

Title of the Project: Education management System

Group Number: 11

Group Members:

| Student ID | Student Name |
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System Request

Introduction

Education Management System is a platform where students, teachers, school administration bodies, and education boards can work together. It improves communication among all of the branches of the education system of a country. Students can have an individual account by which they can run their academic life smoothly and adequately. And all of the information of the system will be controlled by the administration body.

Motivation

This system will make the educational activity more accessible to everyone. Students, teachers, and officials can easily browse through education results, CV, achievements. It is a web-based application that tracks current student's academic information. The main purpose of this project is to a digital world for education that will save both money and time.

Project Sponsor:

- Education Ministry
- Robi

Business Need:

This project will allow students to continue their student life more efficiently and Also, help them in their career. Besides, maintaining of education system would easier and smoother for the Education Board.

Business Requirements:

Using the web, students and Education Board will able to communicate and maintain the whole education system. When a student starts his/her academic student life, then a profile will be created for him by the admin body. Also, for existing student's administration body will create an individual account for every student with verified information. The features of the project given below:

- Verified information of a student.

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- All academic achievement would assign by the admin body.
- Individual result publishment.
- Admission applies.
- Admission result tracking.
- Verified Co-curricular activities certification.
- Auto-generated CV according to current academic background.
- Data for job recruiters
- Supportive resources for students such as videos, books, solution

Business Value:

This is a project something like E-learning. It will create a global business value. As we mentioned before, it is a systematic education system, here the original data of students will be stored, so different companies from corporate bodies can quickly get the proper information of students as per their requirements and can offer jobs to the applicants. On the other hand, applicants can also apply for their desired posts. Here, both parties can save their time and resources. By saving time and resources, people can benefit in many ways, and it has a global impact. Moreover, this also helps to reduce different difficulties.

This system will make the educational activity easier. We invest a lot of money, time arranging academic results and distributing them. Through this cost will be gone, and it all save time which is valuable for education.

- 100,000 Tk can save monthly form results publish free.
- 1,200,000 Tk admission will be saved annually.

Special Issues or Constraints:

- All the data will be govt approves.
- Education institutions or officials can quickly evaluate students using this system.
- This system should be access able to any educational institutions or officials through user permission. So, there will be no privacy issue.
- Digital identification will give each student a unique ID.
- Create more work opportunities.

Requirement Analysis

1. Recorded Management for Student

Functional Requirement:

FR1.1: Make categories like Student results, CV, etc.

FR1.2: Admin and users must go through an authentication process.

FR1.3: Anyone can browse through to find the educational Info of a student.

FR1.4: Users should be able to leave comments.

Non-Functional Requirement:

NFR1.1: Student information must be verified.

NFR1.2: Info update latency should be less than 10s.

FR1.3: Only Admin can edit Info.

FR1.4: It should have education board approval.

2. Academic Administration.

Functional Requirements:

FR2.1: **Fee collection:**

- This education management system will offer the fee collection module, which will have a payment method for monthly school fees, yearly fees, admission fees, admission test fees, etc. It should also provide parents with an online and reliable mode of payment and integrated SMS service to alert and remind the parents of the fee payment or dues if any.
- It will send an automatic notification if there's any payment deadline. It may include mobile banking systems like Bkash, Nagad, Rocket, and also bank transfers. It will provide and paid receipt for further convenience.

FR2.2: **Data feed for job recruiters:**

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- It will have a separate feed system where certain specific information of a student will be shown to the job recruiters.
- It will sort all the data according to the requirements of a job recruiter.

FR2.3: Improve Communication:

- The education management system should offer a communication platform for the administration body to regularly improve student-teacher interaction and communicate with students. It should make communication possible and accessible through notification, automated mobile messages, and emails, increasing teacher-parent interaction.
- Besides, every teacher's contact information from a particular institution according to the student's enrolment classes and courses will be provided in his profile.

FR2.4 Account types:

- There will be three kinds of login account for students, teachers, and the administration body of an institution.

Non-functional Requirements:

NFR2.1: All the payments should be made with the verified user information.

NFR2.2: Troubleshoot for mistakes in payments.

NFR2.3: Manual Payment method strategy in case the system can't cope with the situation.

NFR2.4: Data feed should be approved by the verified authority.

NFR2.5: Password recovery method with a verified identity.

NFR2.6: Student profile can be approved only by a verified authority.

Non-Functional:

1. Operational:

1.1 Mobile Devices

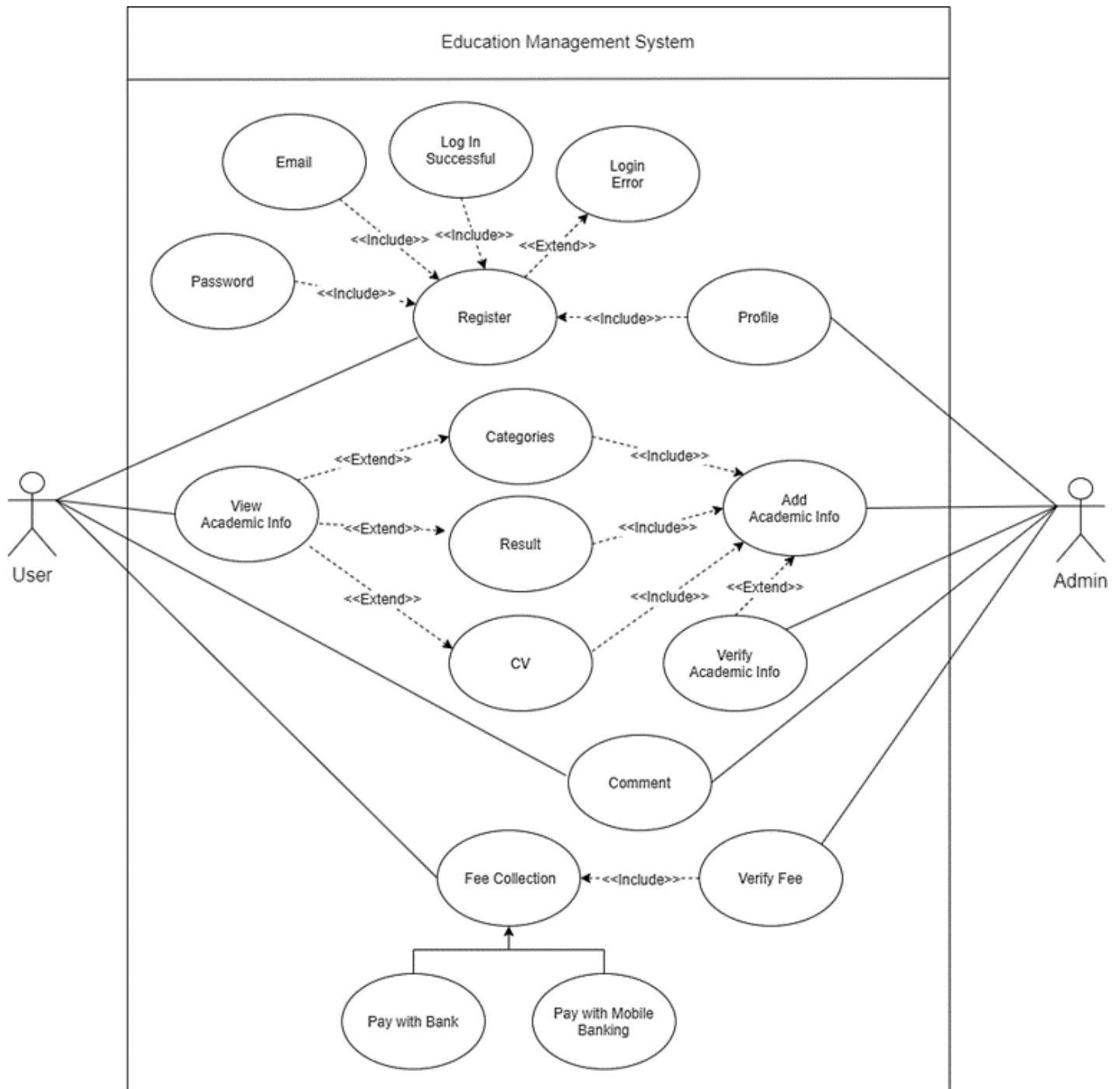
1.2 Web Browsers

2. Performance: Data load takes less than 3 seconds

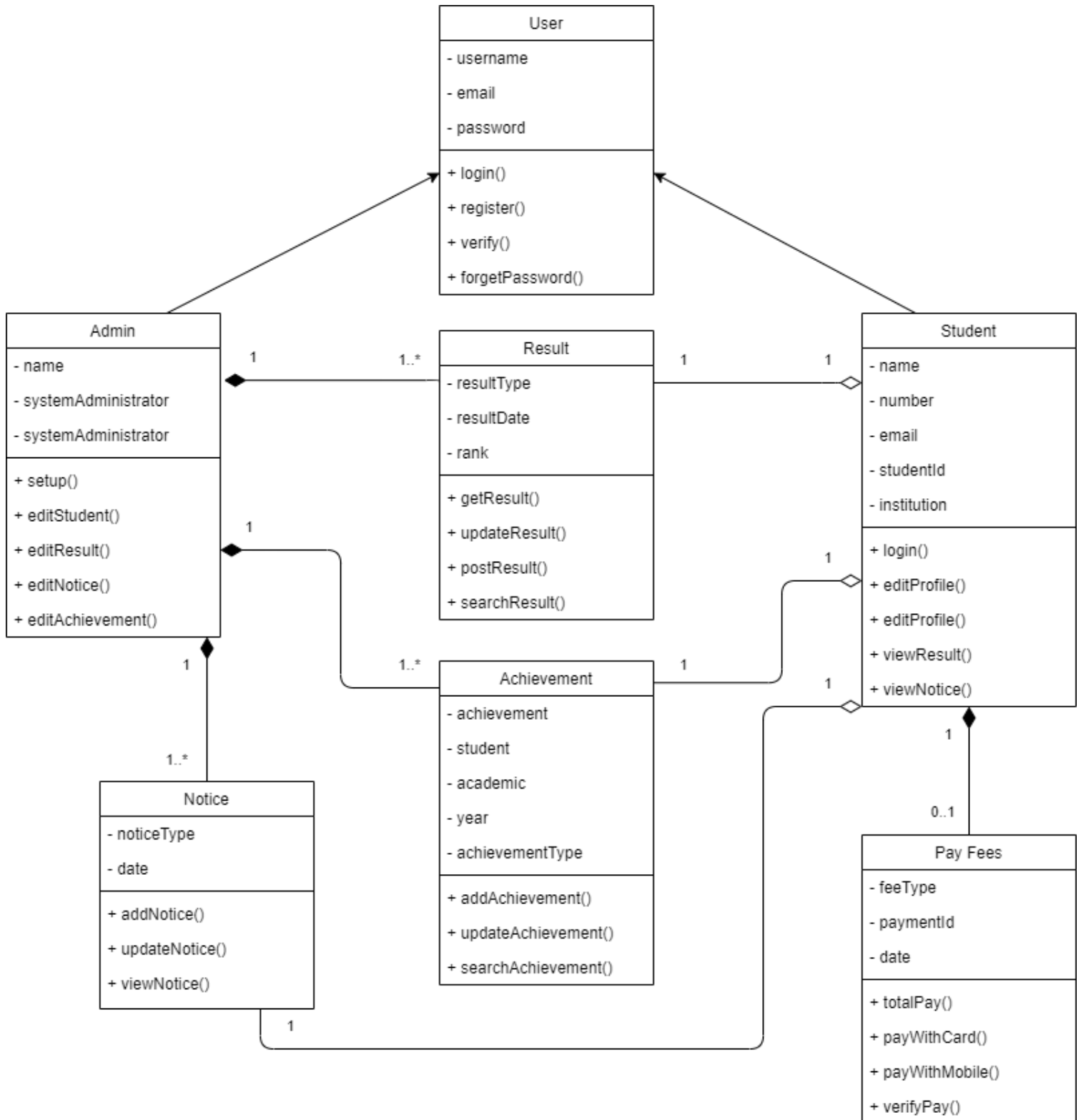
3. Security: Only Admin can update or add verified Info.

4. Cultural & Political: Data can only be accessed in Bangladesh. Supported language Bangla and English.

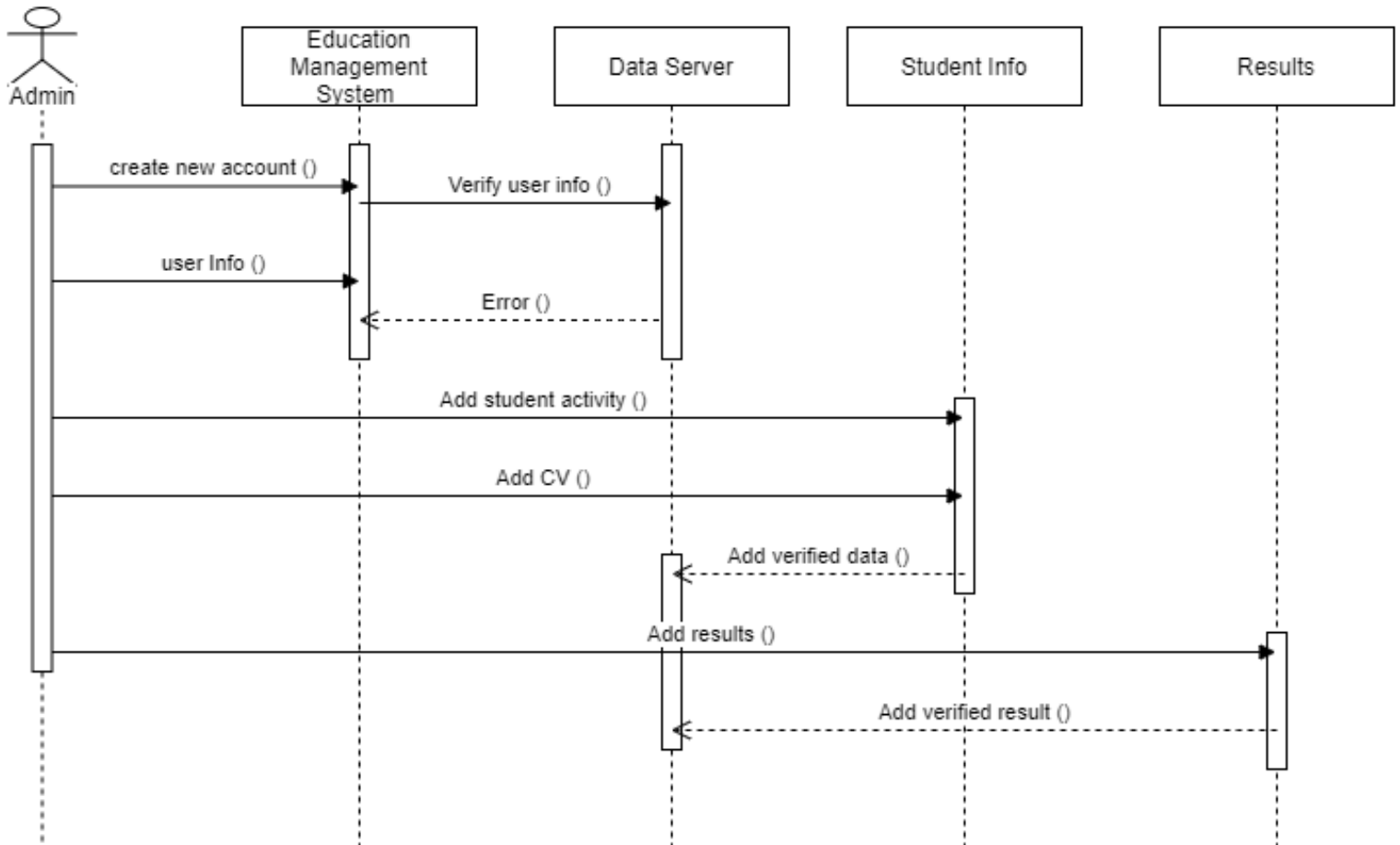
Use Case Diagram



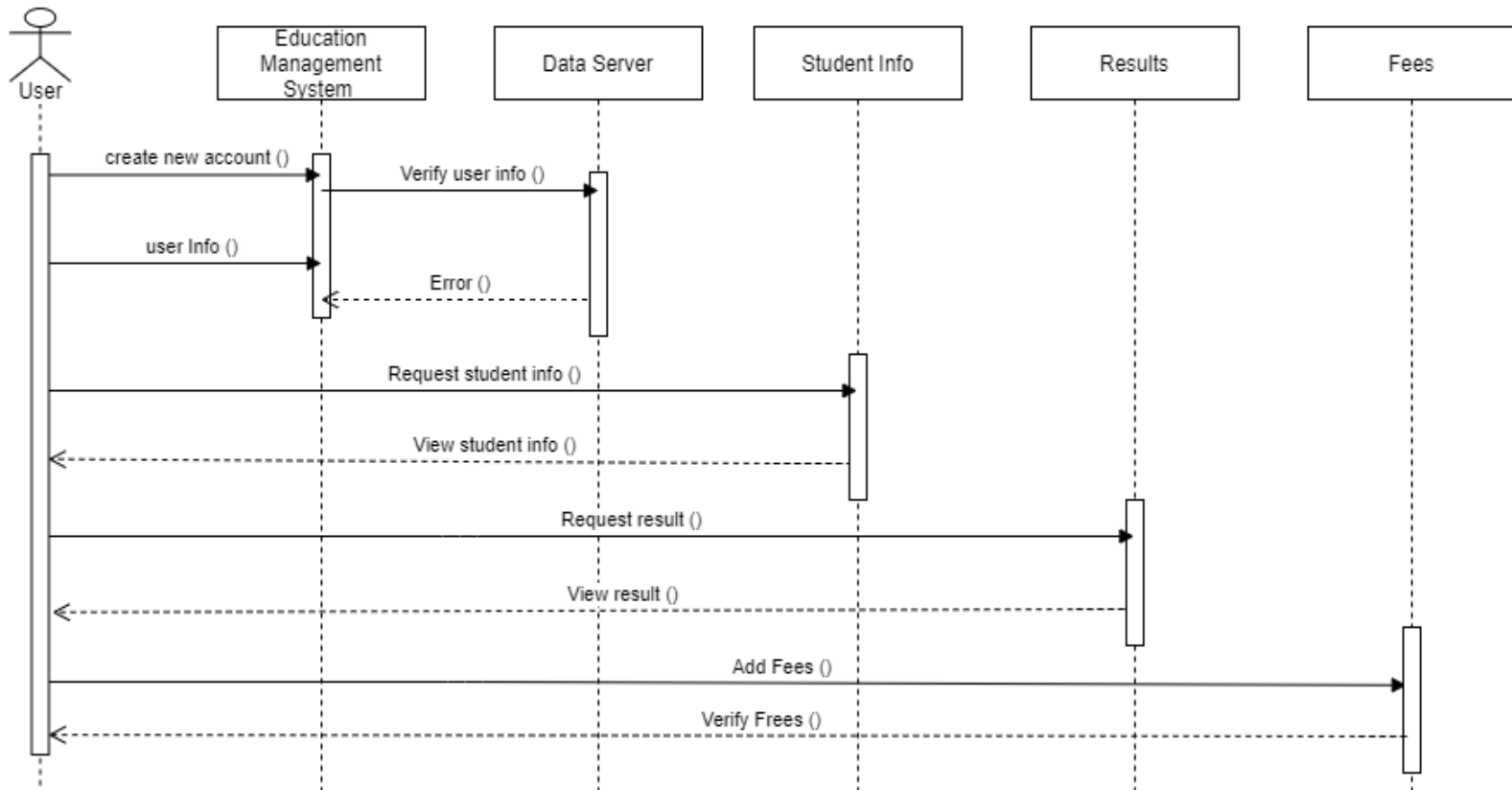
Class Diagram



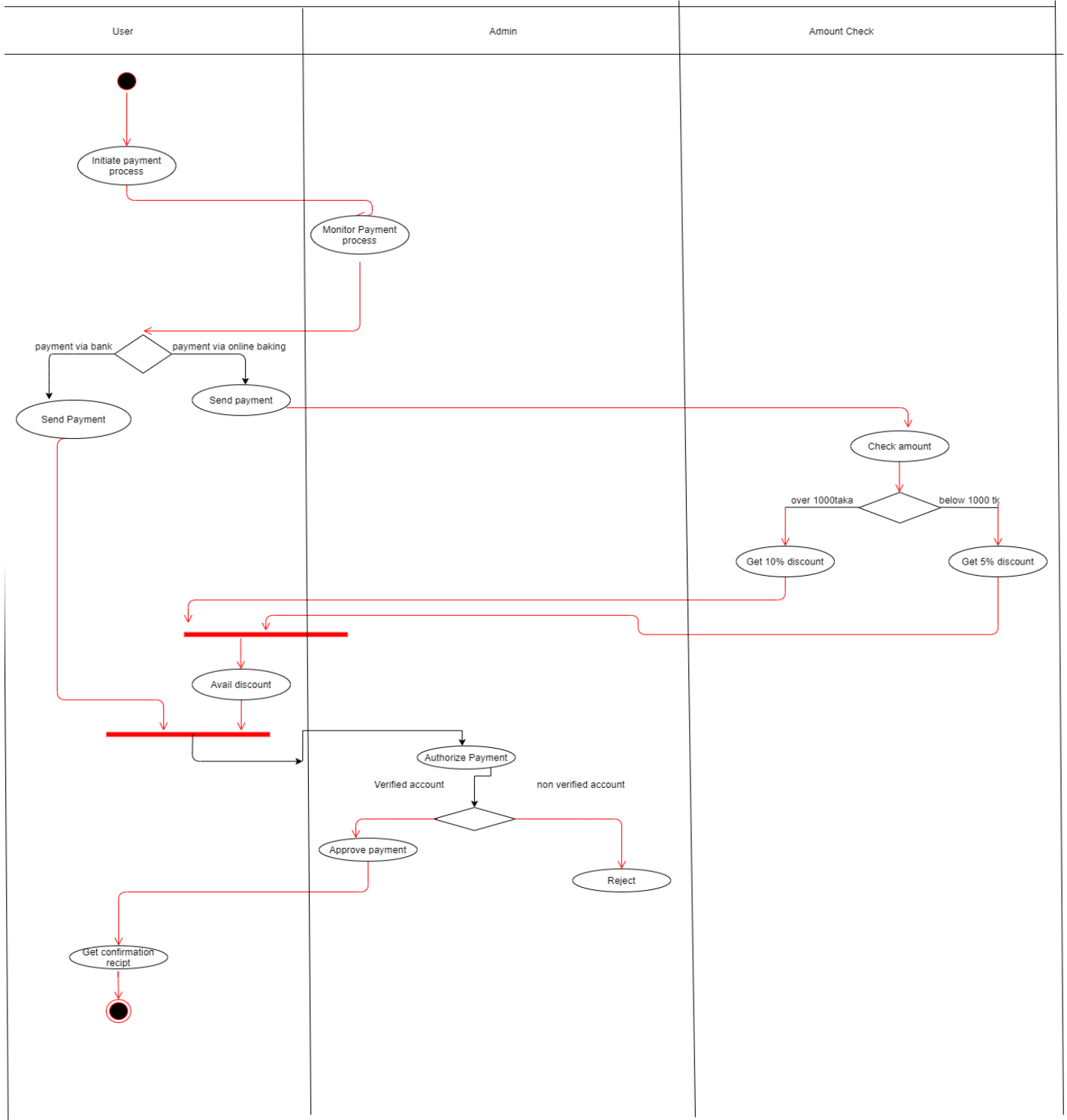
Sequence Diagram



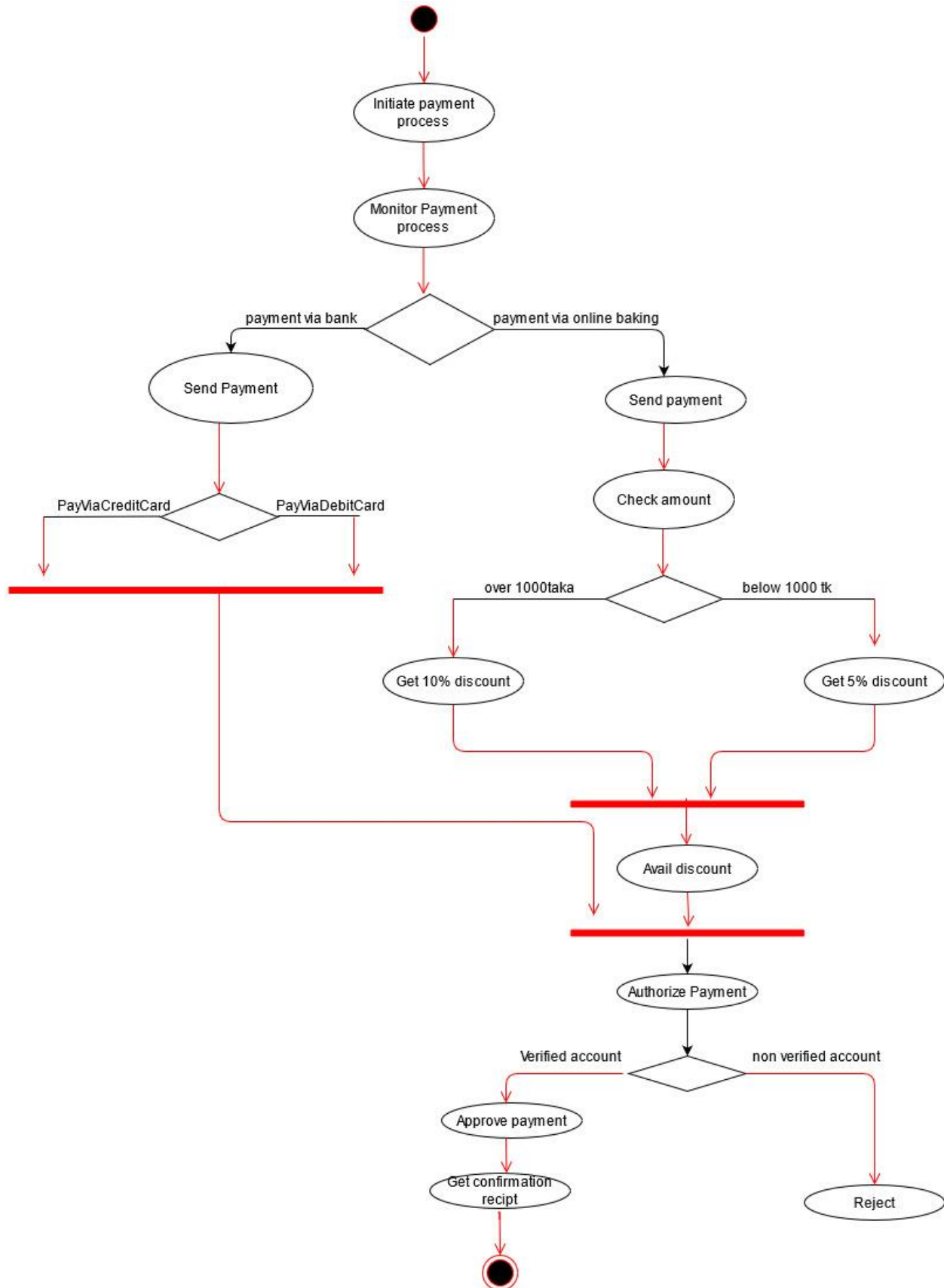
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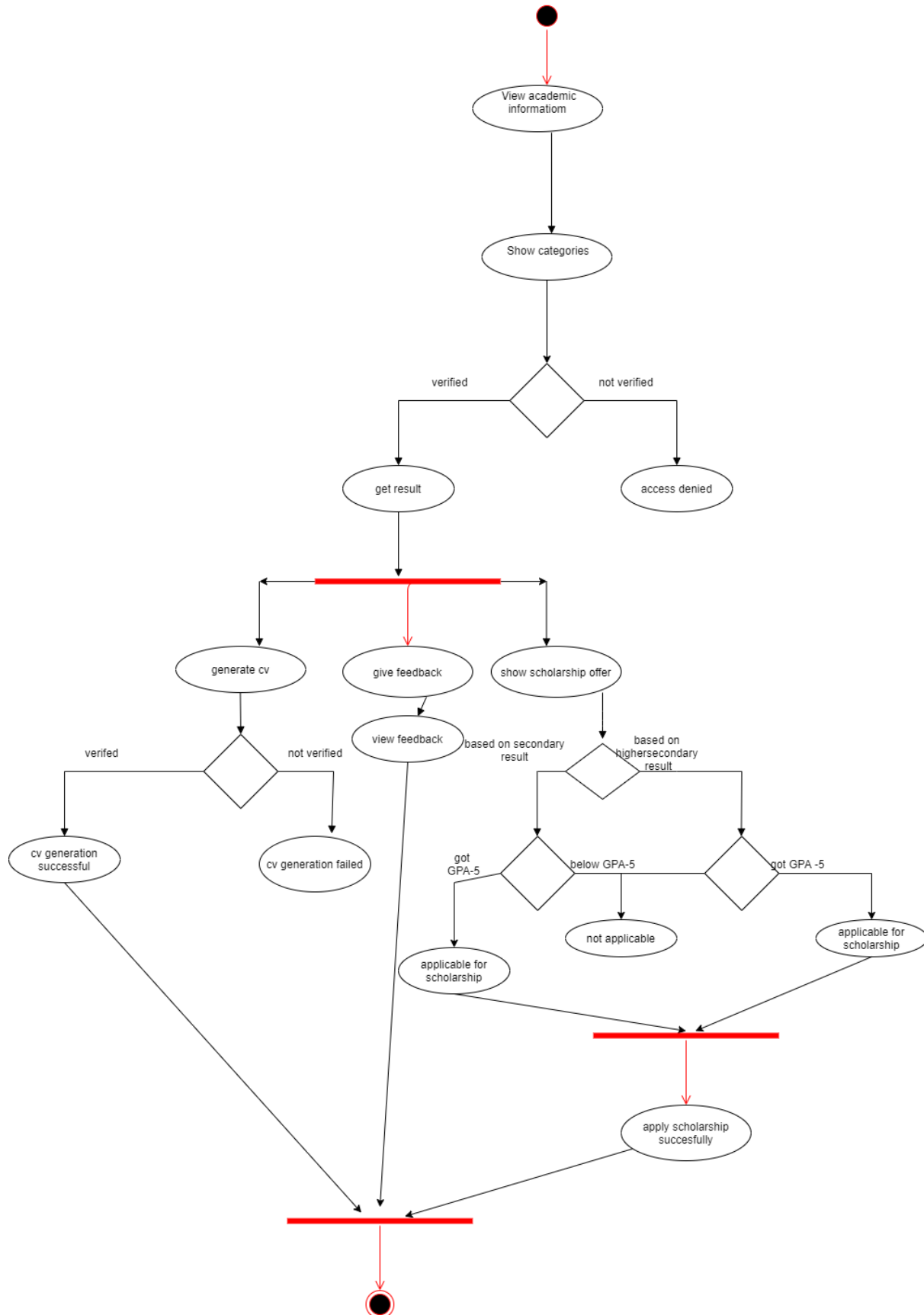
Activity Diagram



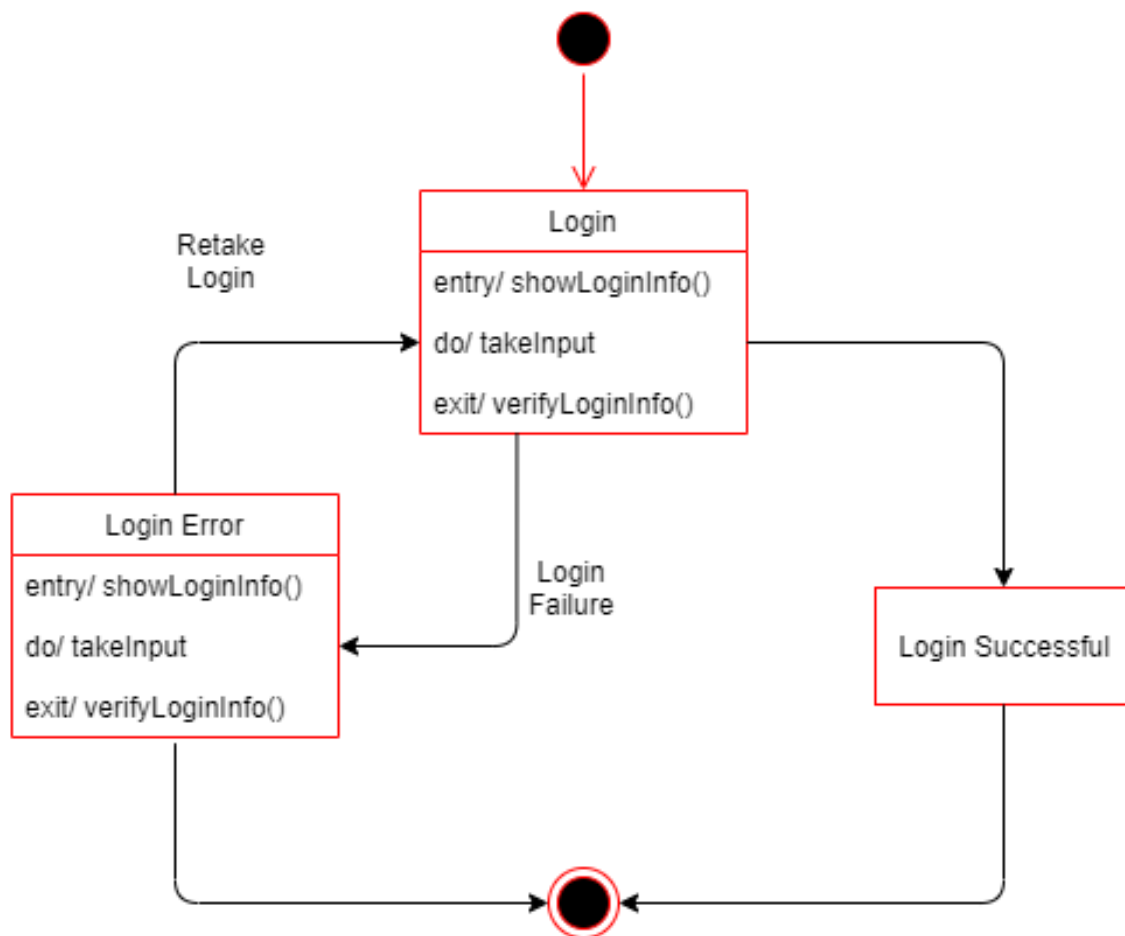
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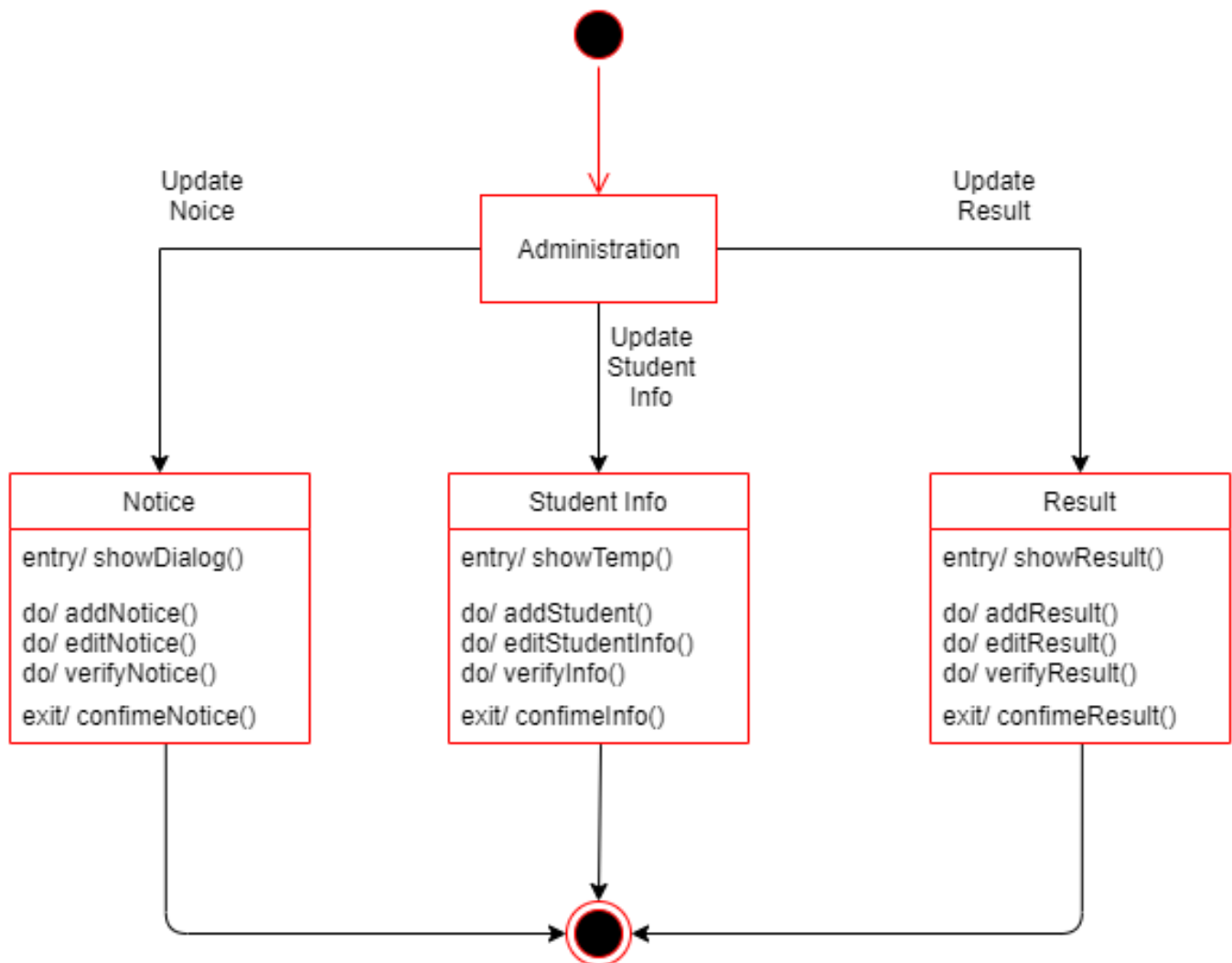


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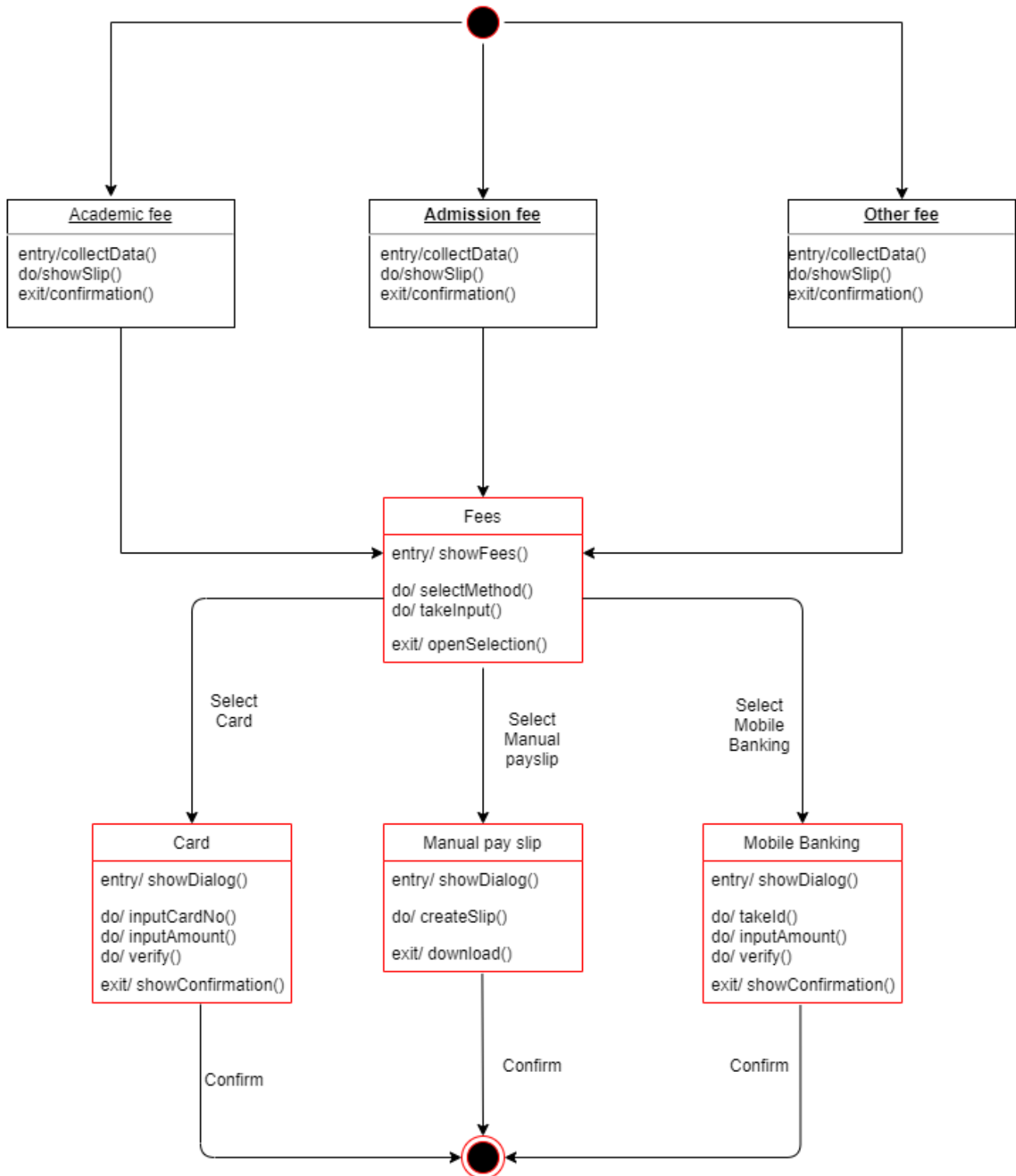


State Machine Diagram

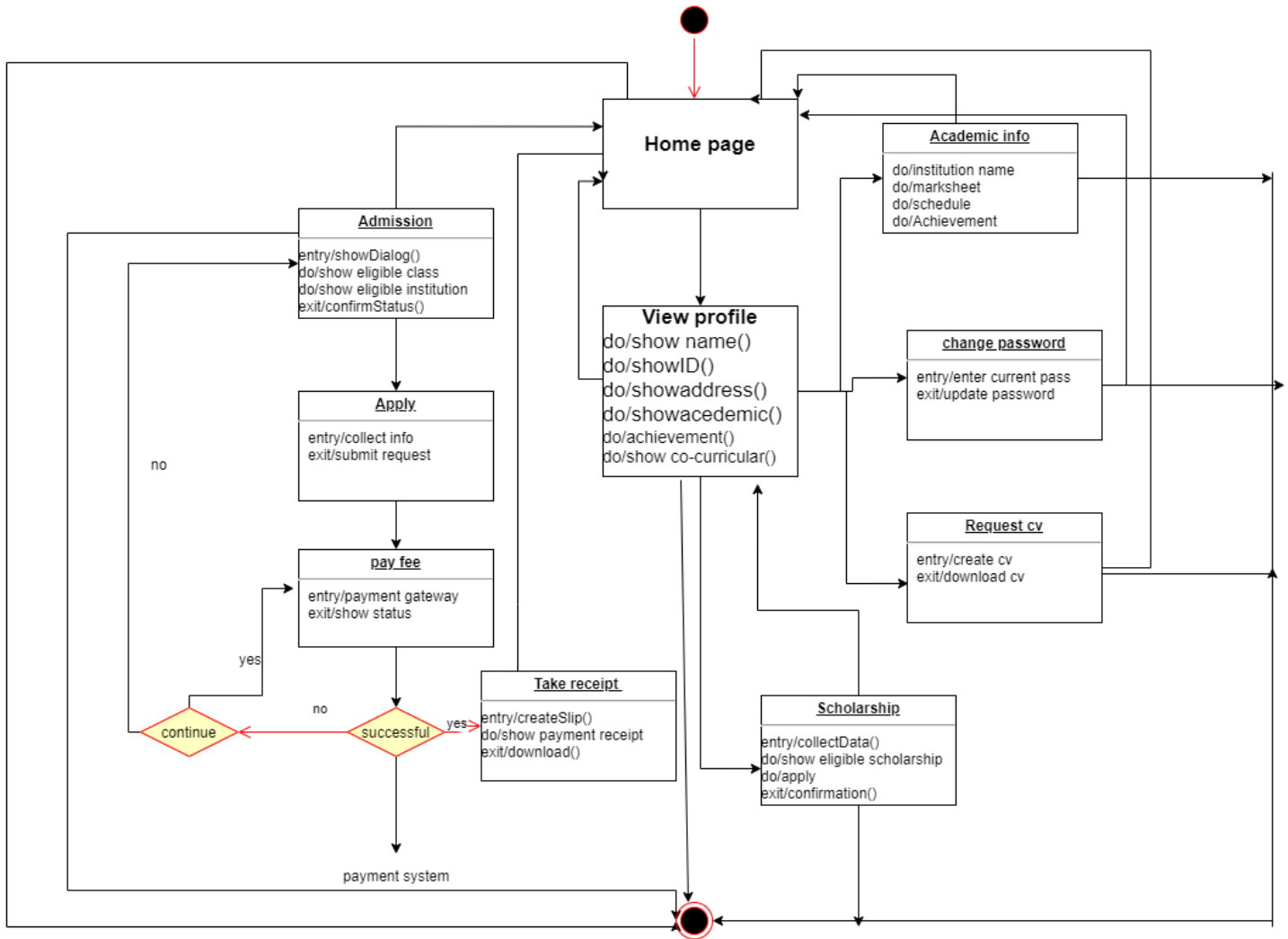




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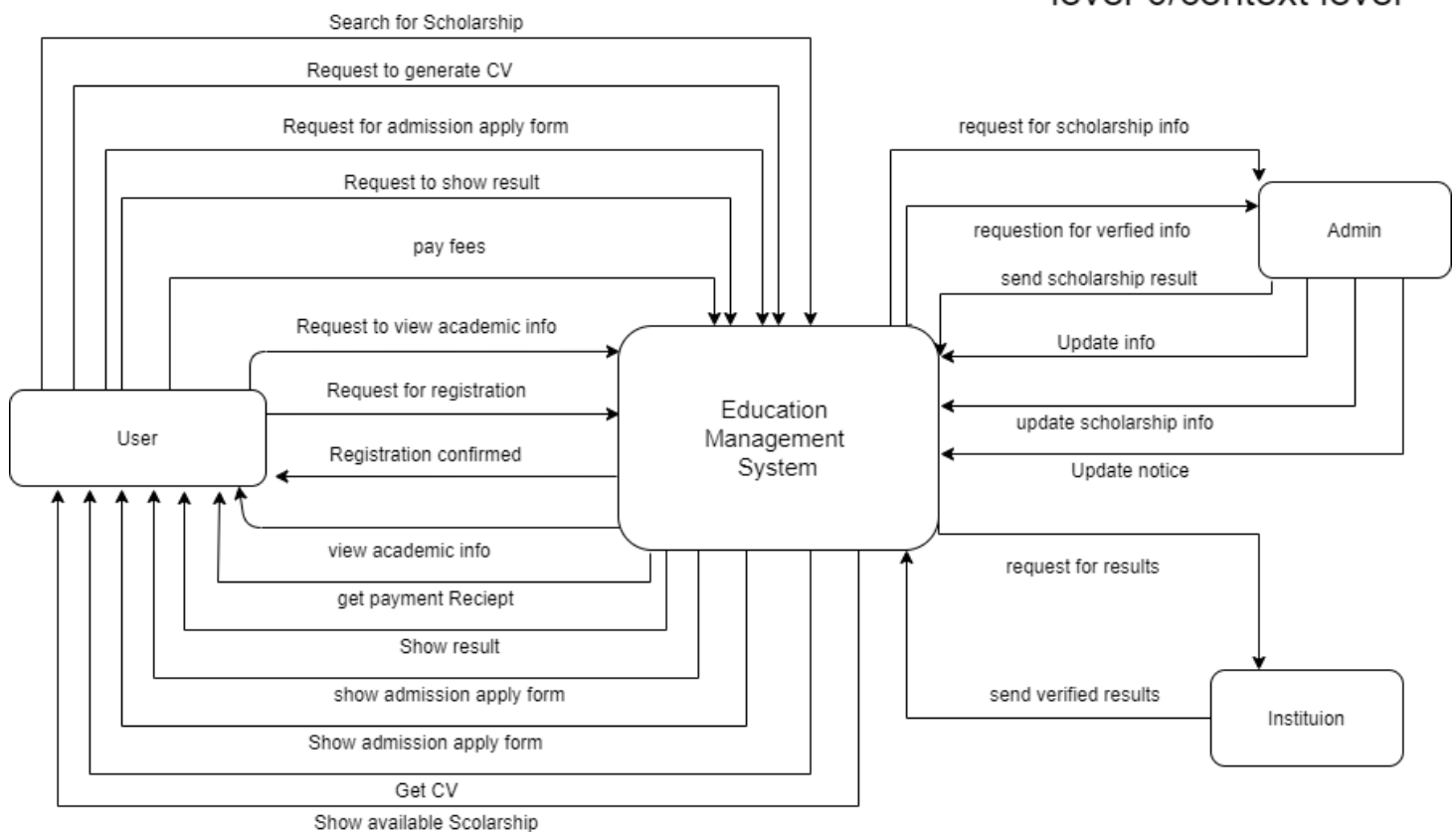
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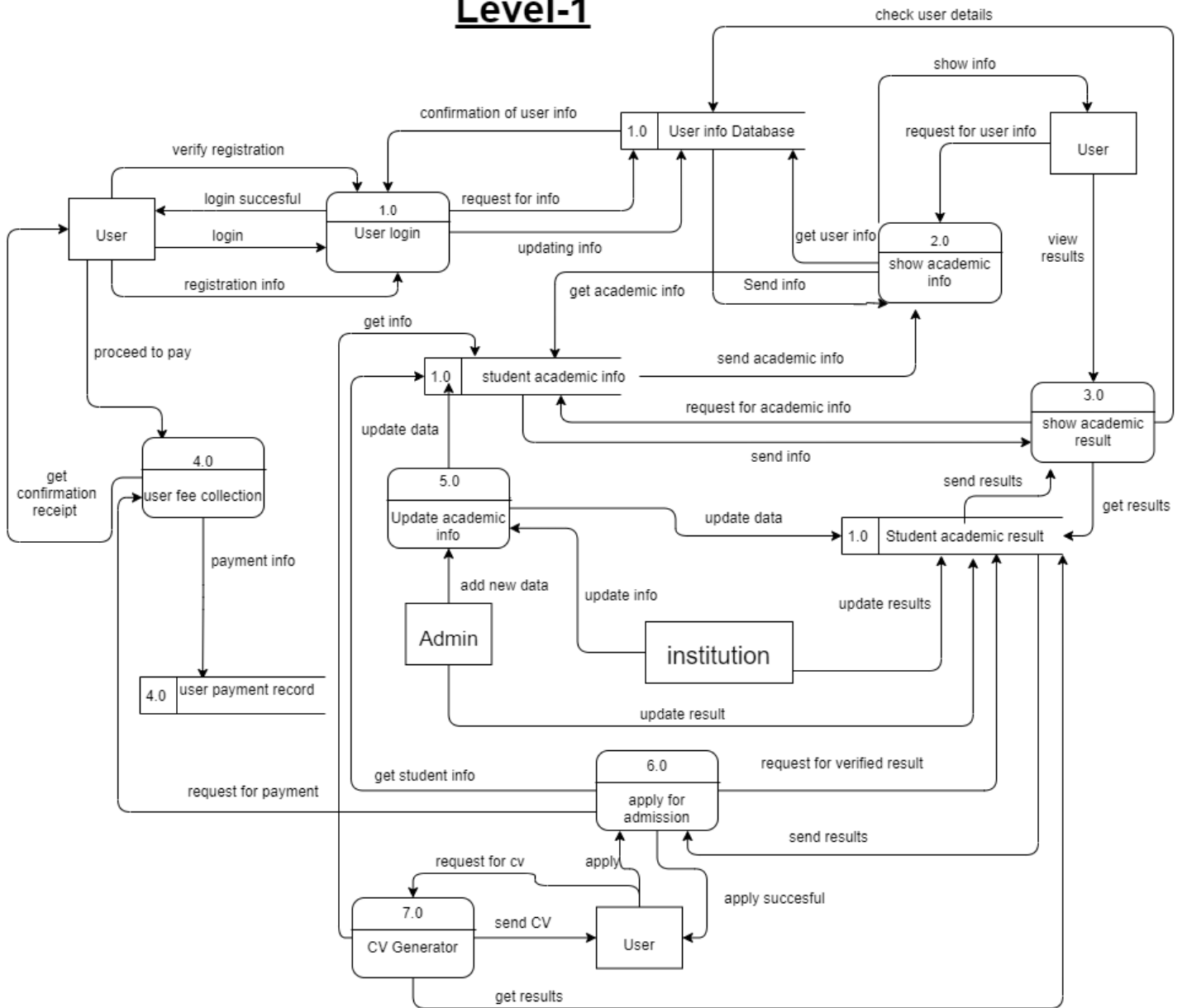
Dataflow Diagram

Education Management System

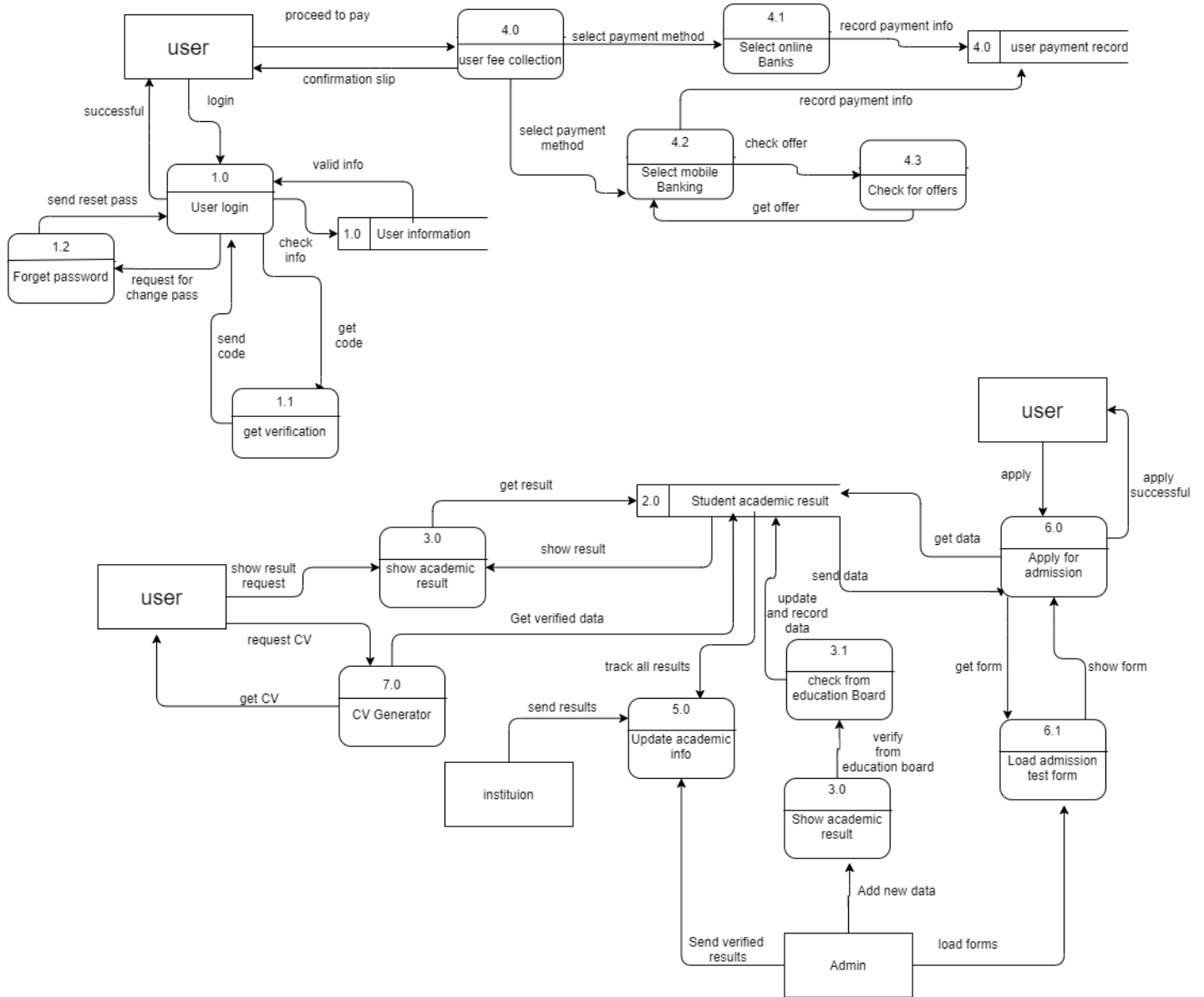
level-0/context level



Level-1



Level -2



Window Navigation

