# Assignment 4 Design

## Group 13: Jingsong Tan, Ian Anderson, Jonathan Van Egeren

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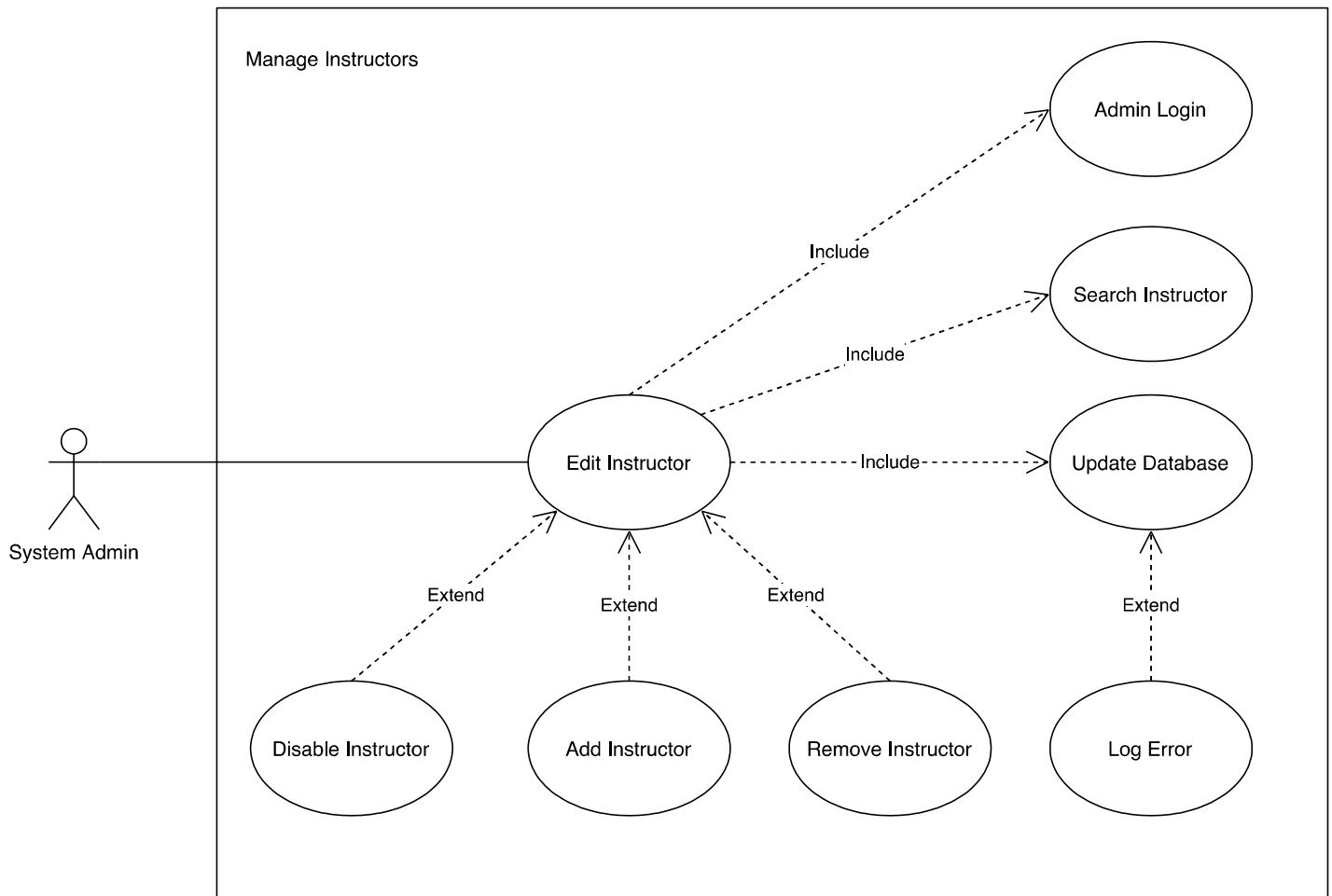
# Use-Case Diagram

Activity: System Administrator managing Instructors
Construction: Ian, Jingsong
Peer Review: Jonathan

Manage Instructors

System Admin

Edit Instructor

Admin Login

Include

Search Instructor

Include

Update Database

Include

Disable Instructor

Extend

Add Instructor

Extend

Remove Instructor

Extend

Log Error

Extend

# Use Case Description

Use Case: Manage Instructors

Primary Actor: System Administrator
Scope: System Administration
Level: User Goal
Stakeholders and Interests:
System Administrator – wants to be able to add/remove/edit/and disable instructors in the system
Precondition: The admin information is already in the system.
Minimum Guarantee: Sufficient logging information that the administrator can detect something went wrong.
Success Guarantee: The remote server has acknowledged the changes made by the administrator and update the database accordingly.
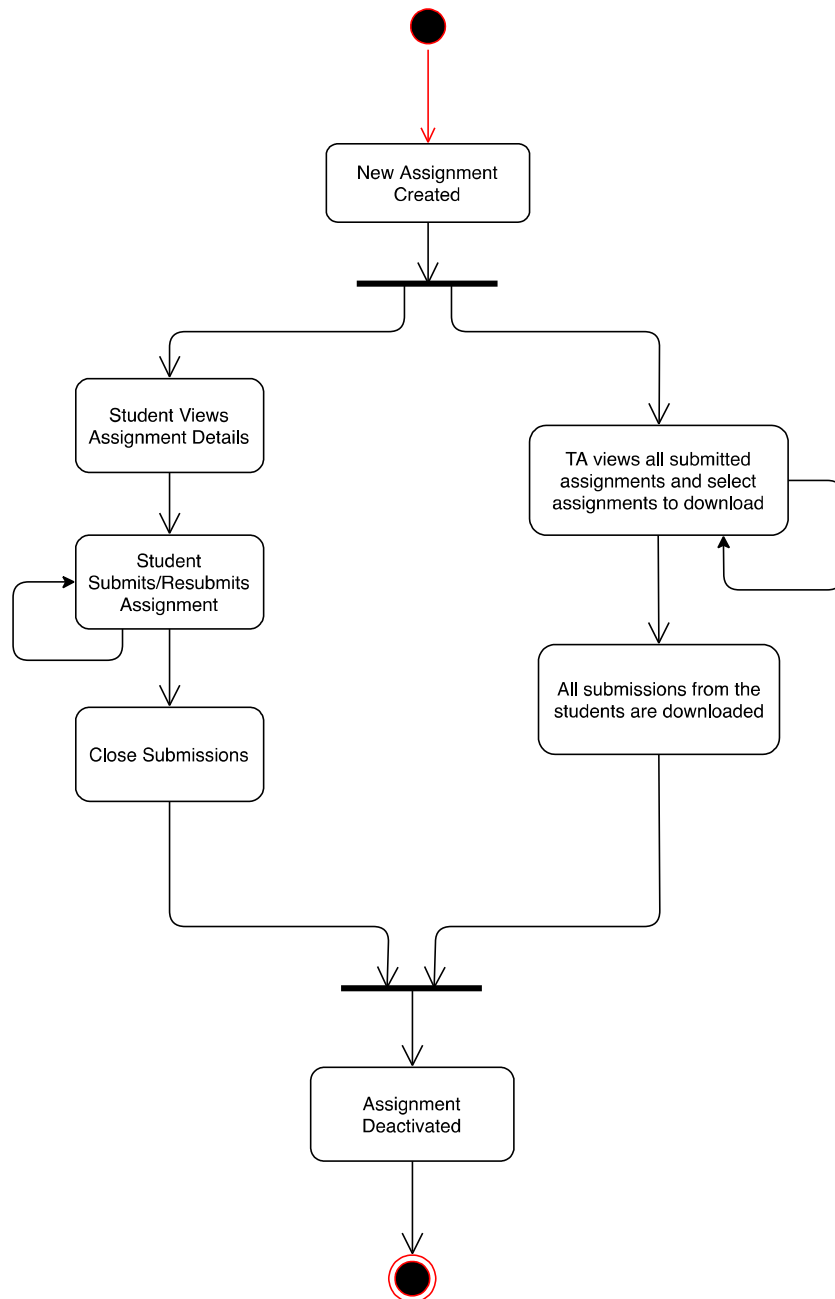Main Success Scenario:
1. The server checks the login credentials and let the administrator log into the system.
2. The server sends out a list of instructors in the system and displays the information to the administrator.
3. The administrator makes changes to the instructors in the system.
4. The server accepts the changing action and updates the database accordingly.
5. The server sends out a new list of instructors'' information in the system and displays to the administrator.

Extensions:
3a. The administrator adds a new instructor.
    3a1. The system asks for information of the new instructor.
    3a2. Continue to step 4.
3b. The administrator selects a existing instructor to remove.
    3b1. Continue to step 4.
3c. The administrator selects a existing instructor to disable.
    3c1. Continue to step 4.
4a. The user's change is invalid and not accepted by the server.
    4a1. The system logs the error onto the server.
    4a2. Return to step 2.

# Activity Diagram 1

Activity: Assignment Collection
Construction: Jingsong, Jonathan
Peer Review: Ian

New Assignment
Created

Student Views
Assignment Details

TA views all submitted
assignments and select
assignments to download

Student
Submits/Resubmits
Assignment

All submissions from the
students are downloaded

Close Submissions

Assignment
Deactivated

# Activity Diagram 2

Activity: Login
Construction: Ian
Peer Review: Jingsong, Jonathan

Redirect to Login Page

User Submits Login

User Exits Page

Process Submission

Verify Credintials

[else]

[verified]

Determine Access Level

Grant Access

Redirect to Homepage
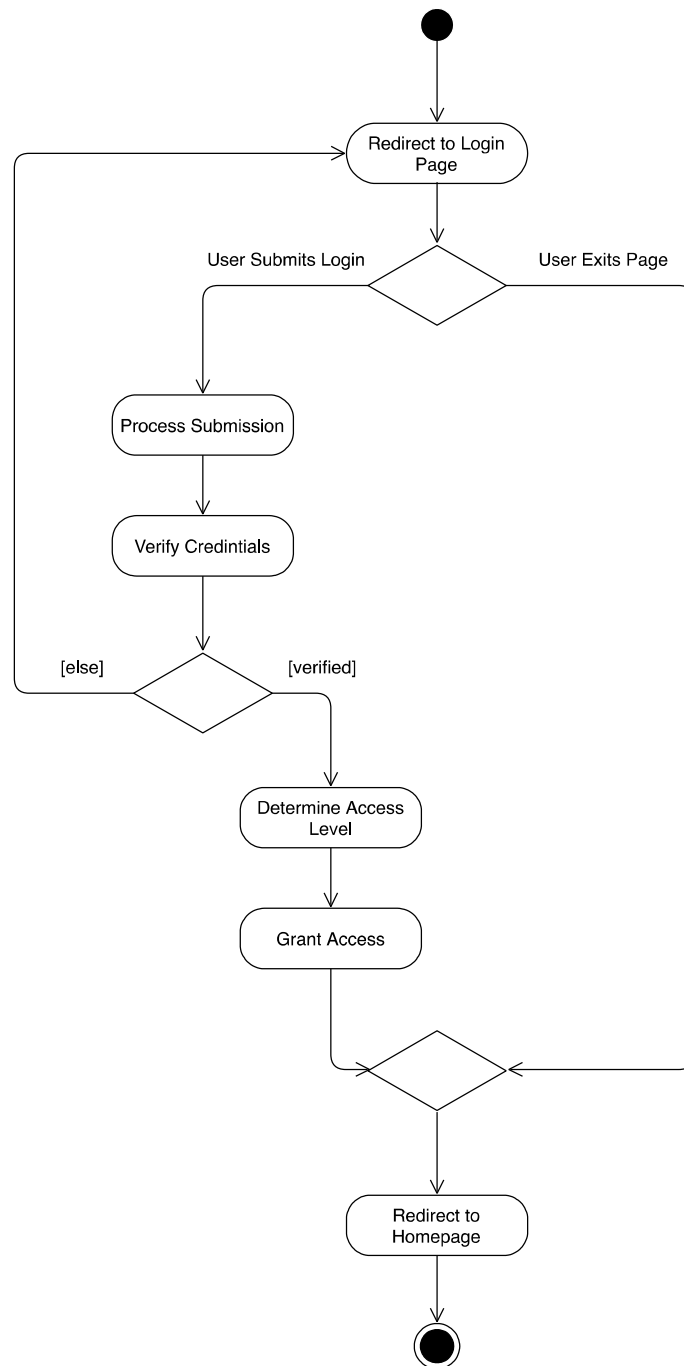
# Activity Diagram 3

Activity: TA Search Student by Name
Construction: Jonathan
Peer Review: Ian, Jingsong

Insert student name

Student name
in course

Student name
not in course

Student name in
TA section

Student name not
in TA section

Notify user that
student name does
not match.  Ask for
new entry

Display student
course data

Notify user that
student is not in their
section
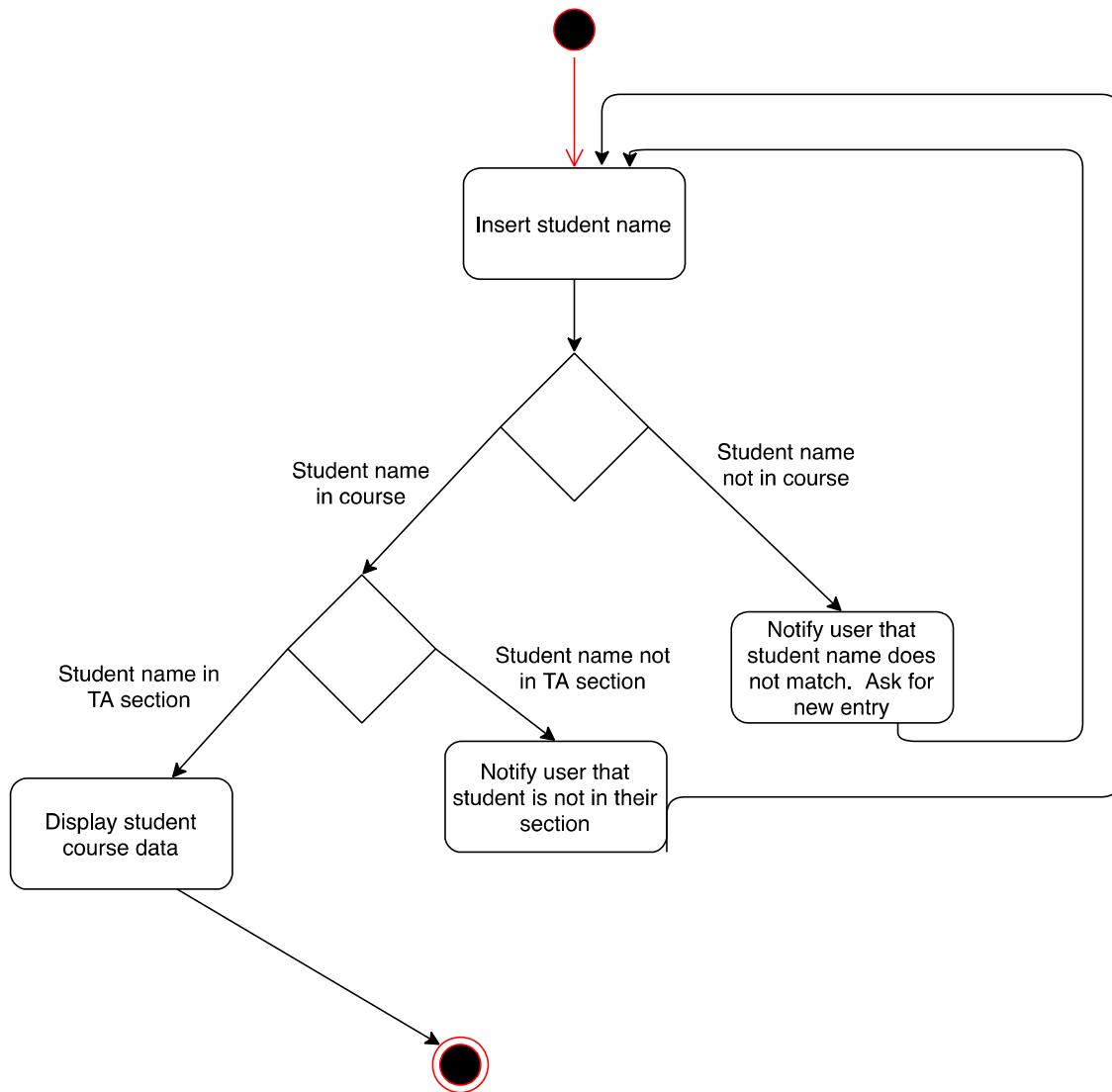
# Class Diagram

Activity: TA view Assignments
Construction: Jonathan, Ian
Peer Review: Jingsong

**TA**

- name: String

- sections: ArrayList<Section>

+ «constructor»TA(name: String, sections: ArrayList<Section>)

**Course**

- courseNumber: String

- courseName: String

+ «constructor» Course(courseNumber:String, courseName:String)

+ getCourseName(): String

+ getCourseNumber(): String

Extends

**Section**

- sectionNumber: String

- assignments: ArrayList<Assignment>

+ «constructor» Section(sectionNumber: String)

+ addAssignment(newAssign: Assignment)

+ getSectionNumber(): String

+ displayAssignments()

**Assignment**

- assignmentName: String

- assignmentDescription: String

- dueDate: String

- availableUntilDate: String

+ «constructor» Assignment(assignmentName:String, assignmentDescription: String, dueDate:String)

+ getAssignName(): String

+ getAssignDesc(): String

+ getAssignDueDate(): String
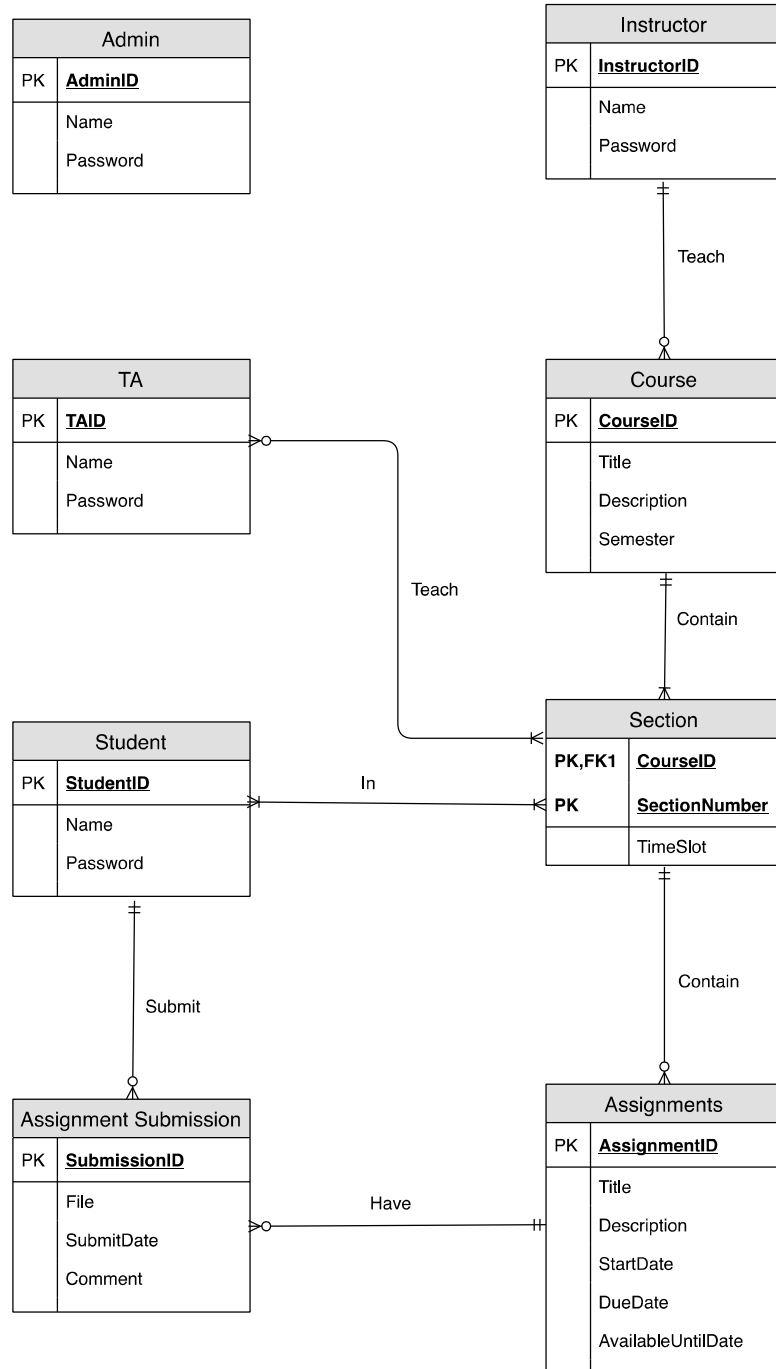
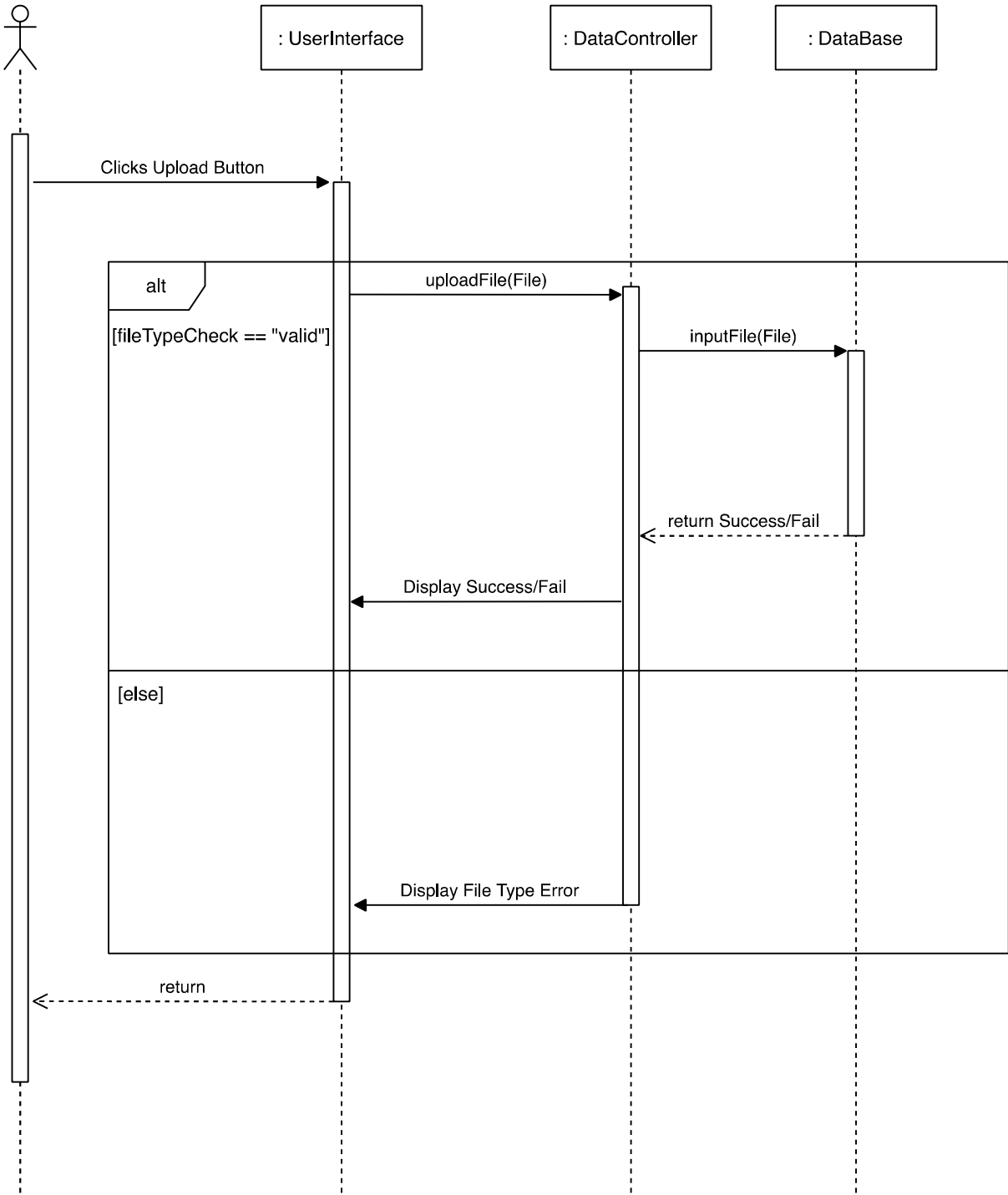+ getAvailableUntilDate(): String

# ER Diagram

Activity: The Whole System
Construction: Jingsong, Ian, Jonathan

# Sequence Diagram

Activity: Student Upload File
Construction: Ian

# State Diagram

Activity: Submit Assignments
Construction: Jingsong, Ian, Jonathan



Assignment Created

Not Complete

date changed [date > dueDate] / close assignment

Submit Assignment [document is in valid format]
/ accept document as current submission

Completed

date changed [date > dueDate] / close assignment

Closed

Resubmit Assignment [document is in valid format]
/ accept document as current submission