IT2020 - Software Engineering
Year 2, Semester I, 2023
Group Assignment

Online School Information Management System

Group Details

Batch: 4.1 & 4.2

SE/OOP Group Number: MLB - WD - G345

	Student Registration Number	Student Name
1	IT22575562 (4.2)	Wijekoon W.M.M.G.K.P
2	IT22591098 (4.2)	Jayalath J.P.R.J
3	IT22606792 (4.1)	Perera B.B.A.R
4	IT22604712 (4.1)	Navanjana L.A.V

Introduction

The Online School Information Management System (SIMS) is a comprehensive and user-friendly software platform designed to streamline and enhance the administrative and academic operations of educational institutions. This innovative system serves as a central hub for managing all aspects of school data, from student records and enrollment information to teacher schedules and financial data.

The data is maintained in the database from the student's registration book. A registered student is given a user name and password by the system. Accordingly, the system provides students with semester and user details as well as payment details.

Managers including the principal administer the system and control the learning and teaching process. Teachers' data and information are also stored by the system and the system stores the salary details as well as administrative details and contributes to maintaining the online learning and teaching process successfully.

Teachers also have to connect with the system through a user name and password when registered with the system and upload the activities of the students' accounts as well as the activities belonging to the academic processes and display the related results through the system. The results are surveyed and approved by the Principal and then displayed by the system.
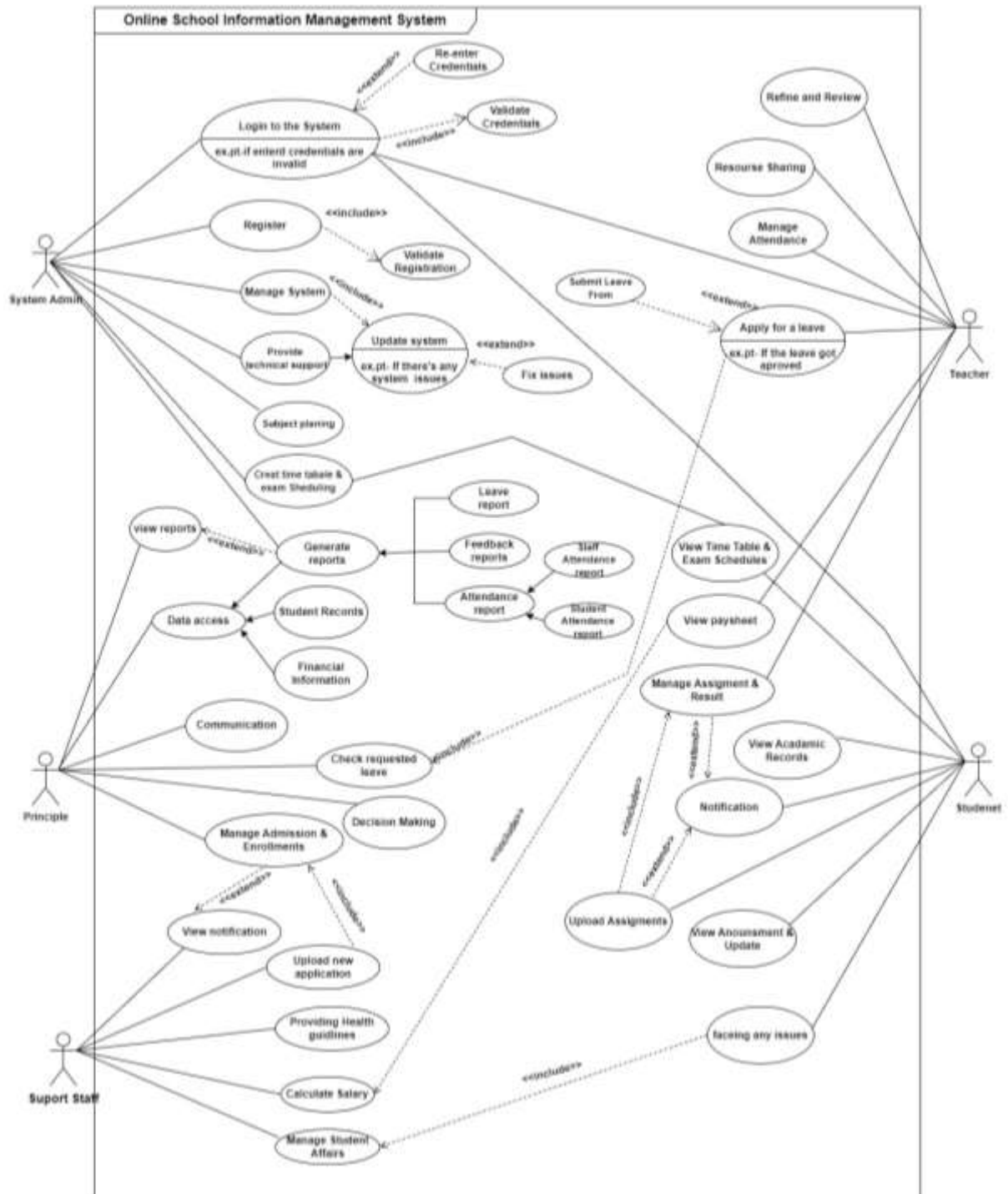
With the approval of the principal and through the management, a report will be prepared and the growth and feedback of the students' study methods will be included in it and the feedback related to the teaching process of the teachers will also be included. By this, the management will be able to identify the weaknesses and errors of the system and correct them.

The Online School Information Management System empowers educational institutions to streamline their administrative processes, improve communication, and enhance overall efficiency. By harnessing the power of technology, schools can focus more on the core mission of education and provide a better learning experience for students, teachers, and parents.

Content

Use Case Diagram

IT22575562 - Wijekoon W.M.M.G.K.P
Use case Scenario- (View & Upload Assignment)

Use Case ID	01
Use Case Name	View & Upload Assignment
Priority	01
Summary	This use case describes the interaction between a student (the primary actor) and a learning management system. The student views available assignments and uploads an assignment as part of their coursework.
Pre-Condition	Student is logged into the system, has navigated to the assignment section, and instructors have published assignments.
Post-Condition	If applicable, the instructor may review and grade the assignment.
Primary Actor	Student
Trigger	The student selects the "View & Upload Assignment" option from their course dashboard or menu.

Main Success Scenario	Step	Action
	01.	The student accesses the online school management system by providing their username and password.
	02.	After successfully logging in, the student navigates to the section of the system dedicated to assignments, typically labeled as "Assignments" or similar.
	03.	The system displays a list of available assignments, showing titles, deadlines, and any provided instructions.
	04.	The student selects a specific assignment from the list by clicking on its title.
	05.	The system presents detailed information about the selected assignment, including the assignment description, due date, and any attached files or resources.
	06.	The student prepares their assignment according to the provided instructions.
	07.	If required, the student selects the file from their device and uploads it to the system.
	08.	After completing the assignment, the student submits it by clicking a "Submit" or "Upload" button within the assignment interface.
	09.	The system records the submission, associating it with the student's account and the specific assignment.
	10.	If necessary, the instructor may log into the system and navigate to the assignment section.
	11.	The system may send a notification to the student, confirming submission and including any feedback or grades

| Extensions	Step	Action
	08.a	If the student encounters an error while uploading the assignment, they receive an error message and are prompted to retry.
	08.b	If the student attempts to submit after the assignment deadline, they receive a notification indicating that the submission is late.
	11.a	In case the instructor encounters delays in reviewing assignments or providing feedback, the student may not receive timely notifications of grades or feedback.

IT22575562 – Sequence Diagram (-)
User Login
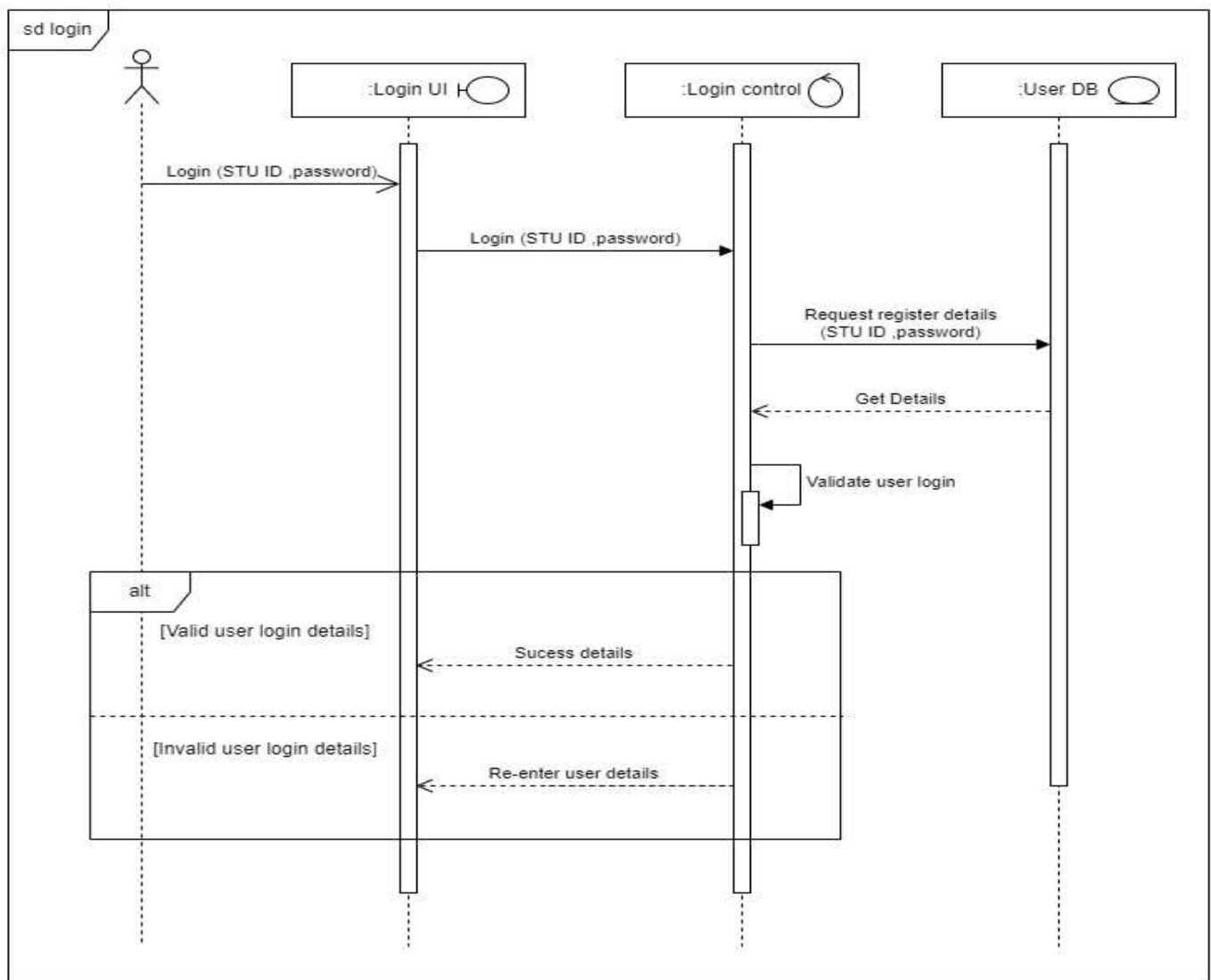
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View & Upload Assignment
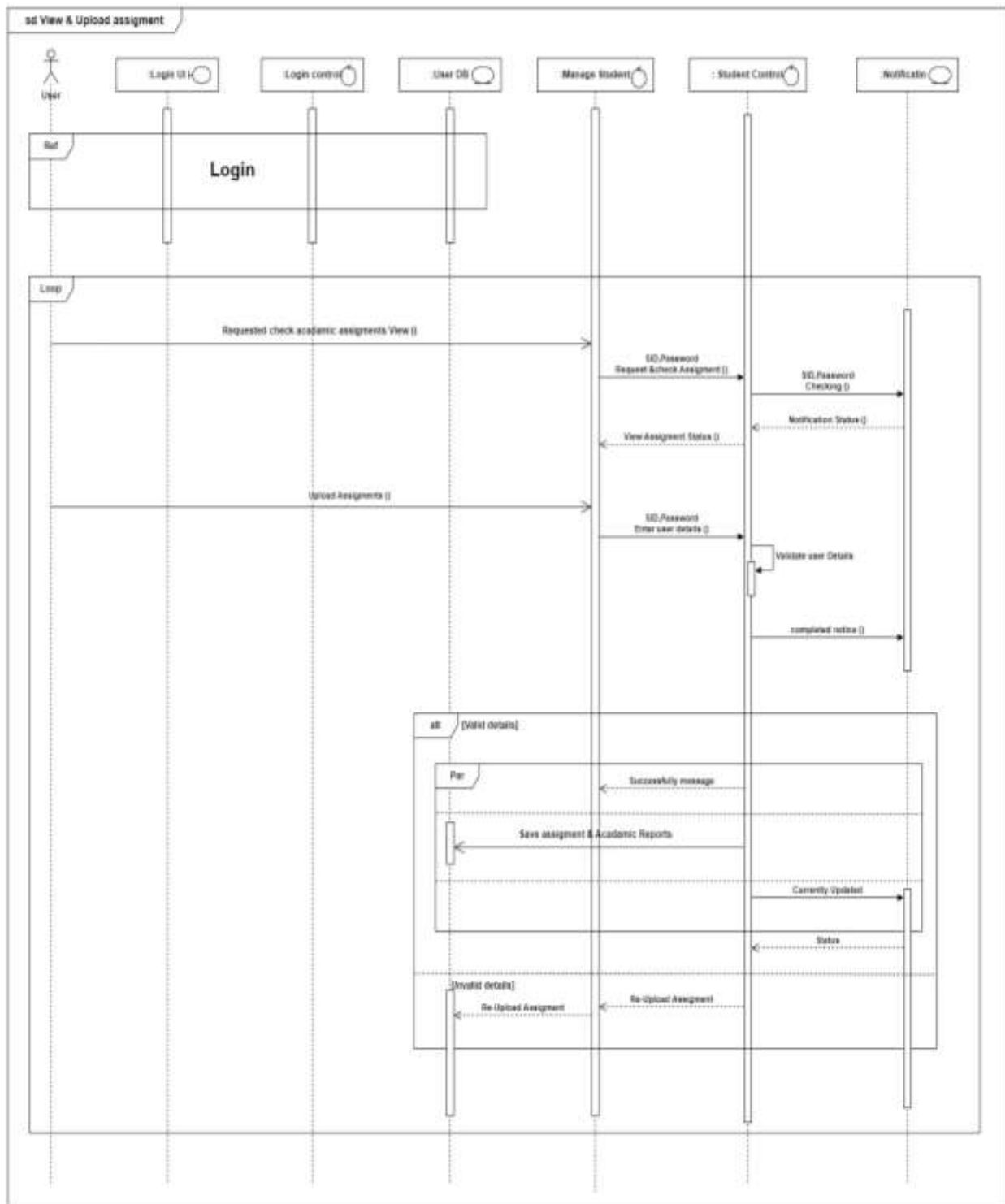
IT22575562 – Communication Diagram (-)
(View & Upload Assignment)
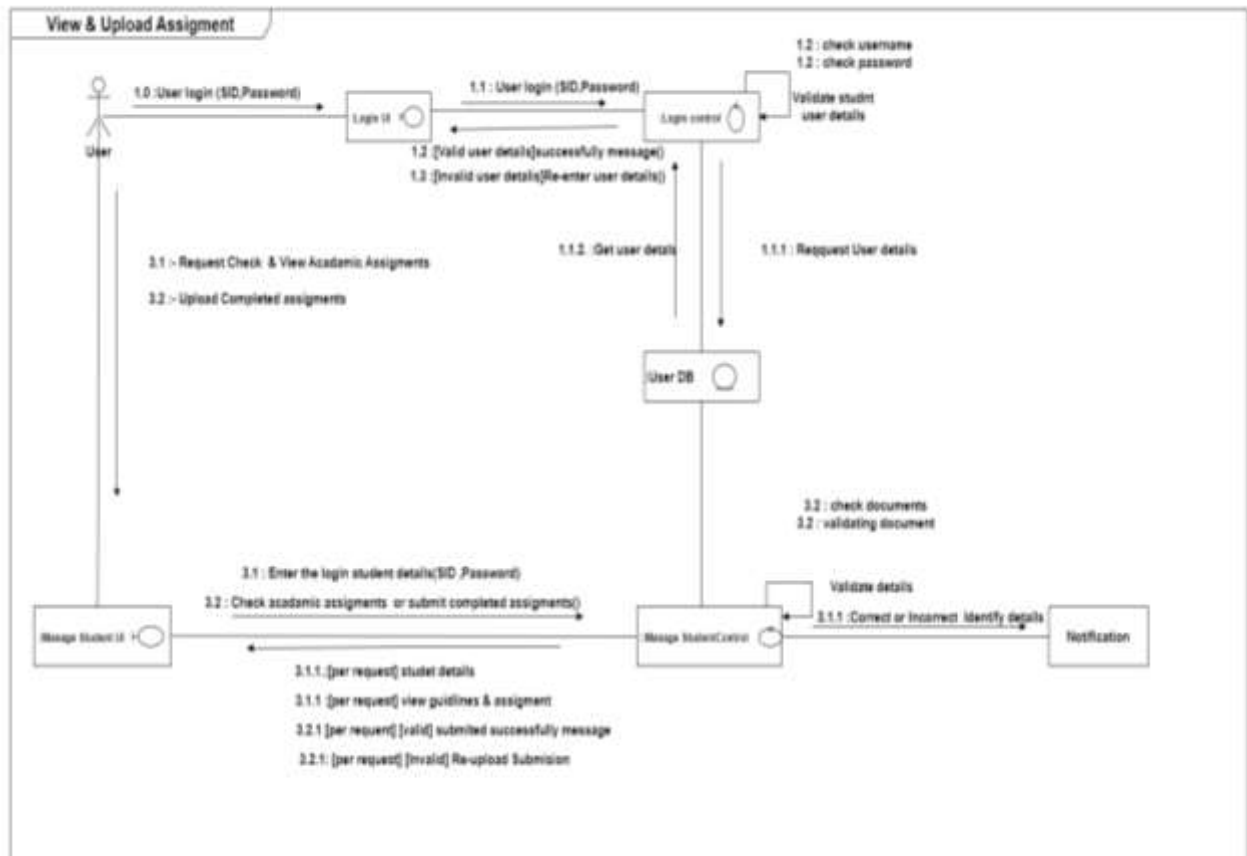
For original image : **View & Upload .jpg**

IT22591098 – Jayalath J.P.R.J

Use case Scenario (Generate Report)

Use Case ID	02	
Use Case Name	Generate Report	
Priority	04	
Summary	This use case allows the admin to generate a report in the Online School Information Management System	
Pre-Condition	The admin must be logged into the system and have appropriate access rights to generate reports.	
Post-Condition	A report is generated based on the selected criteria and saved in the system.	
Primary Actor	Admin	
Trigger	The admin selects the "Generate Report" option from the system's menu.	
Main Success Scenario	**Step**	**Action**
	01.	The admin selects the "Generate Report" option from the system's menu
	02.	The system displays a list of available report options.
	03.	The admin selects the desired report option (Eg: Leave Report, Feedback Report, Attendance Report(student or staff))
	04.	The system prompts the admin to select the criteria for the report (e.g., date range, specific users).
	05.	admin enters the necessary criteria for the report
	06.	system generates the report based on the selected criteria.
	07.	saves the generated report in the report database
	08.	system displays a success message indicating that the report has been generated and saved.
	09.	The admin can choose to generate another report or exit the report generation process.
	10.	Finally, generate reports view & Download
Extensions	**Step**	**Action**
	05.a	if the admin enters invalid criteria (e.g., an invalid date range)
	05.b	the system displays an error message and prompts the admin to enter valid criteria
	09.a	if the admin chooses to generate another report, the use case returns to step 2 and repeats the process
	09.b	If the admin chooses to exit, the use case ends.

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IT22591098 – Communication Diagram
(Generate Report)
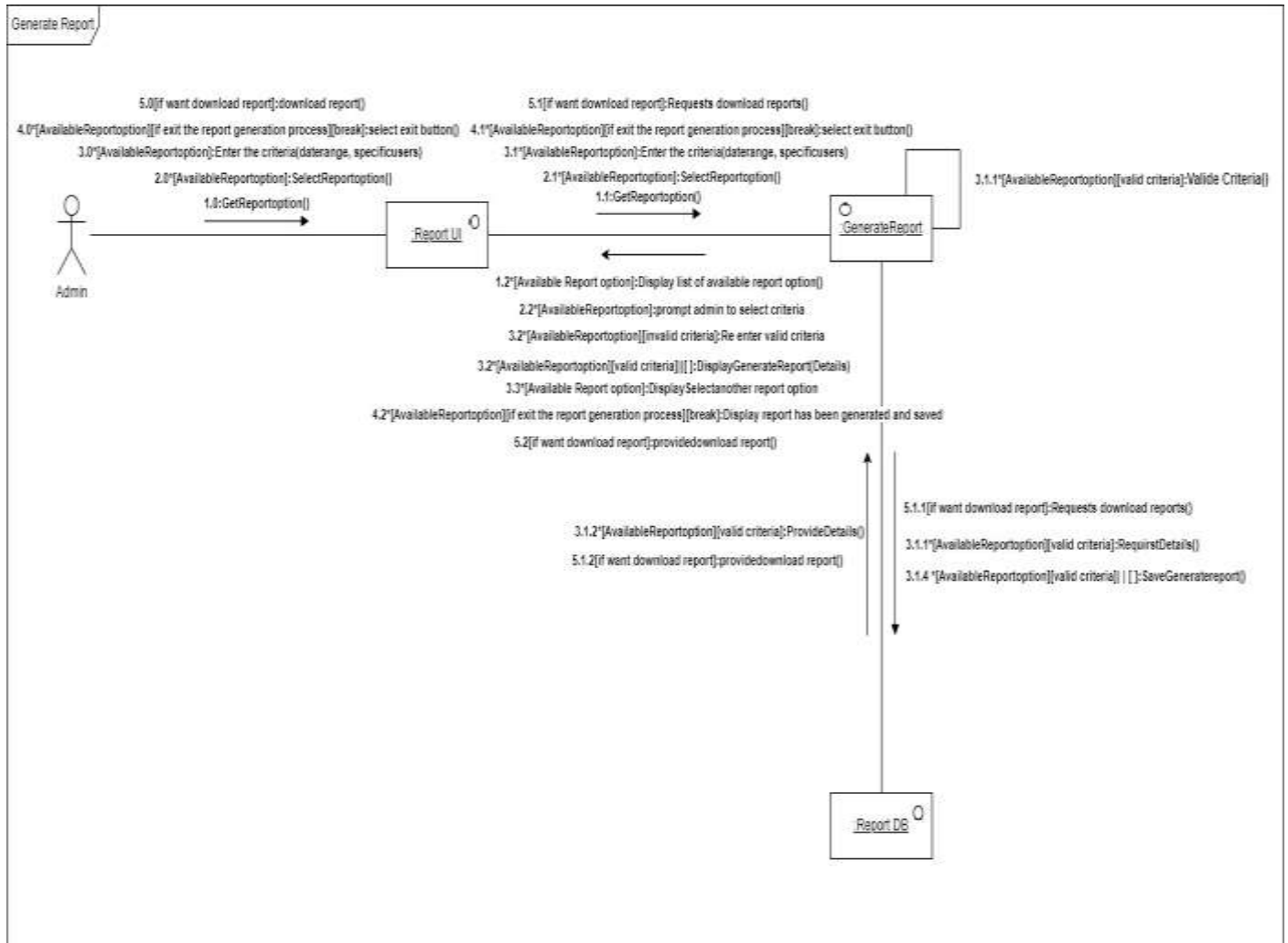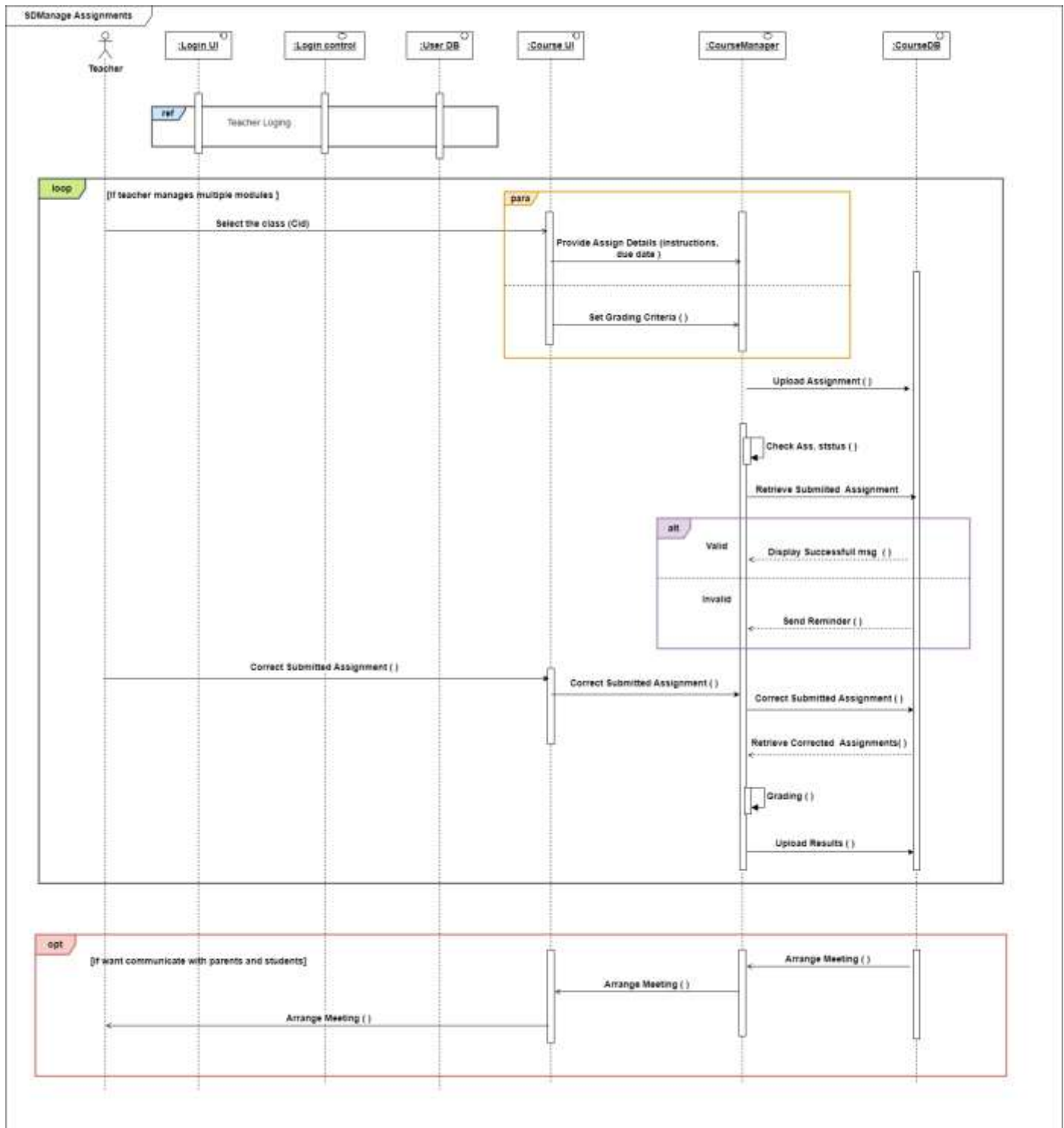

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IT22606792 - Perera B.B.A.R

**Use case Scenario (Manage Assignments and results)**

Use Case ID	SIMS003	
Use Case Name	Manage Assignments and results	
Priority	03	
Summary	This use case allows the teacher to manage assignments and results in the Online School Information Management System.	
Pre-Condition	To check students performance for each modules.	
Post-Condition	Students can view grading and performance.	
Primary Actor	Teacher	
Trigger	The teacher selects the module ID in the system's menu.	
Main Success Scenario	**Step**	**Action**
	01.	Log in to the System.
	02.	Select the class or course for which they want to create an assignment.
	03.	Provide assignment details, instructions, due date and any resources.
	04.	Set the grading criteria for assignments.
	05.	Assignment distributed electronically to all the students in the selected class.
	06.	Monitor the assignment status, if the students have submitted or not.
	07.	Correct the submitted assignments.
	08.	Grading the results.
	09.	Upload the results.
	10.	Communicate with students & parents regarding assignment grade & performance.
Extensions	**Step**	**Action**
	06.a	Display successfully massage.
	06.b	Send the reminders.

IT22606792 – Sequence Diagram

(Manage Assignments and results)

IT22606792 – Communication Diagram

(Manage Assignments and results)
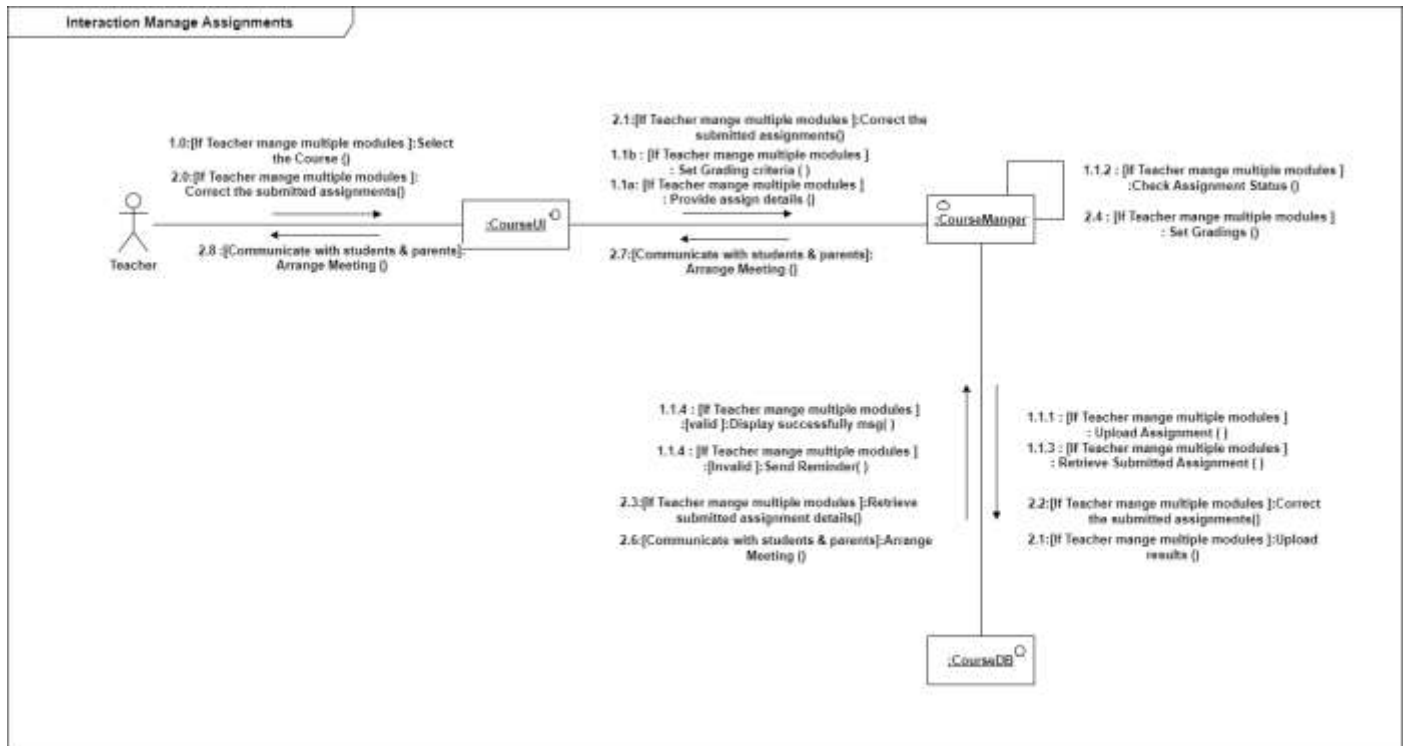
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IT22604712 - Navanjana L.A.V

Use case Scenario (Manage Admission & enrollment)

Use Case ID	04	
Use Case Name	Manage Admission & enrollment	
Priority	03	
Summary	Approve submitted student admission forms and required documents through the system	
Pre-Condition	Supportive staff have submitted students' application forms and required documents through the system	
Post-Condition	Admit or reject students' application successfully	
Primary Actor	Supportive staff	
Trigger	Start of the school's admission cycle for the upcoming academic year.	
Main Success Scenario	**Step**	**Action**
	01.	Principle log into the system by using authorized credentials
	02.	System display Admission UI
	03	Principle selects "Admission form" button
	04.	The system displays a list of available Admission forms for the upcoming academic year.
	05.	Principle selects an application for review
	06.	System display accept and reject button relevant application
	07.	Principle reviews the applicant's information, including personal details, academic history, and any additional documents submitted.
	08.	The principle selects the admission decision for the applicant (eg., Accept, Reject)
	09.	Principle selects "Accept" button and system display list of available admission
Extensions	**Step**	**Action**
	01.a	If system notifies login details are incorrect, display an error massage and reenter the login details
	05.a	If required document not completed principle click "reject" button
	08.a	If the principal decision is acceptance, the system sends an automated notification to the supportive staff, informing them of the admission offer.
	08.b	If the principal decision is rejected, the system sends an automated notification to the supportive staff, informing them of the rejected letter.
	09.a	Admission save in admission database and show in accept admission folder

IT22604712 – Sequence Diagram
(Manage Admission & enrollment)
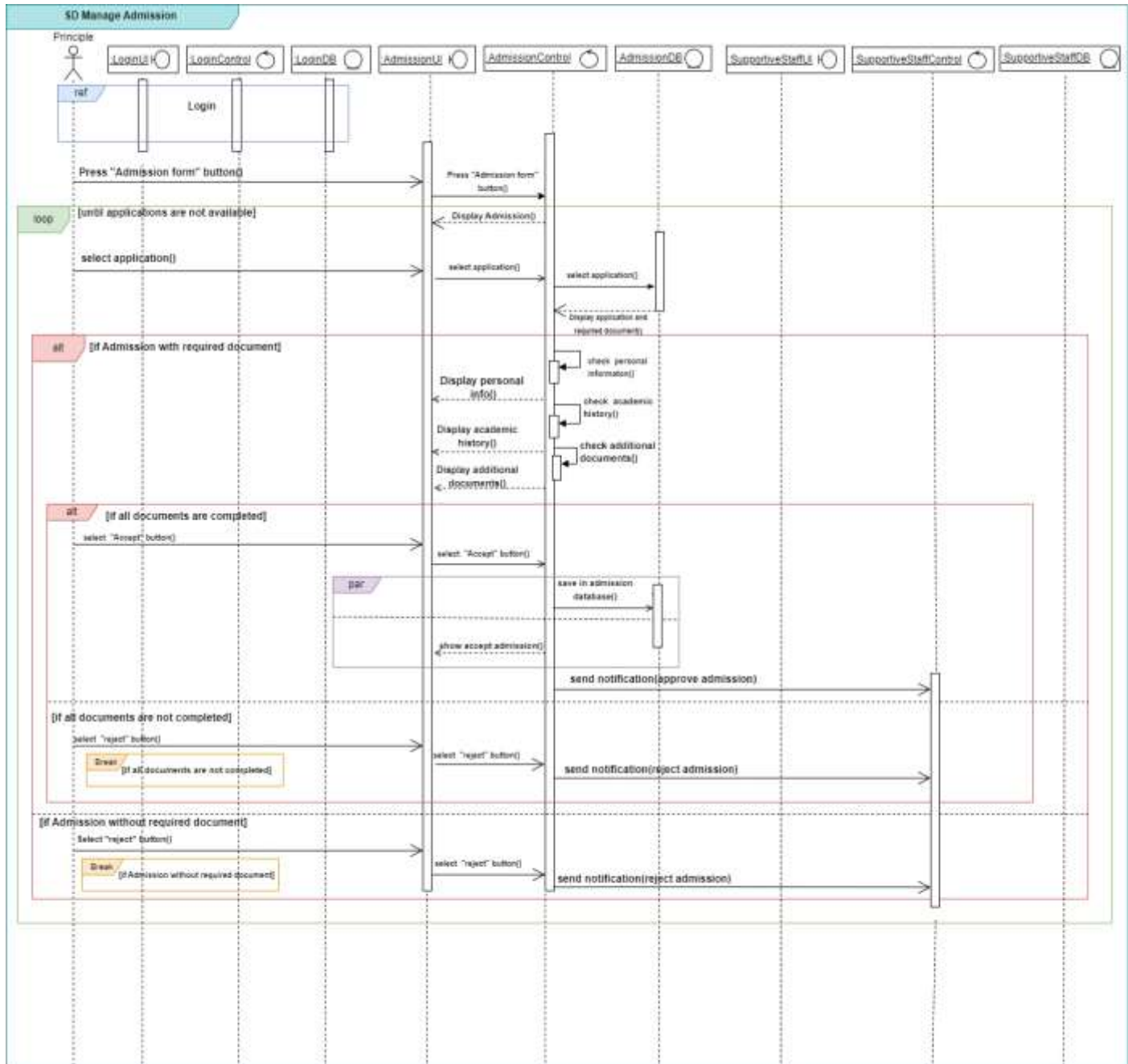
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IT22604712 – Communication Diagram
(Manage Admission & enrollment)
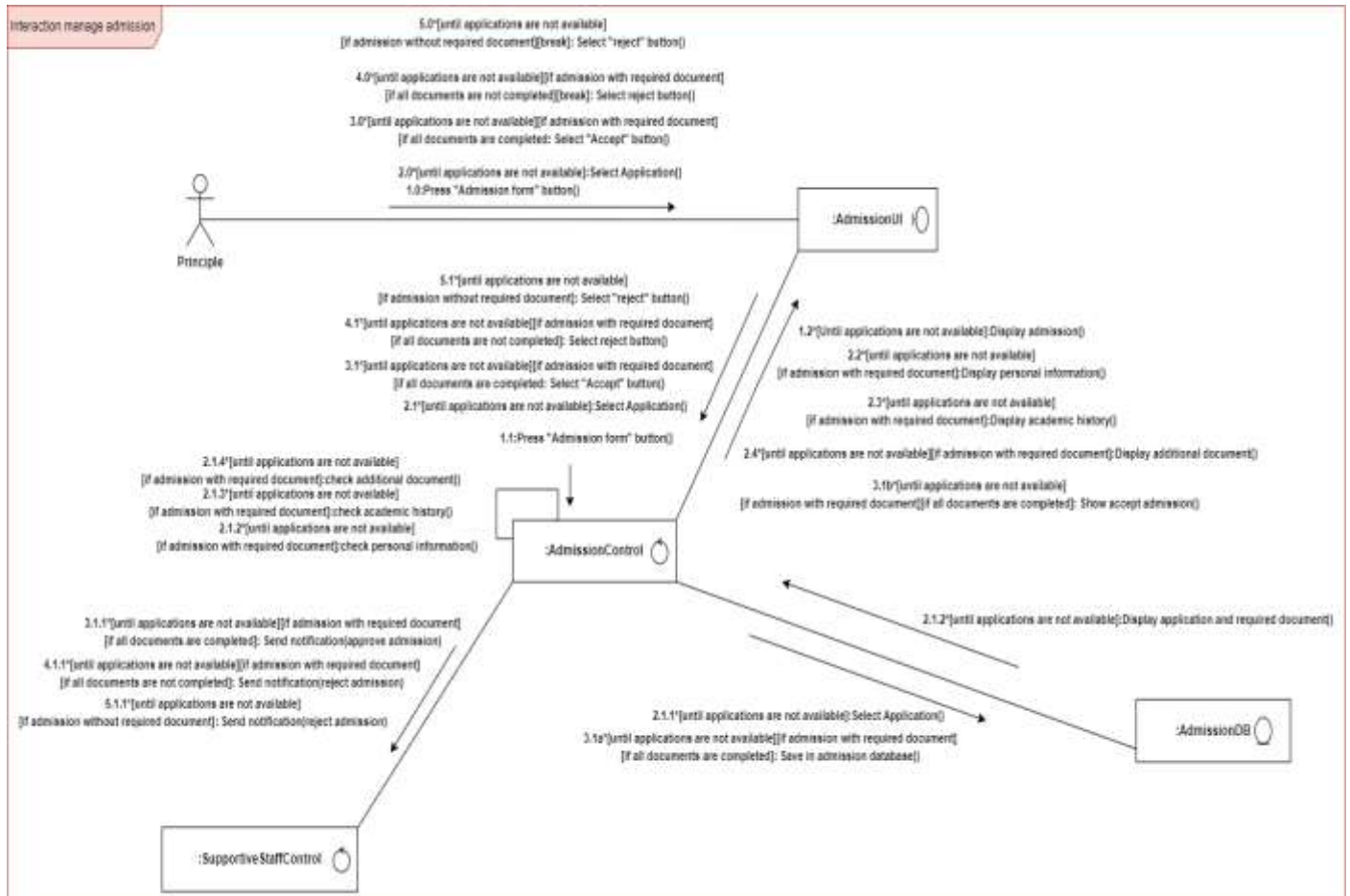
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Individual Contribution

	Student Registration Number	Student Name	Contribution
01.	IT22575562	Wijekoon W.M.M.G.K.P	-Sequence diagram and communication diagram for use case scenario "User login with View Assignment & Upload" -use case diagram "Student"
02.	IT22591098	Jayalath J.P.R.J	-Sequence diagram and communication diagram for use case scenario "Generate Report" -use case diagram "Admin"
03.	IT22606792	Perera B.B.A.R	-Sequence diagram and communication diagram for use case scenario "Manage Assignments and results" -use case diagram "Teacher"
04.	IT22604712	Navanjana L.A.V	Sequence diagram and communication diagram for use case scenario "Manage Admission & enrollment" -use case diagram "Principle"