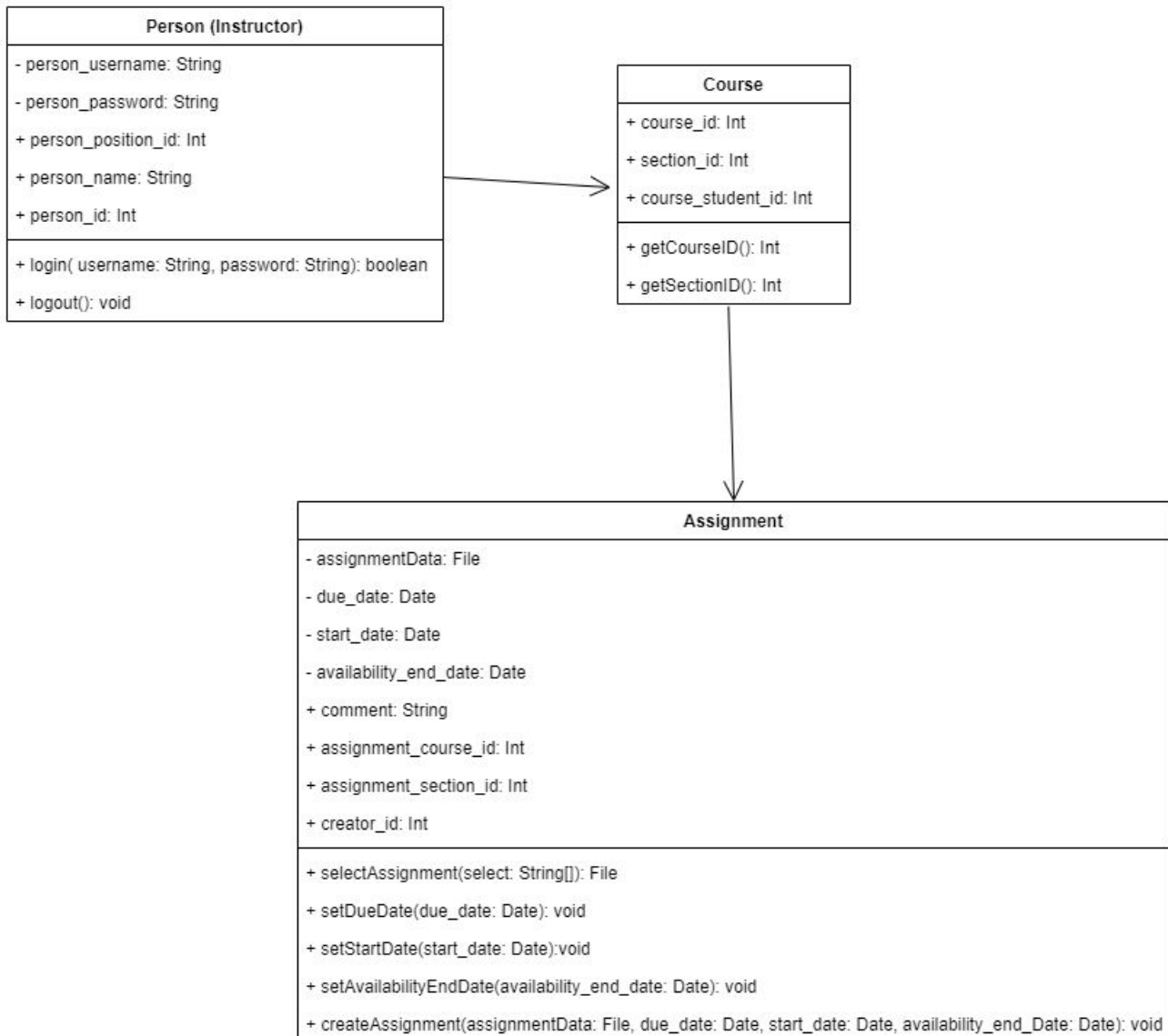
Activity Diagram: Adding and Removing TAs



Instructor can add/remove TAs for the course sections relevant data: TA data, course data
constraints: Instructors can only add or remove TAs from their own course sections.

Creator: Yutong Zhu

Class Diagram: Instructor Creating Assignment

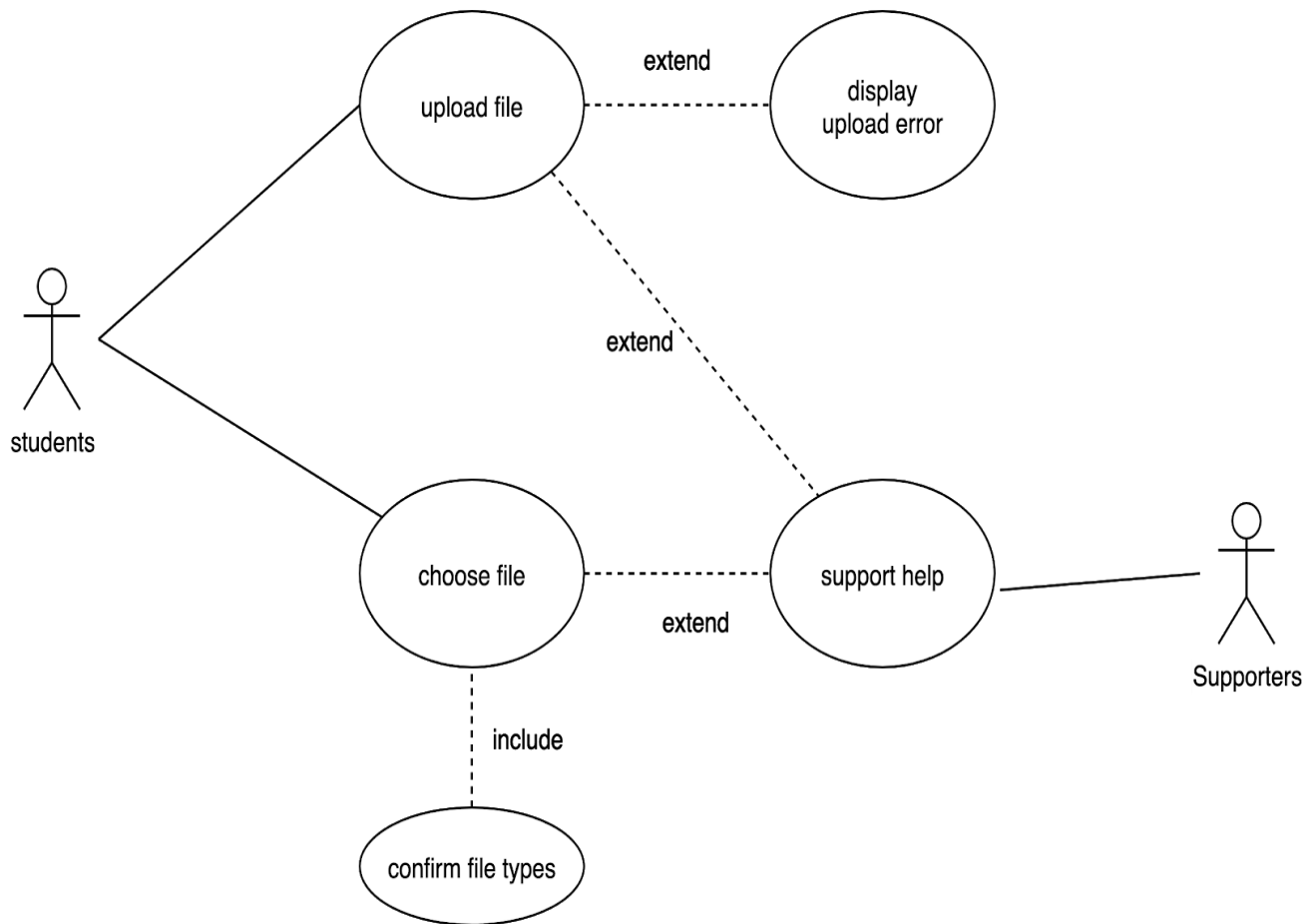


This is the Class Diagram for the activity “Instructor can create assignments for each course”. This class diagram makes the assumption the instructor is already added to the system with a login and password, and that they have created the course and section they wish to create the assignment under.

Collaboration: Jessie Murphey, David Hannan, Yutong Zhu

Use Case Diagram/Description: File Uploading

- 1.Student can upload files relevant data: course data, assignment data, submission data constraints.
- 2.Students can only choose the assignment from the classes that they enrolled in.
- 3.Students can only submit assignments that are opened.)



Creator: Yutong Zhu

Use Case Description

Use Case: Upload files over the web

Description: This use case allows students to choose files and upload files into the system. The user role is student. TA and instructors can view and grade students' assignments. Students have to choose the files type to satisfy the assignment requirement. If selected files do not match the required file type, it will have an error message for reminding students. If students have any technical problems, they can contact technical supporters to ask for help.

Trigger: Students click the 'choose files' button.

Primary Actor: Students.

Secondary Actor: Tech Supporters.

Preconditions:

- Students need to have a valid account and can login.
- Students need to have access to assignments.

Success guarantee:

- Selected files uploaded successfully into the system.

Main success scenario:

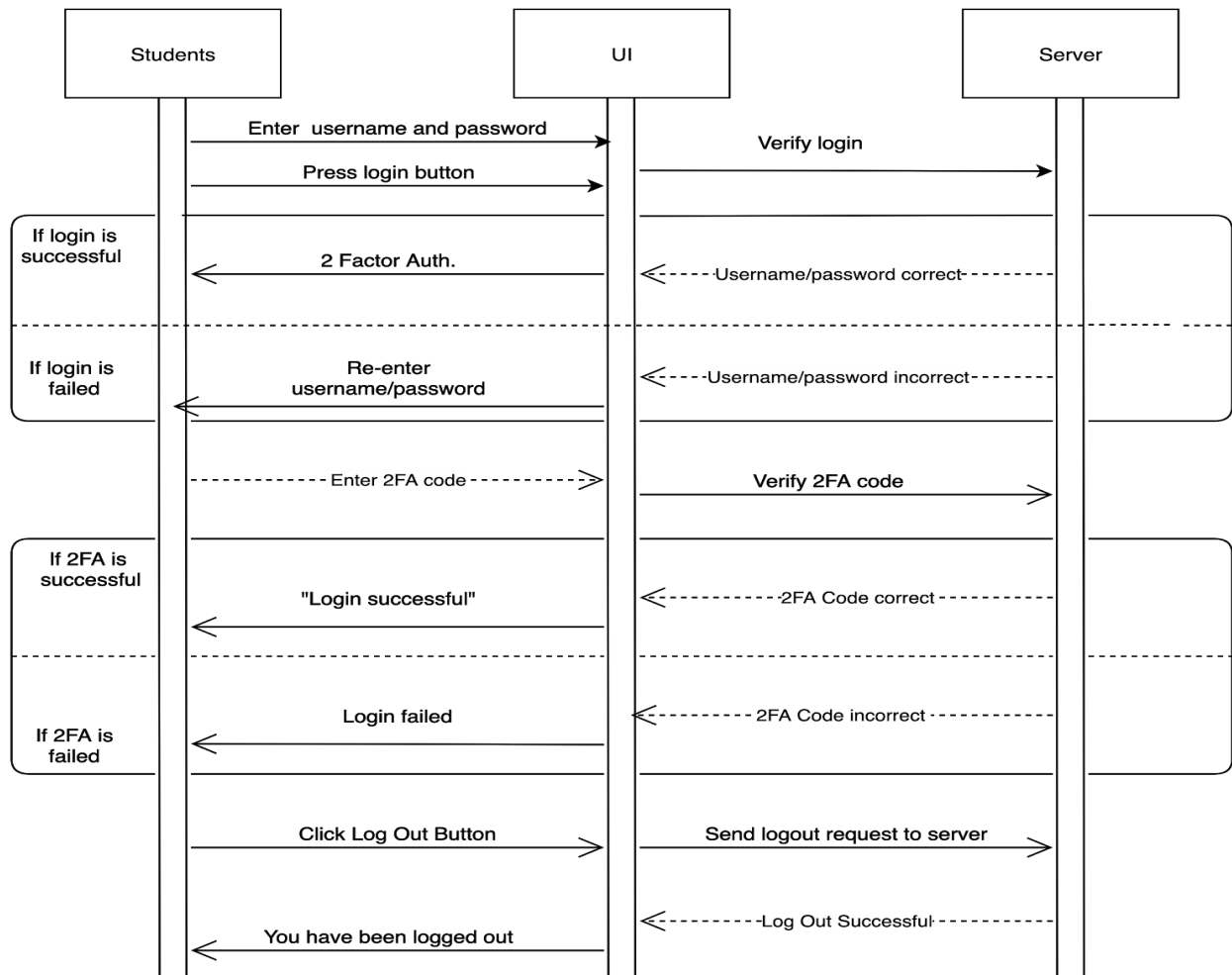
- Students click the 'choose files' button and choose files from their local machines.
- Students click the 'upload' button and upload files into the system.

Extensions:

- Students want to choose a file whose file type is not supported by system
- Students want to choose a file whose file type does not satisfy assignment requirements.
- Students meet technical problems when uploading.

Creator: Yutong Zhu

Sequence Diagram: User Login/Logout

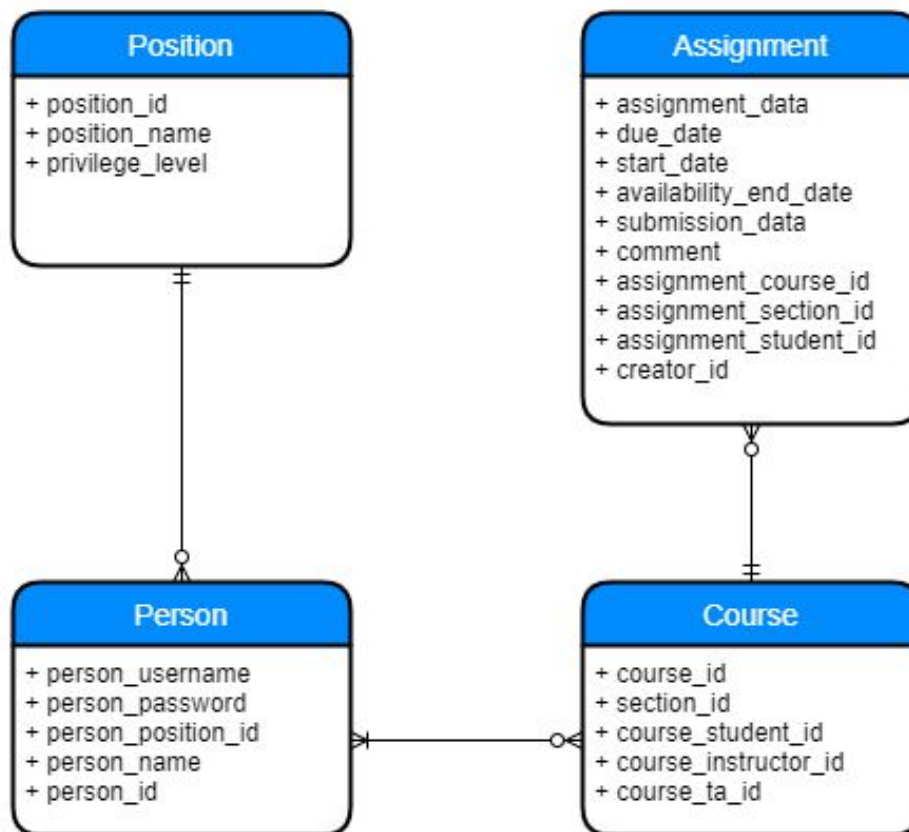


1. Login/Logout

- relevant data: credential data (username & password)
- constraints: TAs can use the system and access their course sections and only their course sections when they input correct username and matched password.

Creator: Yutong Zhu

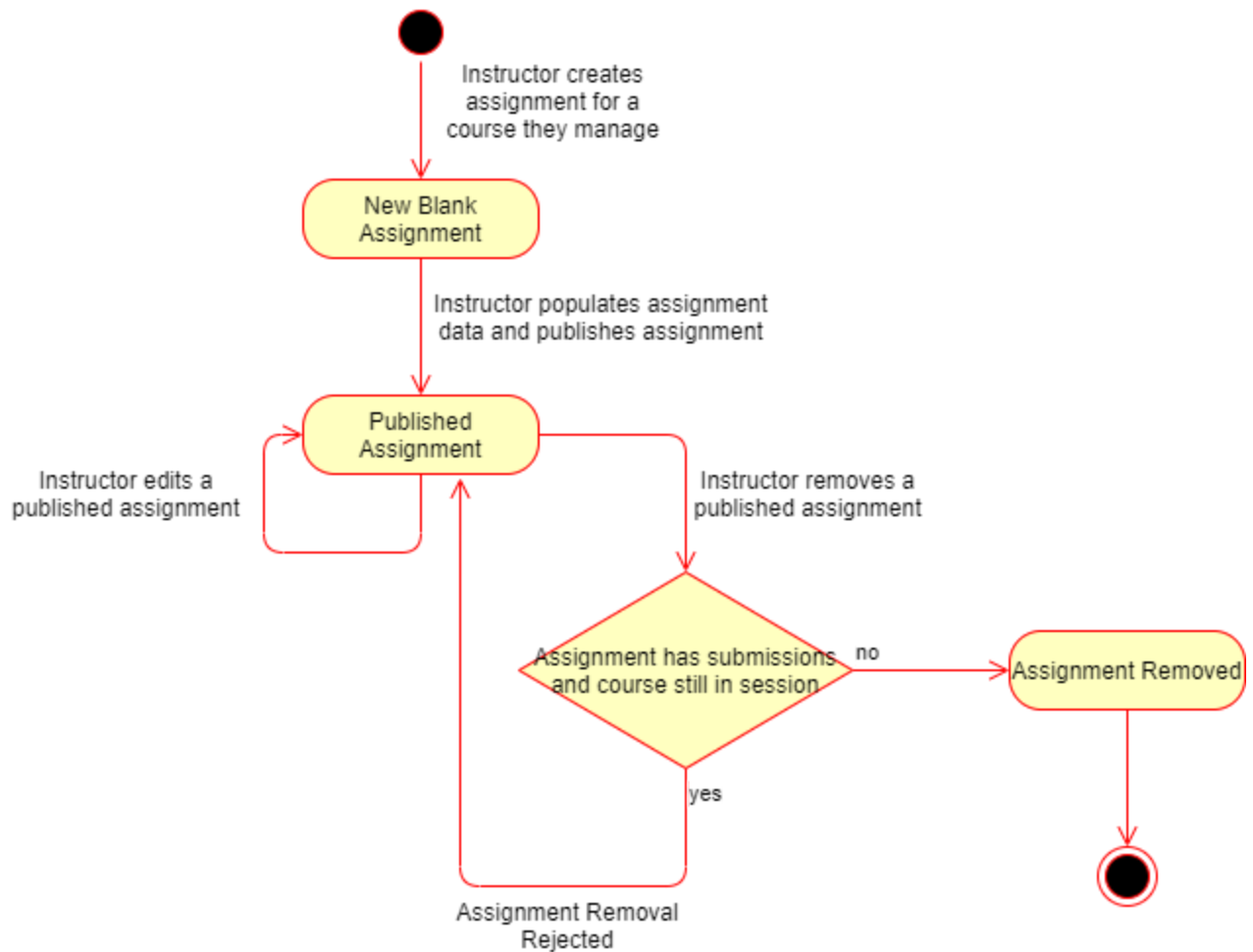
Entity Relationship Diagram: Whole System



This is the ERD diagram for the whole system. The Position table establishes whether the person is a TA, Student, Instructor, or System Admin (in position_name and position_id), and their respective privilege_level which will determine the extent they can edit/view/access the system.

Creator: Jessie Murphey

State Diagram: Instructor Assignment



This state diagram shows the possible states that an assignment can exist in based on actions taken by the instructor.

Creator: David Hannan