AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

FACULTY OF SCIENCE & TECHNOLOGY

Object Oriented Analysis and Design

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Section: M

Project Title: University Management System

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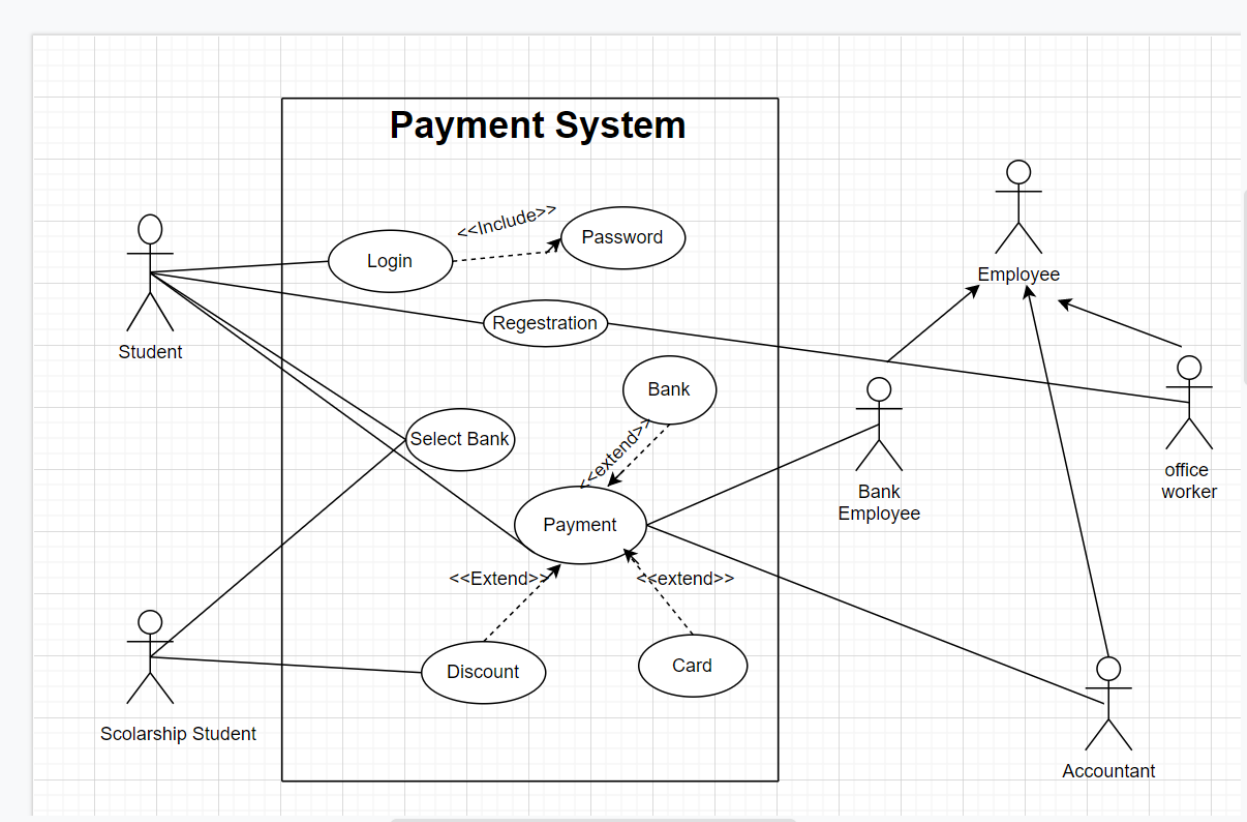
University Management System

Project Overview: In the project I want to highlight some necessary aspects of a Management System of a University. In the first case I will be mentioning the use case diagram. It shows the relationship between objects and processes. Then the class diagram is based on how the University and the other processes work with each other. By this, we will know about the importance of one another system. The sequence diagram describes the process of examination in university. It will explain from the examination paper to the student. The registration system of a university is shown in the Activity diagram. This will be started from the login of a student to the confirmation of registration. In the last step the state chart diagram will be shown. It will describe how the admission process takes place and the necessary steps like admission fee, exam, submission and about the viva procedure.

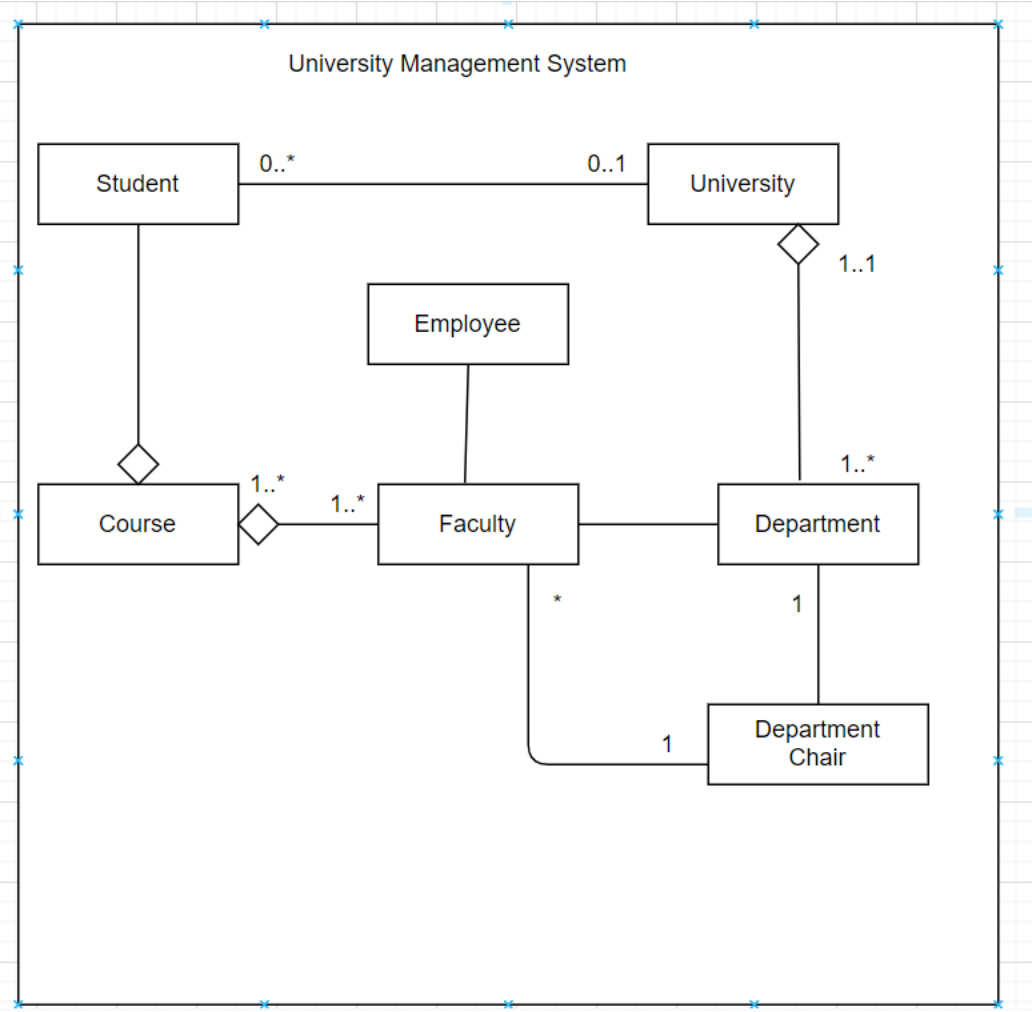
1. Use Case Diagram:

In a student payment system Student log into the system by a password. Students completes their registration through this system. There are two types of students. Normal students and the scholarship students. The office worker confirms to the registration process. Then the student needs to select a bank and pay the tuition fees by a card or by the bank. Student those who are eligible for the scholarship will get a discount from the payment. Bank employee manage the payment procedure. The accountant confirms the payment.



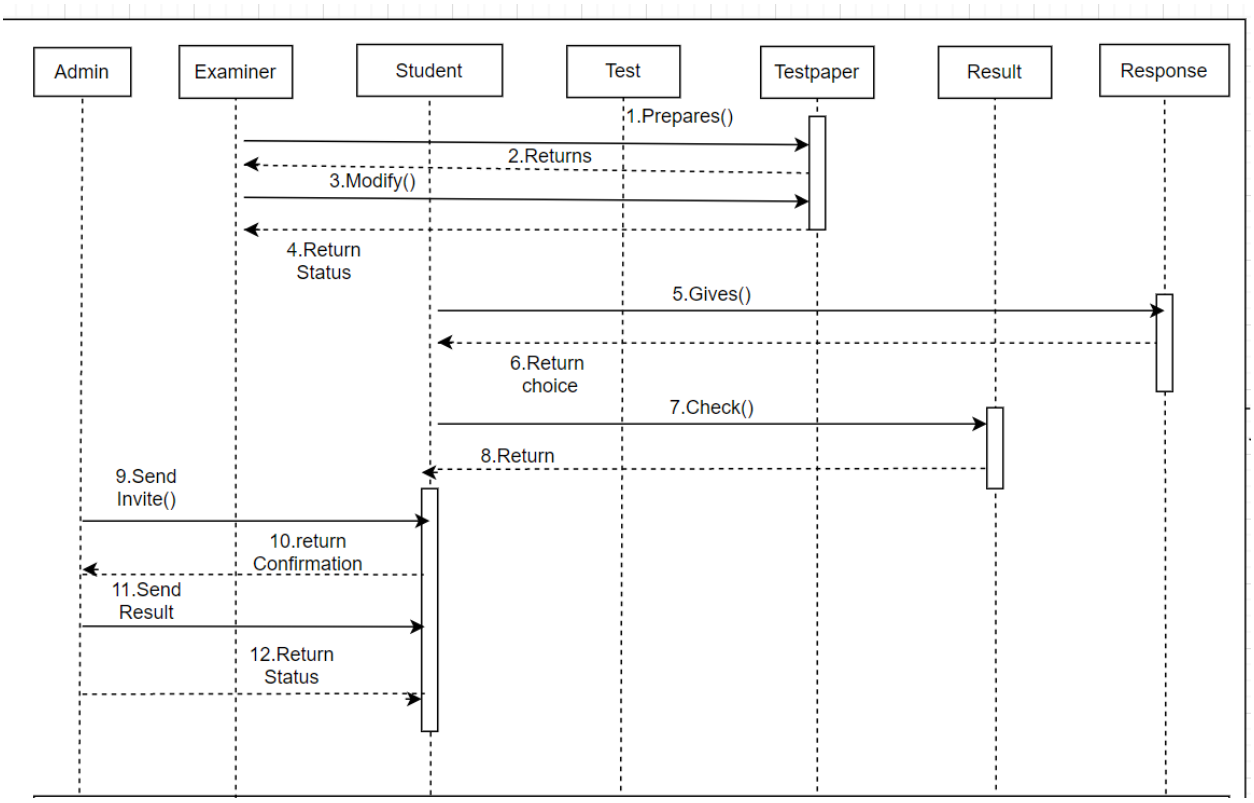
2. Class Diagram:

In a University Management system, there is are several departments, students, employees. Faculties are the employees of the University. Each department has a department chair and a number of faculties. The Department chair is selected from the faculty member. Each faculty teachers several courses. If there are no students in any courses then the courses will be cancelled. Faculty can take one or more courses. To be a regular student he must have to take some courses. Students can take more than one courses.



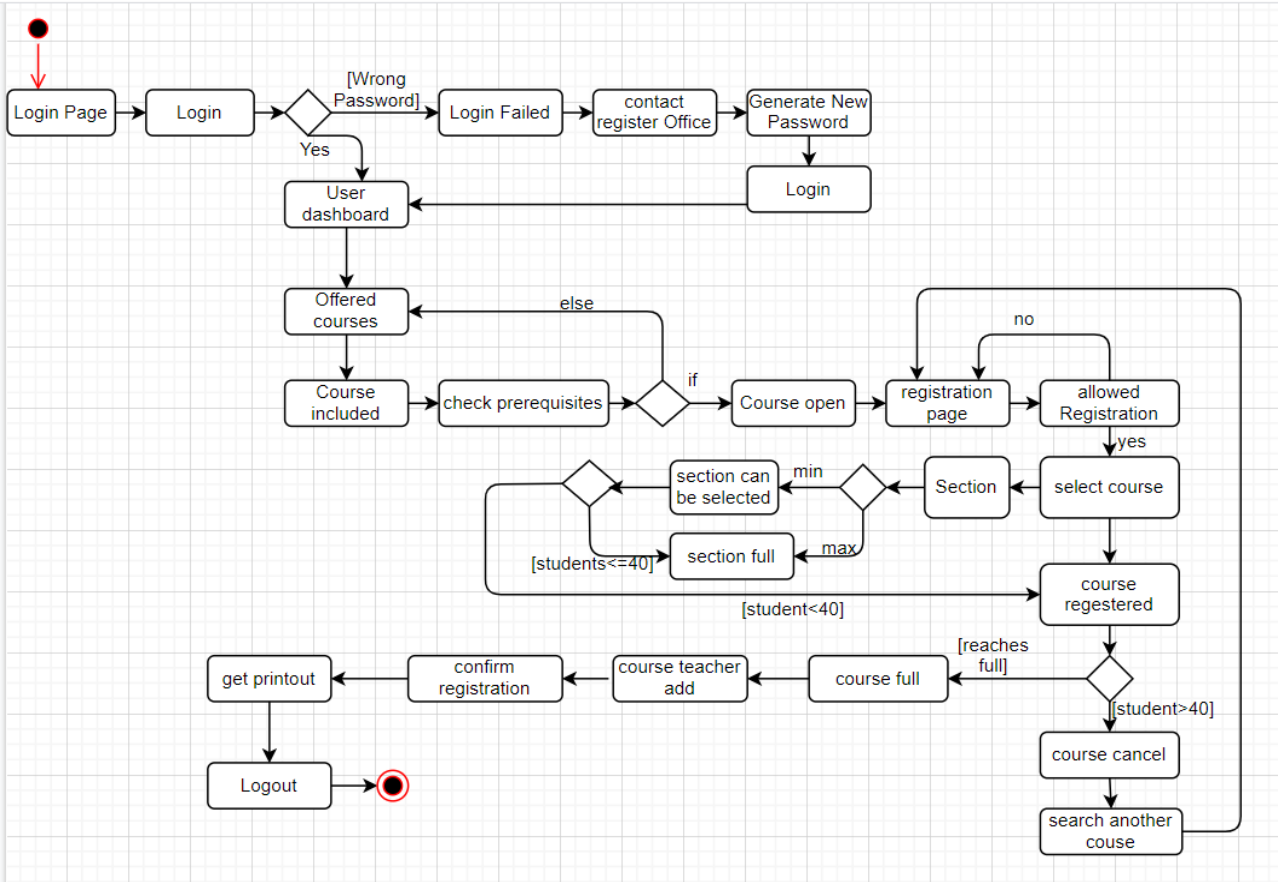
3. Sequence Diagram:

The Examiner prepares Test papers for the students for the exam. The Examiner can modify the papers if he wants to. When the students sit for the exam, he can choose his response if he wants to. If he wants to change his response, he can change it. After the exam he gives his answer sheet to the examiner. After that the student will get result. Then they will check the result. Then the admin will ask the student for the confirmation of the result. Then they will confirm it. Then the result will be sent to the admin's system.



4. Activity Diagram:

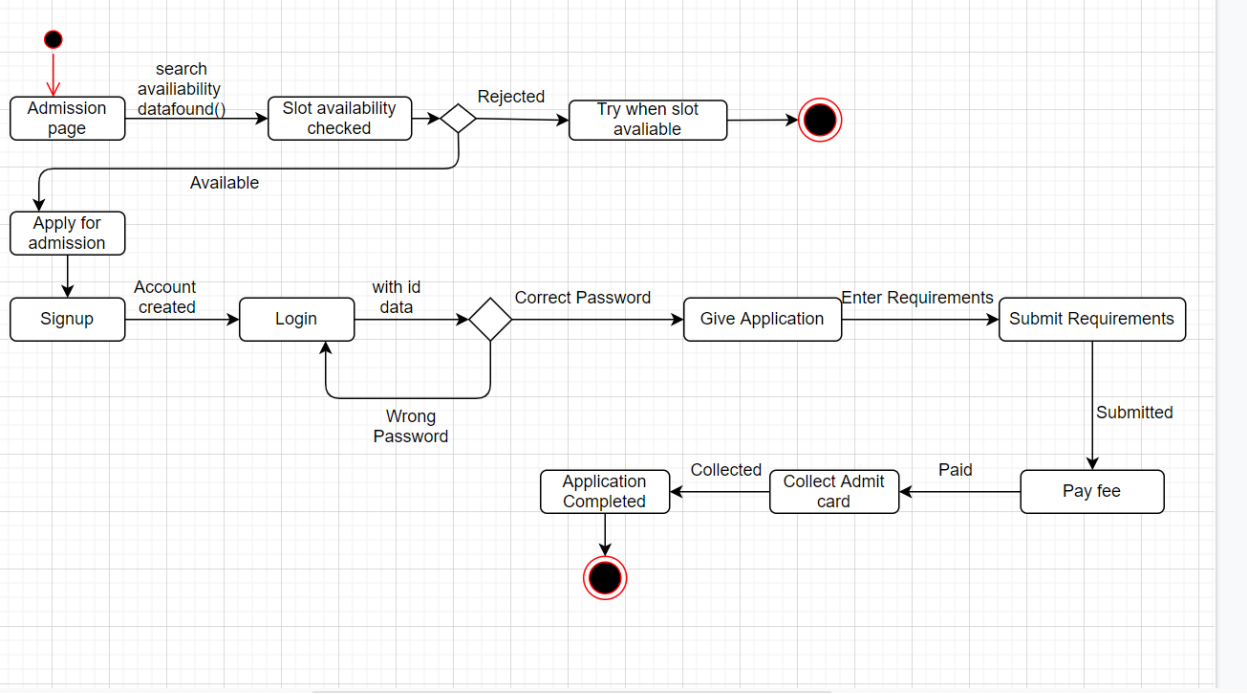
This is a registration system. A student can go to the university website for registration. At the website a login page will be shown. After entering with the correct password, the student can take their own dashboard. But if he enters the wrong password for 3 times the account will be restricted and they are recommended to contact the registration office for creating the new password. Offered courses are shown in the dashboard. Students can select courses according to their pre-requisites. If the pre-requisites are fulfilled then they are allowed to take course or they need to select the course again. If the pre-requisites fulfill the course is open to take. At a definite time, the registration page opens and students check if the registration page allowed to take courses. If not, a message is shown to notify the students. Then the students select courses and sections. If the limit of the students is less than or equal 40 then the section is full. Otherwise, the students get their registered courses. When a course reaches limits of its capacity then the course is closed for the other students. On the other hand, if there are not enough students requesting for the course then the course is also closed. Students confirms their registration after getting their desired courses. Definite teacher for the course will be added to their course. A printout is given to them of all the courses that they have selected.



5. State-chart Diagram:

University Admission System,

In this system, from the website we go to the admission page and search that there is any slot available for the admission to the University. If there is no seat available then we have to try later for the admission when the slots are available. Otherwise, we can apply for the admission. First, we have to create an account to apply. After creating the account, we have to login to the system for the admission. After that we have to submit all the necessary information they want. After that we have to payment the fee, then we will receive the receipt and collect the admit card from the University. Then the admission exam date will be published and student have to sit for it. Some candidates will be selected for the viva and some will be rejected. The schedule of viva will also be released. After attending the viva, the result will be published. Student can be selected or rejected. If you get rejected then try again for the next semester. Otherwise, student have to pay the payment to complete the admission of the University.



Conclusion:

The main purpose of the project is to found a University Management System which enables us to show the dynamic administrative process of university. The Output of this feedback helps to maintain the registration page, course selection, student payment method etc. The goal of this course project is to establish a strong Management system of university.