



University of Santo Tomas
College of Information and Computing Sciences
S.Y. 2022-2023



Online Submission and Approval of Capstone Project Requirements

Software Design Document

Client: Alma V. Perol

Client Address: España Boulevard, Sampaloc, Manila, Metro Manila

Course Adviser: Mr. Christopher Ladao

Members:

DACIO, Francis Dantes J.
Project Manager

GERONIMO, Brian Joseph
Systems Analyst

MACAHIYA, Christian R.
Developer

MANONGSONG, Luke
Developer

MANSUETO, John Raphael A.
Quality Assurance

UY, Keane Timothee S.
Business Analyst

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1 | System Overview

The project aims to address concerns regarding the process of online submission of capstone requirements. The main client for this project is the CICS community and its point-person is Ms. Alma V. Perol. The project's objectives are to implement a system that will allow the students to submit their capstone projects to the system and the academic staff involved can view said submission and grade, sign, and comment on the submission.

2 | System Architecture

a.) Architectural Design

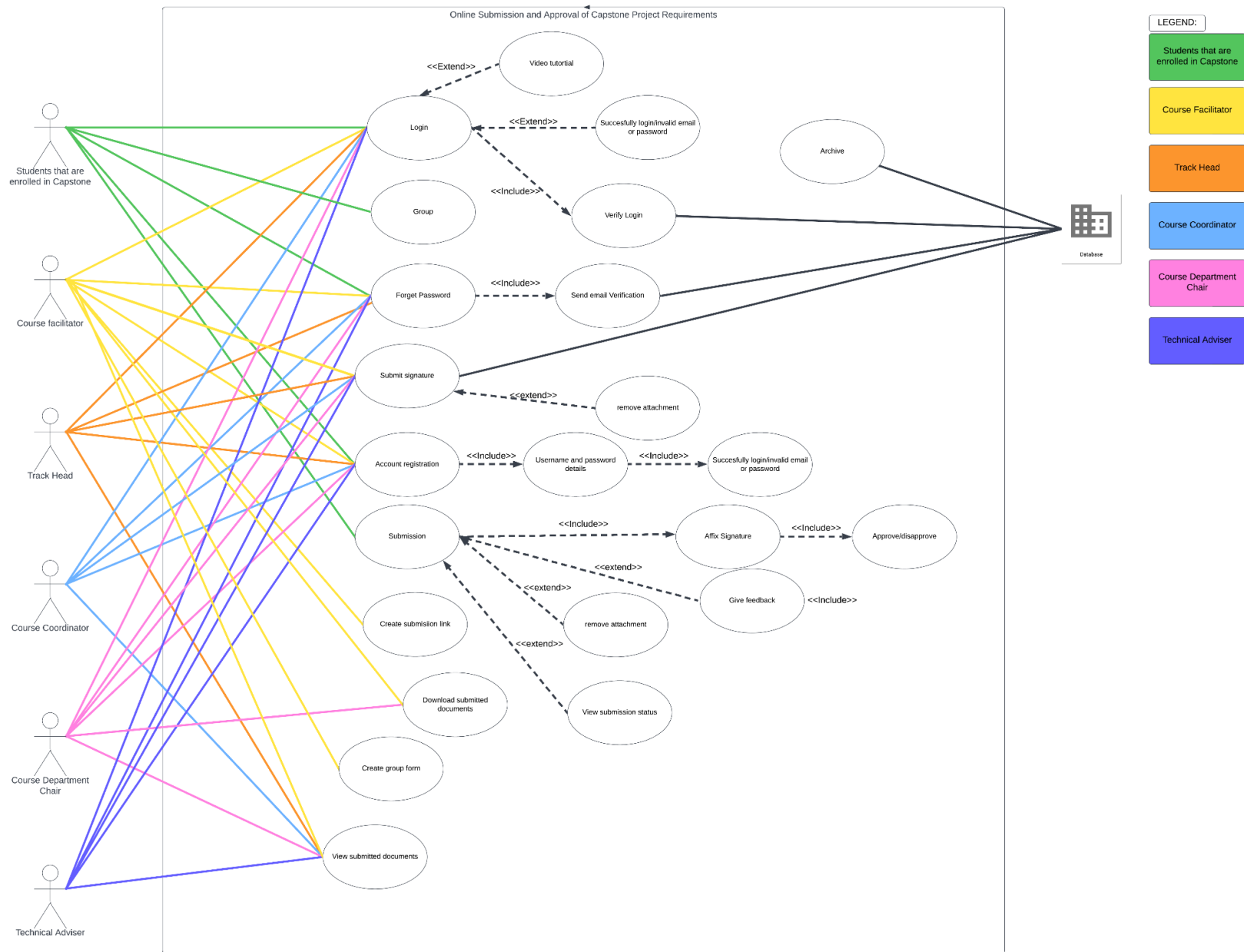


Figure D2.1. Detailed Use case diagram (with dependencies, inclusions, etc.)

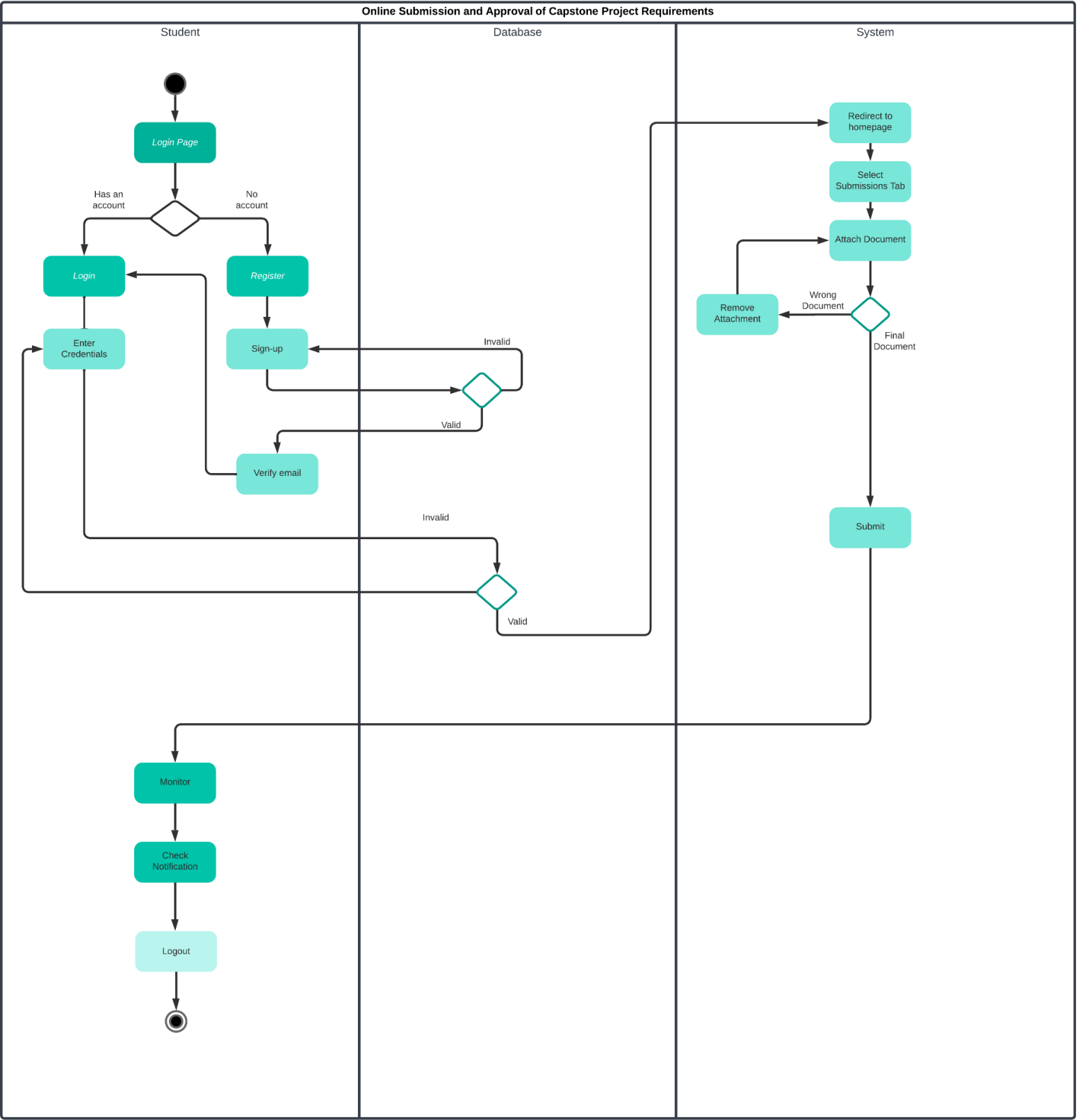


Figure D2.2.1 Swimlane diagram (Student)

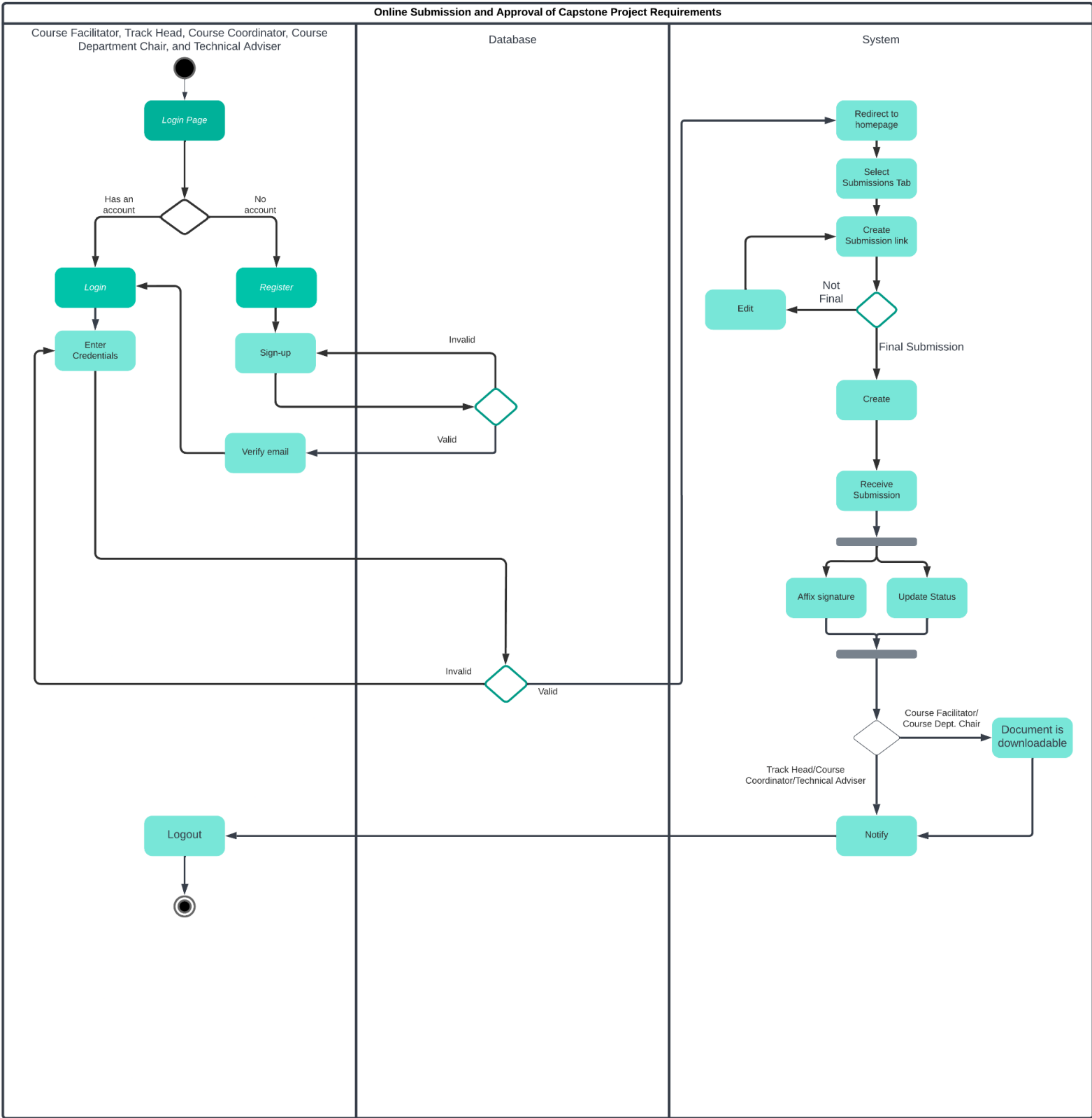
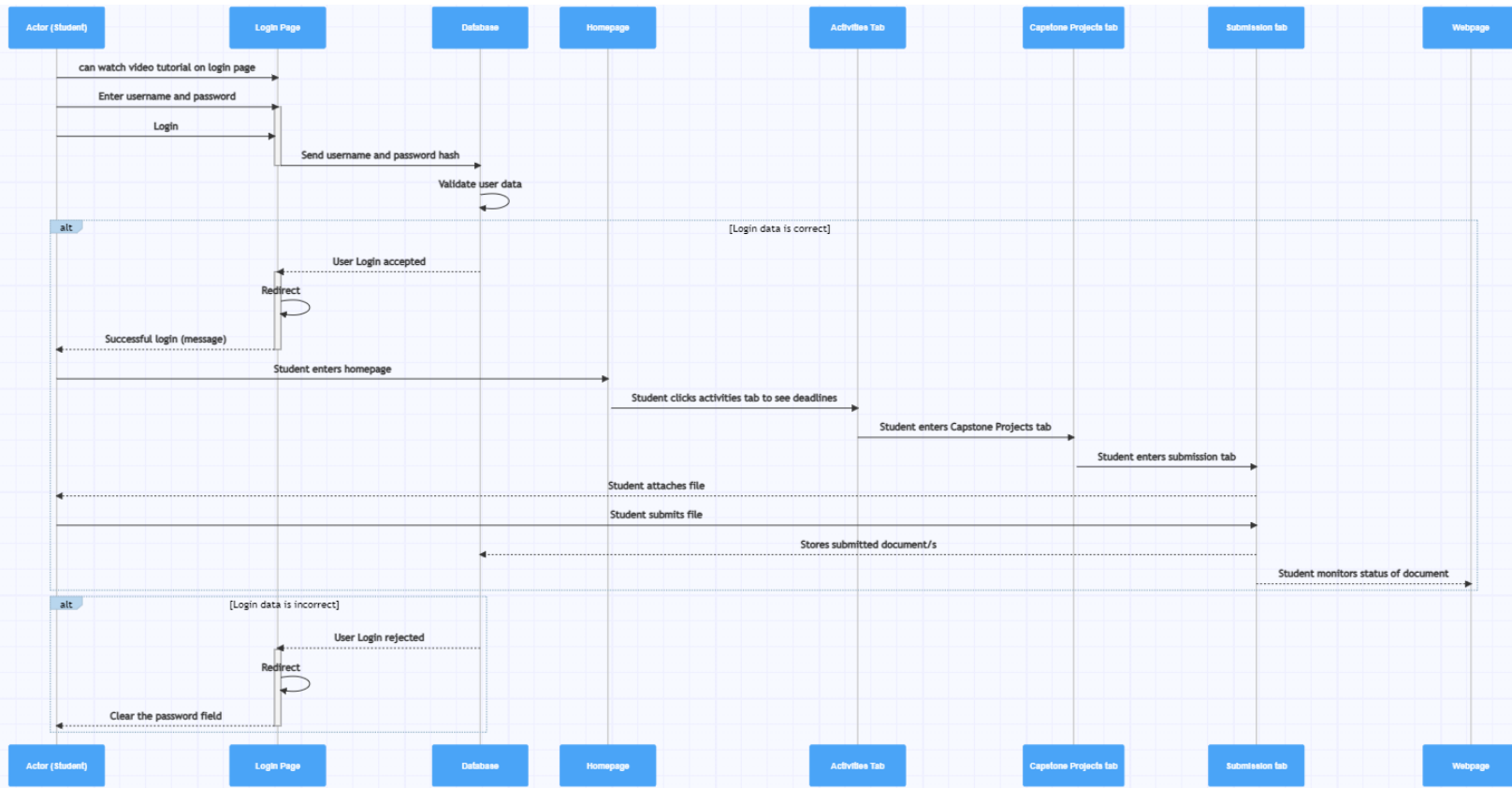


Figure 2.2.2 Swimlane Diagram (Professor)

b.) Decomposition Description

Figure D2.3.1 System sequence diagram (Student)



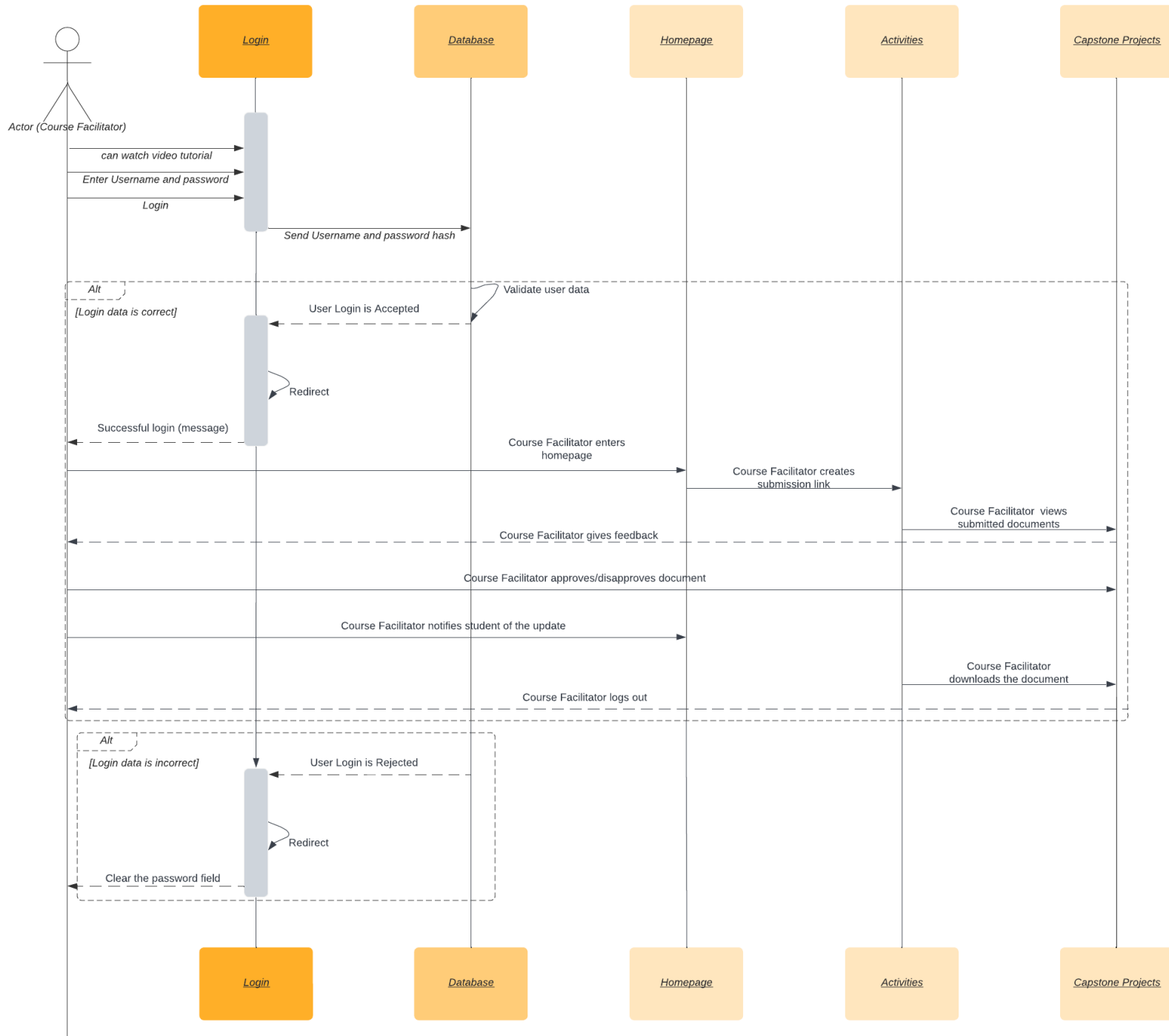


Figure D2.3.2 System sequence diagram (Course Facilitator)

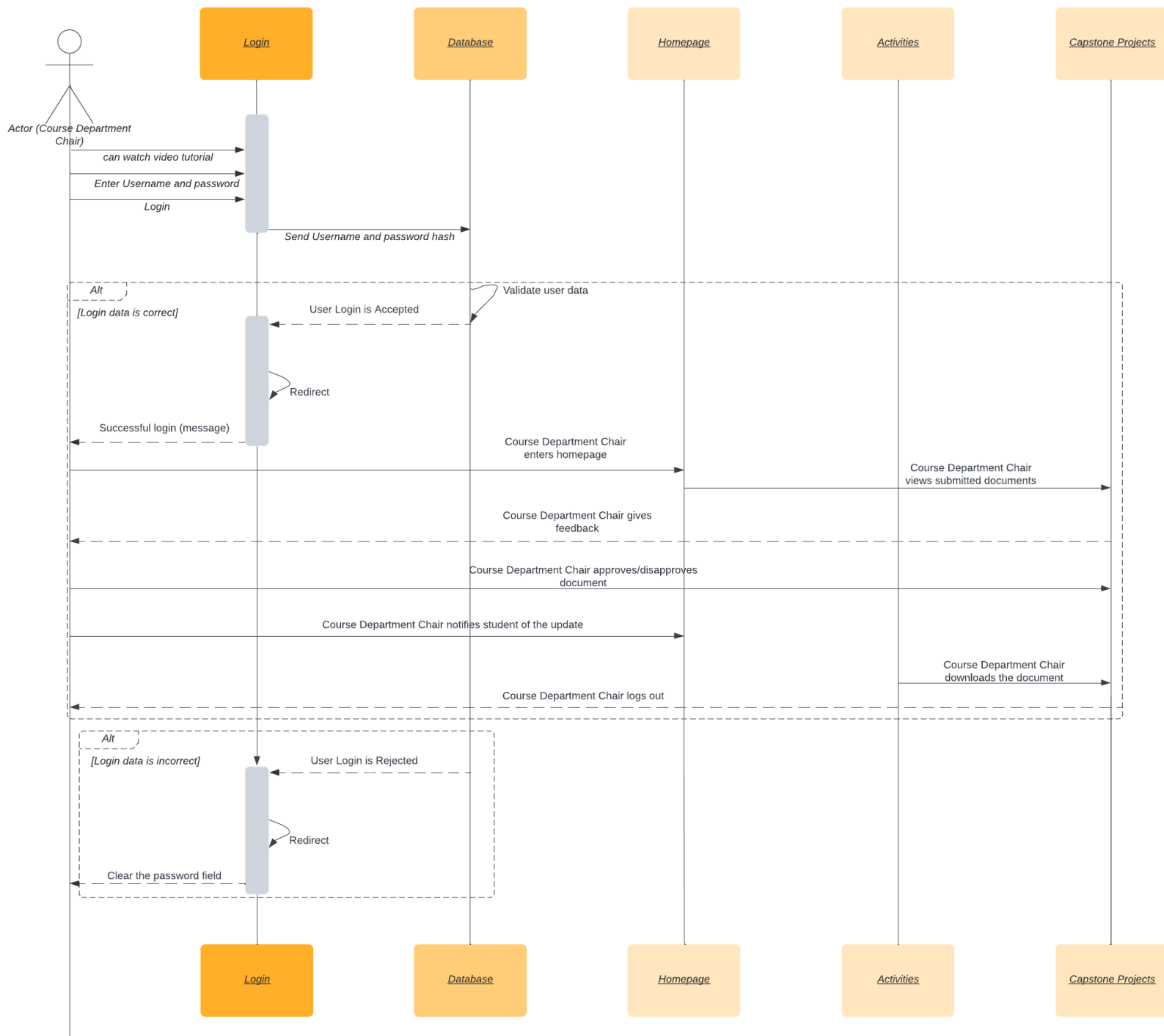


Figure D2.3.3 System sequence diagram (Course Department Chair)

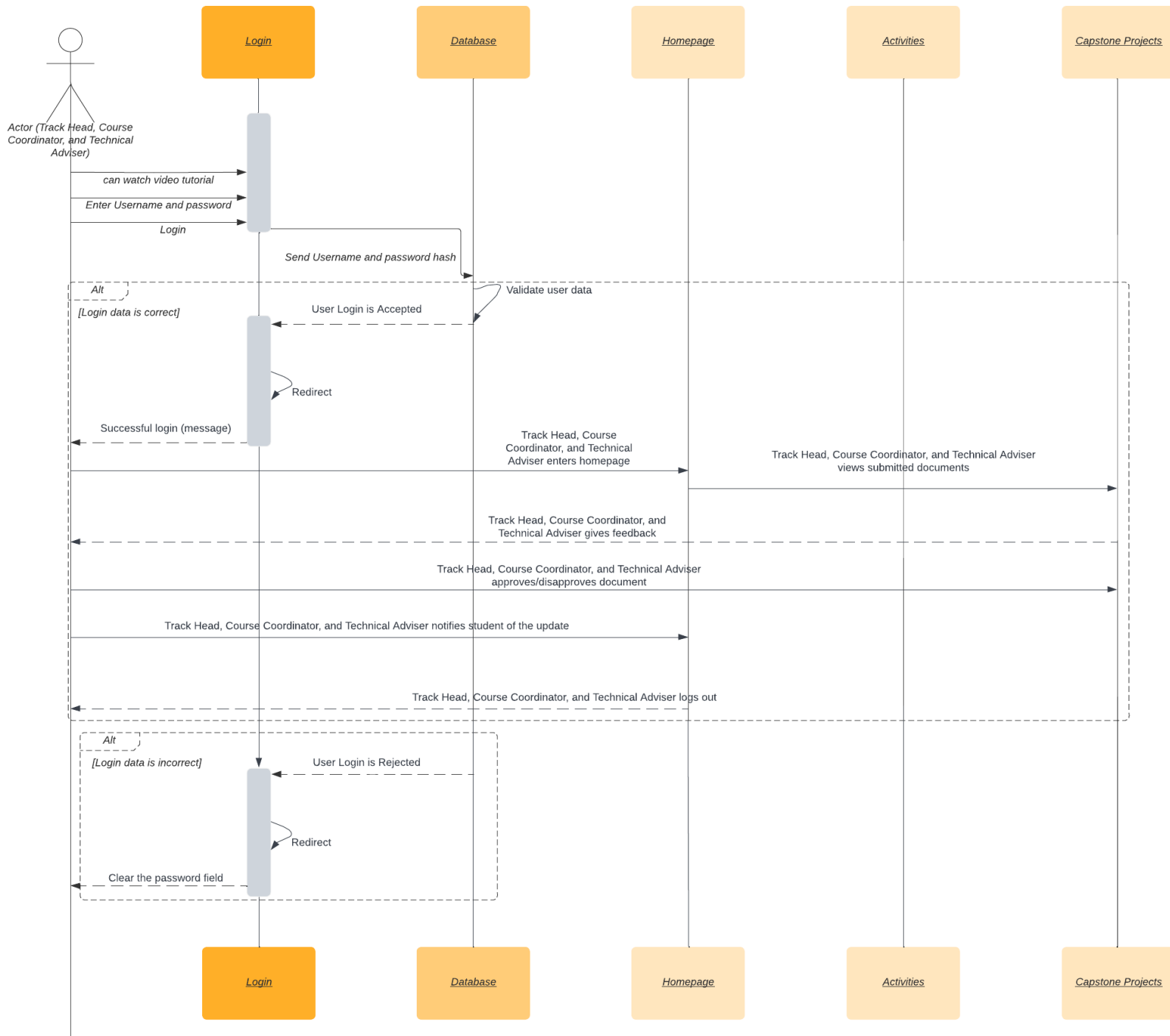


Figure D2.3.4 System sequence diagram (Track Head, Course Coordinator, Technical Adviser)

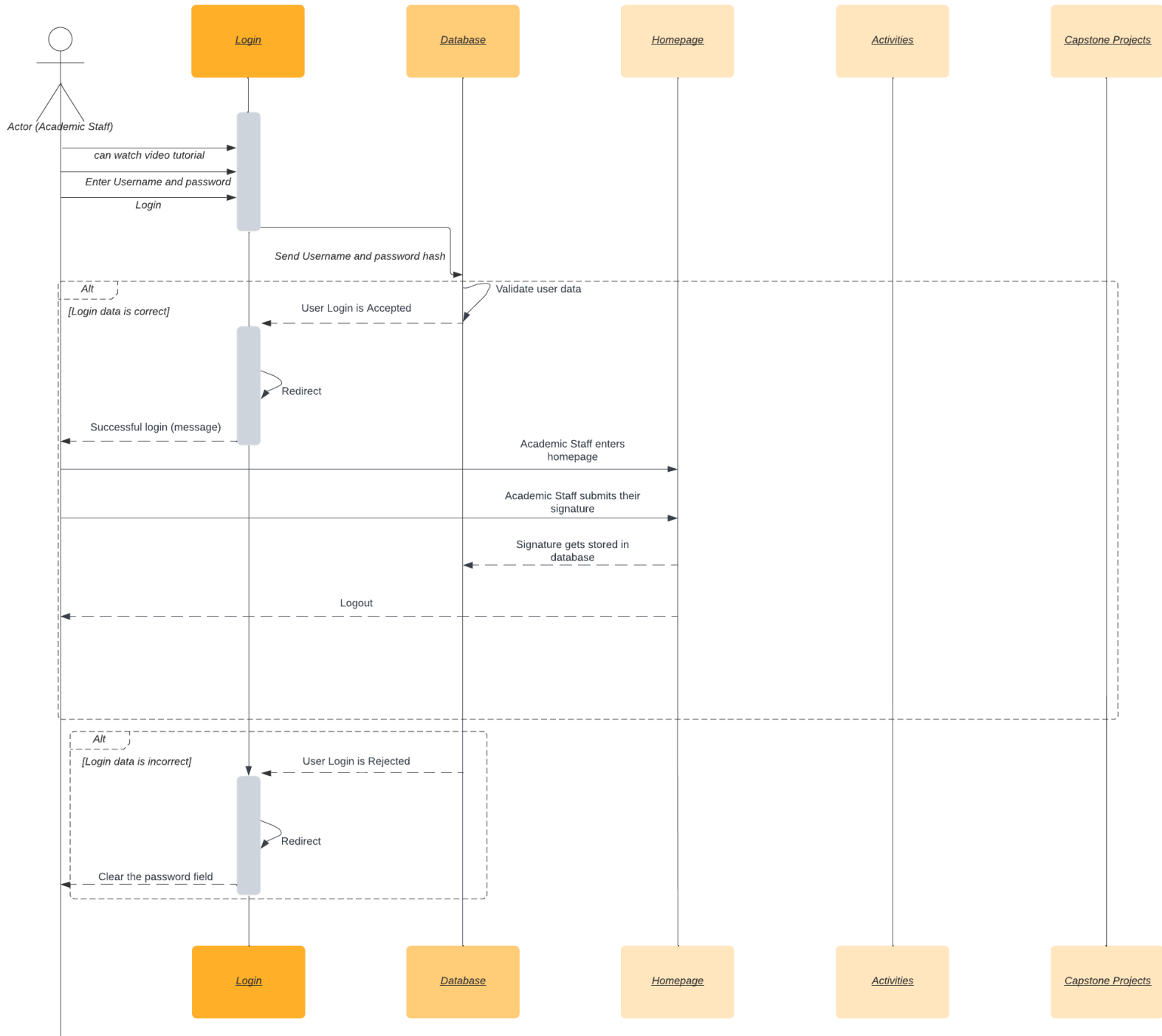


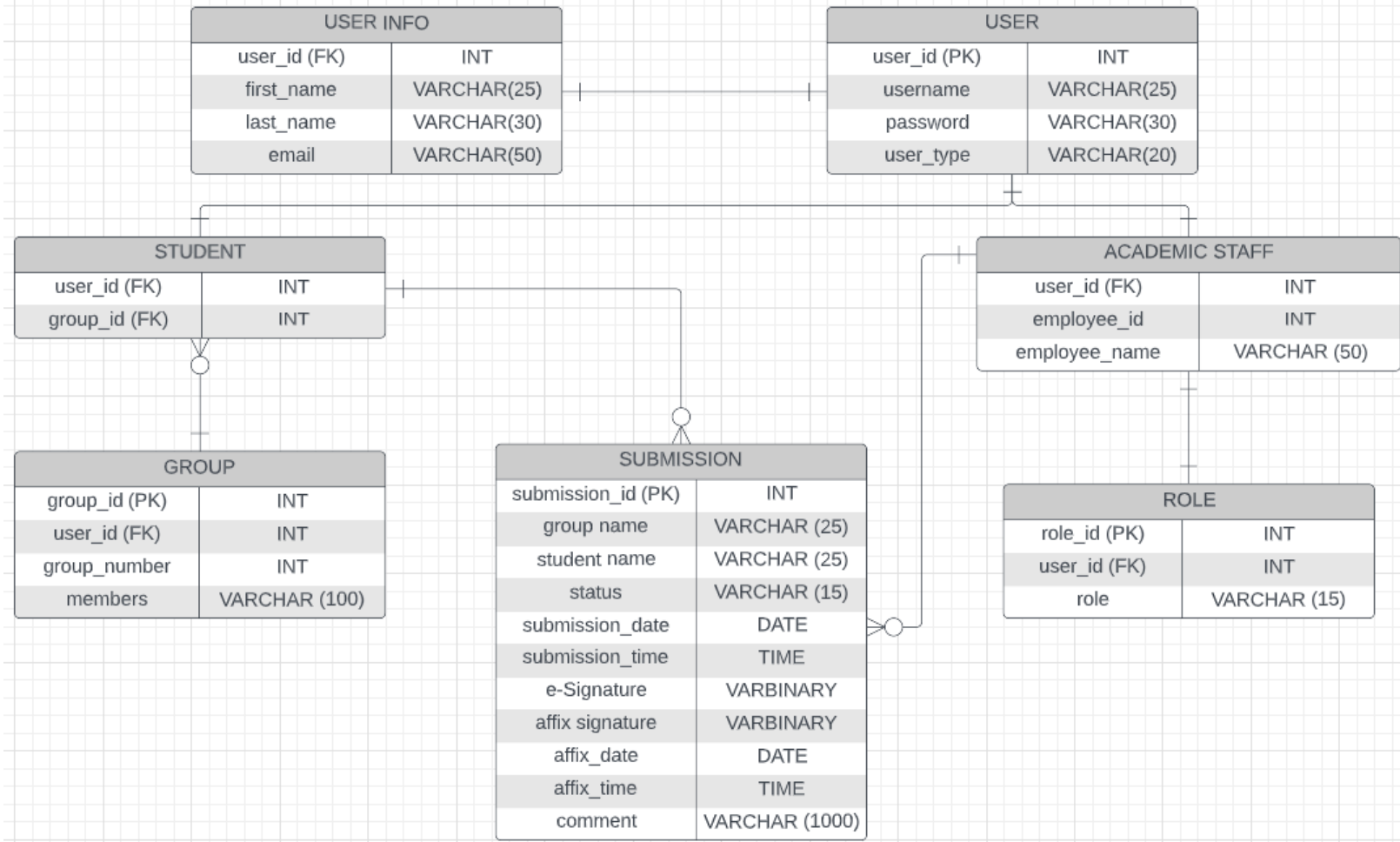
Figure D2.3.5 System sequence diagram (Submission of Signature)

3 | Data Design

a.) Data Description

The database of the system is composed of seven(7) tables namely USER INFO, USER, STUDENT, ACADEMIC STAFF, GROUP, SUBMISSION, and ROLE. The User Info entity has four attributes namely user_id, first_name, last_name, and email. The User entity also has four attributes namely user_id, username, password, and user_type. For the student entity, it is associated with two attributes namely user_id, and group_id. For the Academic staff entity, it involves three attributes namely user_id, employee_id, and employee_name. For the Group entity, it has four attributes namely group_id, user_id, group_number, and members. For the Submission entity, it contains eleven attributes namely submission_id, group name, student name, status, submission_date, submission_time, e-Signature, affix_signature, affix_date, affix_time, and comment. For Role entity, it is associated with three attributes namely role_id, user_id, and role. Both User Info entity and User entity are connected to each other, and both associated with Student entity and Academic Staff entity. Group entity and Submission entity are connected to Student entity while on the other side, Role entity is connected to Academic Staff entity.

Figure D3: E-R diagram



b.) Data Dictionary

Table 3: Data dictionary

USER INFO					
Label	Alias	Length	Data Type	Type of Data	Description
User ID	user_id	None	INT	Derived	Numeric (0-9)
First Name	first_name	25	VARCHAR	Base	Combination of Uppercase and Lowercase

					letters (A-Z, a-z)
Last Name	last_name	30	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Email Address	email	50	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)

USER					
Label	Alias	Length	Data Type	Type of Data	Description
User ID	user_id	None	INT	Derived	Numeric (0-9)
Username	username	25	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Password	password	30	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)
User Type	user_type	20	VARCHAR	Derived	Combination of Uppercase and Lowercase letters (A-Z, a-z)

STUDENT					
Label	Alias	Length	Data Type	Type of Data	Description
User ID	user_id	None	INT	Derived	Numeric (0-9)
Group ID	group_id	None	INT	Derived	Numeric (0-9)

ACADEMIC STAFF					
Label	Alias	Length	Data Type	Type of Data	Description
User ID	user_id	None	INT	Derived	Numeric (0-9)
Employee ID	employee_id	None	INT	Derived	Numeric (0-9)
Employee Name	employee_name	25	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Role	role	15	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)

GROUP					
Label	Alias	Length	Data Type	Type of Data	Description
Group ID	group_id	None	INT	Derived	Numeric

					(0-9)
User ID	user_id	None	INT	Derived	Numeric (0-9)
Group Number	group_number	None	INT	Base	Numeric (0-9)
Members	members	100	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)

ROLE					
Label	Alias	Length	Data Type	Type of Data	Description
User ID	user_id	None	INT	Derived	Numeric (0-9)
Submission ID	submission_id	None	INT	Derived	Numeric (0-9)
Comment	comment	1000	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)

SUBMISSION					
Label	Alias	Length	Data Type	Type of Data	Description

Submission ID	user_id	None	INT	Derived	Numeric (0-9)
Group Name	groupName	25	VARCHAR	Base	Numeric (0-9)
Student Name	studentName	25	VARCHAR	Base	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Status	status	15	VARCHAR	Derived	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Submission Date	submissionDate	30	DATE	Derived	Numeric (0-9)
Submission Time	submissionTime	30	TIME	Derived	Numeric (0-9)
e-Signature	e-signature	None	VARBINARY	Base	Variable-width string up to a length of max-length bytes
Affix Signature	affixSignature	None	VARBINARY	Base	Variable-width string up to a length of max-length bytes
Affix Date	affixDate	30	VARCHAR	Derived	Combination of Uppercase and Lowercase letters (A-Z, a-z)
Affix Time	affixTime	30	VARCHAR	Derived	Combination

					n of Uppercase and Lowercase letters (A-Z, a-z)
Comment	comment	1000	VARCHAR	Base	Combinatio n of Uppercase and Lowercase letters (A-Z, a-z)

4 | Component Design

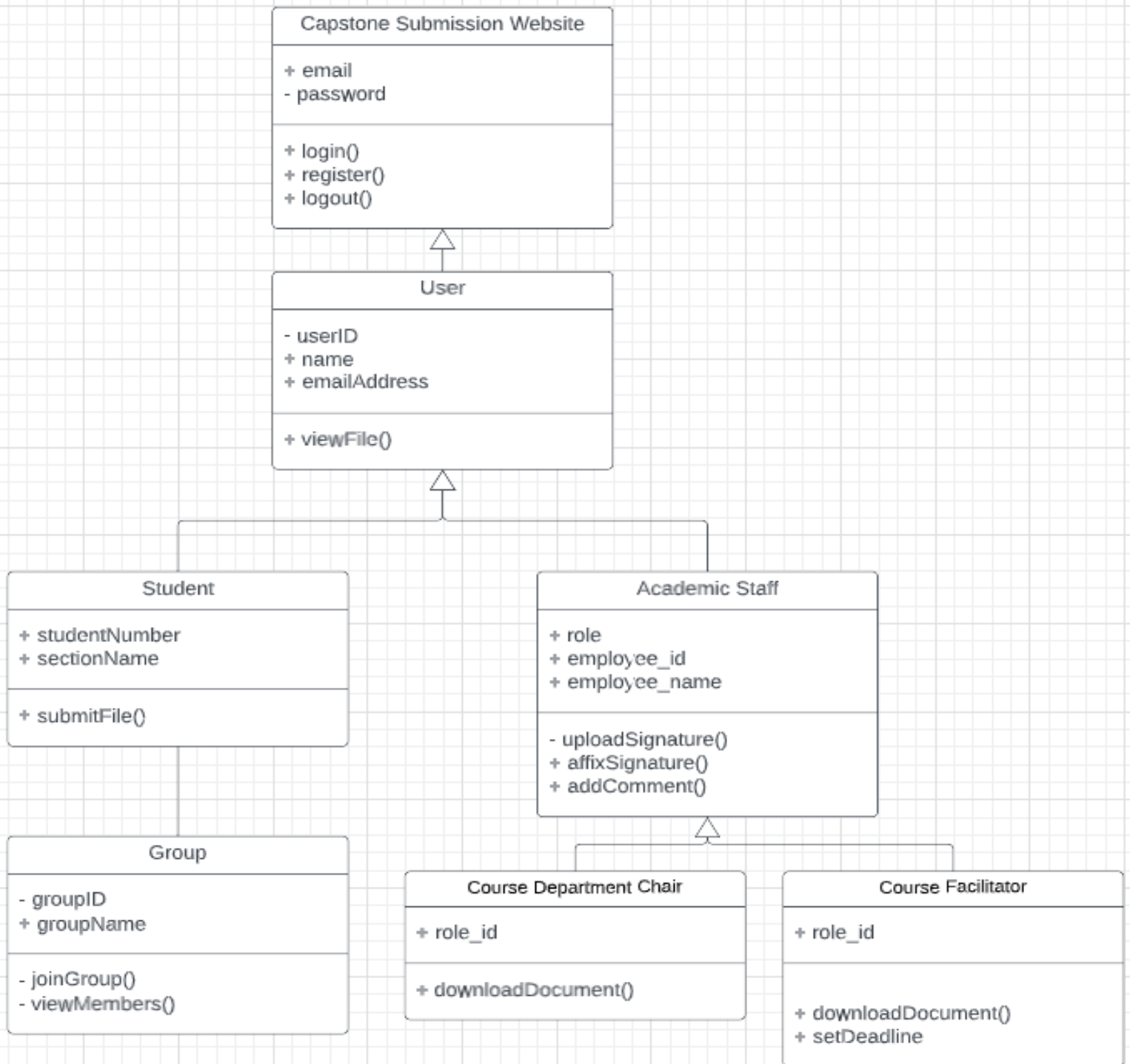


Figure D4: Class diagram


5 | Human Interface Design

5.1 | Overview of User Interface


Upon entry to the website, users will be directed to the login page. In the login page students will have an option to login, signup, and click a URL link that will direct them to a tutorial video on how to use the application. If the user already has an account he or she will need to input their email address and password to login. If users still don't have an account, they will then need to press the signup text, which will then redirect them to the signup page. If the user already has an account but forgot his/her password they will need to press the forgot password text, then they will be redirected to the forgot password page and they will be required to input their email address to receive a special code for them to be able to reset their password. Once the users already have their account, they will be able to login to the application and browse the different features.

5.2 | Screen Mockups

Figure 5.2.1 Registration Tab



UNIVERSITY OF SANTO TOMAS
ESPAÑA, MANILA



Register your account

First Name

Last Name

UST email address


Password

Confirm Password


[Sign Up](#)

Already have an account? [Sign in](#)

Figure 5.2.2 Log in Tab



UNIVERSITY OF SANTO TOMAS
ESPAÑA, MANILA



Log in

UST email address

Password

Don't have account? [Register here.](#)

[Login](#)

[Forgot Password?](#)

[Click Here for the video tutorial](#)

Figure 5.2.3 Hyperlink to Video

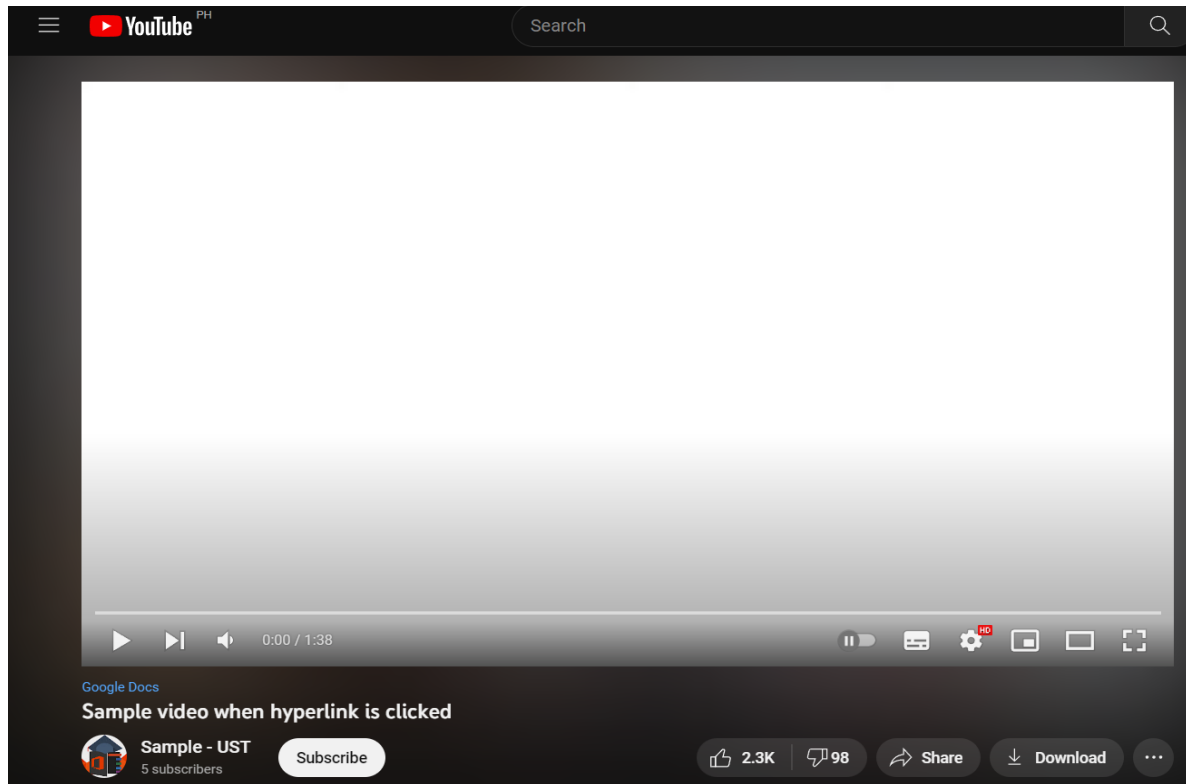


Figure 5.2.4 Forgot Password Tab

A screenshot of the University of Santo Tomas (UST) website's "Forgot Password" form. The header is yellow with the UST logo and name "UNIVERSITY OF SANTO TOMAS ESPAÑA, MANILA". The form is a white box with a blue "Submit" button. It contains input fields for "Email", "First Name", and "Last Name".

UNIVERSITY OF SANTO TOMAS
ESPAÑA, MANILA

Forgot Password

Email

First Name

Last Name

Figure 5.2.5 Home Tab (Student's View)

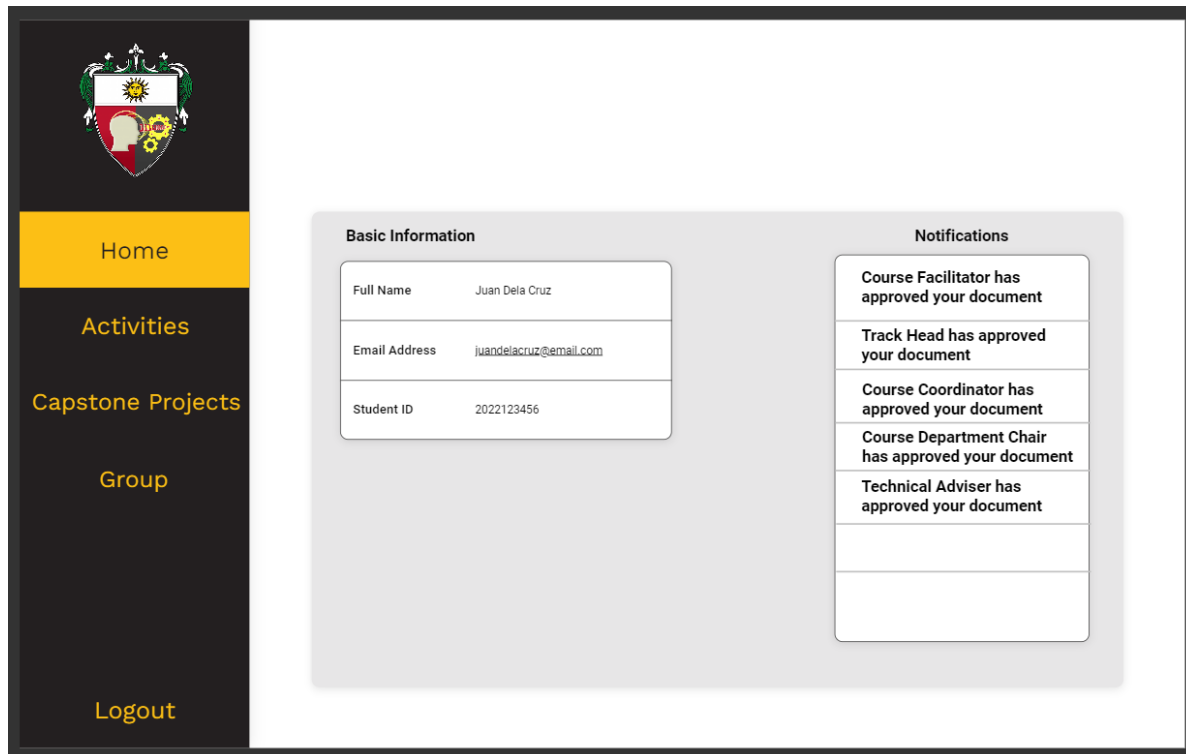


Figure 5.2.6 Activities Tab (Student's View)

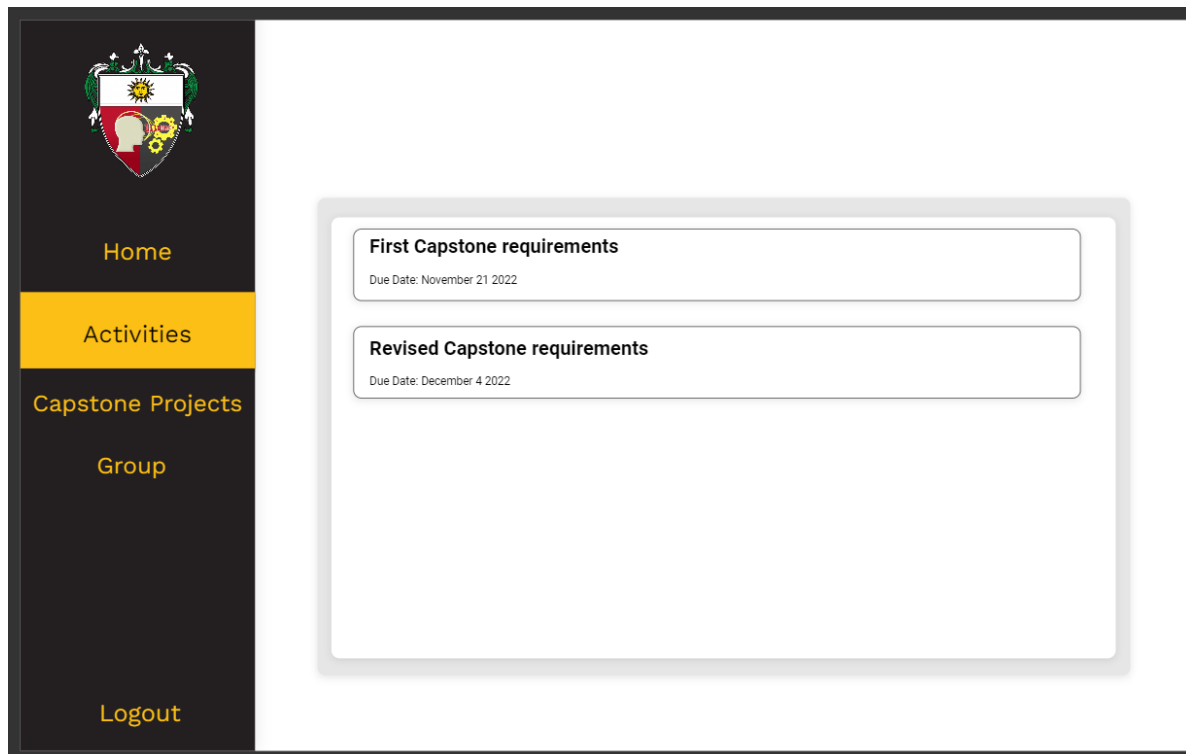


Figure 5.2.7 Capstone Projects Tab (Student's View)

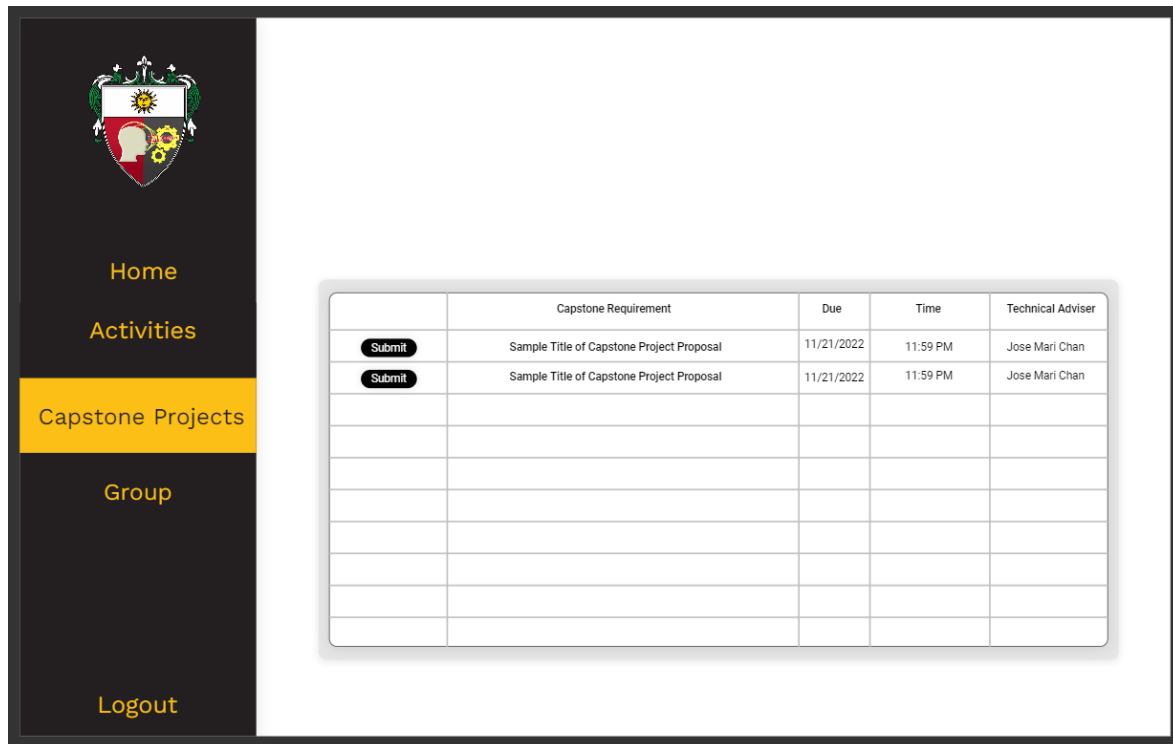


Figure 5.2.8 Submit Button UI (Student's View)

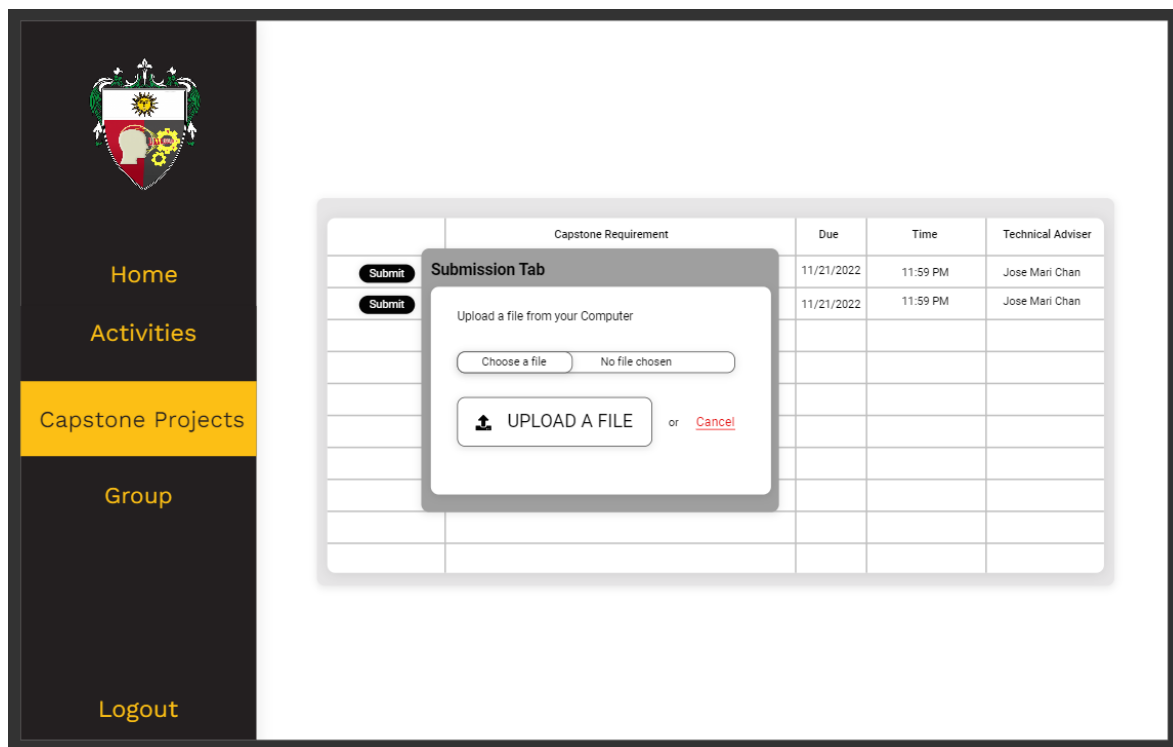


Figure 5.2.9 Capstone Project View (Student's View)

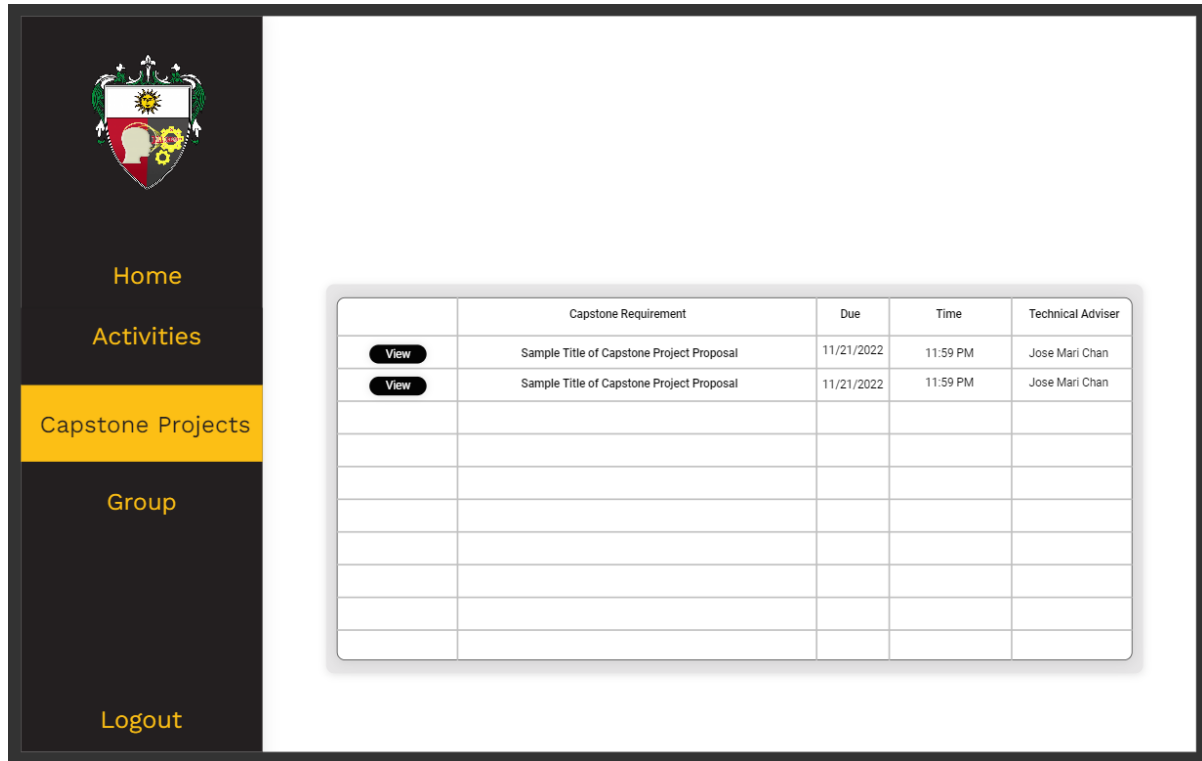


Figure 5.2.10 Capstone Project View Tab (Student's View)

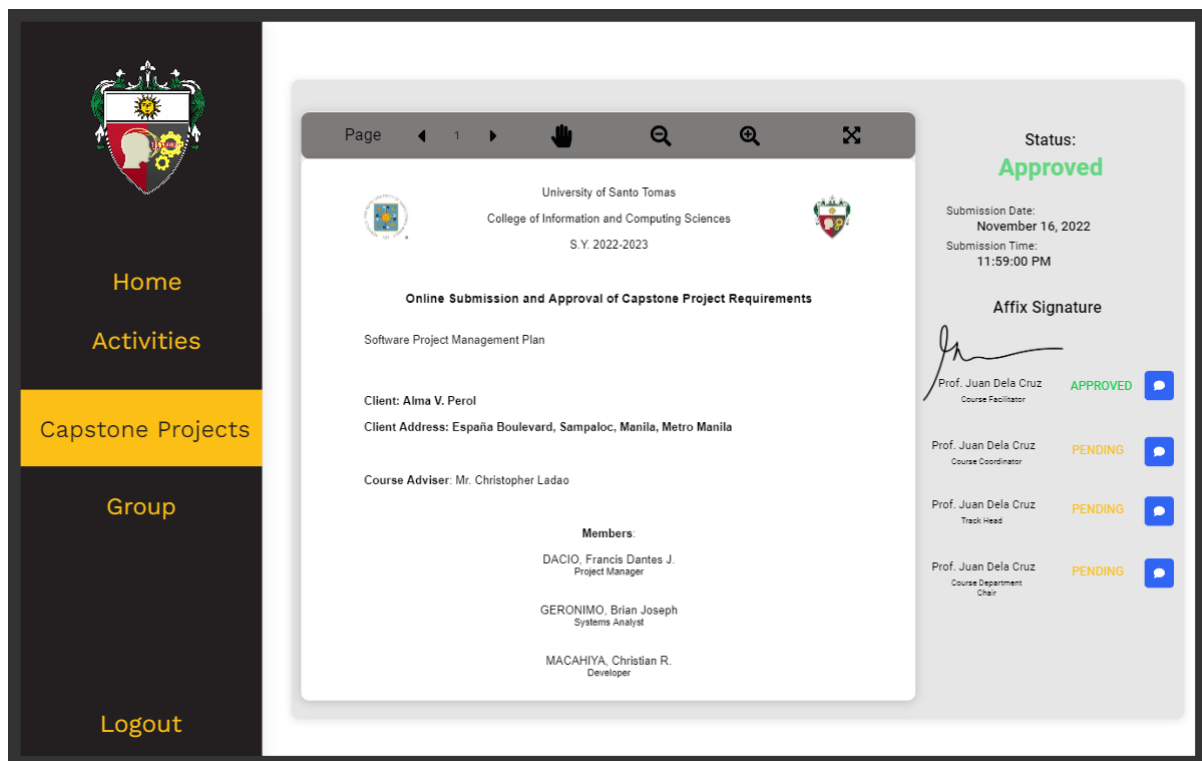


Figure 5.2.11 Comments View (Student's View)

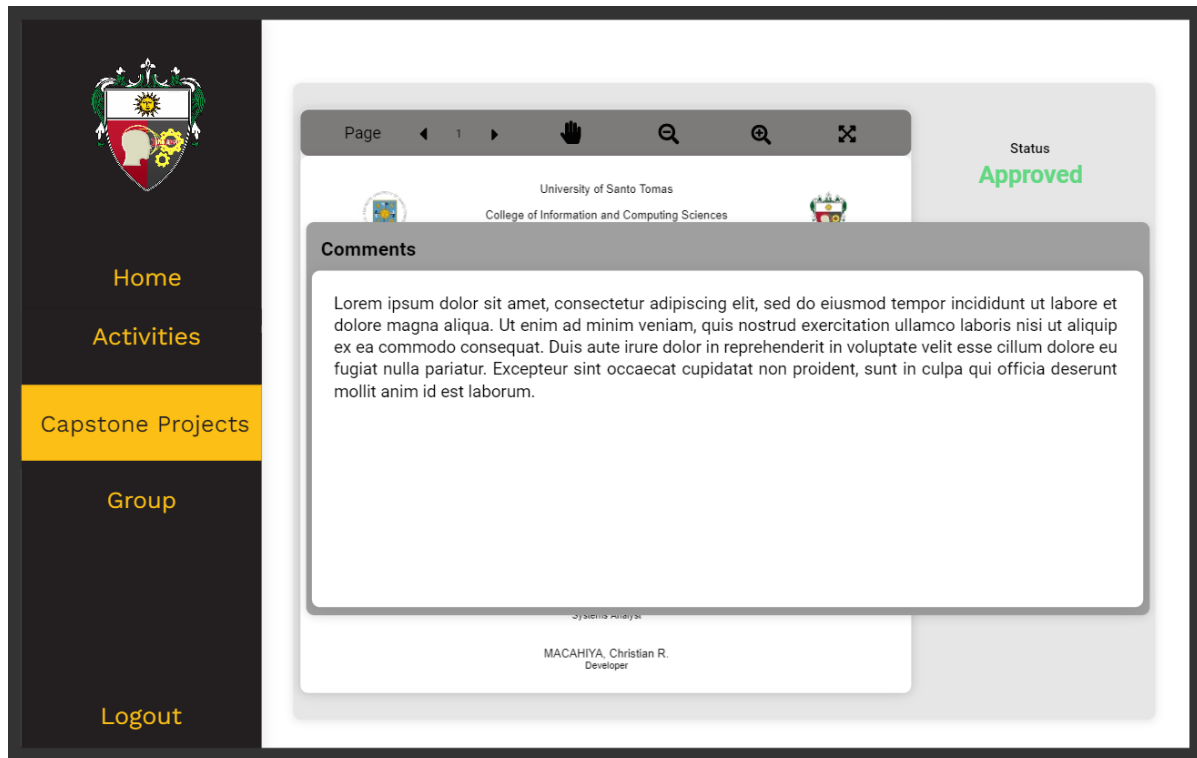


Figure 5.2.12 Group Tab (Student's View)

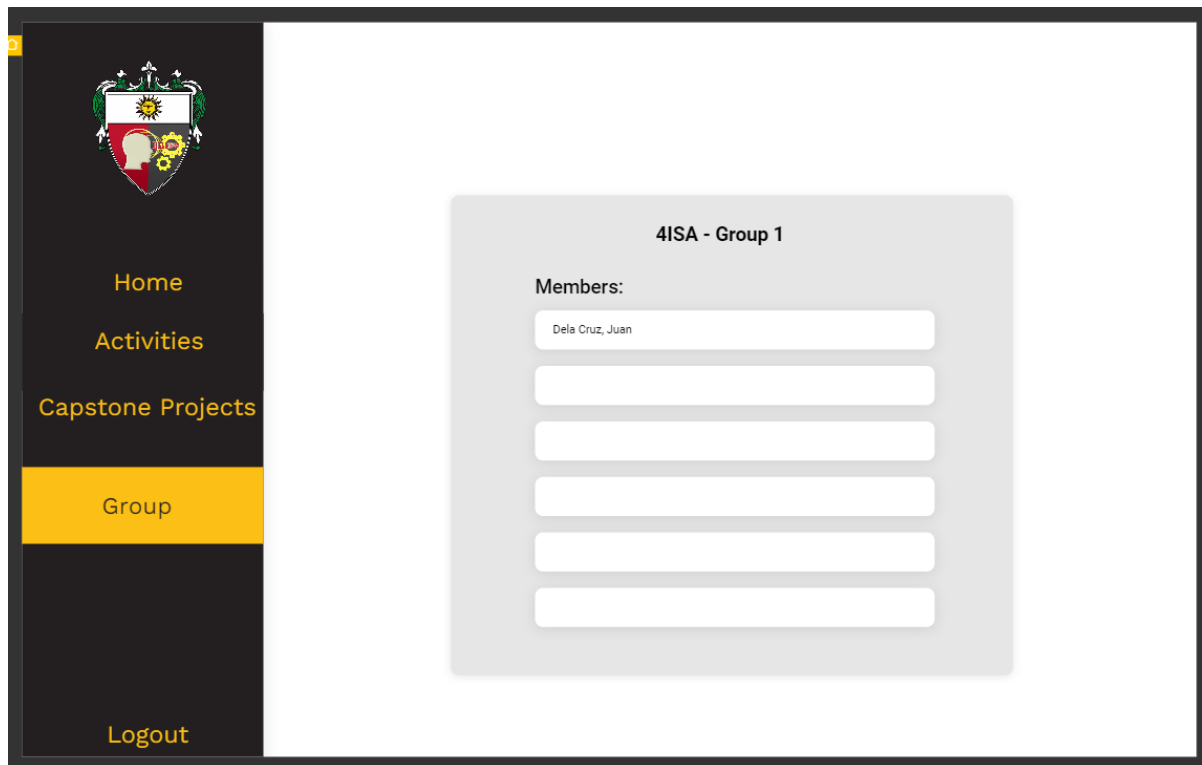


Figure 5.2.13 Home Page (Academic Staff View)

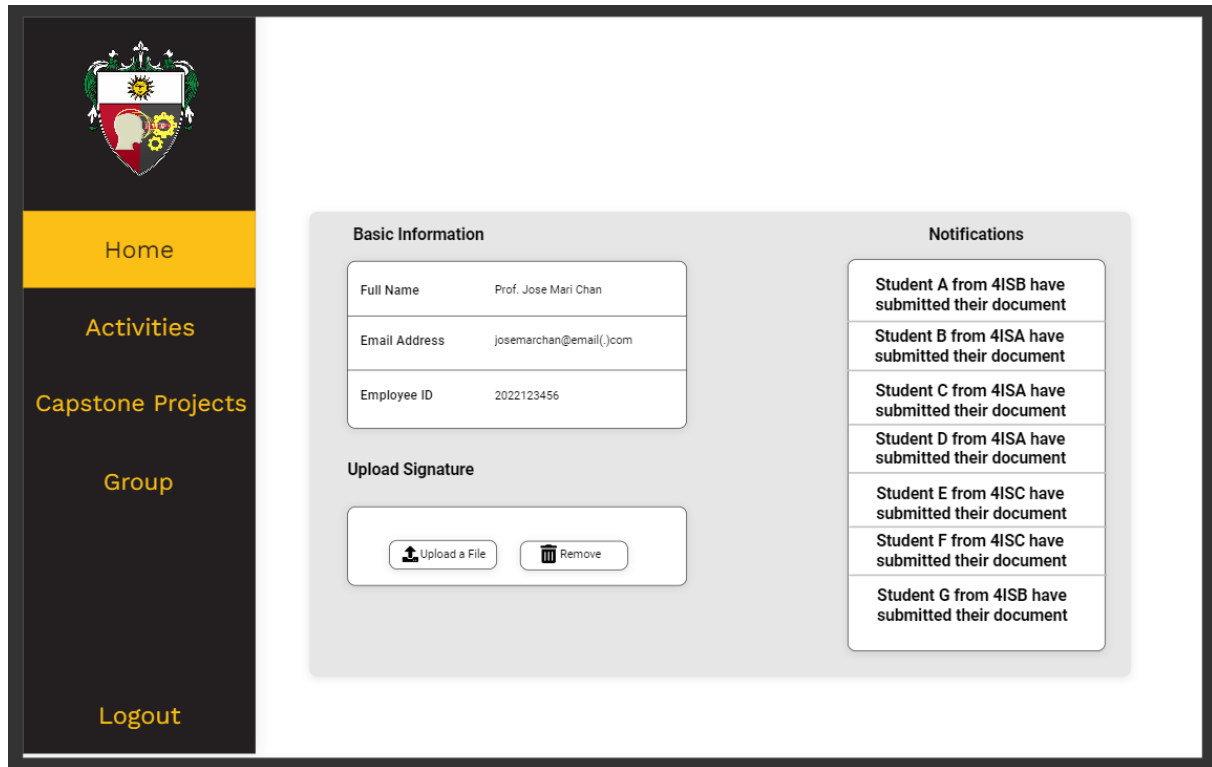


Figure 5.2.14 Activities View (Course Facilitator View)

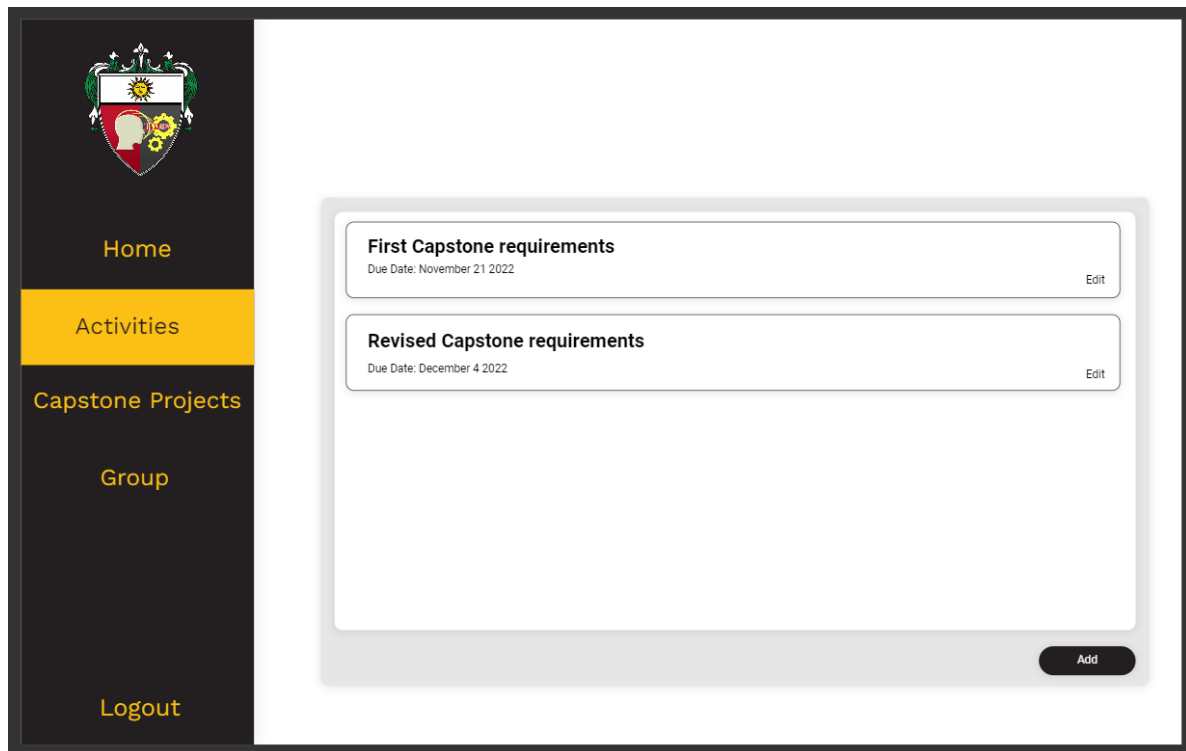


Figure 5.2.15 Add Button UI (Course Facilitator)

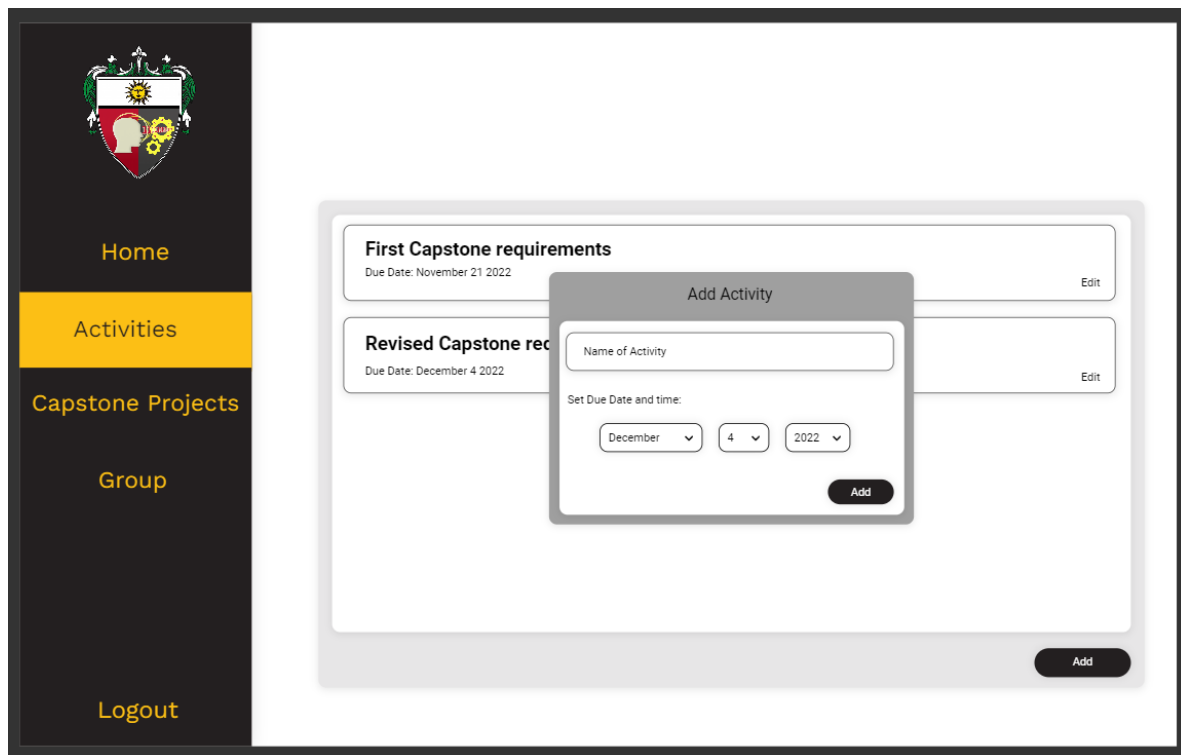


Figure 5.2.16 Capstone Projects Tab (View for Track Head, Course Coordinator, and Technical Adviser)

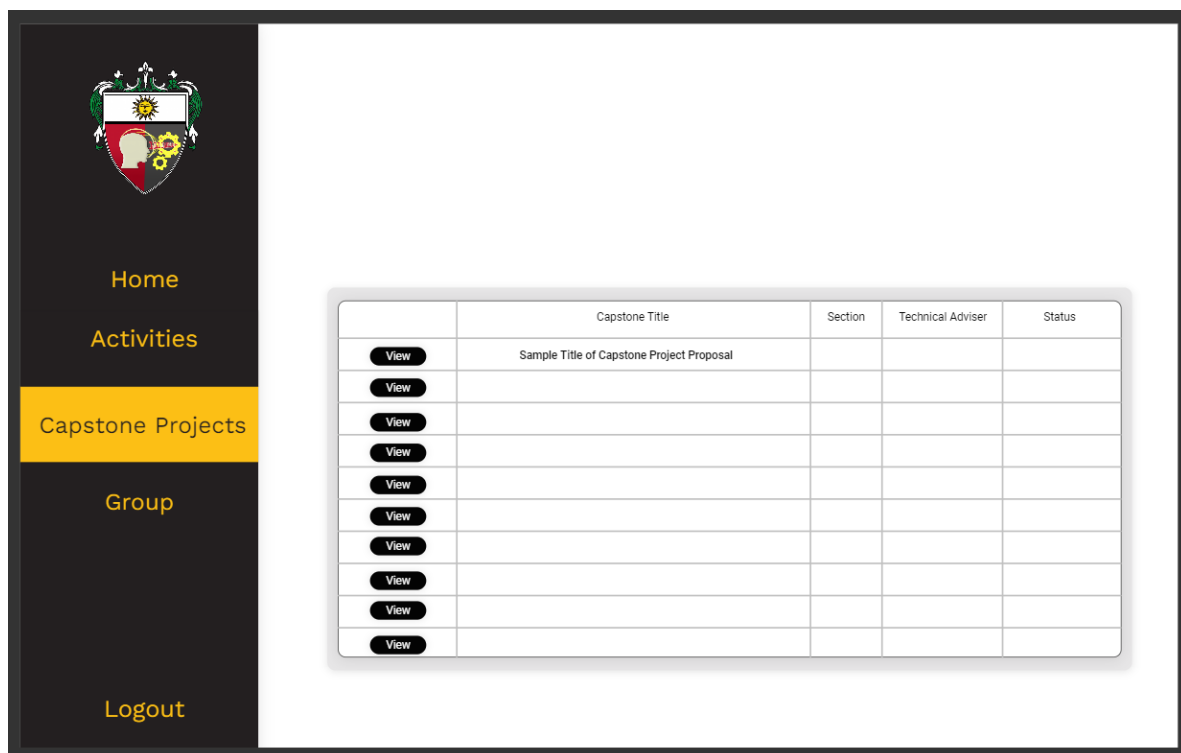
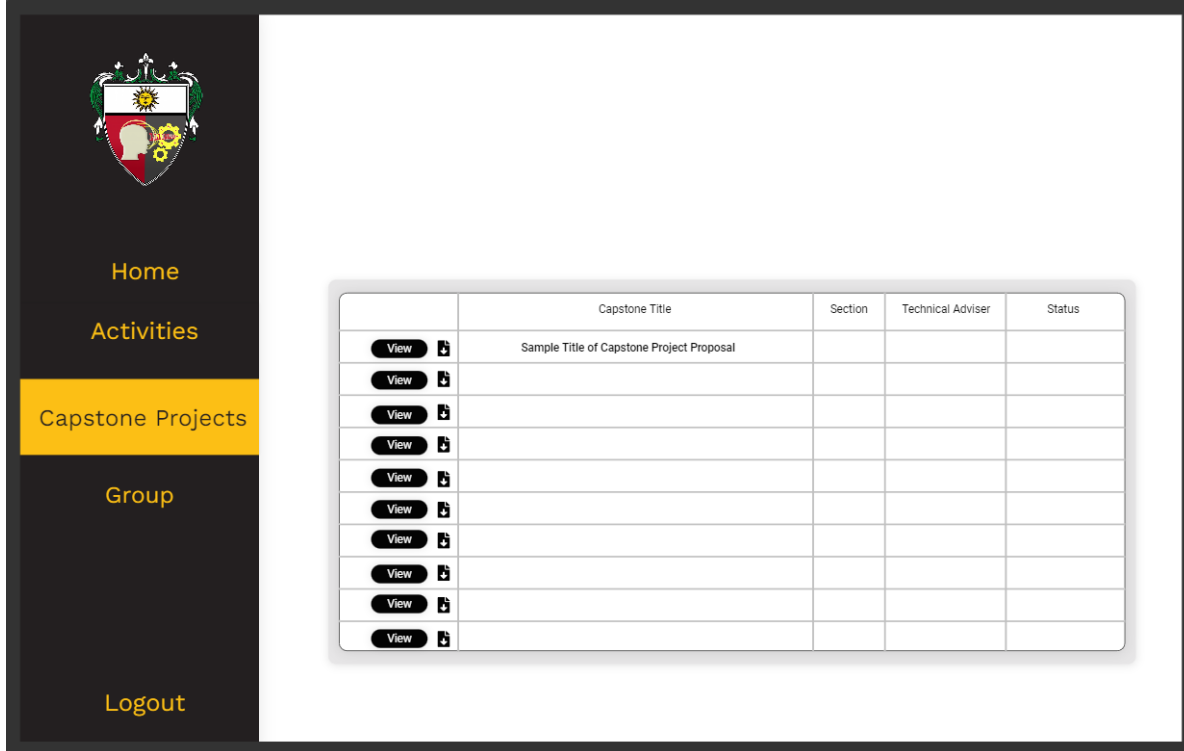
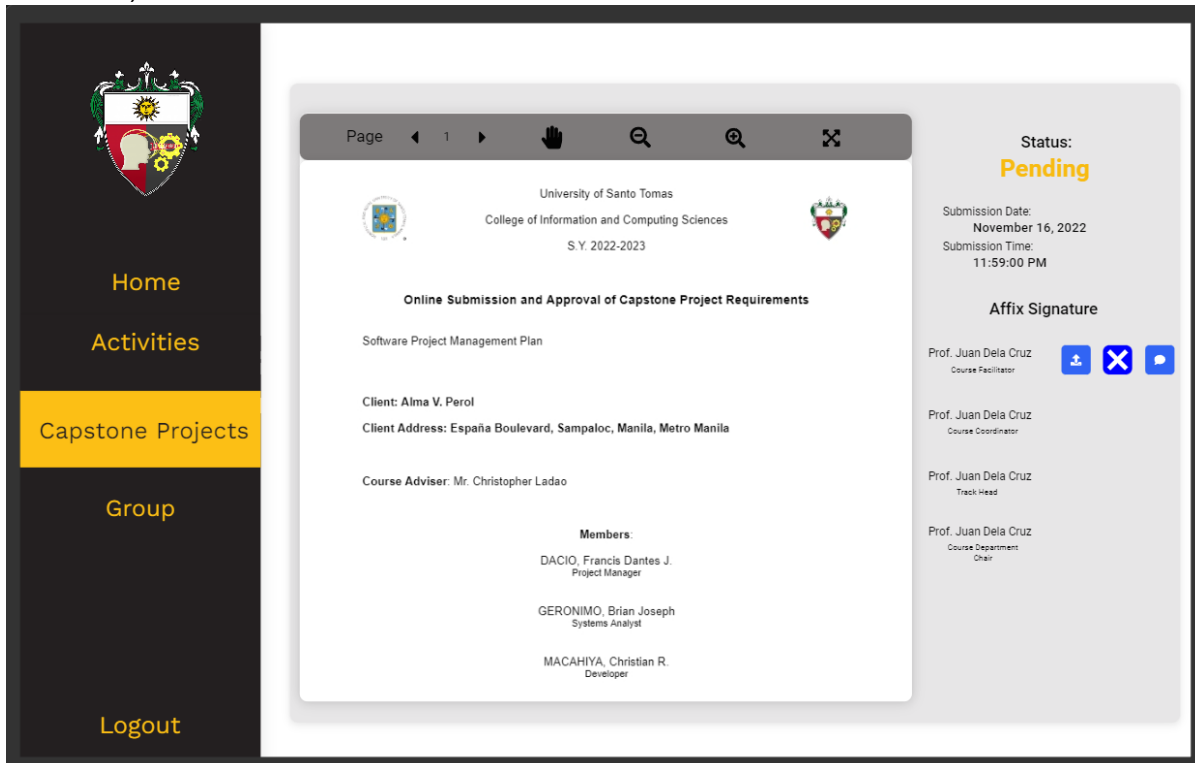


Figure 5.2.17 Capstone Projects Tab (View for Course Facilitator and Course Department Chair)



	Capstone Title	Section	Technical Adviser	Status
View	Sample Title of Capstone Project Proposal			
View				
View				
View				
View				
View				
View				
View				
View				
View				

Figure 5.2.18 Capstone Projects Tab (View for Track Head, Course Coordinator, and Course Facilitator)



Page 1

University of Santo Tomas
College of Information and Computing Sciences
S.Y. 2022-2023

Online Submission and Approval of Capstone Project Requirements

Software Project Management Plan

Client: Alma V. Perol
Client Address: España Boulevard, Sampaloc, Manila, Metro Manila

Course Adviser: Mr. Christopher Ladao

Members:

DACIO, Francis Dantes J.
Project Manager

GERONIMO, Brian Joseph
Systems Analyst

MACAHIYA, Christian R.
Developer

Status:
Pending

Submission Date:
November 16, 2022

Submission Time:
11:59:00 PM

Affix Signature

Prof. Juan Dela Cruz
Course Facilitator

Prof. Juan Dela Cruz
Course Coordinator

Prof. Juan Dela Cruz
Track Head

Prof. Juan Dela Cruz
Course Department Chair

Figure 5.2.19 Group View (Academic Staff)

