SOFTWARE REQUIREMENT SPECIFICATION

For Project
DIU CLUB ORGANIZER (DIU C.O.)

Version: 2.0 (Approved)

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Revision History

Name	Date	Reason For Changes	Version

LIST OF FIGURES & TABLES

1.0. Introduction

1.1 Purpose

The main thinking of this system is bringing all the clubs of DIU in one platform. This system is for the DIU students and the university related people. Those who are in the first semester in university they will mostly be benefited by this system because they get confused about which of the club will be useful or important for them. Through this system, they can also complete the registration process. The records will be more structured and safer. The system will be also benefited for the initial club authority, they wouldn't need to go each of the Batch and wouldn't need to do the analog registration process.

1.2 Intended Audience and Reading Suggestions

The main reader of our documents is a user, developer, stakeholder, tester, project manager and the document writer also. The document is made with the purpose of understanding the system functionality with constrains or limitation. Our SRS describes the user's connection with the system, the flow of activity for a particular user. At first, the reader should read the project purpose and perspective, user functionality, characteristics, system limitation, constraints, and dependencies. In the second step reader will read the functional requirements, non-functional requirements, then they will read the SRS with their description and at last reader will read the user manuals, contact links, the appendix of this system.

1.3 Product Scope

Our system DIU C.O typically based on the purpose of removing the hustle of students during the time when they are confused about their interested clubs, club's registration and manage the different club activities at a time. The system DIU C.O represents a club's activities in front of the freshers or new members who are interested to join the club, manage all club's activities in one place and the user of this system can easily organize their work for a particular club. The benefits of this system are that the students don't need to communicate the club's authority to know about any kind of club's information and also need not to connected to know important club notice/news/posts. The students can get all of those facilities in using this system where club authority post their sharable information through the system and the system automatically send a notification mail to students and other users. By which student or other users easily manage and monitor the clubs.

1.4 Reference

1. Arman Ul Alam, Amena Akhter, Md. Mahmudul Hassan, Ibne Sayad, Md. Redwanul Haque, "Daffodil International University Club Organizer" Cyclic Software Ltd, Dhanmondi 32, Dhaka 1212, Bangladesh, Accessed Date: 30-03-201, Path: cylcsoftware.com/reference/diuco.

2.   Overall Description

2.1   Product Perspective

The system DIU C.O. is a new self-contained system. From the perspective of bringing all clubs activities/performance of Daffodil International University (DIU) in one platform rather than individually. Also, make sure that all activities of different clubs are done in an organized and systematic way. The main component that is, common users of 29 clubs of DIU anticipating with different designation will use this system for individual activities and can relate with a large system where the main requirement is to cluster all the activities for different users and we ensure it as our main functionally of our system.

2.2   Product Function
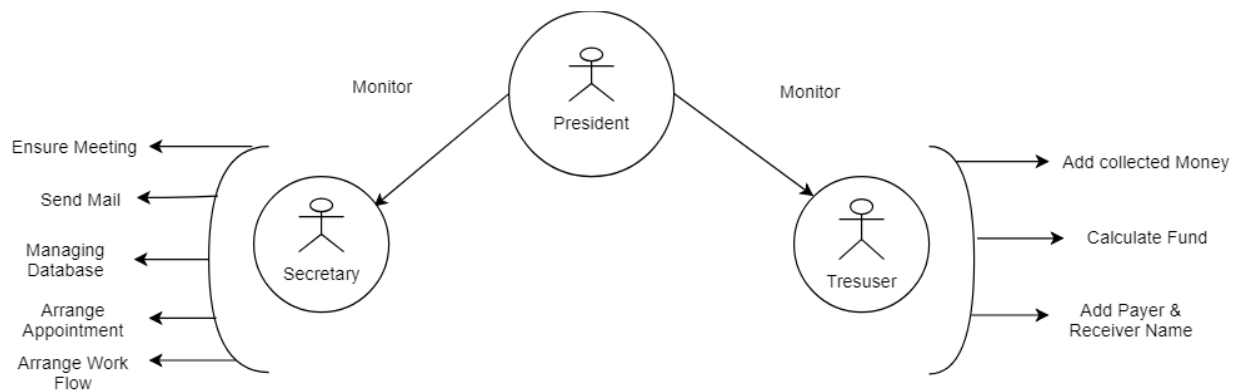
Fig1: Secretary & Treasurer Functionality
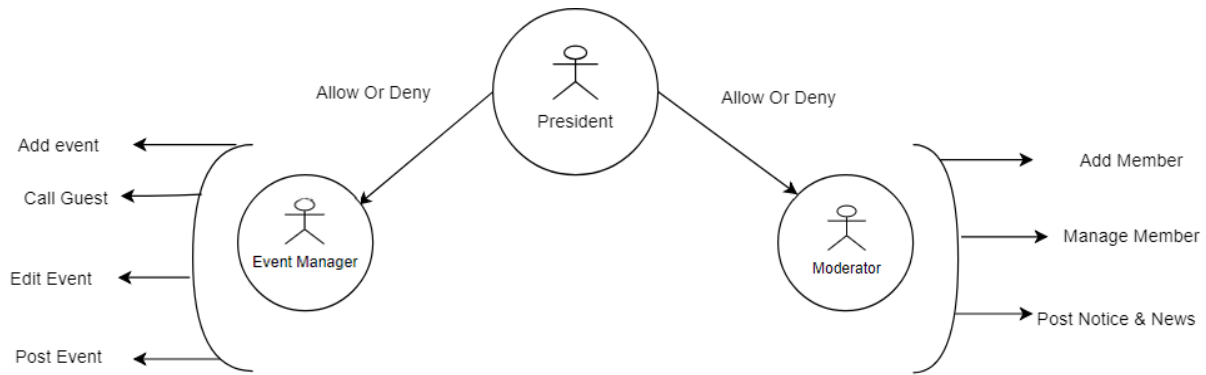
Fig2: Event Organizer & Moderator Functionality
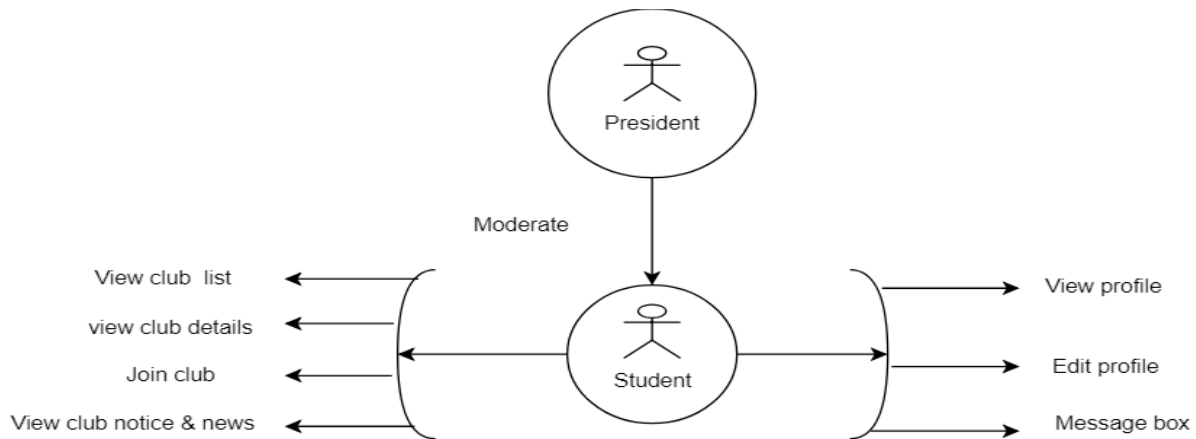
Fig1: Students Functionality

2.3   User Classes and Characteristics

Administrative	Executive	External
President	Event Organizer	Student
Secretary	Moderator	Teacher (optional)
---	Treasurer	---

Table1: User Class

Administrative

1. Overall responsibilities of a particular club.
2. Monitor Executive and External Members.
3. Give allowance for any club activities.

Executives

1. Execute club activities.
2. Manage important records.
3. Manage Databases.
4. Track the funds.

External

1. Get involved with club's activities
2. Gather Experiences.

2.4   Operating Environment

The environment needs for the system are Android operating system devices like mobile or tablets with version 5.0.2 and for Windows 10 required for computers. It also required 1GB internal memory and work extreme with high processor speed. And always get connected with internet.

2.5 Design and Implementation constraints

The main constraint is that are many users/members involved with a club with a different designation. But all of them we couldn't add in our system because for the extra functionality of these members, the system needs extra memory to terminate and will increase the system size which will work in high storage devices but not in low storage devices. Also working in time bounded scheduling, it is impossible right now to add all of them and their activities. In development, we need to more web server storage to manage more files and documents rather than using user device storage but we cannot use it right now for user's security.

2.6   User Documentation

Online Video Tutorial Link:

YouTube: www.youtube.com/daffodil/diuco

For further contact:

Phone   **:** +88 01777 xxx xxx

WhatsApp   **:** +88 01777 xxx xxx

Facebook   **:** www.facebook.com/diuco

2.7   Assumptions and Dependencies

The success of this system depends on

1. Internet Connection
2. Windows or Android operating system.
3. Gmail Account connected with the System.
4. Basic knowledge of computer.

In our system we used third-party social apps for sharing news/notice or messaging like Facebook, YouTube, LinkedIn, WhatsApp which may affect badly in our system functionality if they stop working or hacked or damaged.

3. Functional Requirements

3.1 Student

Prerequisite	(Student signed in) for some requirements below.

Requirement ID	R1.01.01
Title	Registration
Description	This action is done to create an account.

Requirement ID	R1.01.02
Title	Login
Description	This event is to log in the registered account.

Requirement ID	R1.01.03
Title	View Profile
Description	A registered student can view their own profile.

Requirement ID	R1.01.04
Title	View Club List
Description	Any student can view the list of clubs.

Requirement ID	R1.01.05
Title	View Details
Description	Any student can view the details about the initial clubs.

Requirement ID	R1.01.06
Title	View Details
Description	Any student can view.

Requirement ID	R1.01.07
Title	View "Why Clubs?"
Description	Any student can view why they should need to do those clubs.

Requirement ID	R1.01.08
Title	Edit Profile
Description	A registered student can able to edit their profile.

Requirement ID	R1.01.09
Title	Join Club
Description	Any student can able to send a request to join the initial clubs.

Requirement ID	R1.01.10
Title	Payment
Description	After fill-up, the form the registered student can give the payment through this functionality.

Requirement ID	R1.01.11
Title	View Notice
Description	A registered student can able to view the notice of the clubs.

Requirement ID	R1.01.12
Title	View News
Description	A registered student can able to view the news of the clubs.

Requirement ID	R1.01.13
Title	Massage box
Description	A registered student can able to view the mail through this functionality.

3.2 President

Requirement ID	R1.02.01
Title	Registration
Description	This action is done to create an account.

Requirement ID	R1.02.02
Title	Login
Description	This event is to log in the registered account.

Requirement ID	R1.02.03
Title	View Profile
Description	A president can view their own profile.

Requirement ID	R1.02.04
Title	View Club List
Description	President can also view the list of the clubs.

Requirement ID	R1.02.05
Title	Edit Profile
Description	A president can able to edit their profile.

Requirement ID	R1.02.06
Title	Add Member.
Description	The only president can able to add a new member.

Requirement ID	R1.02.07
Title	Check Fund.
Description	President can check the funds also.

Requirement ID	R1.02.08
Title	Allow/ Deny Approval
Description	Only a president can allow or deny the member request.

Requirement ID	R1.02.09
Title	Remove Member
Description	Only a president can able to remove a member from the clubs.

Requirement ID	R1.02.10
Title	View Member List
Description	President can view the member list of all the clubs.

3.3 Treasurer

Requirement ID	R1.03.01
Title	Registration
Description	This action is done to create an account.

Requirement ID	R1.03.02
Title	Login
Description	This event is to log in the registered account.

Requirement ID	R1.03.03
Title	Add Collected Money

Description   The only treasurer can able to add the collected money.

Requirement ID   R1.03.04
Title   Calculated Total Fund
Description   Only the treasurer can calculate the total fund.

Requirement ID   R1.03.05
Title   Add Payer Name & Purpose
Description   Only the treasurer can add the payer name and purpose.

3.4 Secretary

Requirement ID   R1.04.01
Title   Registration
Description   This action is done to create an account.

Requirement ID   R1.04.02
Title   Login
Description   This event is to log in the registered account.

Requirement ID   R1.04.03
Title   Call meeting
Description   Secretary can call a meeting through this functionality.

Requirement ID   R1.04.05
Title   Manage Records
Description   Secretary can manage all the records of the initial clubs.

Requirement ID   R1.04.06
Title   Send Mail
Description   Secretary can able to send mail to all.

Requirement ID   R1.04.07
Title   Arrange Work Flow
Description   Secretary can arrange the workflow.

Requirement ID   R1.04.08
Title   Manage DB
Description   Secretary can manage the database through this system.

4. Nonfunctional Requirements

4.1 Performance Requirements

Response time:

System's execution time is more efficient and it's running quickly within a second. It's response time is shorter. If more users request specific one function at a time, then it running without any interruption.

Throughput:

This system can execute multiple functions within a second. Multiple function's execution time is not creating conflict to any other.

4.2 Safety Requirements

The system is being protected from harm outcomes. This requirement refers to the control of the acceptable level of risk. It maintains installation safety because harmful software may be attack system installation time.

4.3 Security Requirements

When a user runs this system or can execute that time, he/she will give all information about him/her for this system security. The system must be check authentication when a user can access more function. It can do check all legal issue by itself and identify or detect virus or malware or cookie. It should not break by sudden attacks from an internal or external source.

4.4 Software Quality Attributes

4.4.1 Accessibility

Users can access this system offline and online both. But it's designed most preferable when user access this system online. It's strongly related to design which is creating accessible functionality for all user.

4.4.2 Flexibility

A different function can perform a machine. The system can easily adapt to market demands. Program flexibility to run this system automatically. Operation flexibility to produce this system in different ways. The system required some hardware limitation.

4.4.3 Portability

This system required windows and Android operating system. It can easily transfer all installed program to another computer of the same architecture.

4.4.4 Efficiency

The system can easily handle quality, user capability, response time and it should work efficiently. It performs the function without failure and interruption.

4.5 Operating Constraints

System constraints some operation like when a user wants to log in this system, it wants authentication key. And also, the user must be given a default browser for download any document. This system includes some software for protecting any virus and show all function's work.

5. System Diagram
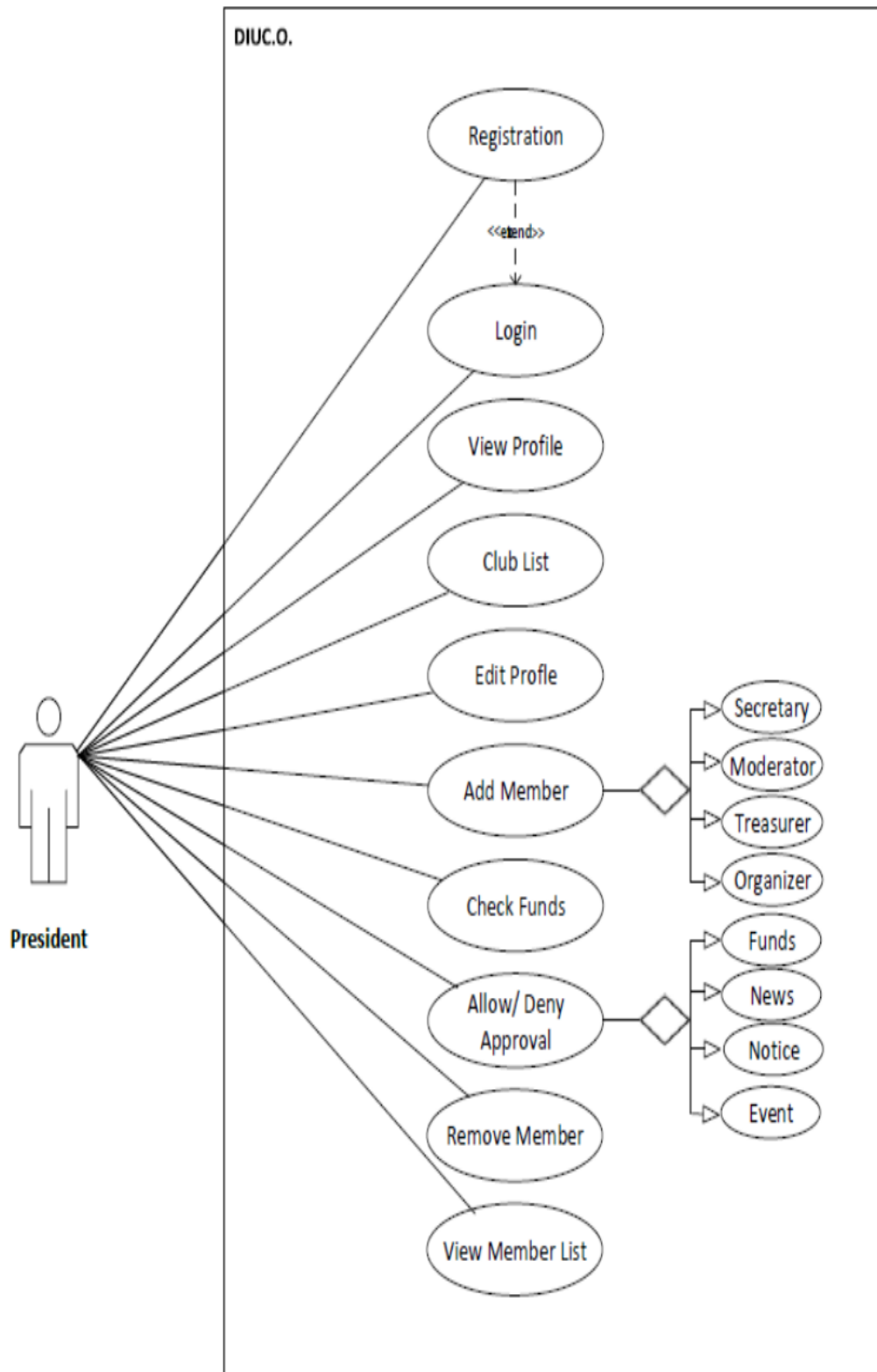
5.1 Use Case Diagram

Fig4: Use Case Diagram (Students)
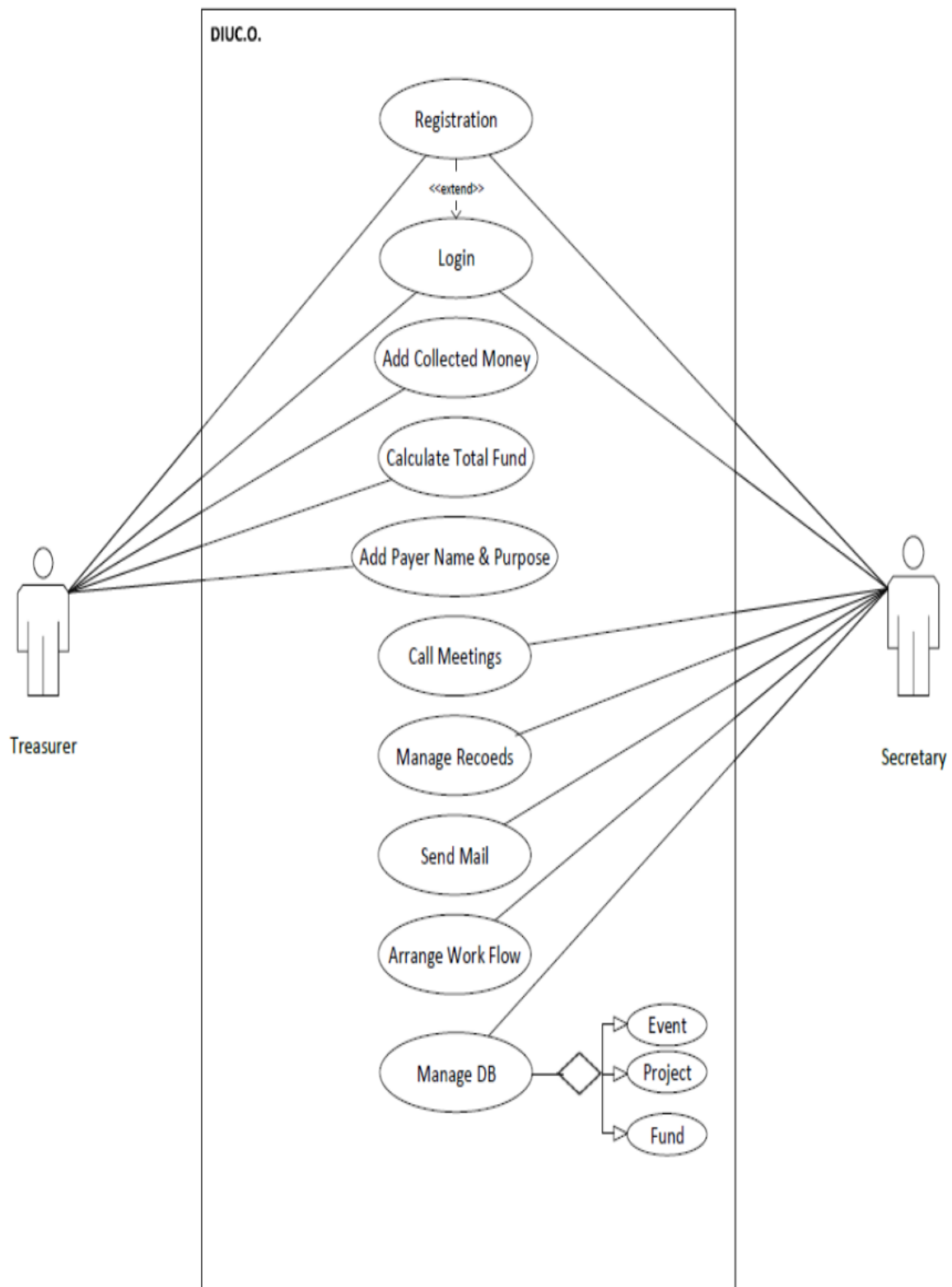
Fig5: use Case Diagram (President)

Fig6: Use Case Diagram (Treasurer & Secretary)

5.2 Use Case Description

Use case name	: Registration
Use case ID	: 01
Super Use case	: No super use case
Actors	: Treasurer , Secretory
Brief description	: They must have to registration, before login. For use this system
Precondition	: No pre condition
Post-condition	: them must have to login for use this system

Use case name	: Login
Use case ID	: 02
Super Use case	: No super use case
Actors	: Treasurer , Secretory
Brief description	: They must have to Login, after registration. For using this system
Precondition	: they must have to registration for use this system
Post-condition	: Add all collected money by using this system

Use case name	: Add Collected money
Use case ID	: 03
Super Use case	: No super use case
Actors	: Treasurer
Brief description	: Treasurer can add all collect money by using this system.
Precondition	: Treasurer must have to login and registration for use this system.
Post-condition	: Treasurer could calculate total fund by using this system.

Use case name	: Calculate total fund
Use case ID	: 04
Super Use case	: No super use case
Actors	: Treasurer
Brief description	: Treasurer can calculate total money by using this system.
Precondition	: Treasurer must have to login and registration for use this system
Post-condition	: Treasurer could add payer name & purpose

Use case name	: Add payer name & purpose
Use case ID	: 05
Super Use case	: No super use case
Actors	: Treasurer
Brief description	: Treasurer can add payer name & purpose by using this system.
Precondition	: Treasurer must have to login & must add collected money by using this system.
Post-condition	: Treasurer could add payer name & purpose by using this system

Use case name	: Call meetings
Use case ID	: 06
Super Use case	: No super use case
Actors	: Secretory
Brief description	: Secretory can call a meeting by using this system.
Precondition	: Secretory must have to login and registration for use this system
Post-condition	: Secretory could manage records by using this system

Use case name	: Manage records
Use case ID	: 07
Super Use case	: No super use case
Actors	: Secretory
Brief description	: Secretory can manage records by using this system.
Precondition	: Secretory must have to login and registration for use this system
Post-condition	: Secretory could send mail by using this system.

Use case name	: Send mail
Use case ID	: 08
Super Use case	: No super use case
Actors	: Secretory
Brief description	: Secretory can send mail by using this system.
Precondition this system	: Secretory must have to login, Registration & manage records for use
Post-condition	: Secretory could arrange work flow by using this system.

Use case name	: Arrange work flow
Use case ID	: 09
Super Use case	: No super use case
Actors	: Secretory
Brief description	: Secretory can arrange work flow by using this system.
Precondition system	: Secretory must have to login, registration & manage records for use this.
Post-condition	: Secretory could manage database by using this system.

Use case name	: manage database
Use case ID	: 10
Super Use case	:Event , project , Fund
Actors	: Secretory
Brief description	: Secretory can manage database by using this system.
Precondition system	: Secretory must have to login, Registration & manage records for use this
Post-condition	: Secretory could manage event, project, and fund by using this system.

Use case name	: Registration
Use case ID	: 11
Super Use case	: No super use case
Actors	: president
Brief description	: president must have to registration for use this system.
Precondition	: No pre condition for use this system.
Post-condition	: president could login for use this system.

Use case name	: Login
Use case ID	: 12
Super Use case	: No super use case
Actors	: president
Brief description	: president must have to login for use this system.
Precondition	: president must have to registration for use this system.
Post-condition	: president could view profile by using this system.

Use case name	: View profile
Use case ID	: 13
Super Use case	: No super use case
Actors	: president
Brief description	: president can view profile by using this system.
Precondition	: president must have to registration and login for use this system.
Post-condition	: president could edit profile by using this system.

Use case name	: Edit profile
Use case ID	: 14
Super Use case	: No super use case
Actors	: president
Brief description	: president can edit profile by using this system.
Precondition	: president must have to registration and login for use this system
Post-condition	: president could see club list by using this system.

Use case name	: add member
Use case ID	: 15
Super Use case	:Secretory , Moderator , Treasurer, organizer
Actors	: president
Brief description	: president can add member by using this system.
Precondition	: president must have to registration and login for use this system.
Post-condition	: president could check funds by using this system.

Use case name	: Check funds
Use case ID	: 16
Super Use case	: No super use case
Actors	: president
Brief description	: president can Check funds by using this system.
Precondition	: president must have to registration and login for use this system
Post-condition	: president could Allow/deny approval for membership in club by using it.

Use case name	: Allow or deny approval
Use case ID	: 16
Super Use case	:Funds , news, notice, event
Actors	: president
Brief description system.	: president can Allow or deny approval for membership by using this
Precondition	: president must have to registration and login for use this system.
Post-condition	: president could remove membership from any club by using this system.

Use case name	: Remove member
Use case ID	: 17
Super Use case	: No super use case
Actors	: president
Brief description	: president can remove membership by using this system.
Precondition	: president must have to registration and login for use this system.
Post-condition	: president could view member list from any club by using this system.

Use case name	: view member list
Use case ID	: 18
Super Use case	: No super use case
Actors	: president
Brief description	: president can view member list by using this system.
Precondition	: president must have to registration and login for use this system.
Post-condition	: No post condition.

Use case name	: Registration
Use case ID	: 19
Super Use case	: No super use case
Actors	: Student
Brief description	: Student must have to registration for use this system.
Precondition	: No pre condition
Post-condition	: Student could login for use this system .

Use case name	: Login
Use case ID	: 20
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can login for use this system.
Precondition	: Student must have to registration for use this system.
Post-condition	: Student could view profile by using this system.

Use case name	: View profile
Use case ID	: 21
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view profile by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could view club list by using this system.

Use case name	: View club list
Use case ID	: 22
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view club list by using this system.
Precondition	: Student must have to registration and login for use this system.
Post-condition	: Student could view club details by using this system.

Use case name	: View club details
Use case ID	: 23
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view club details by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could edit his /her profile by using this system.

Use case name	: Edit profile
Use case ID	: 24
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can edit his / her profile by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could join club by using this system.

Use case name	: join club
Use case ID	: 25
Super Use case	:payment
Actors	: Student
Brief description	: Student can join in any club by using this system.
Precondition	: Student must have to registration and login for use this system.
Post-condition	: Student could pay his or her payment by using this system.

Use case name	: payment
Use case ID	: 26
Super Use case	:Bkash , DBBL
Actors	: Student
Brief description	: Student can pay his or her payment by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could view club notice by using this system.

Use case name	:View club notice
Use case ID	: 27
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view club notice by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could view club news by using this system.

Use case name	:View club news
Use case ID	: 28
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view club news by using this system.
Precondition	: Student must have to registration and login for use this system
Post-condition	: Student could view club mail by using this system.

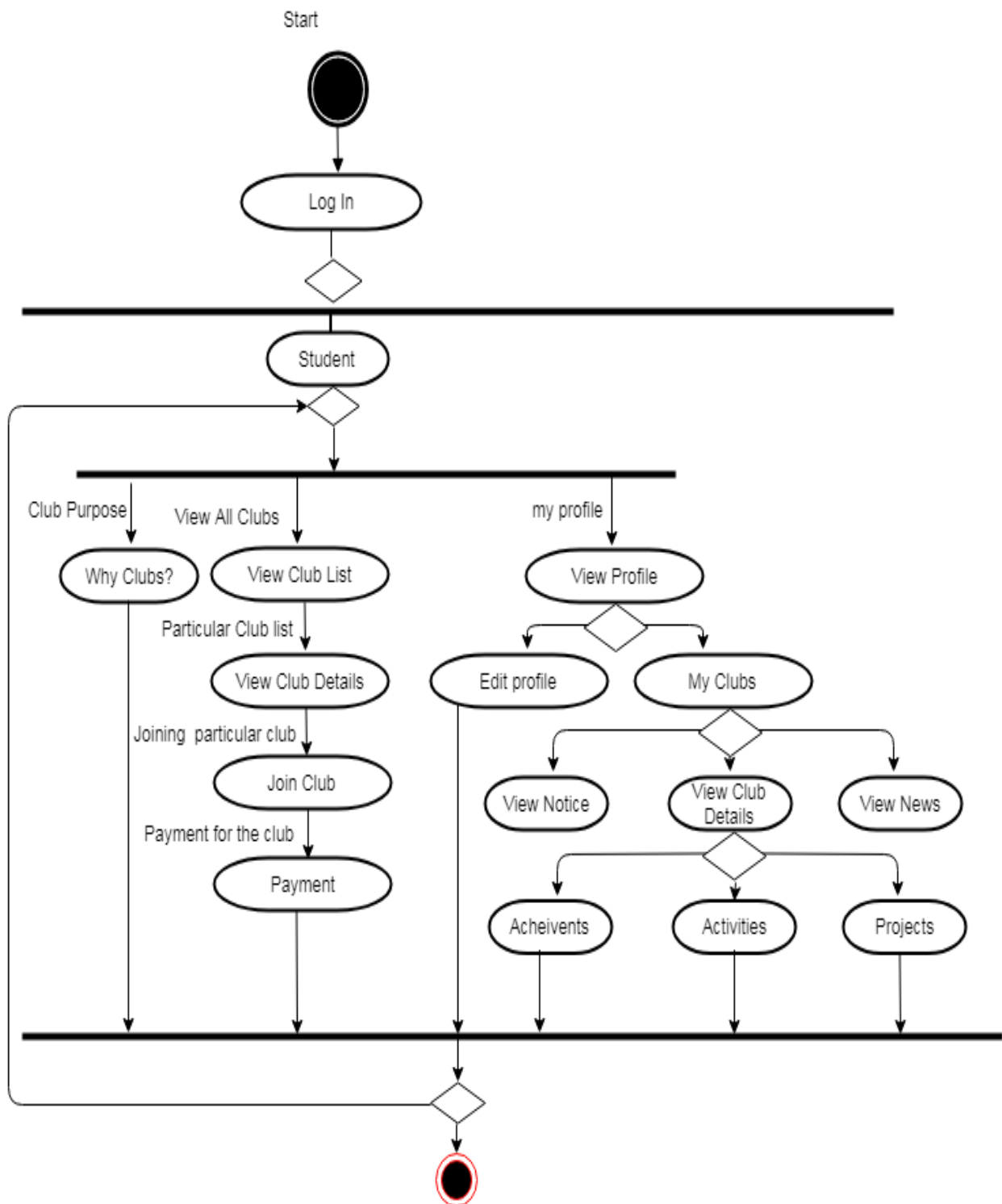|	
Use case name	:View club mail
Use case ID	: 29
Super Use case	: No super use case
Actors	: Student
Brief description	: Student can view club mail by using this system.
Precondition	: Student must have to registration and login for use this system.
Post-condition	: No post condition

5.3 Activity Diagram

5.3.1 Students

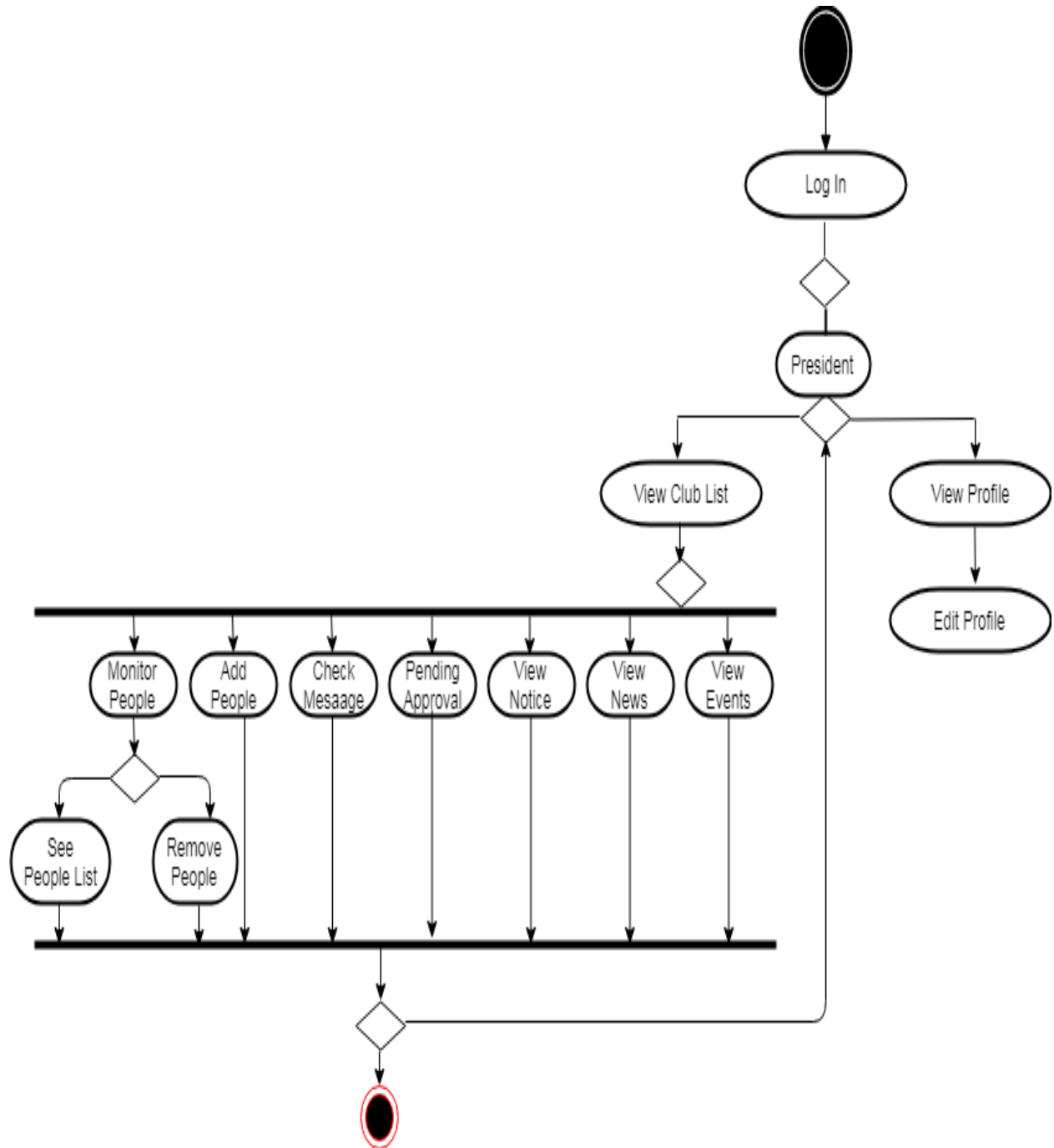**Fig7: Activity Diagram (Students)**

5.3.2 President

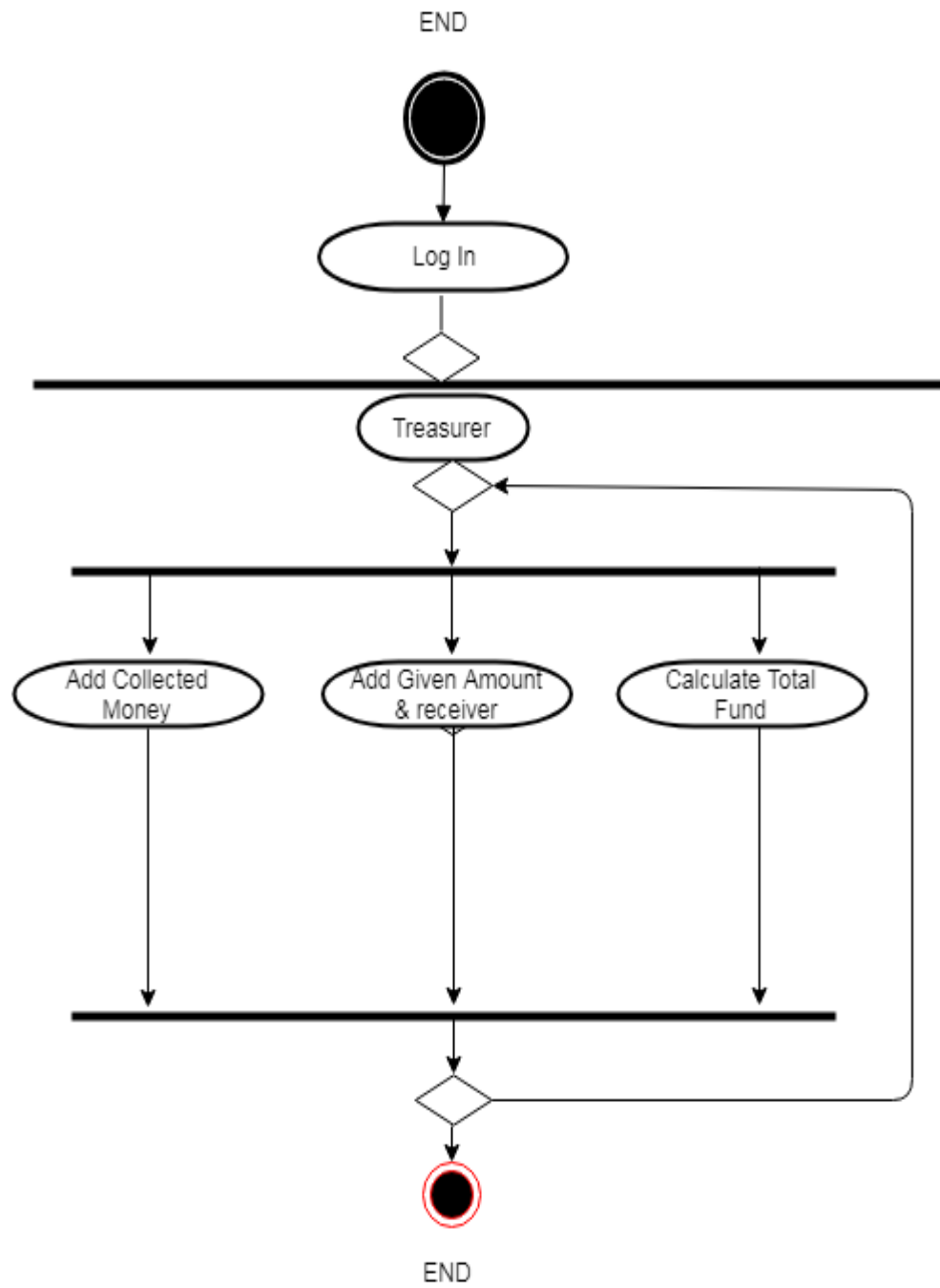**Fig8: Activity Diagram (President)**

5.3.3 Treasurer

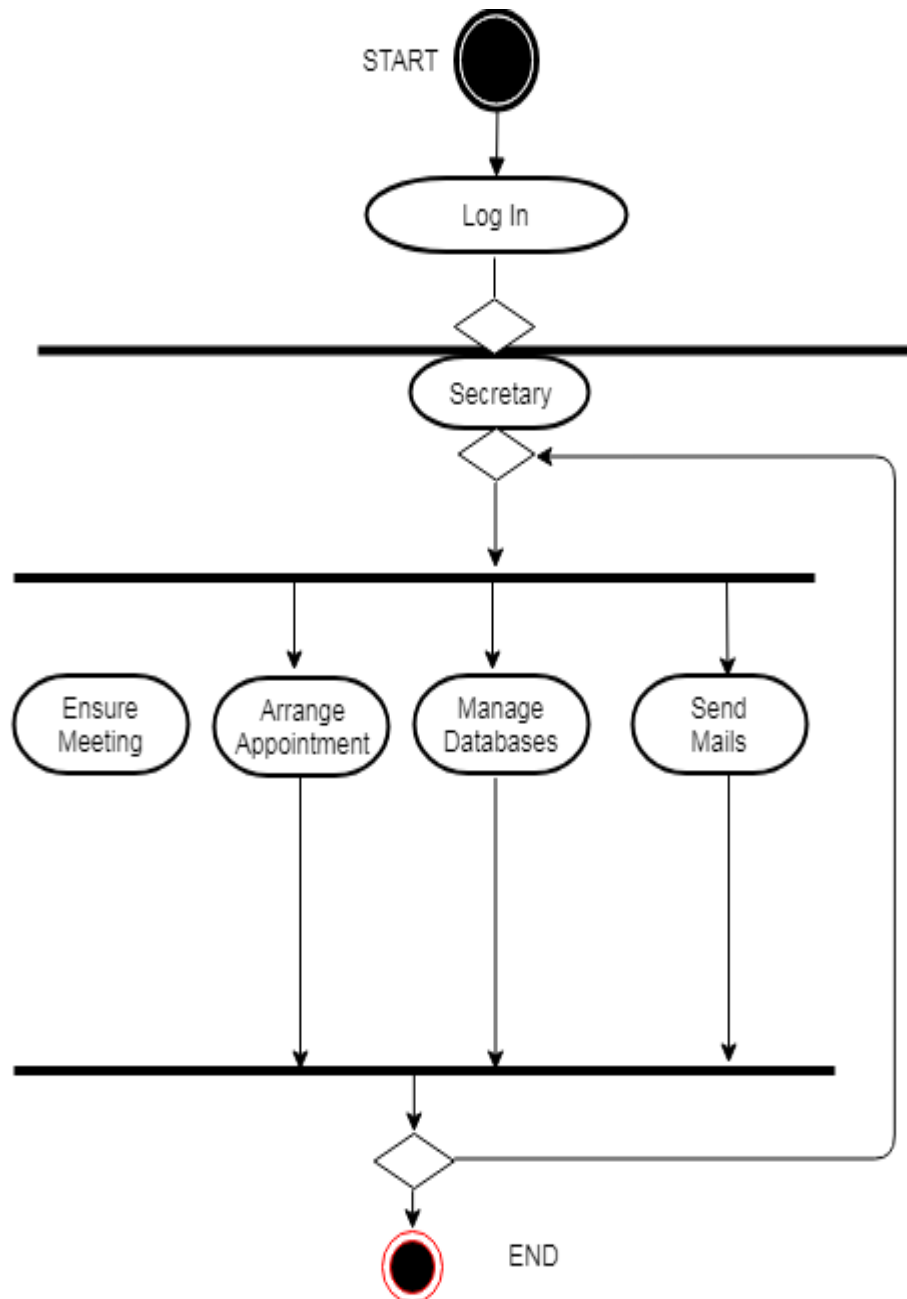

Fig9: Activity Diagram (Treasurer)

5.4.4 Secretary

Fig10 : Activity Diagram (Secretary)

THANK YOU