

MODULE

IN CLASS COMPETITION BOARD

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PROJECT SUMMARY

We want to create where faculty register and can post coding competitions for students to participate in. Teachers should be able to create competitions, evaluate the submissions and view the submissions and results. Students should be able to register, participate in the competition by submitting code and view the results. Faculty should able to end the competition. An admin user is responsible for granting permissions for students and faculty.

PROJECT REQUIREMENTS

Business Requirements

ID	Requirement	Topic Area	Actor	Priority
BR001	Admin User should be able to verify faculty.	verification	Admin	High
BR002	Admin User should be able to verify student.	verification	Admin	High
BR003	Faculty should be able to track all the submissions	Submissions	Faculty	Medium
BR004	Student should be able to see all the submissions	Submissions	Student	Medium
BR005	Password should be atleast 6 characters	Login	Student/faculty	low
BR006	User Name should be alphanumeric	Login	Student/Faculty	low

User Requirements

ID	Requirement	Topic Area	Actor	Priority
UR001	Student/Faculty view all competitions posted	View	Student/Faculty	High
UR002	Student should be able to join a particular competition	Participate	Student	High
UR003	Student should be able to upload submission for competition	Submissions	Student	Medium
UR004	Student should be able to see results of his submissions for competition	Submissions	Student	Medium
UR005	Faculty should be able to post and start the competition	Post Competition	Student	High
UR006	Faculty should be able to upload test case for completion of the competition	Post Competition	Faculty	High
UR007	Faculty should be able to stop the competition	Post Competition	Faculty	Low
UR008	Admin should be able to allow/disallow student registered to compete	Authentication	Admin	Medium
UR009	Admin should be able to allow/disallow faculty registered.	Authentication	Admin	Medium

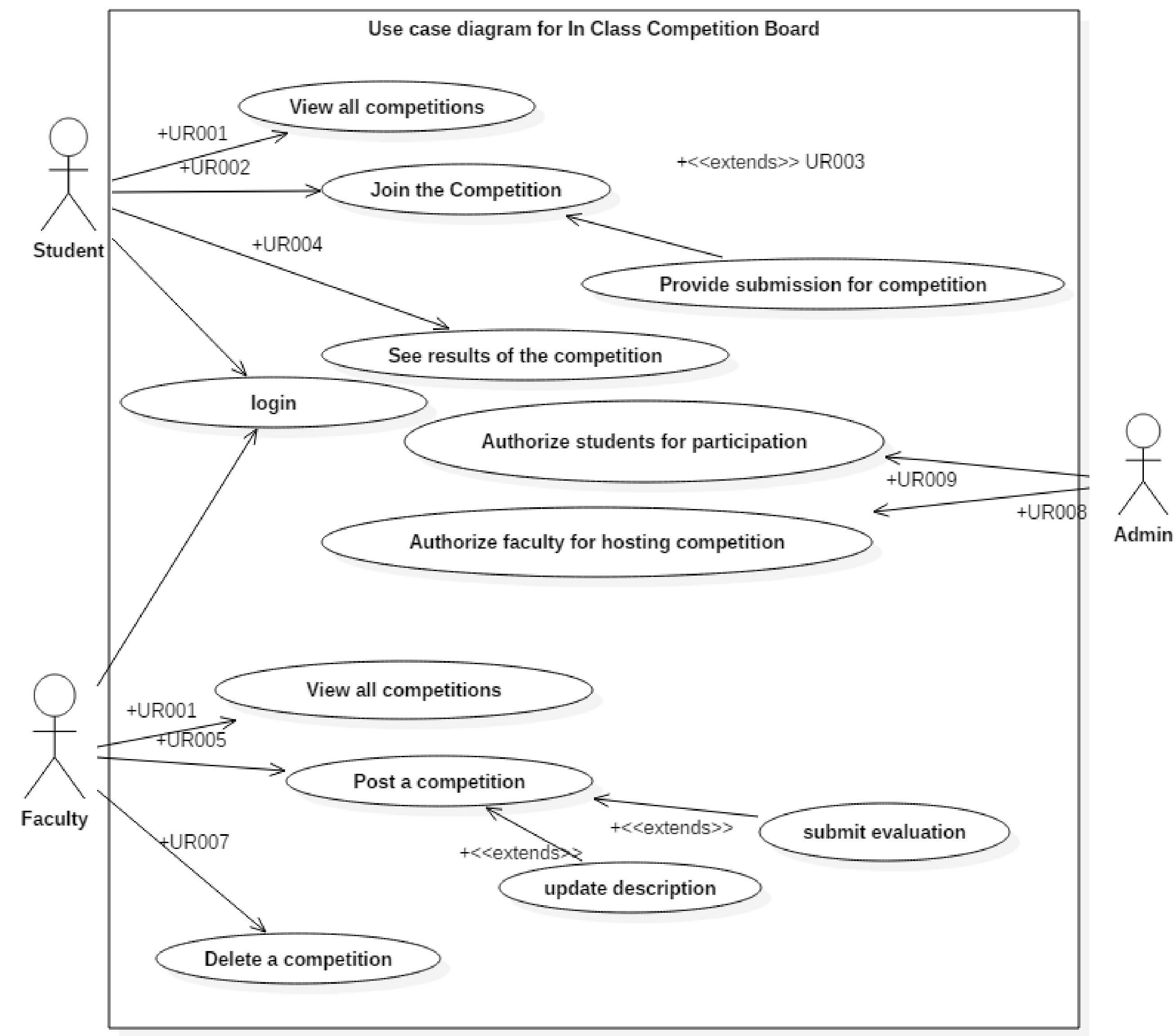
Nonfunctional Requirements

ID	Requirement	Topic Area	Priority
NF001	User account should be password-protected	Security	High
NF002	Normalized database,allowing for easy database changes	Database consistency	High
NF003	Competitions Posted should be visible realtime	Performance	Medium
NF004	Submission posted should be evaluated within a minute	Performance	Medium
NF005	Confirmation popups before and after submissions	User experience	High

DATA STORAGE

We'll be using MYSQL Database management systems for storing and accessing competitions. Students and faculty details.

USE CASES



USE CASE DOCUMENTS

User Case ID:	UC001	
Use Case Name:	Create Competitions	
Description:	Faculty should be able to create competitions for students.	
Actors:	Faculty	
Pre-Conditions:	Faculty has registered into system. Faculty has been granted permission by an admin to create competitions. Faculty has logged into system.	
Post-Conditions:		
Frequency of Use:	Weekly.	
Row of Events:	Actor Action	System Response
	1 Click on Create Competition in menu.	Display create competition form.
	2 Fill out Name, Description, and Test Case fields in create competition form.	Display Confirm button.
	3 Click on Confirm button.	Create competition and redirect user to view competitions page.
Variations:	Faculty partially fills out fields and clicks on "Save as Draft". Faculty is redirected to "View Competitions" and draft competition appears in competitions list.	
Exceptions:		
Developer Notes	Do not show "Confirm" button until all fields have been filled. Before that, only show the faculty user "save as draft".	

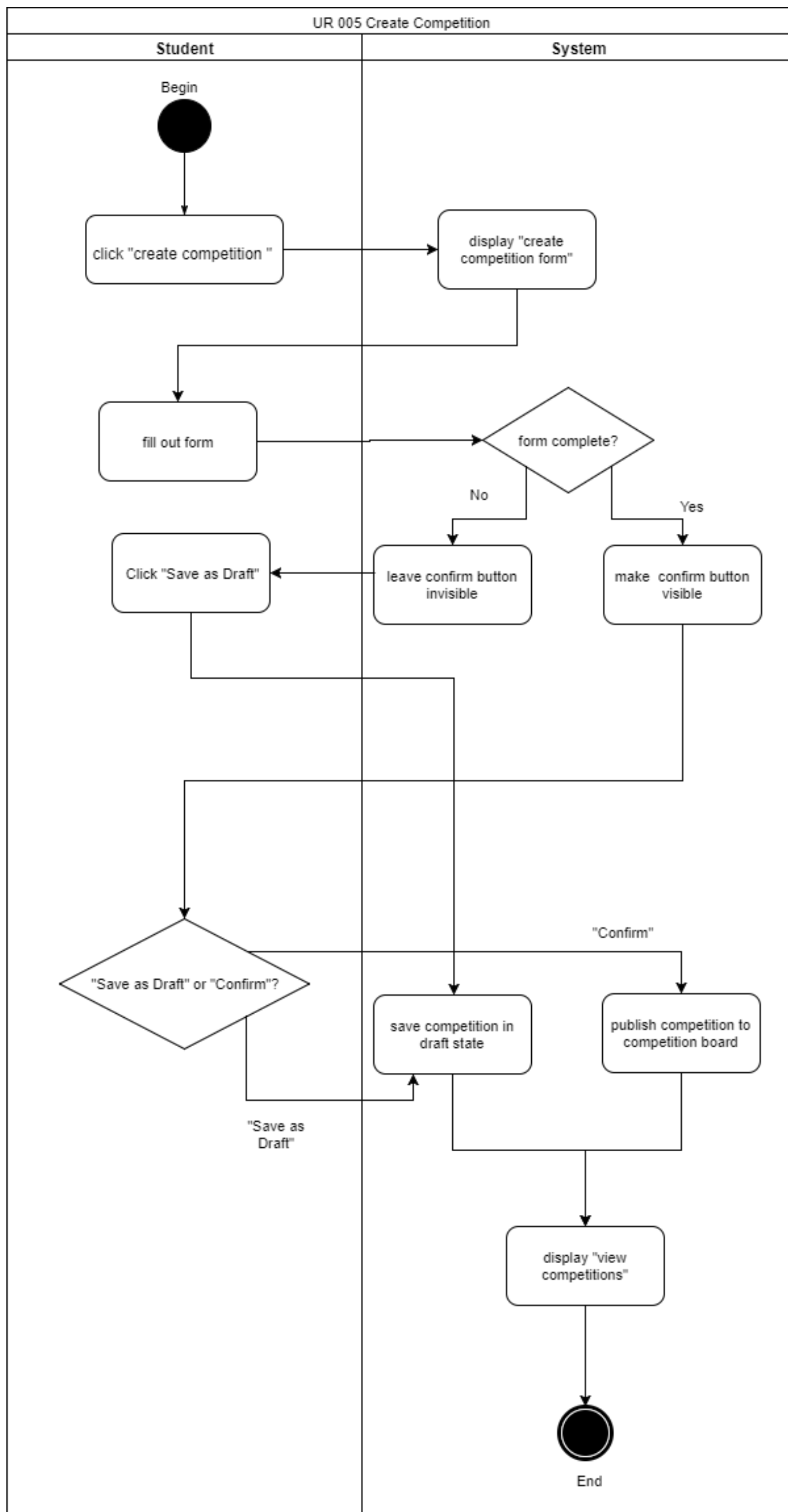
User Case ID:	UC002	
Use Case Name:	Student Participating in posted competition	
Description:	Student should be able to join and participate in the competition	
Actors:	Student	
Pre-Conditions:	Student should be authorized by admin to participate in competition. Student should be logged in to the system. Student should be able to view all posted competitions	
Post-Conditions:	Student should be able to see results of the submissions	
Frequency of Use:	Daily.	
Row of Events:	Actor Action	System Response
	1 Click on Join Competition	Display the confirmation on joining competition
	2 Upload solution for competition.	Show confirmation of upload.
	3 Click submit	Show confirmation of submission and results of submission
Variations:	Student might just join the competition and submit solutions later. Student might submit multiple solutions, latest solution must be considered.	
Exceptions:	Student couldn't submit solutions, submission is not considered.Student not able to join competition	
Developer Notes		

ACTIVITY DIAGRAMS

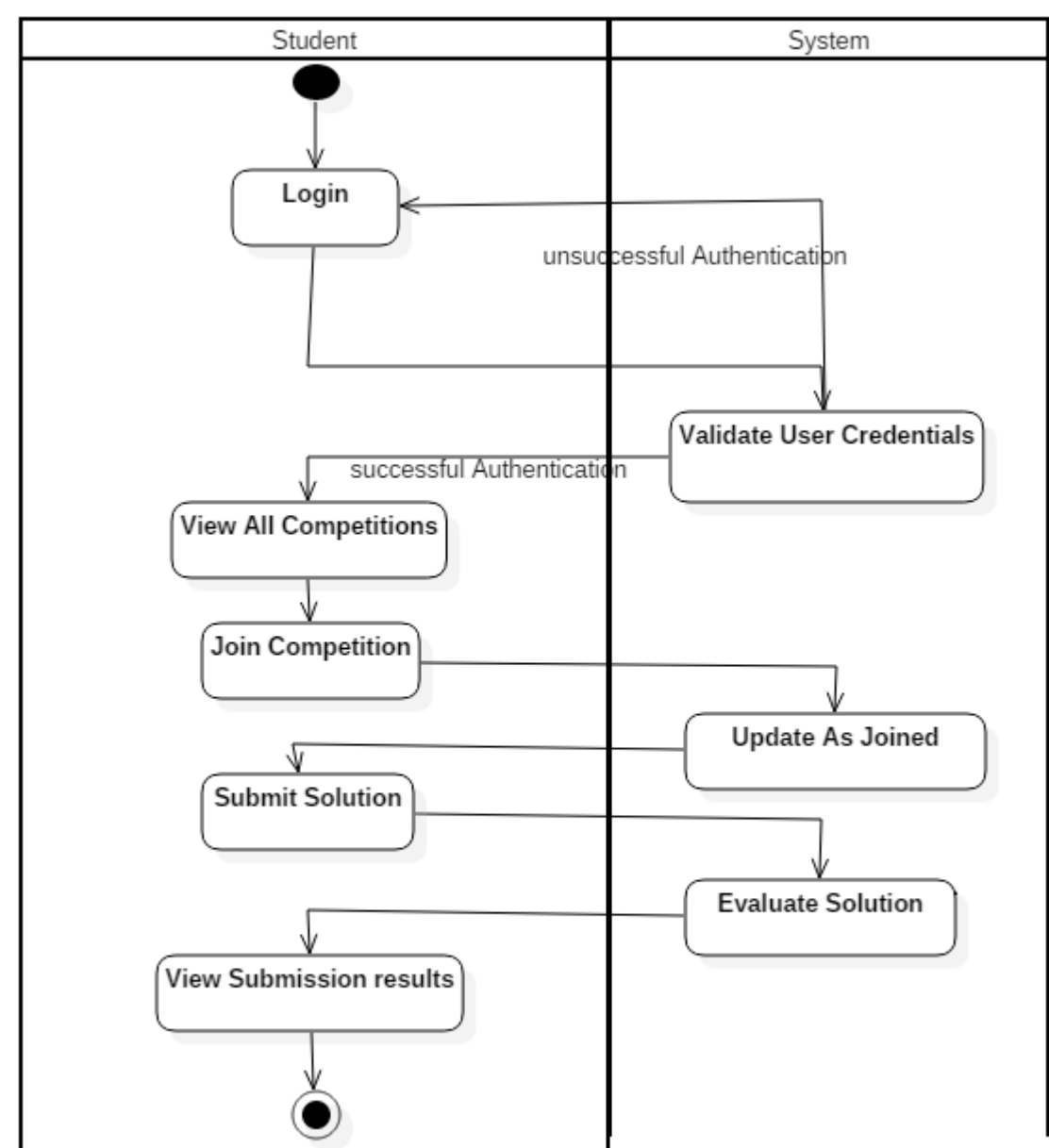
Activity Diagram 1:

Use Case: UC001

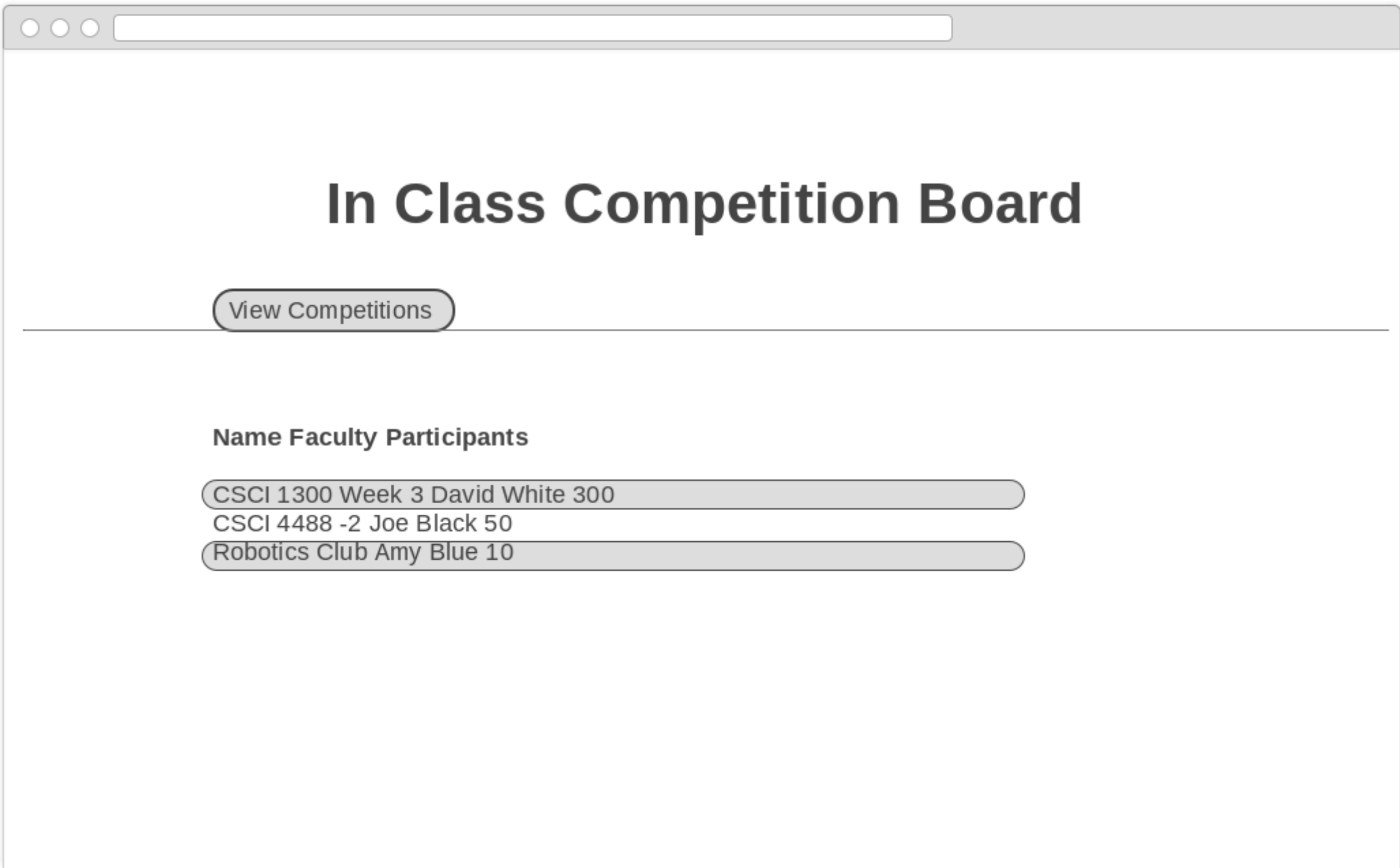
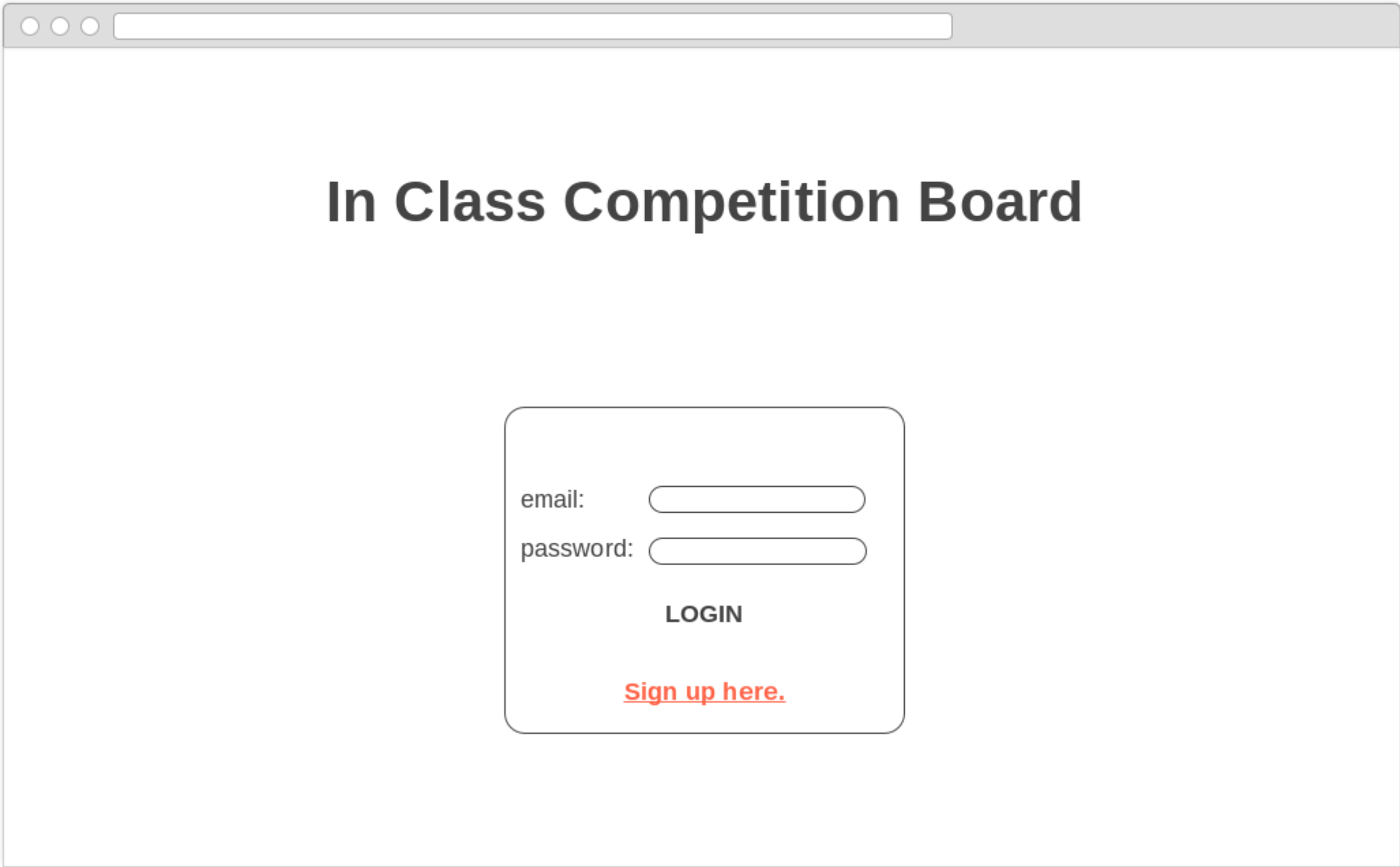
Requirement:UR005

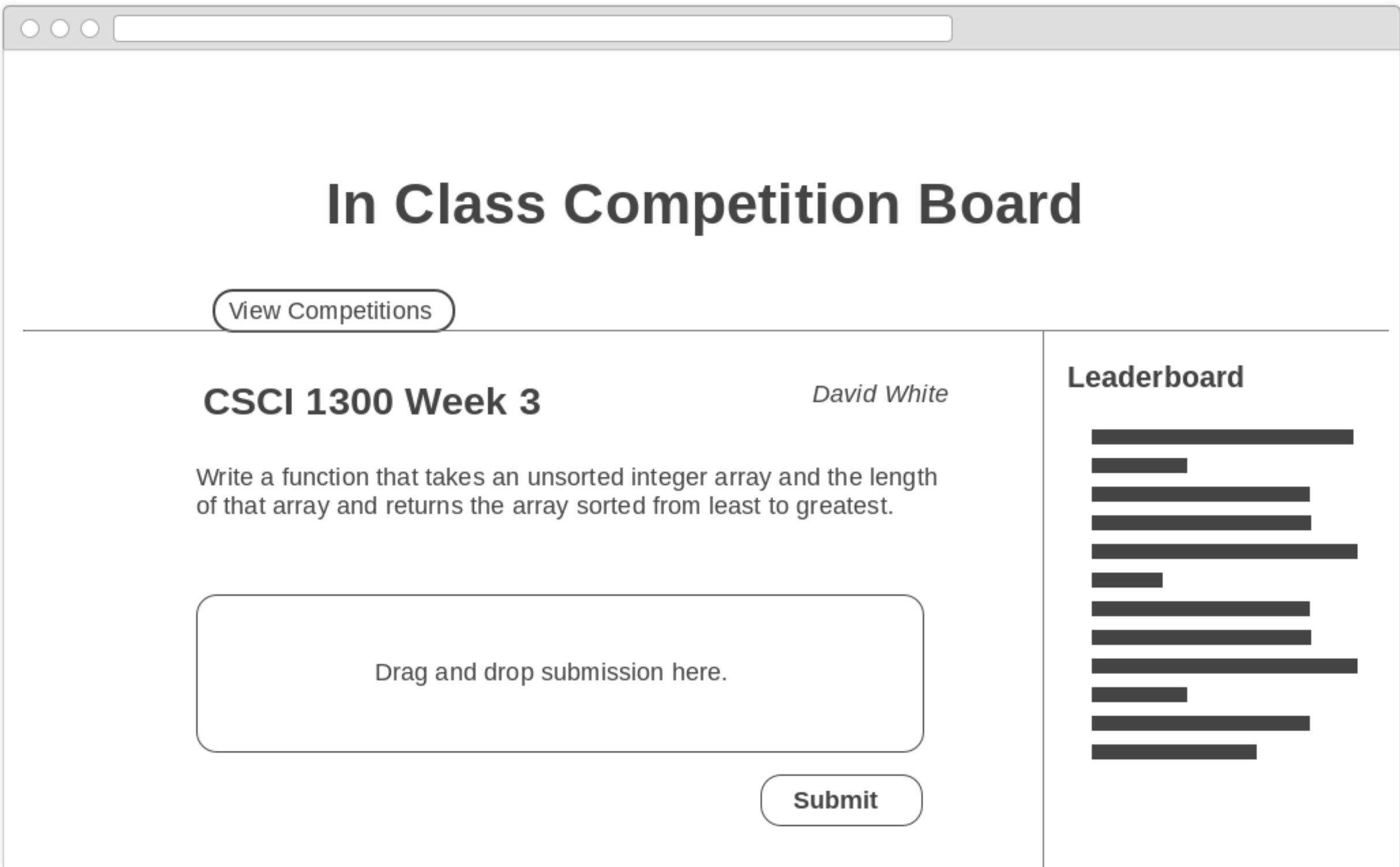
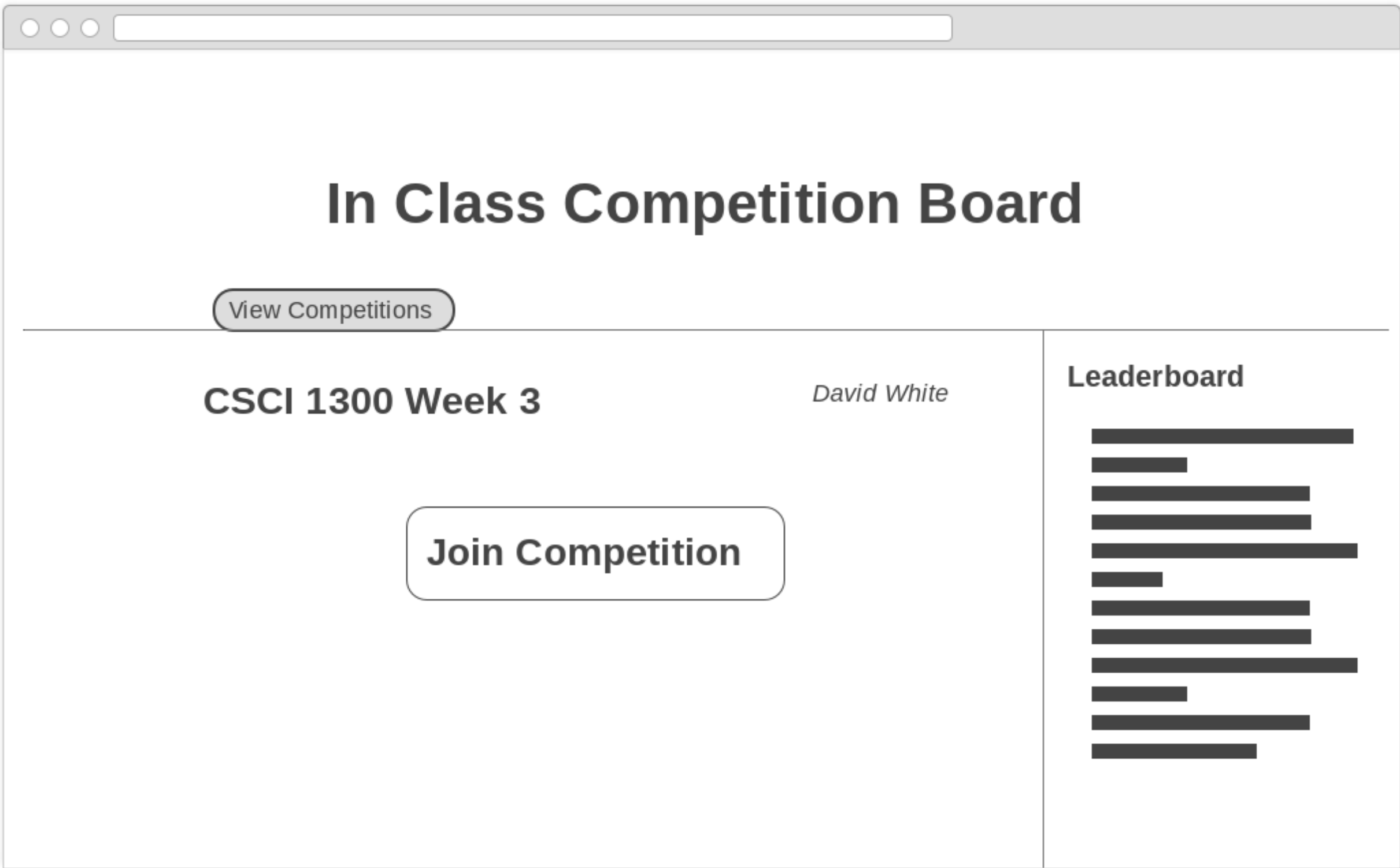


Activity Diagram 2:
Use Case: UC002
Requirement:UR002, UR005



UI Mockups





In Class Competition Board

View Competitions

Create Competition

Name Faculty Participants

CSCI 1300 Week 3 David White 300

CSCI 4488 -2 Joe Black 50

Robotics Club Amy Blue 10

END

MODIFY

In Class Competition Board

View Competitions

Create Competition

Save as Draft

Name:

Untitled Competition 1

Description:

Tests:

Drag and drop test file here.

In Class Competition Board

View Competitions

Create Competition

Confirm

Save as Draft

Name:

Robotics Club 2

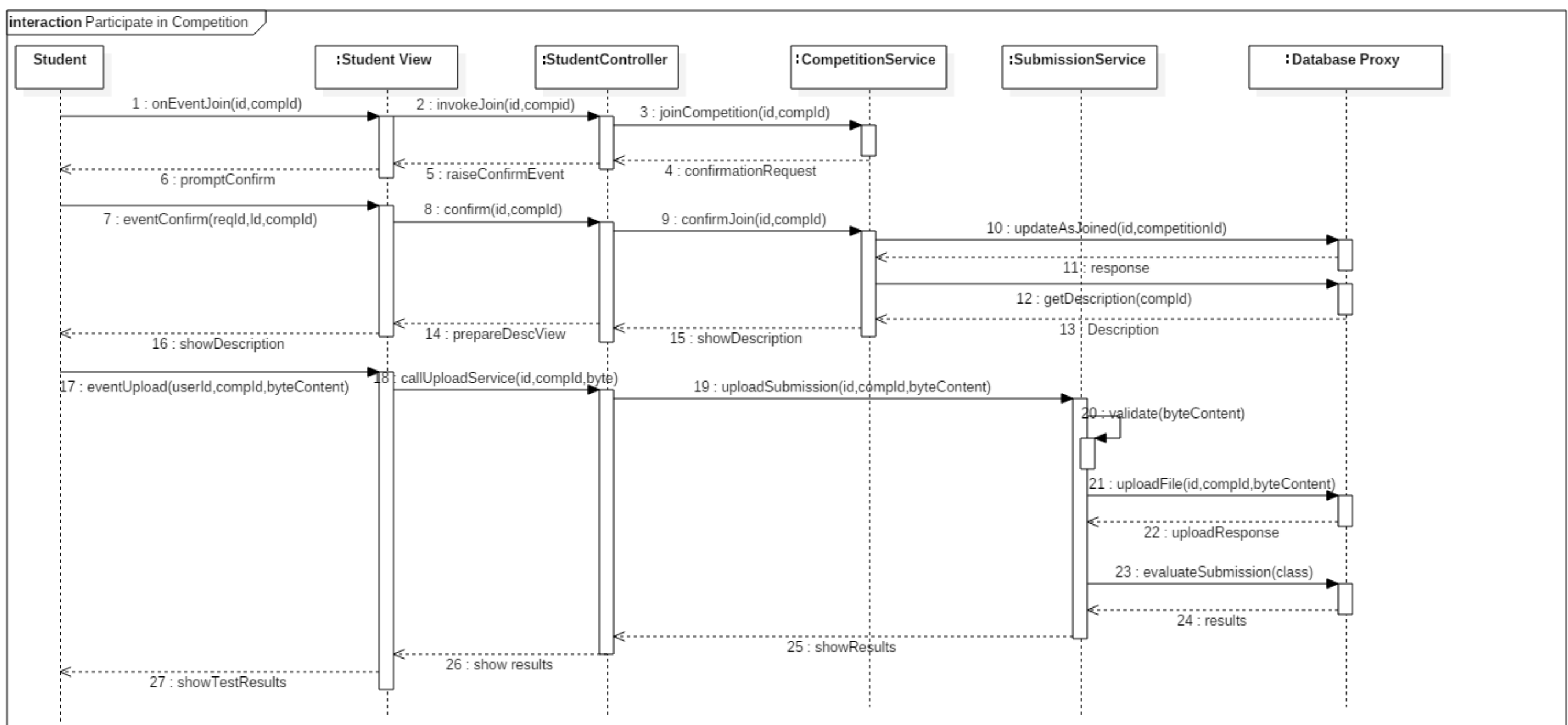
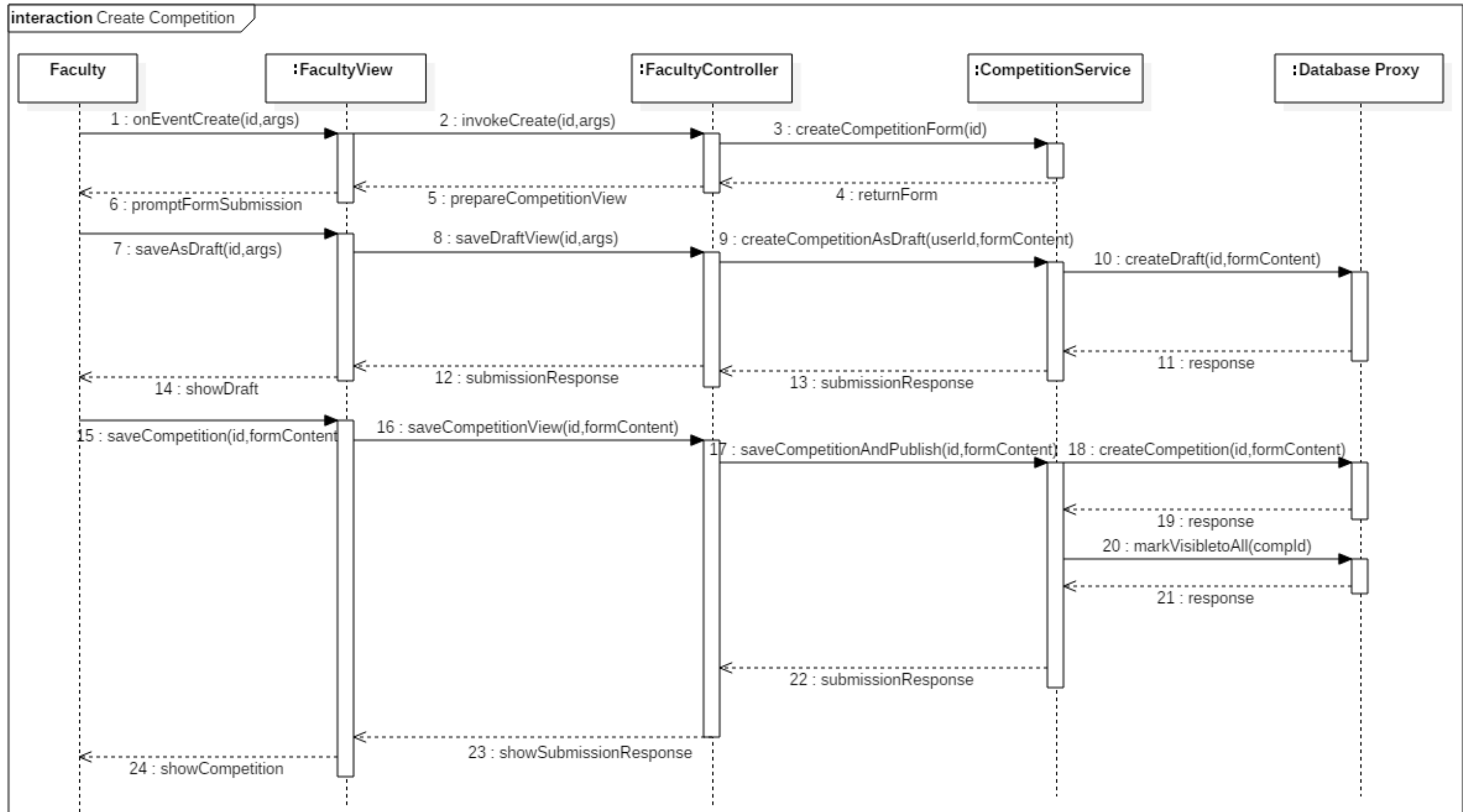
Description:

Please add your week 2 submissions for the robotics club here. (Details on course website).

Tests:

testWeek2.c

SEQUENCE DIAGRAMS



CLASS DIAGRAM

