Task 01

Use case diagram for School Management System showing actors User, Student, System Manager, and School Database with use cases: makes account, Student login, fill forms, Pay fee, Submit document, Pass test, gets admission, Gives test, Fails test, CRUD functionality of subject, CRUD functionality of students, and Conduct entry test.
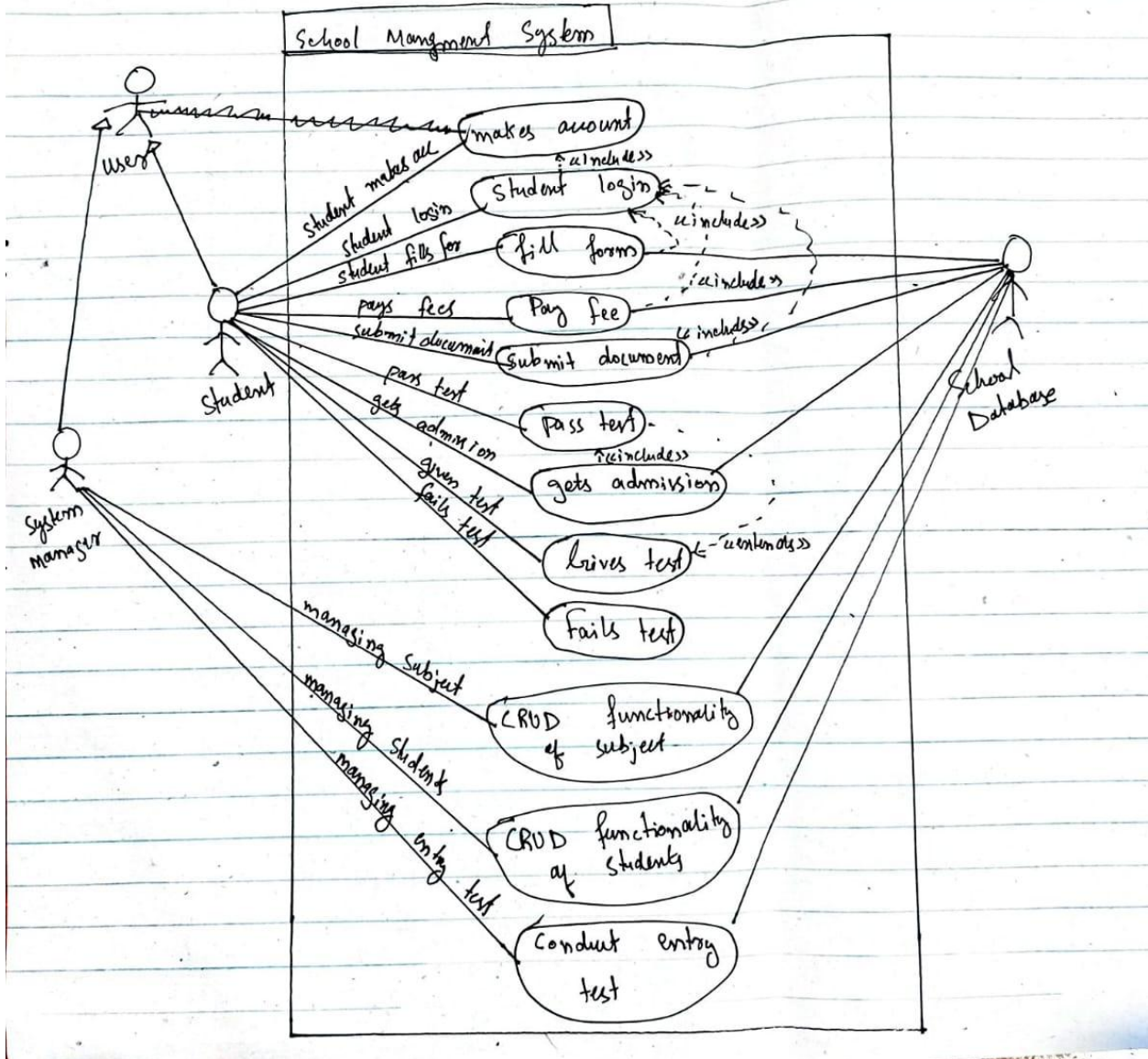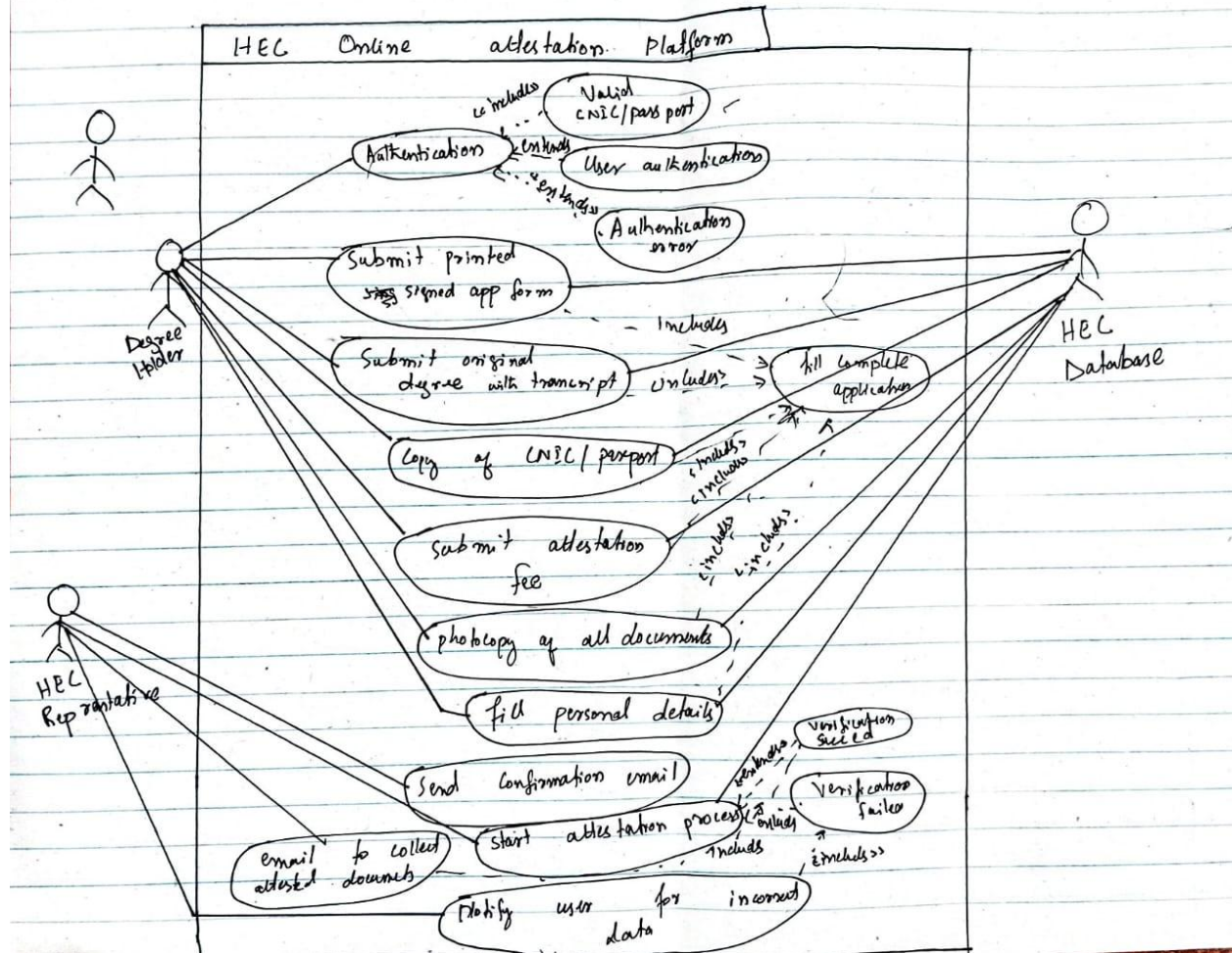
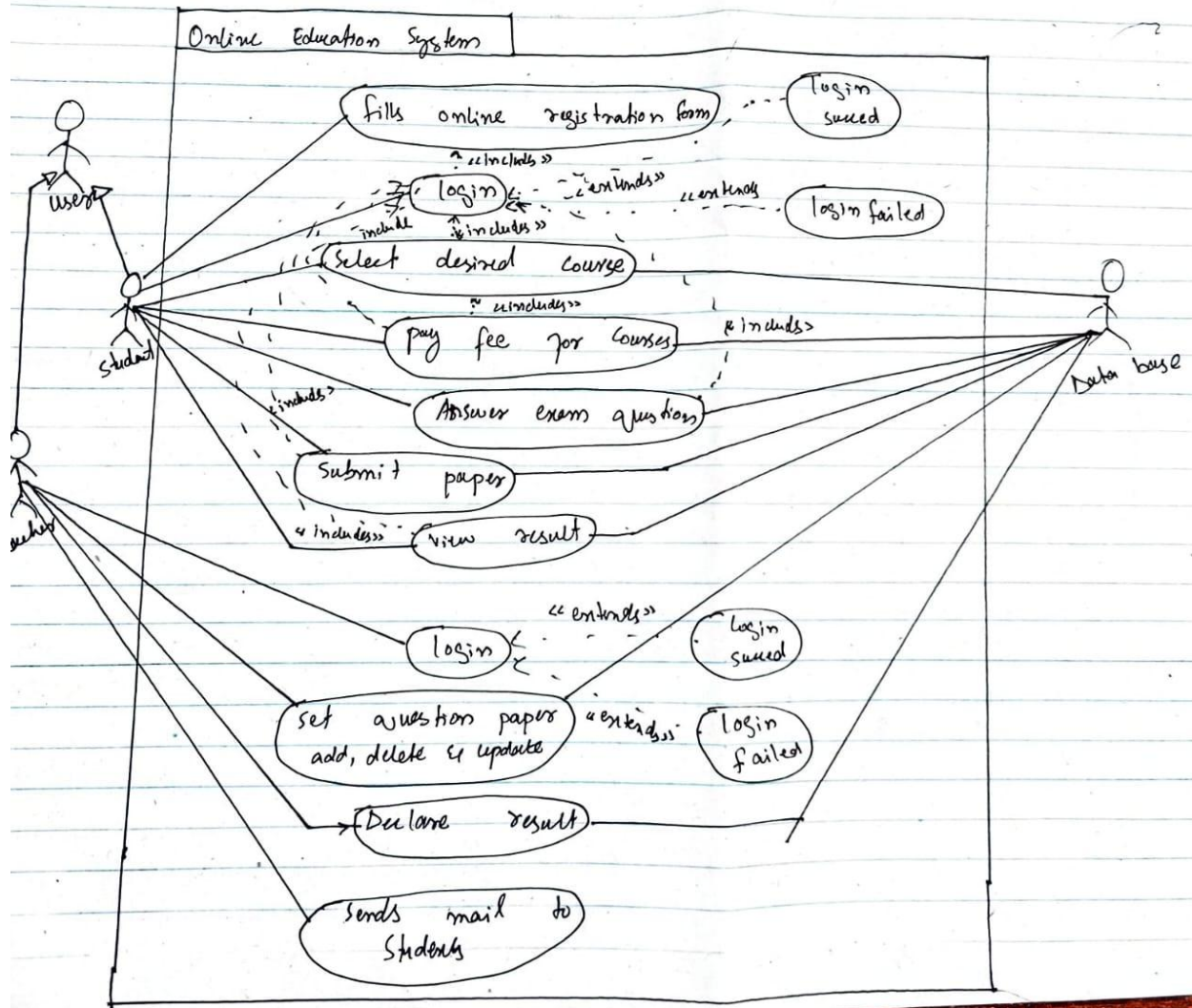| ID:	UC 1
Use case name:	Student Login
Author name:	Mohammad Usama
Last revised:	5-10-22
Description:	Student login into School management system
Primary Actor:	Student
Supporting Actor:	Database system
Pre-condition:	Student Log ins to the system
Post-condition:	Students submits his/her exam and views his/her result
Main success Scenario:	1. A Student Logs into the system. 2. He fills the registration form 3. He pays the fee 4. He submits the required documents 5. He gives the test 6. He gets admission if he passes the test

Extensions:	1. Student restarts the System, logs in, and requests recovery of prior state. System reconstructs the prior state.
	
	2. Student enters wrong credentials
	   2a) Student is asked to enter correct email if the email is wrong
	   2b) Student is asked to enter correct password if the password is wrong
	
	3. Student fails the test
	   3a) Student is asked to retake the test after 1 month
	
	4. Students doesn't pay the admission fee on time
	   4a) Student is asked to pay the admission fee so that his admission can be processed

TASK 02

Task 02

HEC Online attestation Platform

- Authentication
  - «includes» Valid CNIC/pass port
  - «extends» User authentication
  - «extends» Authentication error
- Submit printed signed app form
- Submit original degree with transcript — «includes» → Fill complete application
- Copy of CNIC/passport — «includes»
- Submit attestation fee — «includes»
- photocopy of all documents
- Fill personal details
- Send Confirmation email
- Start attestation process
  - «extends» Verification succeed
  - «includes» Verification failed
- email to collect attested documents
- Notify user for incorrect data «includes»

Actors:
- Degree Holder
- HEC Database
- HEC Representative

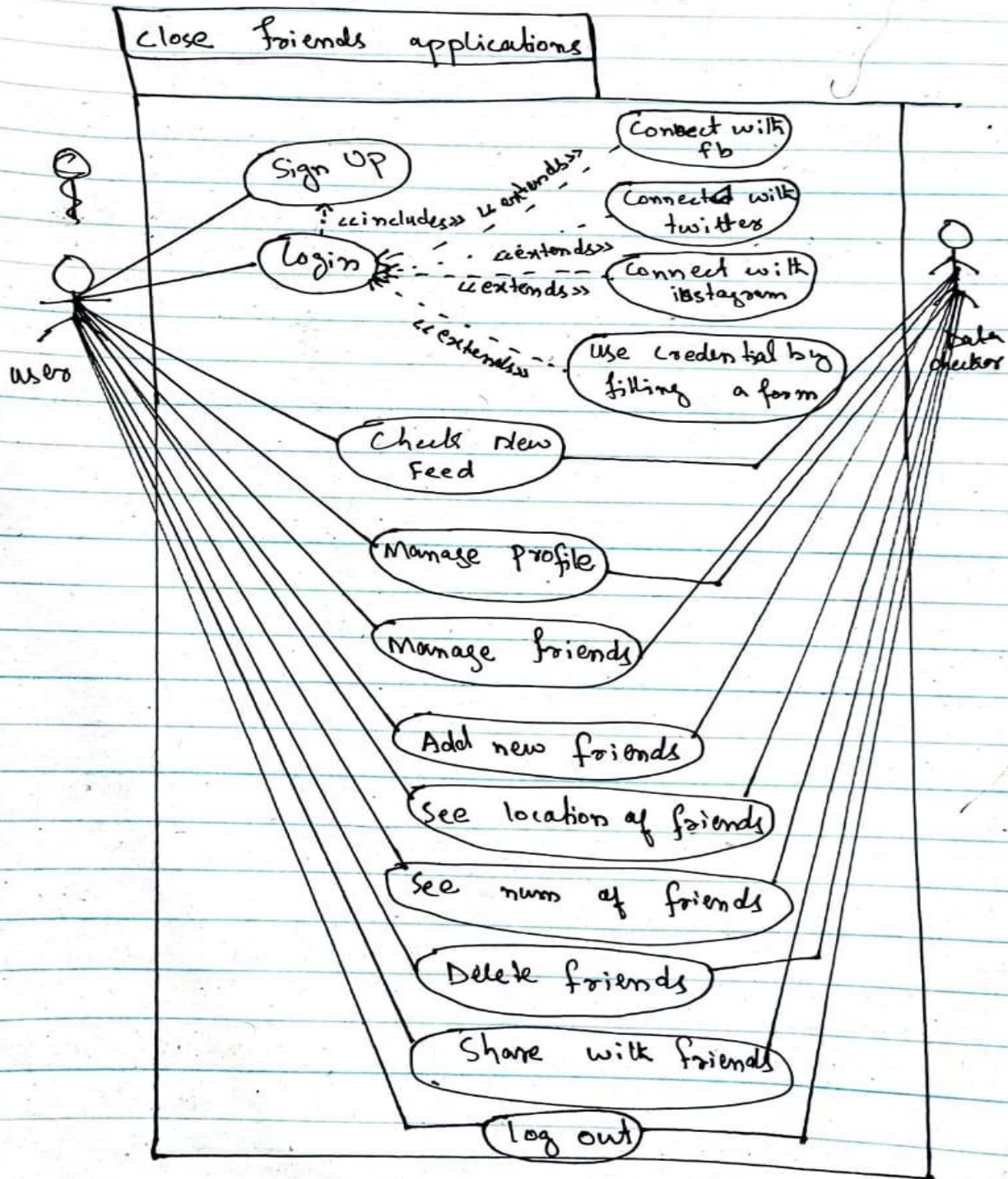| ID:	UC 2
Use case name:	Degree Holder Verification
Author name:	Mohammad Usama
Last revised:	5-10-22
Description:	Degree Holder enters his credential and documents into the system, after verification his documents are attested
Primary Actor:	Degree Holder
Supporting Actor:	HEC Representative
Pre-condition:	Degree Holder is logged into system
Post-condition:	Degree Holder gets his documents verified
Main success Scenario:	1. Degree holder authenticates himself via NIC/Passport verification 2. He submits his printed application form 3. Submits his original degree with transcript 4. Submits the attestation fee 5. Submits the photocopy of all documents 6. Fills his personal details

Extensions:	1. Anytime the system crashes the user restarts they system and the system restores itself to its previous state
	
	2. If the NIC/Passport is not valid user is prompted to enter a valid NIC/Passport number
	
	3. User submits incomplete/incorrect documents/document details
	   3a) User is asked to enter correct and complete set of documents required for verification
	
	4. User doesn't submit fee
	   4a) User is asked to submit attestation fee to move forward with the verification process

TASK 03

Task 03

Online Education System

fills online registration form

Login succeed

«includes»

login «extends» «extends»

login failed

«include» «includes»

Select desired course

User

Student

«includes»

pay fee for courses «includes»

Database

«includes»

Answer exam question

Submit paper

«includes» view result

teacher

«extends»

login

Login succeed

set question paper add, delete & update

«extends»

login failed

Declare result

sends mail to students

ID:	UC 3
Use case name:	Given online Exam
Author name:	Mohammad Usama
Last revised:	5-10-22
Description:	Student logs into the system, gives his exam and views his result
Primary Actor:	Student
Supporting Actor:	Teacher, Database
Pre-condition:	Student is logged into system
Post-condition:	Student views his result after giving the exam
Main success Scenario:	1. Student logs in to the system 2. Student selects his desired subjects 3. Student pays the fee for his subject 4. Student attempts his exam and answers his questions 5. Student views his results

Extensions:	1. At any time, System crashes: Student restarts the System, logs in, and requests recovery of prior state. System reconstructs prior state.
	2. Student enters wrong log in credentials
	   2a) He is asked to enter correct password if the password is wrong, he is also given an option to recover his password via email, if he has forgotten his password
	   2b) He is asked to enter correct log in email if the email is wrong
	3. Student hasn't paid his fees on time
	   3a) Student is asked to pay his fee in order to appear in the exam

TASK 04

Task 04

Close Friends applications

User

Sign UP

«includes» «extends»

Login

«extends»

«extends»

«extends»

Connect with fb

Connected with twitter

Connect with instagram

Use credential by filling a form

Check New Feed

Manage Profile

Manage friends

Add new friends

See location of friends

See num of friends

Delete friends

Share with friends

log out

Data checker

ID:	UC 4
Use case name:	Log in and use close friends application
Author name:	Mohammadd Usama
Last revised:	5-10-22
Description:	User logs into the app and uses it to interact with his existing friends and make new friends
Primary Actor:	User
Supporting Actor:	Database system
Pre-condition:	User has logged into system
Post-condition:	User has logged out of the app after using the app
Main success Scenario:	1. User logs into the app 2. User makes new friends on the app 3. User views his new feed 4. User check his current friend's activity 5. User logs out of the app after using it for some time

Extensions:	1. At any time, System crashes: Student restarts the System, logs in, and requests recovery of prior state. System reconstructs prior state.
	2. User enters wrong log in credentials
	   2a) User is asked to enter correct email if he enters the wrong log in email
	   2b) User is asked to enter the correct password if he enters the wrong password an d also given the option to retrieve his password using his email