



**REPUBLIC OF ALBANIA**

**EPOKA UNIVERSITY**

**FACULTY OF ARCHITECTURE AND ENGINEERING**

**COMPUTER ENGINEERING DEPARTMENT**

**CEN 302 - SOFTWARE ENGINEERING**

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# EPOKA DORMITORY MANAGEMENT SYSTEM

## DOCUMENTATION

### **PREPARED BY:**

ALDO LISI  
KLEVIS XHYRA  
KRISTJAN PASHOLLARI  
NAIL SPAHIJA  
SEMIH ZENGINDEMIR

### **RECEIVED BY:** Msc. Igli Hakrama

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DELIVER AN EXPERIENCE*

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# 1. Executive Summary

## 1.1 Project Overview

Nowadays, technology has advanced and most of the system are controlled on real time. The main purpose of this technology is to make the life of the people easier, by giving the people more time to deal with other things rather than being stuck with one problem. As always everywhere are problems related with the management stuff.

In our circumstances, we have a lot of problems related to real time management system in our dormitory. Analyzing this case we decided to deal with the dormitory management system. A web application software used to manage and make the dormitory management system more reliable and the best way to manage and inform everyone in real-time. Also the primary aim is to make the management of the dorm easier for every end user.

**Application, admission, and registration** process is taking a lot of time to be accomplished, so we planned to include also them in our system too. Every problem, technical or disciplinal is going to be managed and on real time, and student, staff, technical staff has right to check and control them respectively, according to their rights.

The dormitory, does not permit the entrance of the students which are not part of it, except for the ones which have a permission. For that problem, our project manages it by using a face recognition at dorm entrance which is going to detect the users which are not part of the dormitory. The system will just recognizes faces and reports to the web server if the person does not belong to the dormitory registered members. The person may enter in dormitory but the system can catches their faces and reports to the Director and Assistants.

## **1.2 Purpose and Scope of this Specification**

The purpose of our project is to support the dormitory with the software which is going to make the life of the students and the staff easier. Everyone will be informed on real time, and for every problem they are going to learn in the fastest way. Our software is going to manage every structure who has some rights on the dorm. Taking permission, in order to stay on the dormitory, the permission are going to be checked by three administrative staff: assistants, dormitory director. Our project idea is to make a system which is going to be user friendly, reliable, modular: since it can be used for furthermore usages.

## **2. Product/Service Description**

EDMS is a web application which is aimed to improve the performance and to facilitate the life of students in Epoka Dormitory. As we as residents have seen many minor problems and latencies of some processes the application will be valuable for all the staff and students.

The platform will be used by Epoka Dormitory and it aims to facilitate the services offered by dormitory in the future. The application will address some of the most emerging problems of the building or said differently it will improve the facilities the services offered by the dormitory as listed below:

- Student applications (as a resident or as a visitor)
- Food menu-s and attendees in the weekends
- Technical problems
- Dormitory services evaluations by students
- Events happening and a short info about dormitory
- Entrance security (not to let non-residents to enter inside)

Our software's concept is a web application based on object oriented PHP and later it can easily be implemented in an application running in any mobile Android or iPhone.

## ***2.1 Product Context***

Our software is directly related to the Epoka Dormitory. The software is designed to be an independent system and later it may be included in the personal EIS profile of each student registered in the dormitory. The system will be available to three main genres divided in four categories: staff, students and admin.

## ***2.2 User Characteristics***

Our software will have different roles of using it and the roles are assigned to 6 categories of users that are listed as below:

- GUEST
- STUDENT
- ASSISTANT
- DIRECTOR
- TECHNICAL STAFF
- FINANCE

Also the competences for each role are determined according to the users.

### **→ Guest**

The guest role is given to every male student who studies at Epoka University. The interface and the capabilities of a guest will be simple and pretty straight forward. Using his Epoka mail he may apply to the appropriate section to stay at dormitory for a specified time.

→ **Student**

As this platform is mainly built for facilitating the everyday activities for a student this role will have a lot of options and sections. All student which are part for the dormitory will be able to report a problem and this problem will be addressed to resident assistants and director. According to the report the problem is addressed to technical staff where they take their responsibility to fix the broken thing or it may be a problem that can be fixed by the resident assistants. Also the student will be able to request for any other necessary thing that can be offered by the dormitory like blankets etc. He can also view payments that he did and has to do and also a history of all of them.

→ **Director**

Director will be as a second admin for the platform. The Director capabilities are as following:

- Assign assistants to students
- Give permissions to guests (Add/Remove guests)
- Add/Remove Students
- Check discipline and give punishment
- Review technical problems
- Give permissions to students
- Approve events created by assistants

Also the director will have the ability to announce meetings or inform students for different events happening around the ambient.

→ **Technical Staff**

Technical will receive a list of issues at the beginning of the day or depending on the reports. There will be a simple page where the list can be exported in WORD/EXCEL/PDF. Then after an issue is solved there will be some checkboxes that will inform Students and other personnel for the fix.

**→ Resident Assistant**

The assistants will be determined by the Director of Dormitory. Assistants will have capabilities as following:

- Report an assistant/student to directory for discipline issues
- Report technical issues
- Evaluate the dorm services
- Create an event
- See the current list of students
- Confirm request from students regarding his responsibilities

**→ Finance**

The finance personnel that will be connected to the platform will have control about the payments of the dormitory. During the approval of the payment the director will be notified in real time. There will be a dashboard where they can see the status of all of the students showing all of their recent and history payments.

**2.3 Assumptions**

It is assumed that some actions performed behind the scenes are performed regularly according to the university and dormitory regulation and will be listed below.

Therefore the Director according to “Vendimit te Keshillit të Ministrave Nr.281 date 12.03.2008” they have to check a list of documents which include id card, 4-photos , certificate from university, payment receipt and the application form. After reviewing these documents provided they decide and consider for the applicant eligible for staying in dormitory or not.

Also it is assumed that according to the Law nr.7850, date 29.07.1994 “Kodi Civil i Republikës se Shqiperise” ndryshuar me ligjin nr.8536 date 18.10.1999 - for the legislation in the field of higher education both University and student have agreed the conditions predefined

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by the university and dormitory regulation stating that the university offers quality conditions for accommodating the students for what they pay stated in the 3rd section of the contract.

For security issues, it is taken for granted that after director assigns the student to the dormitory, he send confidentially by mail the random generated password. This procedure is performed by school organs who provide the email addresses to students attending the first year. It is assumed that all the students have and personal school email address.

It is also assumed that the user responsible for accepting students that in this case is Director confirms the contract after notifying both sides respectively.

It is also assumed that the payments are firstly confirmed to the finance office and until the time the students hasn't paid the fee he isn't allowed to enter the system and after one week he can't also enter the dormitory.

It is also assumed that for confirming the attendance the system will communicate with the security part of the project and will automatically confirm the attendance when needed.

It is assumed that the students are registered in school.

It is assumed that all the data for the students is correct.

It is assumed that the students have their faces scanned when they apply to stay in dormitory which will be used by the entrance system.

It is assumed that all the students will have a device connected with internet.

It is assumed that every event happening in the dormitory is logged into the system.

#### **2.4 Constraints**

The project is constrained by the Internet connection. Having a stable Internet connection is crucial for the system to work since the application fetches data from the database over the Internet. It is also crucial to have a device where the system will run and process the solutions of the problems. Also for the entrance system the system is constrained by the cameras that will be used for the security. The cameras need to be connected to the internet also and be always turned on.

## ***2.5 Dependencies***

List dependencies that affect the requirements are as following:

- Normally everyone can view the introduction to Dormitory and can apply as a visitor without providing any information because all of them will be automatically taken by Epoka University only from his email. A guest can apply also for registration in Dormitory as a student. Both applications are reviewed by Director. For a simple visitor Director can approve or not his accommodation and besides that he will assign the room he will stay and the assistant who will look after him. If the guest is applying for registration in dormitory Director reviews the application form and then requests an approval from Finance (about the payment) and the Director. If the guest is approved to be a resident in Dormitory automatically director has the right to print the contract and both of them can sign. Of course from the system Director can assign his assistant and his room.
- A new facility called entrance security will be added for a better security to dormitory students. With face recognition (face ID) the system will identify all students and open the door to them. If a new visitor comes the system sends a notification to all assistants and Director. If one of them knows him and if the visitor have permission to enter the Dorm the door will be opened. Otherwise his photo will be saved in the Database
- The entrance system code has to be done before we start the developing of the site.
- Every assistant have the opportunity to report any technical issue in the dormitory and once a week these issues are sent as a .doc or .xlsx file to the head of technical staff. After these problems are fixed any of assistant may check as repaired all fixed problems.
- Same as EISAPP system that is used for the school we thought that would be helpful a service evaluation as it gives a huge help to improvement of all facilities. All services will be graded from students and then those information will anonymously be sent to Director.

As it can be seen from the explanation given above there is a dependency between the level of users that in same time represent different positions in school and dormitory.

### 3. Requirements

#### 3.1 Functional Requirements

No.	Requirement	Comments	Priority	Date
BR_01	System should offer different interface and functionality to different kind of users	Each user type (Role) must enter into his/her own page which will be different from another type of user	1	30/03/2018
BR_02	The system is going to accept only the students which have an account in the “EIS” of the ‘Epoka University’ system.	The access is restricted for every user which is not part of the Epoka University.	1	30/03/2018
BR_03	System should deliver emails to all residents about every kind of event that will be held in dormitory	For example: it will send an email to all residents that in 2 days there is a cocktail for everyone in the main hall	3	30/03/2018
BR_04	System should be able to retrieve every information of students living in dormitory	Personal information written in the contract in the beginning	1	30/03/2018
BR_05	All logs of students who have been in dormitory must be saved in the DB.	If whenever something happens or something is required from the last years, system must be able to show who was in the dormitory and in what period of time	2	30/03/2018

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BR_06	All users (residents) must have a unique ID	ID will be provided from University-s DB. It will be taken (queried) from the users Epoka University email	1	30/03/2018
BR_07	All users must have their own interface (page)	According to the users credentials, the application will direct them to their own interface (according to position)	1	31/03/2018
BR_08	All personal pages (interfaces) must be restricted with a password	Every user must enter his/her credentials and the password	1	31/03/2018
BR_09	System must have 5 type of users	Student, assistant, director, technician, finance	1	31/03/2018
BR_10	System should be able to give access to specific persons to enter the dormitory (security camera)	Give access to new students or visitors and remove access manually or automatically to the persons who have finished their time in dormitory	2	31/03/2018
BR_11	System should deliver emails to assistants and students when an unknown face has been caught.	When a new person comes to Dorm system must send an email to prove if he has permission or not	2	14/01/2018
BR_12	System should handle technical reports	System should give permission to report technical issues and assistants or masters can see the issues has been fixed or not.	1	31/03/2018
BR_13	System should handle discipline reports.	system should give permission to report discipline to only some users	1	31/03/2018

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BR_14	System should give ability to technical staff and assistants to approve all fixed technical problems	When a problem is fixed, tech staff or assistants may tick it as done	1	14/04/2018
BR_15	System should produce contracts for all approved long term applications.	If a student is approved as a resident system should print his contract with all needed data-s	2	31/03/2018
BR_16	System should support at least twice a year a ranking form delivered to all students	twice a year students are required to rank all facilities provided to them	3	31/03/2018
BR_17	System should deliver emails to assistants when students report about their problems.	If any student has any problem, he can report about it.	1	15/04/2018
BR_18	System create account automatically when student is being accepted.	When the director accept student's application, system creates account with random password and send this password to the student.	1	15/04/2018
BR_19	The Director can add and remove the assistants.	The director will see a list with all the assistants in the dormitory.	2	15/04/2018
BR_20	The students are going to be provided with the necessary information regarding the payments.	The Director is going to inform the student for the payments periods, automatically by using mail server. Then students have the right to check about the payments on our system.	1	15/04/2018

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BR_21	Students has the right to view information about their respective assistant	Every student has a respective assistant, and they are going to see necessary information about them.	3	15/04/2018
BR_22	The system will be opened only for a specific period of time.	There can be different application forms. There is an application for the long term students and short term permissions for the dorm application.	2	15/04/2018
BR_23	The director has the right of making a decision regarding the payment acceptance period.	The director decides at which period the students can apply for the system.	1	15/04/2018
BR_24	Assistants have the right to write student performances	Every student will be shown with a respective performance	3	15/04/2018
BR_25	Students have the right to request features which the system supports them.	The dormitory support the students with some features, like blankets etc..	3	15/04/2018

## **3.2 Non-Functional Requirements**

### **3.2 .1 Product Requirements**

#### **3.2.1.1 User Interface Requirements**

The user interface is compatible with any device. It supports Chrome, Mozilla, Safari IOS and Android. It is also very simple, user such as Guests will only be able to see the main screen and they will be able to make requests only by using their email.

Other users at first will face the login page, after entering the credentials and the login is successful, they can proceed to their own interface. Students can make requests and can see their payments. The director will have more access on the page, his main duties will be editing students and guests.

The technical staff will have a much simpler page, they can see the reports exported in a pdf/word/excel file. For finance's users the page is also simple, they will be able to control payments. The user with full control is Director whose interface includes all of the above access and additional competences.

#### **3.2.1.2 Learnability**

The application has a user friendly interface so anybody without much computer skills can use it. It is very straight forward, the users simply login by using their emails from Epoka University and can view everything they have access in. Our system is going to be closer to the real world management of the dormitory.

#### **3.2.1.3 Accessibility**

Since the interface is user friendly everything it is easy to be accessed by different users. Each group has its own page with different panels. Each of the actions will be placed in visible places so they can be accessed easily.

#### **3.2.1.1.4 Performance**

The performance of the application will depend mostly on the servers. Also its users should have performance internet in order to prevent any late response. Device users will not have any performance lag as the application is compatible with their browsers, but on other users the performance will also depend on their hardware. Also the application will not require more than 20 percent of the processor capacity.

#### **3.2.1.1.5 Capacity**

The website volume will not be high enough to buy external equipment as the traffic will be low most of the time. During the daylight time there may be higher usage than night time but the website will be able to handle it without using other equipment. The higher volume will be during the registration period. There will be students who will apply for accommodation and the director who will be checking their application. That will be the only part when the traffic will be at its highest point. On other normal days the website will not exceed a few visits.

### **3.2.2 Organizational Requirements**

#### **3.2.2.1 Availability**

The website will be online all the time, even during the night and weekends which will mostly not be used very frequently. During the days that the system will be very reliable, while during the time when the system volume is lower the reliability is not needed so it can be reduced in order to save some costs.

#### **3.2.2.2 Latency**

Acceptance script during the time that the website will not be loaded will be completed within less 3.21 seconds and less than 4 seconds when the website is loaded.

#### **3.2.2.3 Monitoring**

Even though the system will use a secure connection with the server ([https](https://)) , there can be cases that the system will be down or it can be attacked by malicious users to steal data. Everything will be kept in a log file which can be accessed by the team and check what caused the system for an unexpected shut down or malicious entry.

#### **3.2.2.4 Maintenance**

Our team will be able to maintain the application and update it with the changes required. Even in any cases when our team is not able to maintain the application, we will provide a backup of the application until the team takes care of any problem that may have caused the application to be down. For maintenance the system shall not shut down more than 12 hours.

#### **3.2.2.5 Configuration**

With the system will be one or more cameras connected. So the security will be higher but also a better and a faster way to access the dormitory. The cameras should be fast enough to capture the data so the students will not have to wait for the camera to response.

#### **3.2.2.6 Operations**

Operations required by the user include:

- login with their Epoka' s emails
- apply for accommodation
- make requests for different problems
- view payments
- CRUD for director
- view the issues
- approve payments
- manage technical problems

#### **3.2.2.7 User Friendliness**

Accessing data and making requests for different groups of users is beginner friendly so anybody can reach the data easily. Most of the requests are handled by forms which everyone is familiar with.

### **3.2.2.8 Error Tolerance**

The application will be able to detect errors and ask the user to correct them. This will be used mostly in login page and different forms. First the user will be shown with important fields that should be filled and if there is something wrong, the system will make a suggestion about the specific user input.

### **3.2.2.9 Data Management**

The required requirements for data management includes:

- data will be used frequently to query information about students
- only the Director is able to view these data
- the student's data should be correct
- there will be no initial value, since information should be correct

## **3.2.3 EXTERNAL REQUIREMENTS**

### **3.2.3.1 Security**

The system will be resistant from any unauthorized, accidental or unintended usage and provide access only to legitimate users. It ensures that every data that will pass through the database has the highest security so no data will be lost or captured from malicious users.

### **3.2.3.2 Protection**

- users must change their default password immediately after the first log in
- the payment category is restricted, so only the appropriate staff can use it
- the access restrictions can only be changed by the director
- password should never be viewable in the login page
- each incorrect login try will be recorded in the log file

### **3.2.3.3 Authorization and Authentication**

Authentication and Authorization are the most important part, because it has to do with the security of our application. Every user will have the opportunity to access only his page. If he tries to be redirected to another page then the system will lead him to its homepage.

Some of the roles will be:

- { path: ^/finance, roles: ROLE\_FINANCE }
- { path: ^/student, roles: ROLE\_STUDENT }
- { path: ^/assistant, roles: ROLE\_ASSIST }
- { path: ^/director, roles: ROLE\_DIRECT }
- { path: ^/tech, roles: ROLE\_TECH }

## **3.3 *Domain Requirements***

Everyone in this project has different management roles. And every role will be secured to access only its own rights.

The students which apply for the dorm residence but at the end are not staying on the dorm. Their application will be canceled, and deleted from the database. No need for unused data.

Also, there are going to be students, which like to stay on the dormitory for a short period of time. And they should have access to enter on the dorm only for that period of time.

For the moment, on the dormitory exist the entrance by using the student cards, but because of the system, many students complains about that. There were registered but the system is not accepting them, so the dorm guardian needs to open the door for them.

The student, in order to be accepted, he should be accepted by the dormitory management staff and then the finance gives the last hand, whether the student made the dormitory payment or not.

## **4. Software Design/ Diagrams**

### **4.1 User Scenarios**

#### **Scenario 1: User-fails-to-login**

1. User enters username and password.
2. Information are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. He will be asked to re-enter his data

#### **Scenario 2: Student-login**

1. User enters email and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in as a Student.
5. Student can view his personal account.
6. Student can view the list of all available actions.
7. Edit his profile.
8. Save Changes.
9. Log out.

#### **Scenario 3: Student-view-payments**

1. User enters username and password.
2. System verifies and authenticates the username and password.
3. User is logged in.
4. User is logged in as a Student.
5. View Payments and their history.
6. Make a request.
7. Reports a problem.
8. Log out.

**Scenario 4: Assistant-login**

1. User enters username and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as an Assistant.
6. Report a discipline problem.
7. Report technical issues.
8. Create an event.
9. Save changes.
10. Log out.

**Scenario 5: Assistant - incorrect-login**

1. User enters username and password.
2. Information are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. He will be asked to re-enter his data

**Scenario 6: View-lists-of-students-in-dorm**

1. User enters username and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as an Assistant.
6. See the current list of students resident in dormitory.
7. Search by their name/surname.
8. Give feedback.
9. Log out.

**Scenario 7: Assistants-management**

1. User enters username and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as Director.
6. See the current list of assistants in dormitory.
7. Search by their name/surname.
8. Add Resident assistants.
9. Remove Resident Assistants
10. Save changes.
11. Log out.

**Scenario 8: Director-login / view-technical-problems**

1. User enters username and password.
2. Information are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. System verifies and authenticates the username and password.
5. User is logged in.
6. User is logged in as Director.
7. See the current list of assistants in dormitory.
8. Search by their name/surname.
9. Check technical problems reported by the students/assistants
10. Save changes.
11. Log out.

**Scenario 9: director-applicants-management**

1. User enters username and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as Director.
6. See the list of applicants.
7. Search by their name/surname.
8. Accepts an applicant.
9. Rejects an applicant
10. Evaluate the accepted applicants for further processing
11. Save changes.
12. Log out.

**Scenario 10:director-views-students-disciplinary-reports**

1. User enters username and password.
2. Information are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as Director.
6. See the student's disciplinary reports.
7. Search by their name/surname.
8. Print the contract for a specific student
9. Log out.

**Scenario 11: Technical Staff - view the technical-problems**

1. User enters username and password.
2. Information are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. Information are correct.
5. System verifies and authenticates the username and password.
6. User is logged in.
7. User is logged in as Technical Staff.
8. View the list of the problems.
9. Log out.

**Scenario 12: technical Staff-view-fixed problems**

1. User enters username and password
2. Information are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. System verifies and authenticates the username and password.
5. User is logged in.
6. User is logged in as Technical Staff.
7. View the technical problems.
8. Log out.

**Scenario 13: Technical-staff-fix**

1. User enters username and password
2. Information are correct
3. System verifies and authenticates the username and password
4. User is logged in
5. User is logged in as Technical Staff
6. Report the state of the issue
7. Report if there is any problem being fixed
8. Save Changes
9. Log out

**Scenario 14: Dorm-application**

1. User no need for login
2. User is logged in as Guest
3. View a simple Guest page
4. Apply for accommodation

**Scenario 15: Guest-incorrect-login**

1. User enters username and password
2. Information are incorrect
3. A warning message will be shown to the user to re-enter the correct information
4. System verifies and authenticates the username and password
5. User is logged in
6. User is logged in as Guest
7. View a simple Guest page
8. Apply for accommodation
9. Log out

**Scenario 16:finance-login**

1. User enters username and password
2. Information are correct
3. System verifies and authenticates the username and password
4. User is logged in
5. User is logged in as Finance Management
6. Redirected to their dashboard
7. Approve payments
8. Save Changes
9. Log out

**Scenario 17:Finance-incorrect-login**

1. User enters username and password.
2. Informations are incorrect.
3. A warning message will be shown to the user to re-enter the correct information.
4. System verifies and authenticates the username and password.
5. User is logged in.
6. User is logged in as Finance Management.
7. Redirected to their dashboard.
8. Approve payments.
9. Save Changes.
10. Log out.

### **Scenario 18:Finance-dashboard**

1. User enters username and password.
2. Informations are correct.
3. System verifies and authenticates the username and password.
4. User is logged in.
5. User is logged in as Finance Management.
6. View a list of students.
7. Search by name/surname.
8. View payments history.
9. View recent payments
10. Save changes.
11. Log out.

### **Scenario 19: camera security-dormitory member**

1. Server is turned on
2. Camera fetch is turned on
3. Frame detects a face
4. Compare with the members faces
5. The person is part of the dormitory
6. Save the information to the log file
7. Repeat

### **Scenario 20: camera security - not a dormitory member**

1. Server is turned on
2. Camera fetch is turned on
3. Camera detects a face
4. Compare with the member faces
5. The person is not part of the dormitory
6. The information is saved on a log file
7. The images are being reported to the Web server
8. Repeat

**Scenario 21: Camera security - new member**

1. New application is made by students
2. Director decides to accept a student
3. The student information is save to the database server
4. The student image and the information are being sent to the python server by using socket communication
5. The information are being saved to a specific folder in the server
6. The confirmation is being sent back to the server that the message was received
7. End

## 4.1 Use Cases

Name	User log in
Summary	The system is going to provide the users with a security system. Every user can login using email and password.
Actor	All Users
Description	Every user can access the system by providing a valid email and password.
Precondition	Every user should be provided with an account
Alternatives	If the user forgets the credentials, the Button “Forgot the credentials” will help them to gain again the password.
Post condition	The user can access the system.

Name	Forgot password
Summary	When a user tries to login and the login does not work. Then there exists a possibility for the password recovery which is going to be sent with the email.
Actor	All Users
Description	The system recovery is going to be managed with the best security. User is going to enter the email, and if the email in the database matches that persons database, Then it is going to sent a confirmation password on that email address.
Precondition	The user must have an account in the system, which is provided automatically from the registration form.
Alternatives	If the user forgets the credentials, the Button “Forgot the credentials” will help them to gain again the password.
Post condition	The user can have access its own system system

***EDMS Documentation***

Name	Create profiles for the students
Summary	The director has the rights to accept the students for furthermore application. And by an automatic system the Student profiles are going to be created directly after the Director accepted them for furthermore processes.
Actor	Director
Description	Every user can access the system by providing a valid email and password.
Precondition	Every user should be provided with an account
Alternatives	If the user forgets the credentials, the Button "Forgot the credentials" will help them to gain again the password.
Post condition	The user can access the system

Name	Create events for the dormitory
Summary	The director has the rights to create events that are related to the dormitory. The system takes the event and publishes for the other users that are related to the event created.
Actor	Director
Description	Create and approve events.
Precondition	Every user should be provided with an account
Alternatives	If an assistant created an event the director can approve or disapprove it.
Post condition	The users can view the event approved

***EDMS Documentation***

Name	Report a problem
Summary	All student which are part for the dormitory will be able to report a problem and this problem will be addressed to resident assistants and director.
Actor	Student
Description	According to the report the problem is addressed to technical staff where they take their responsibility to fix the broken thing or it may be a problem that can be fixed by the resident assistants
Precondition	A student firstly has to report the problem
Alternatives	The student will be able to request for any other necessary thing that can be offered by the dormitory like blankets. Or it may be a problem that can be fixed by the resident assistants
Post condition	The report is processed and addressed successfully

Name	Report technical issues
Summary	All assistants which are part for the dormitory will be able to report a problem and this problem will be addressed to director and after approval it will be addressed to technical staff.
Actor	Assistant
Description	According to the report the problem is addressed to technical staff where they take their responsibility to fix the broken thing.
Precondition	An assistant firstly has to report the problem
Alternatives	The issue may be solved inside the dormitory by other assistant or any other worker.
Post condition	The report is processed and addressed successfully

***EDMS Documentation***

Name	Create an event
Summary	All assistants which are part for the dormitory will be able to create an event and it will be addressed to director
Actor	Assistant
Description	According to the event it will be shown to respective dashboards of different users
Precondition	An assistant firstly has to create an event
Alternatives	The event may not be related with students
Post condition	The event is shown to the aimed dashboards.

Name	Confirm request from students regarding his responsibilities
Summary	All assistants which are part for the dormitory will be able to confirm request from students.
Actor	Assistant
Description	According to the request the assistant will evaluate it and decide if he can give permission or not
Precondition	An assistant firstly has to receive a request from a student
Alternatives	The assistant may not approve the request
Post condition	The request is approved or disapproved

***EDMS Documentation***

Name	The issues is received by technical staff
Summary	Technical will receive a list of issues at the beginning of the day or depending on the reports.
Actor	Technical staff
Description	According to the issue the workers will evaluate it and edit the statues and the action that will be taken
Precondition	One of the technical staff has to receive a issue
Alternatives	The issue may take longer time than expected
Post condition	The issue is solved

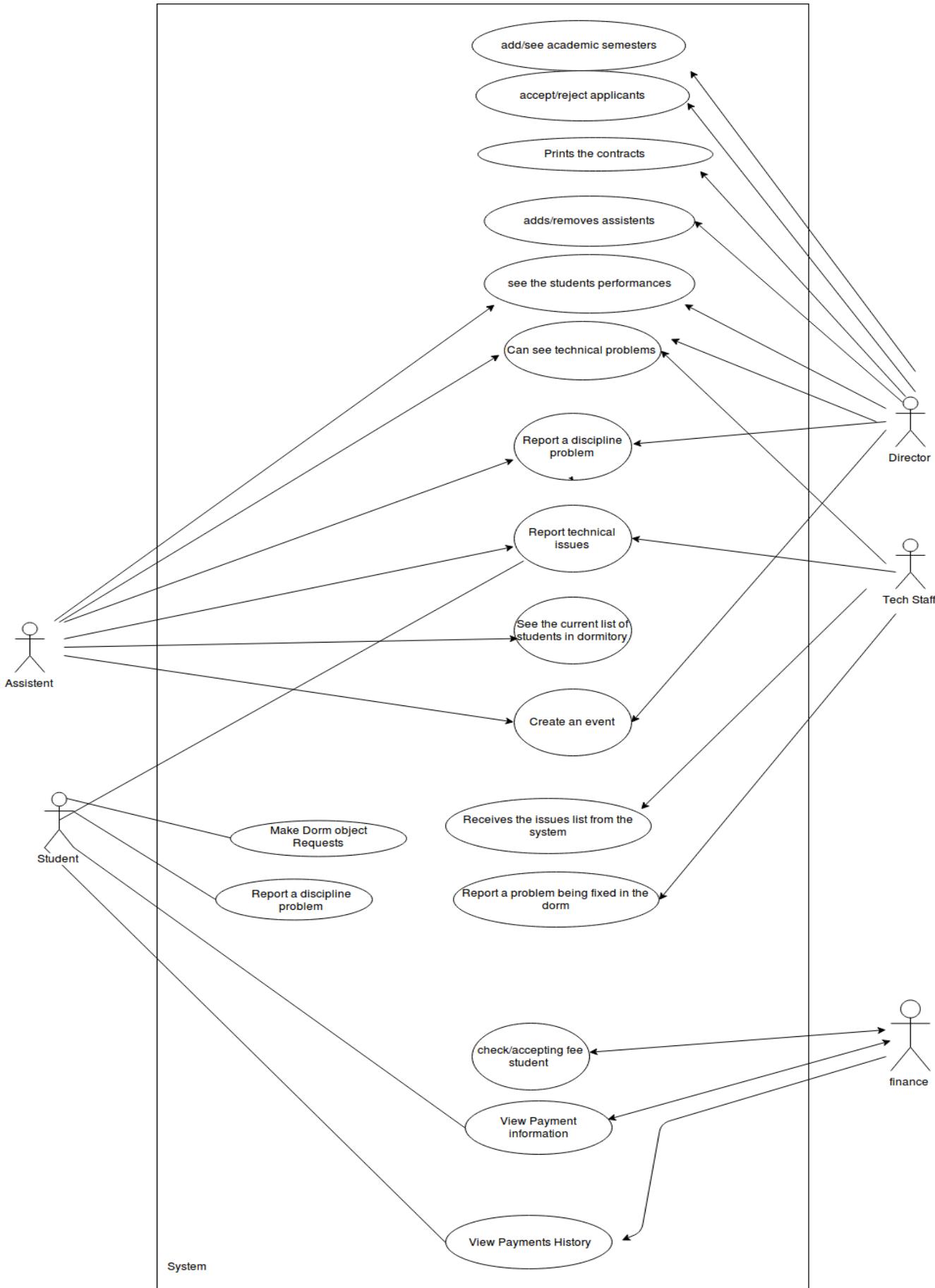
Name	The approval of the payment the director
Summary	The approval of the payment the director will be notified in real time.
Actor	Finance Personnel
Description	There will be a dashboard where they can see the status of all of the students showing all of their recent and history payments.
Precondition	The payment has to be done by students
Alternatives	There may be some delay in confirming the payment from bank and then to director
Post condition	The payment is done and approved in the system

## 4.2 Diagrams

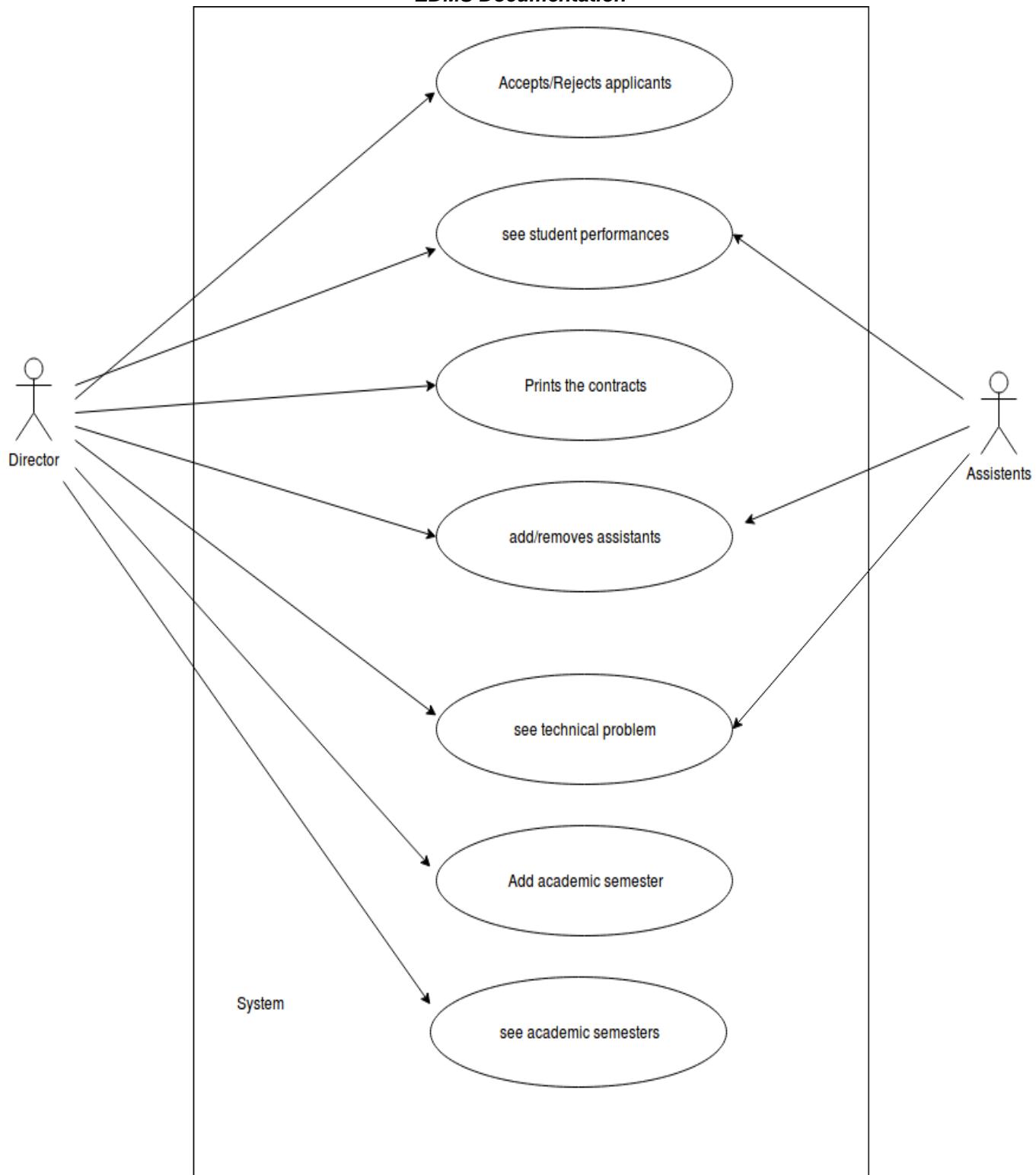
### 4.2.1 Use Case Diagrams

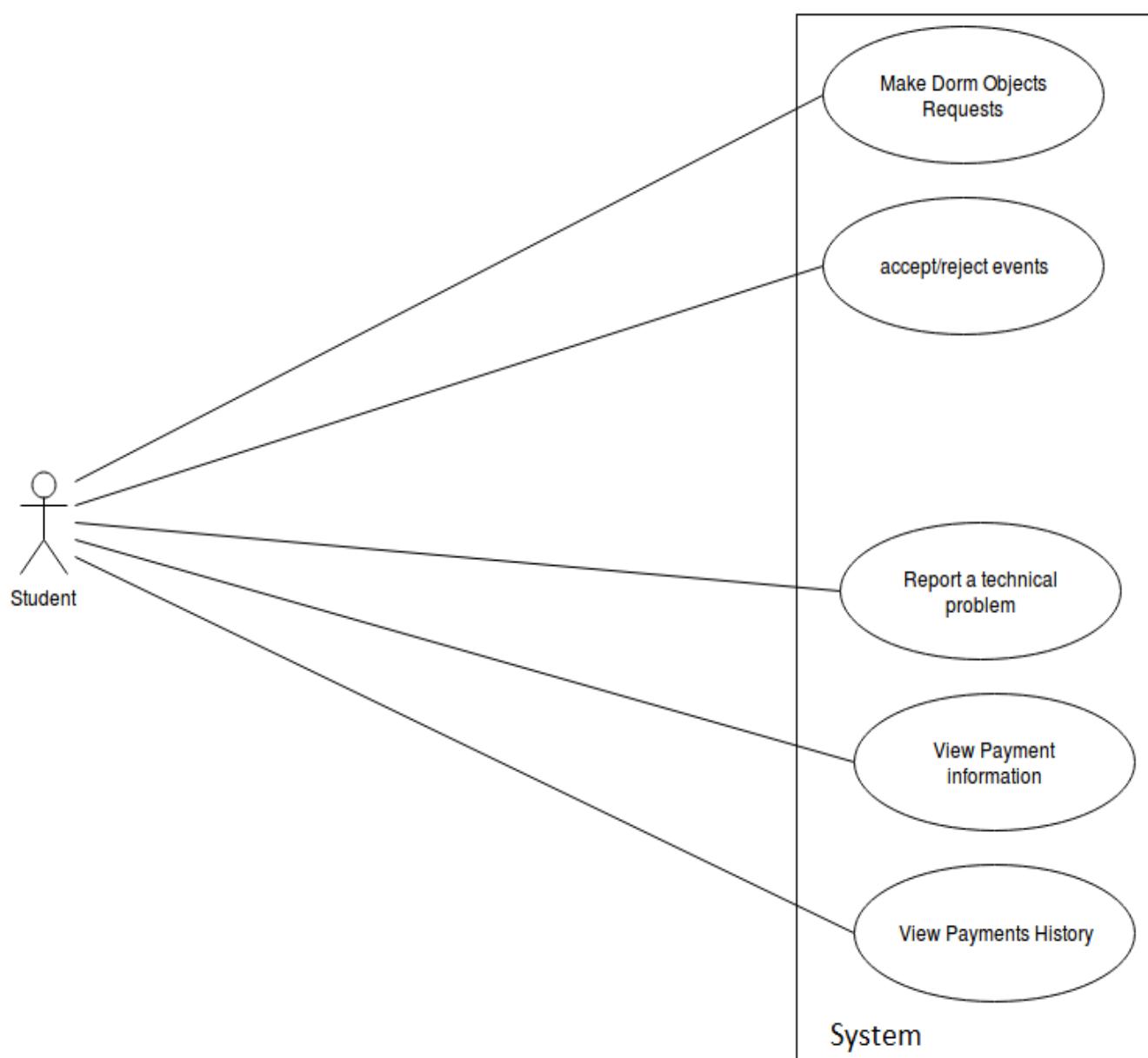
(Continues in the other page)

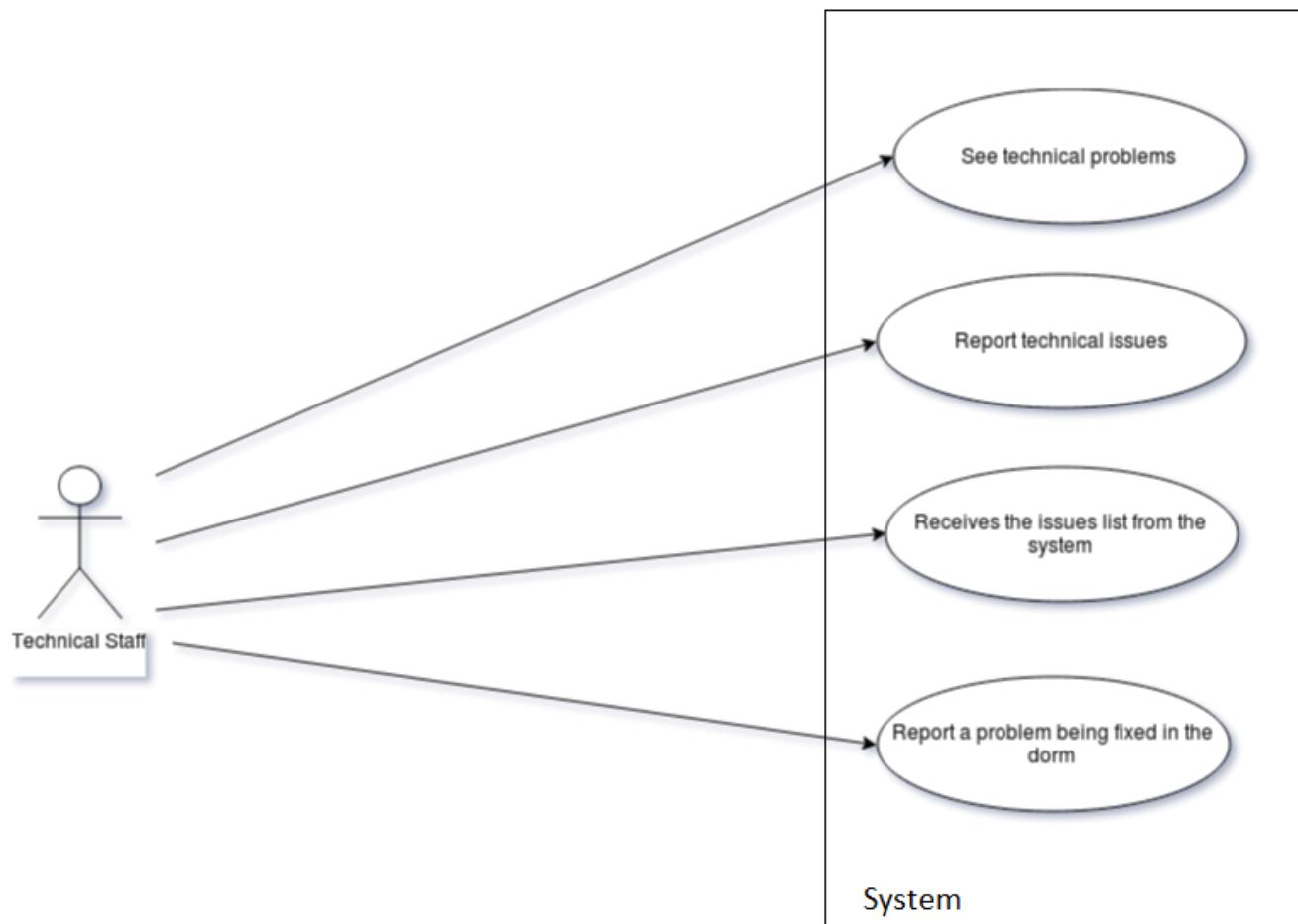
## EDMS Documentation

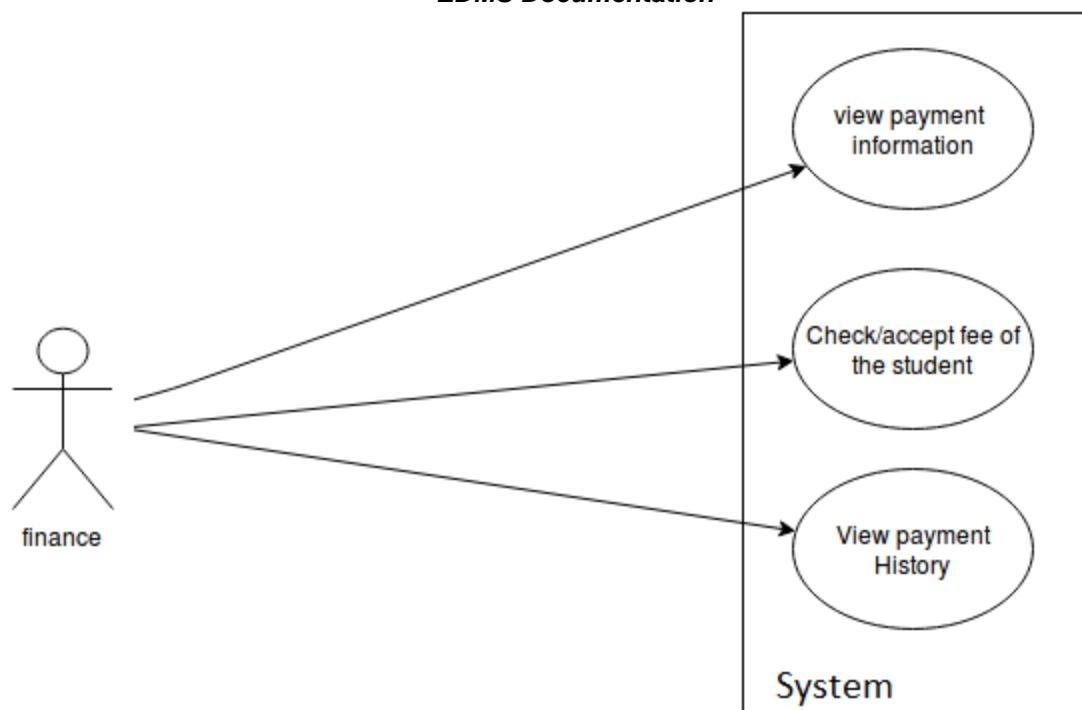


### **EDMS Documentation**

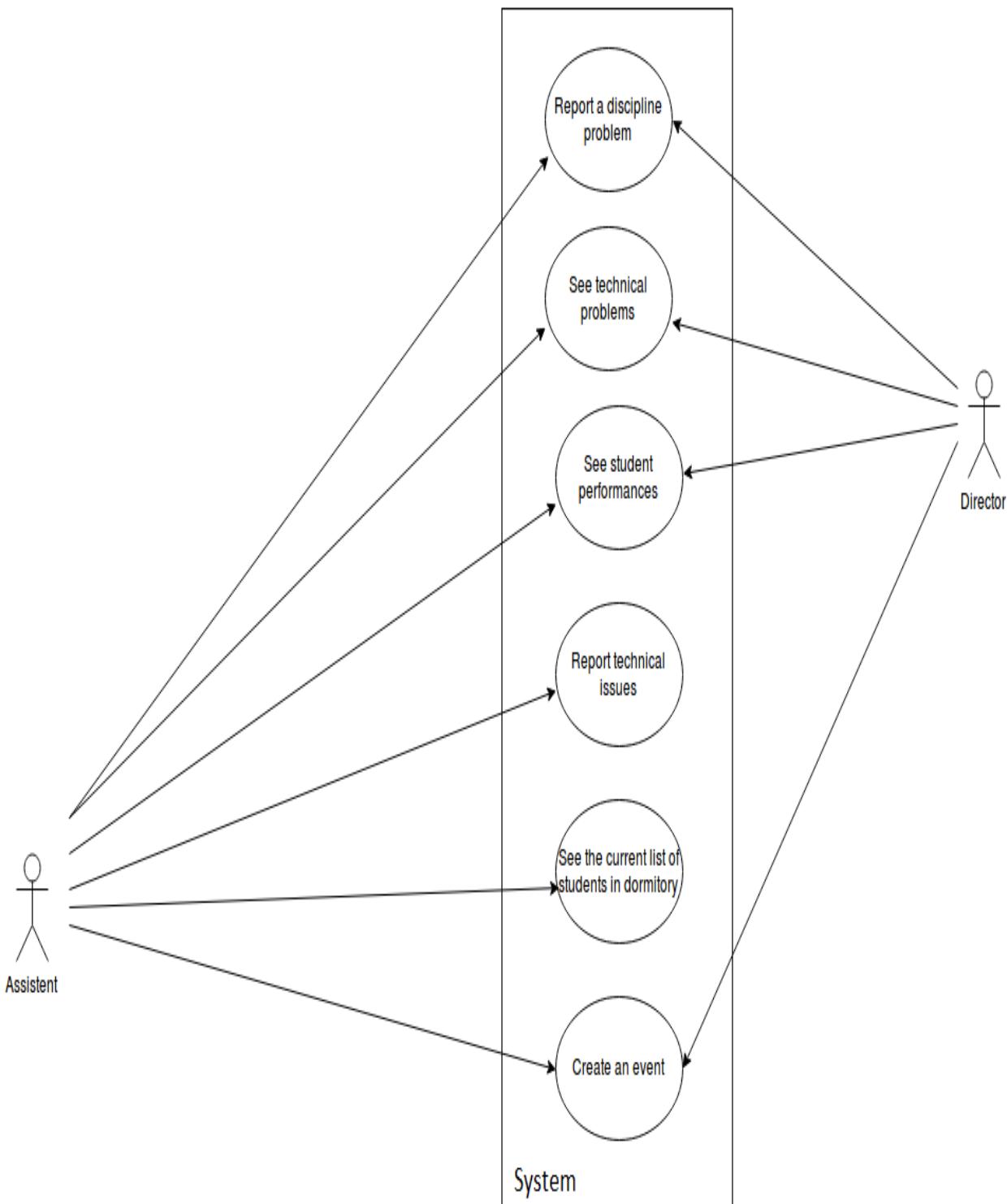








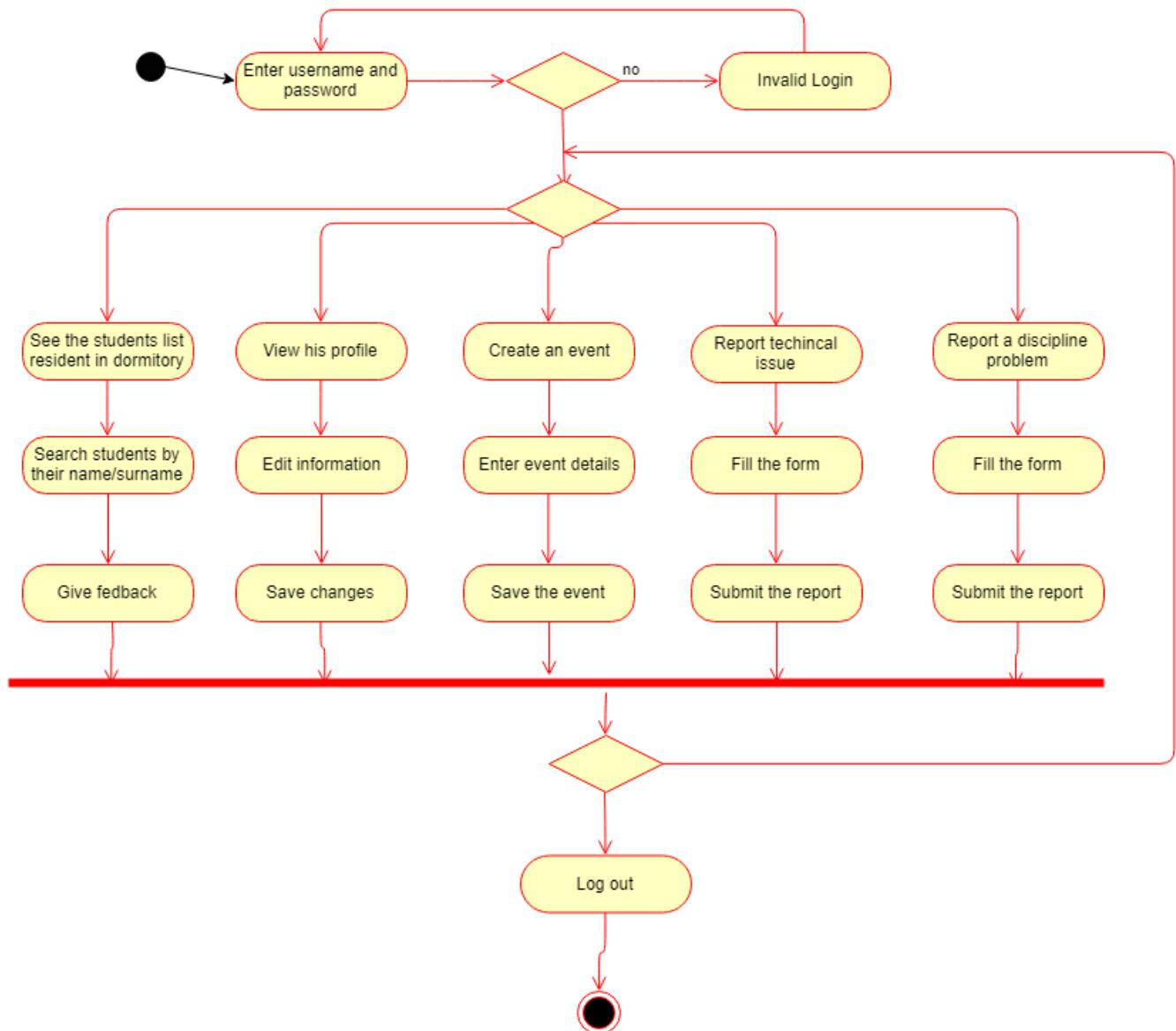
**EDMS Documentation**



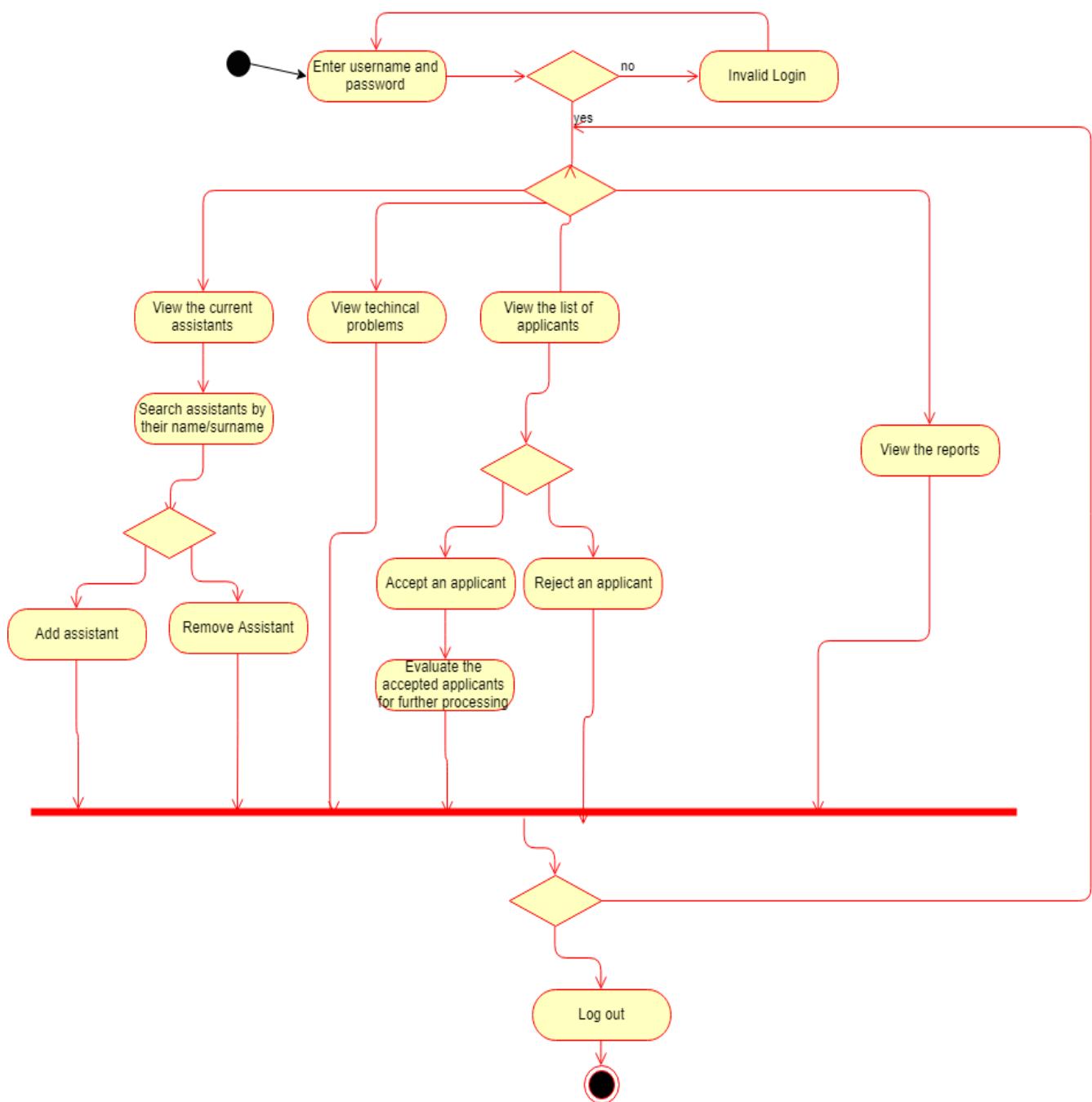
### 4.2.2 Activity /Swimlane Diagrams

#### Activity Diagrams

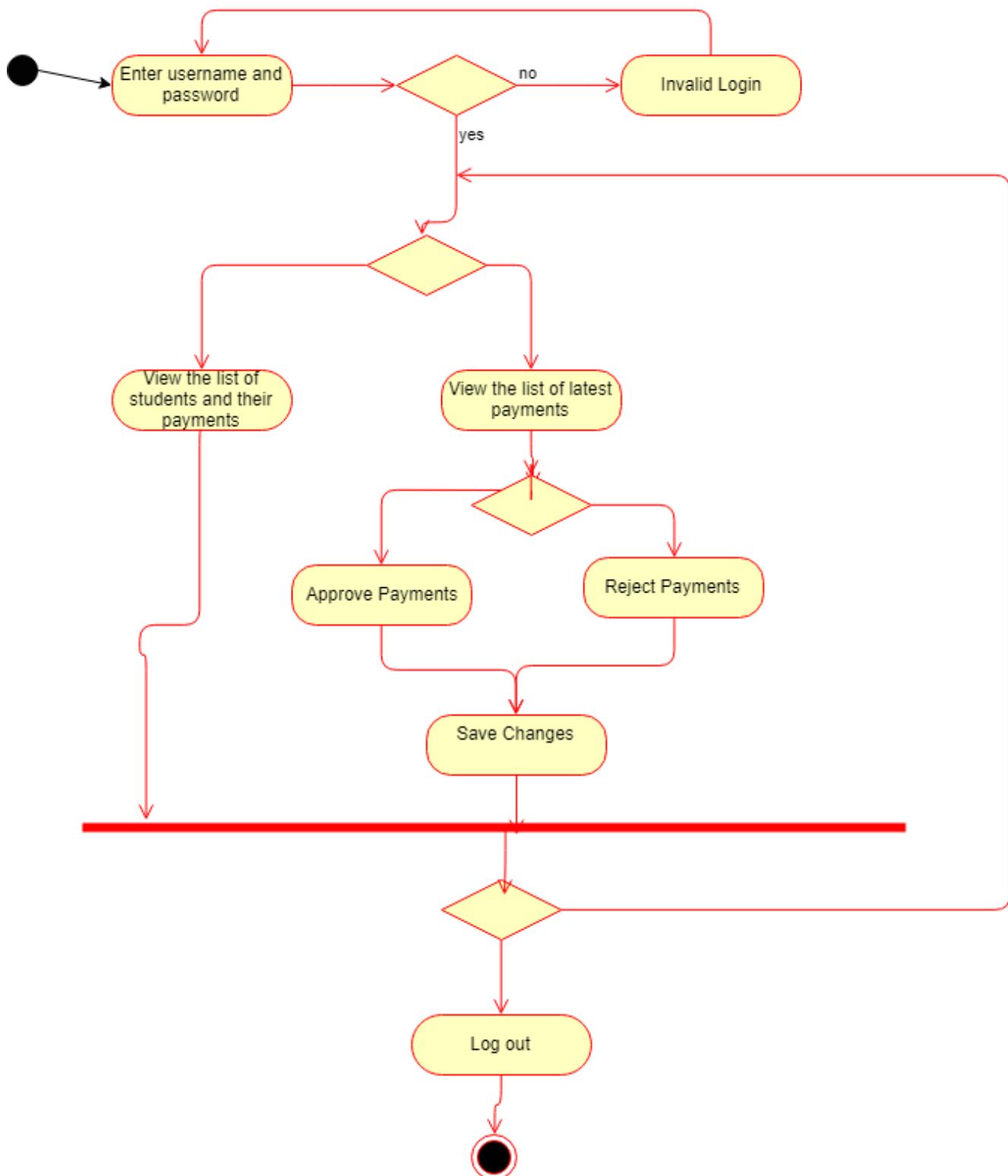
Assisstant\_Activity\_Diagram



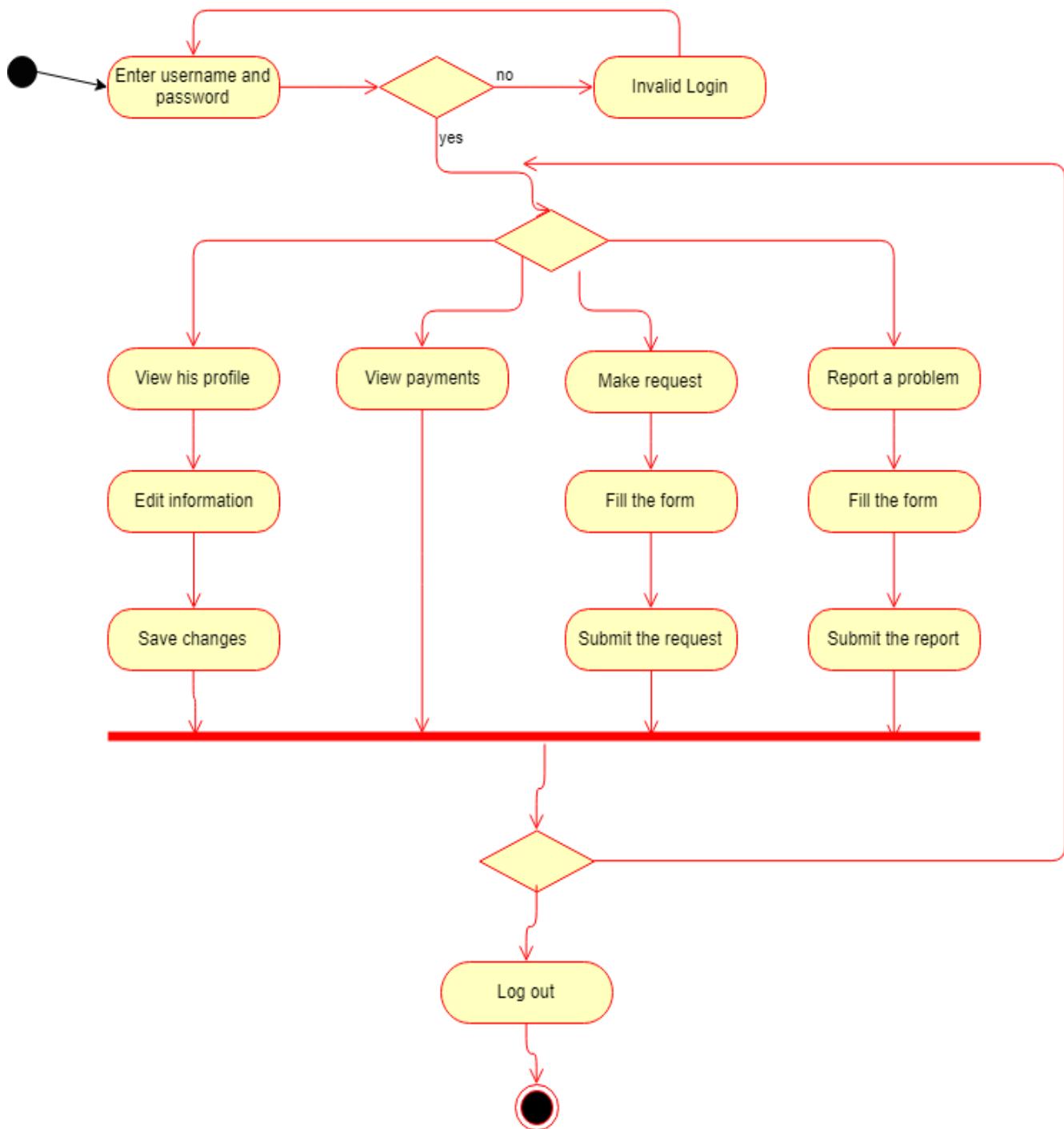
## Director\_Activity\_Diagram



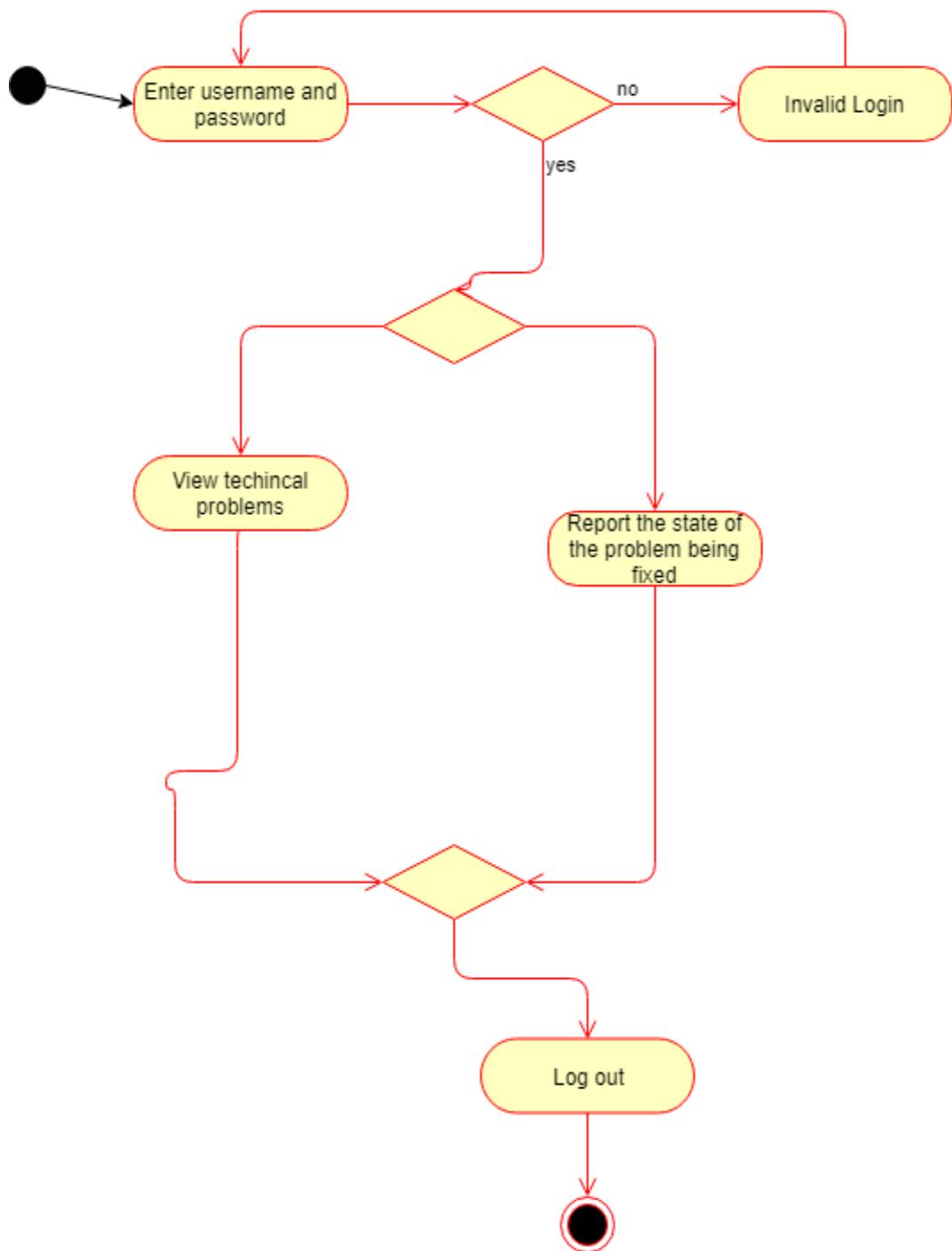
**Finance\_Activity\_Diagram**



**Student\_ActivityDiagram**

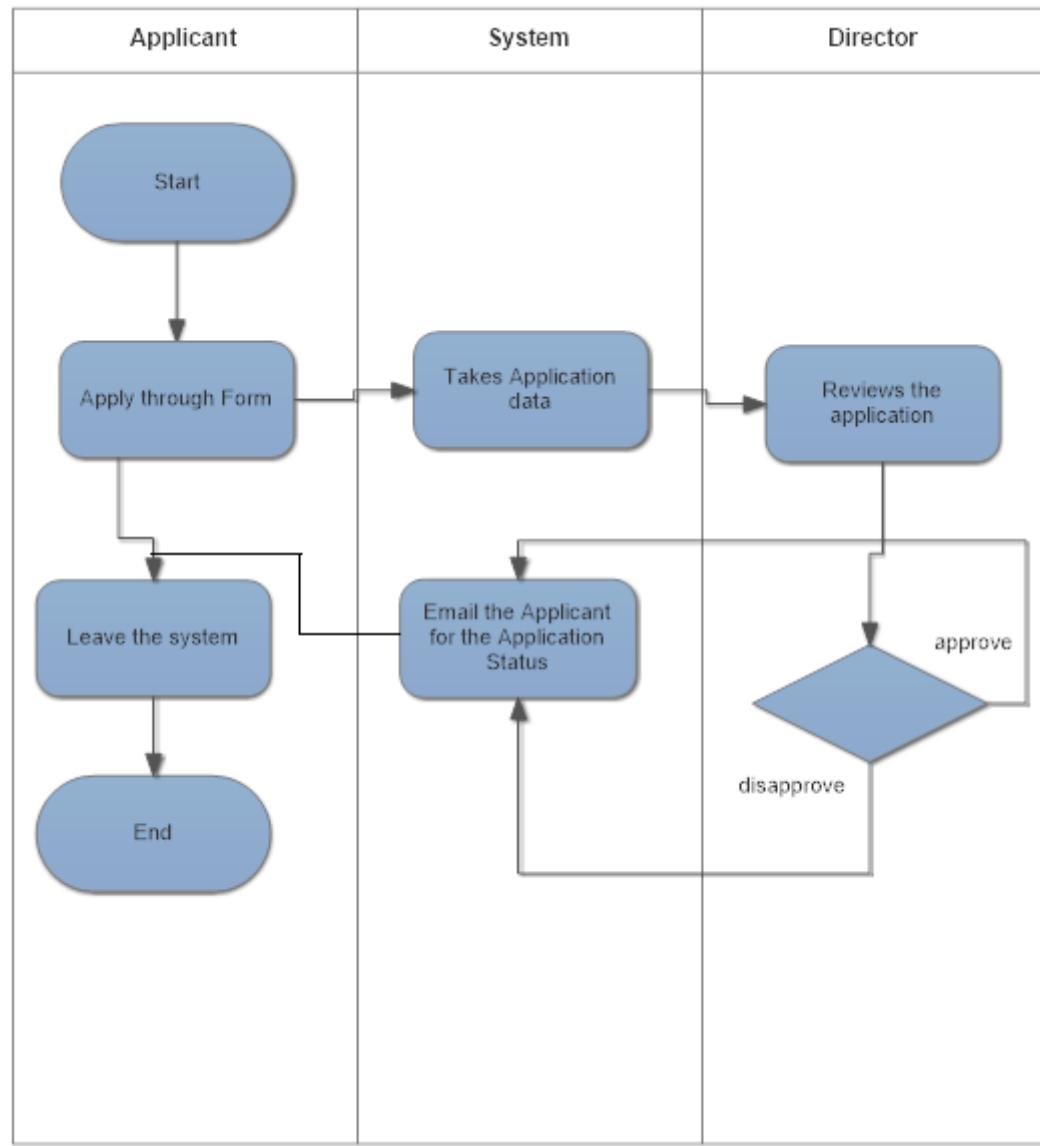


**Technical\_Activity\_Diagram**

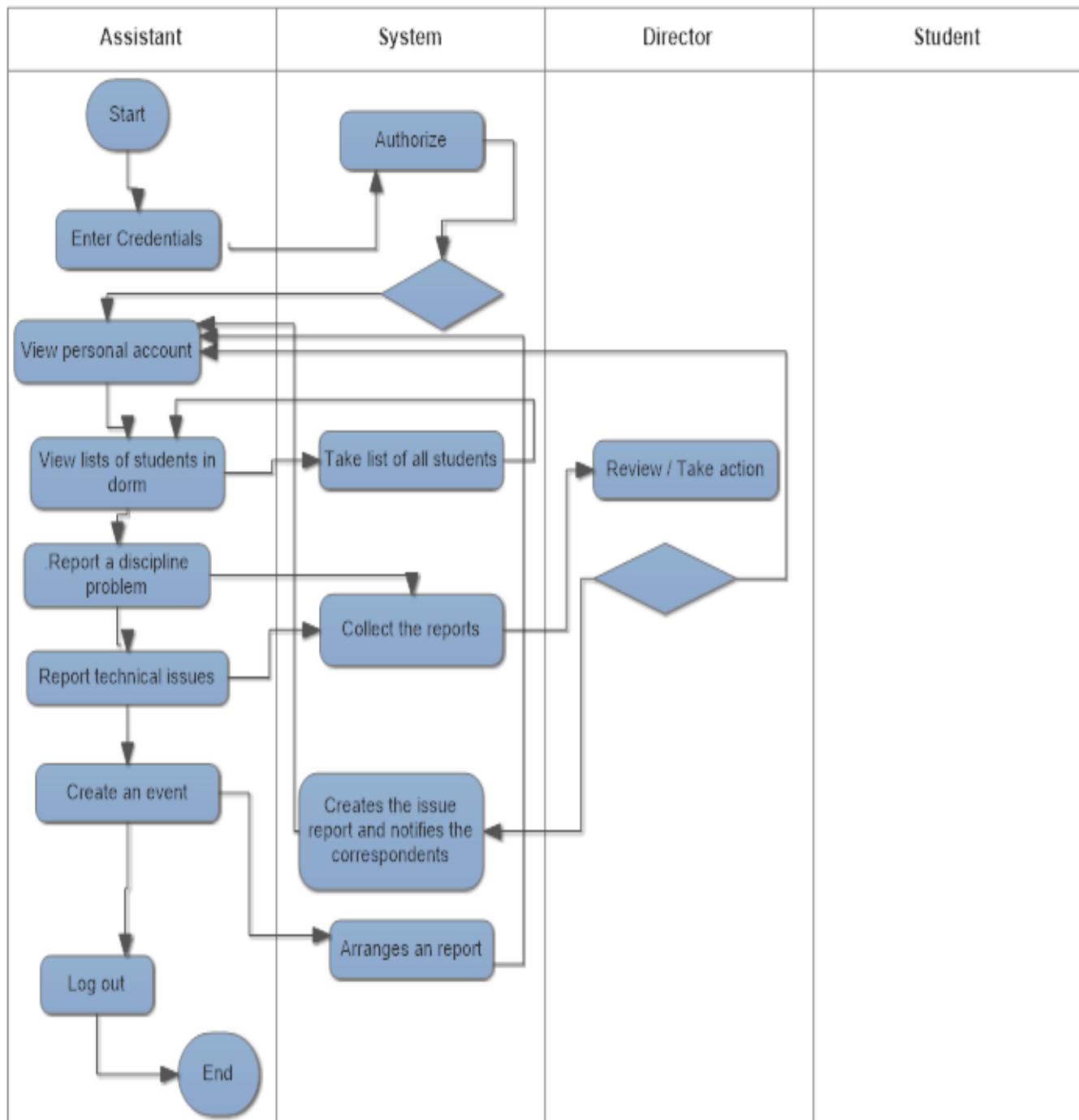


## Swimlane Diagrams

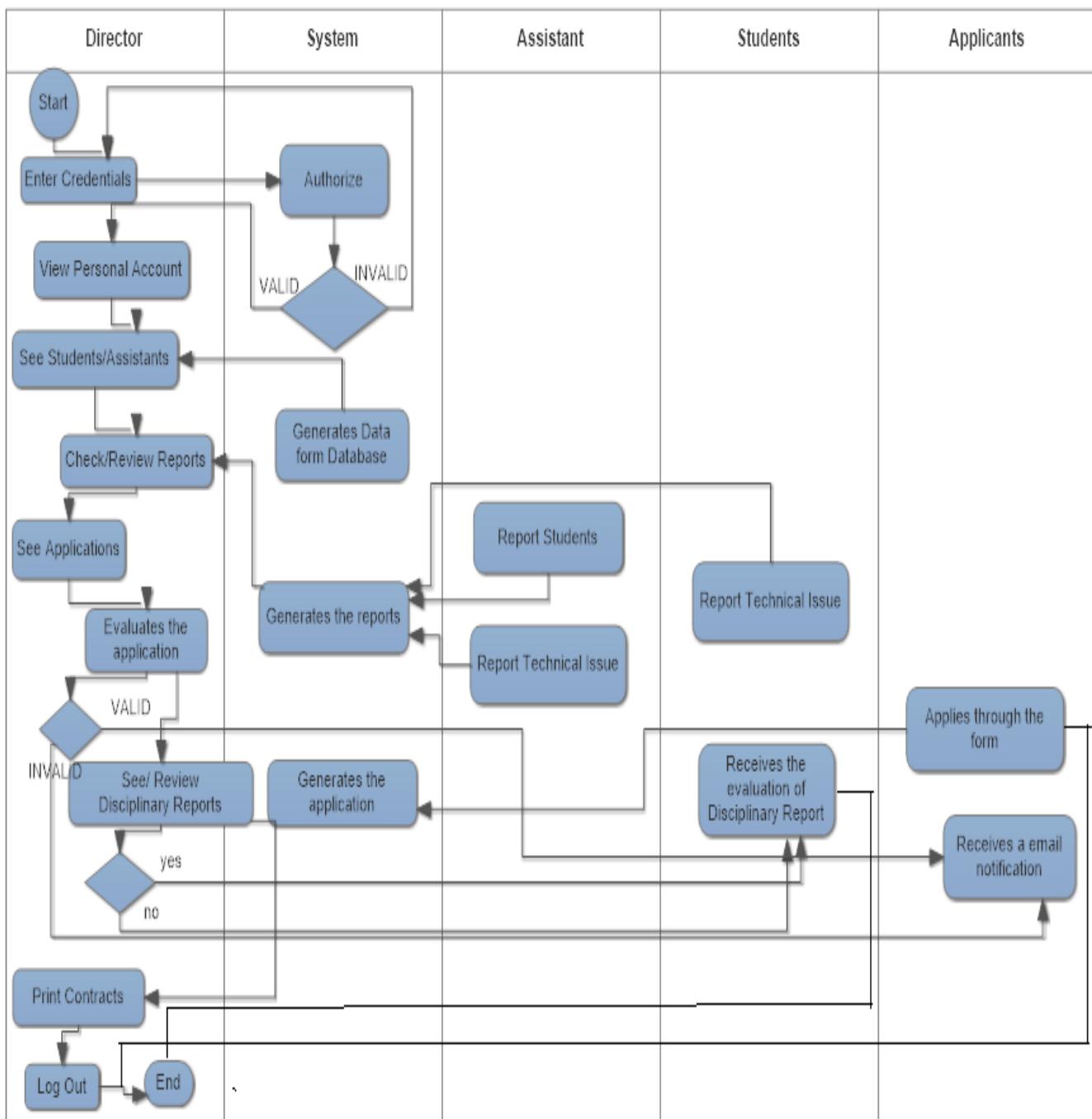
Applicant



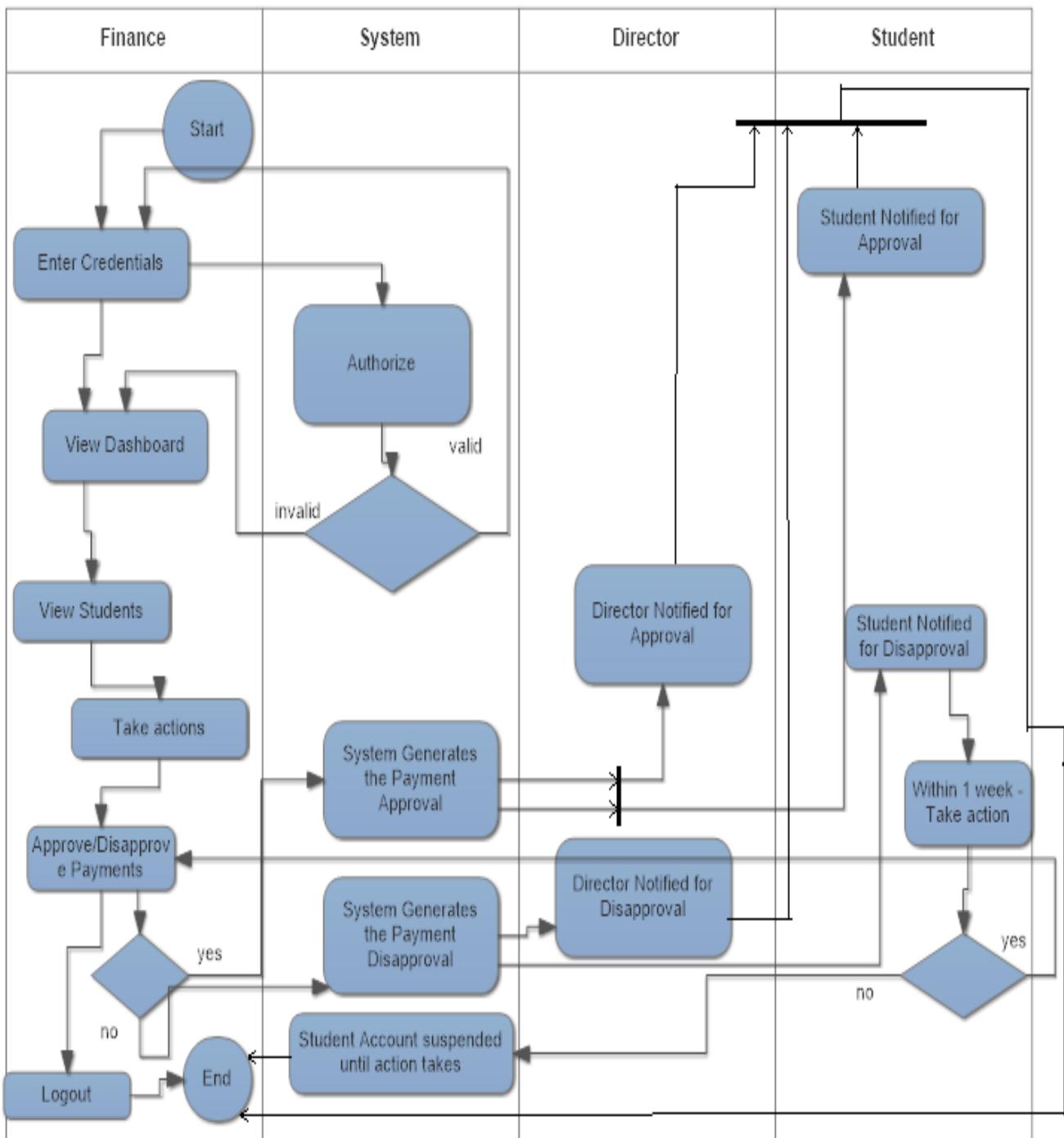
Assistant



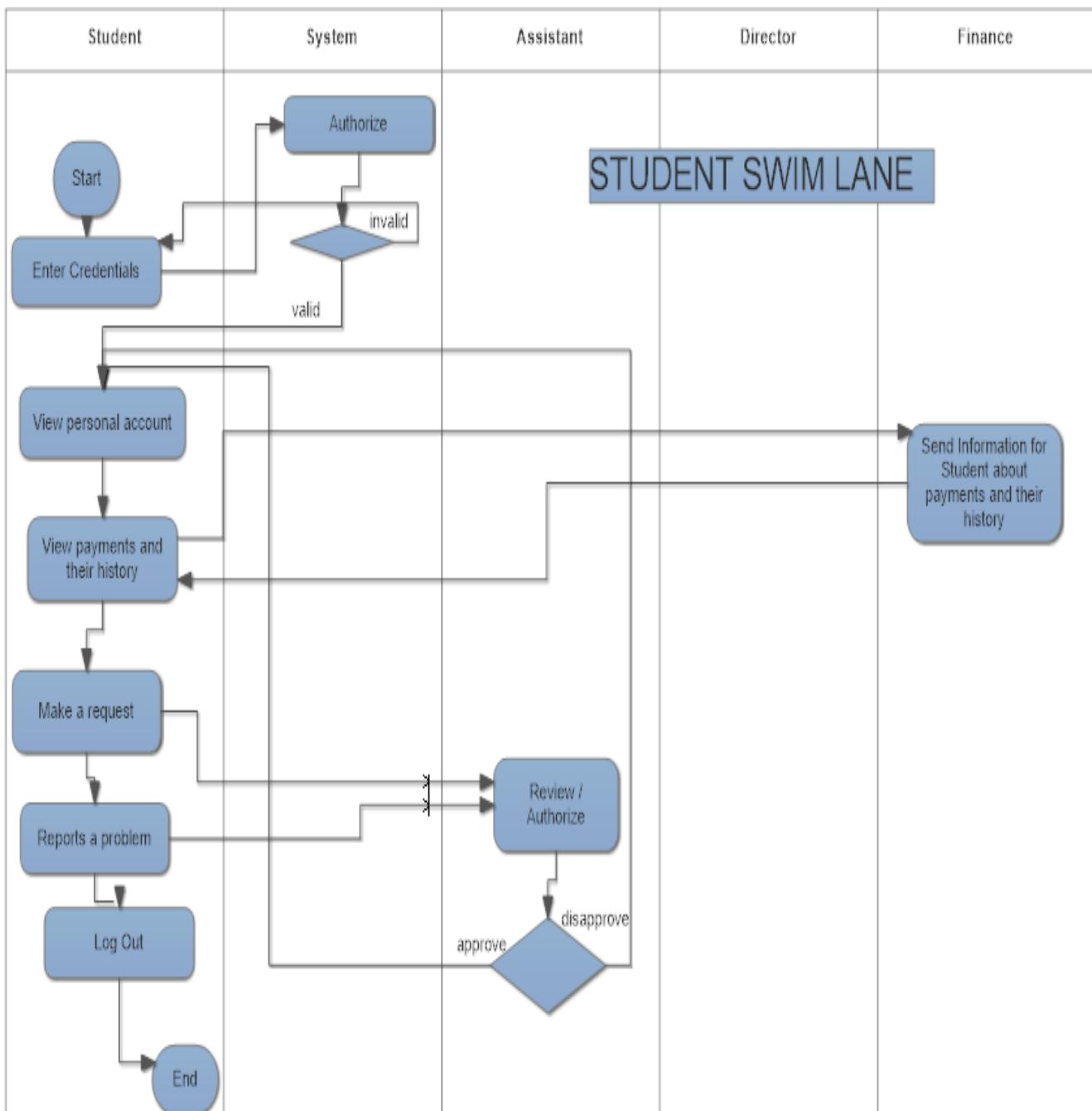
Director



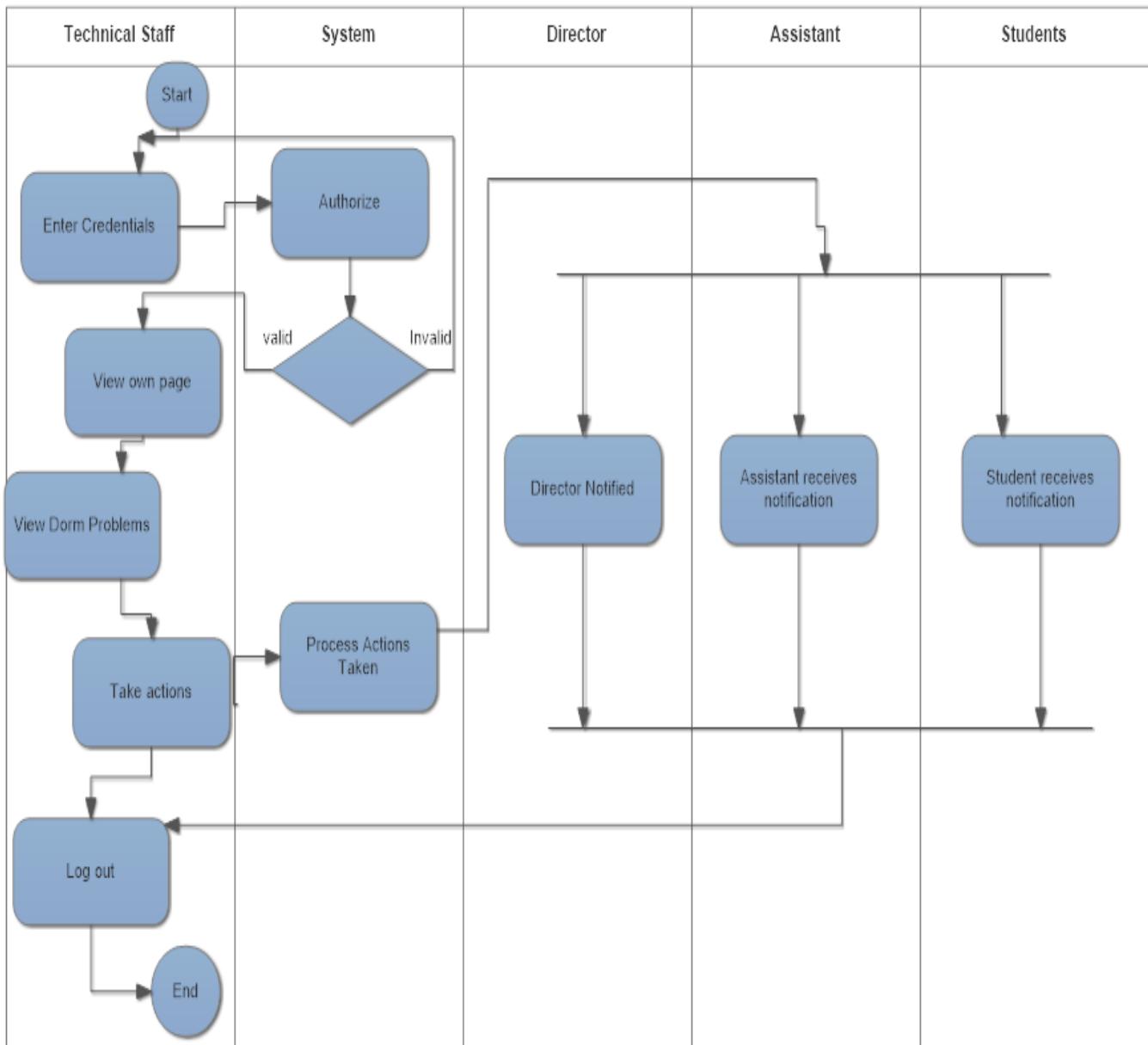
**Finance**



Student



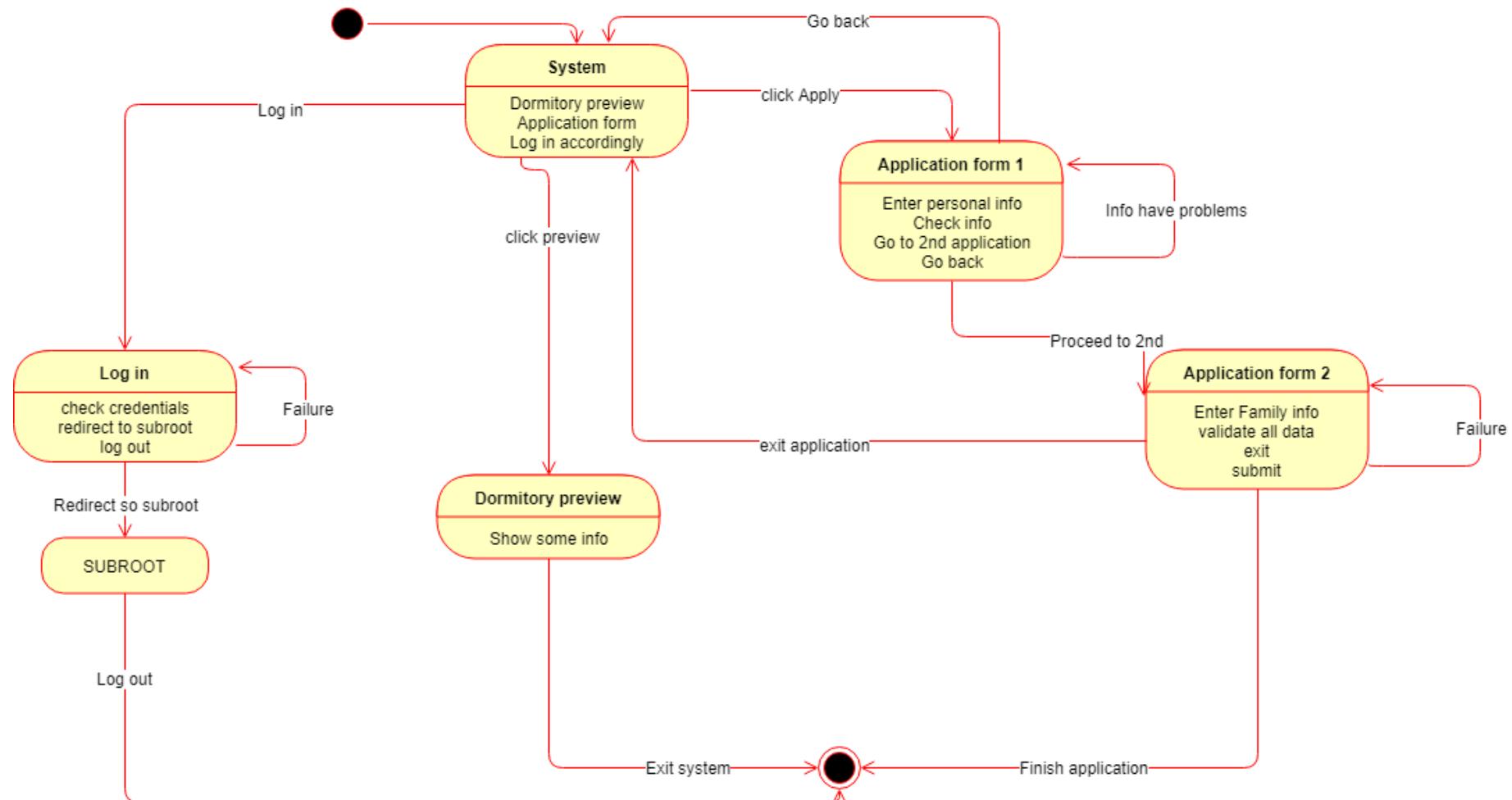
Technical Staff



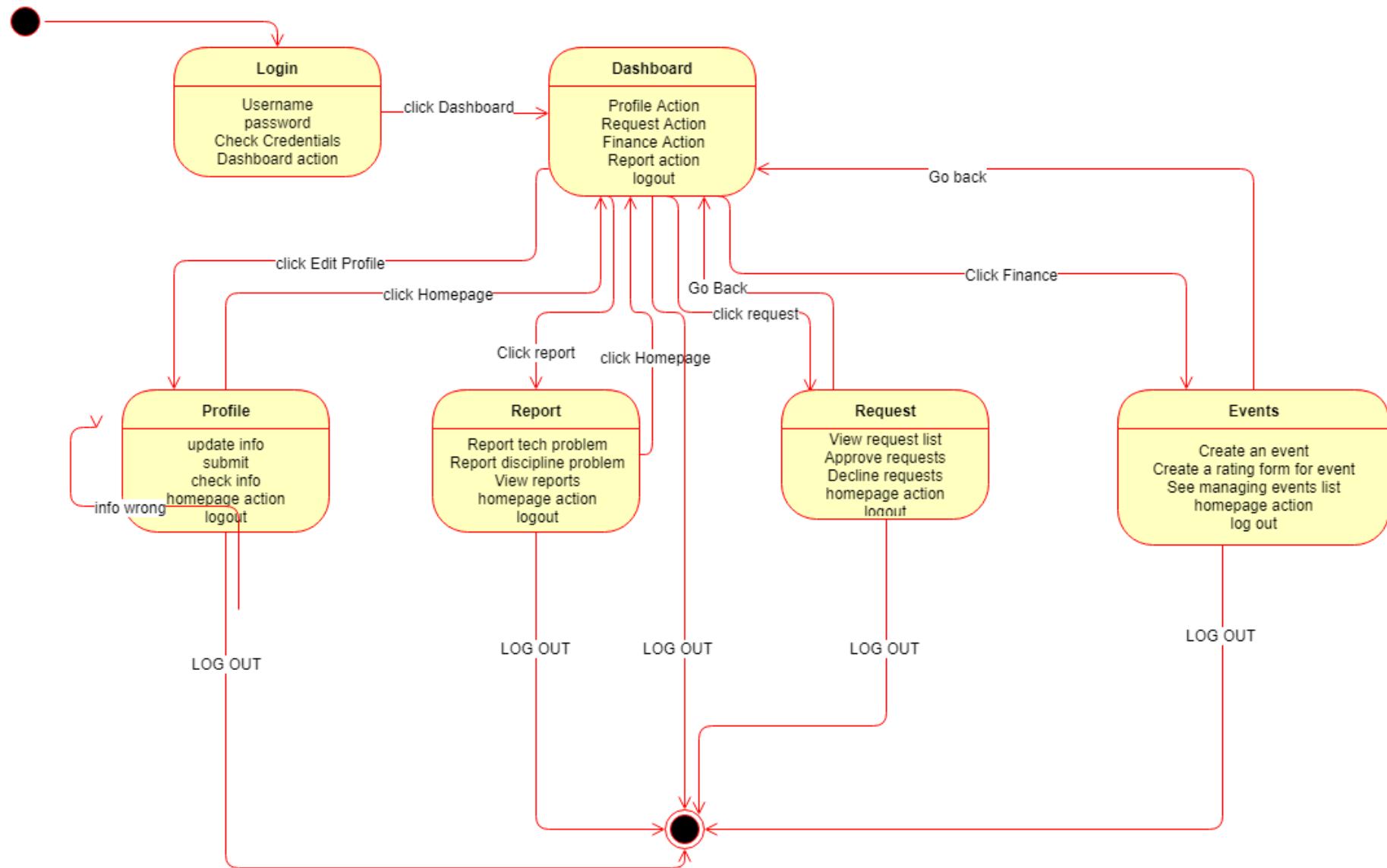
## 4.2.3 State Diagrams

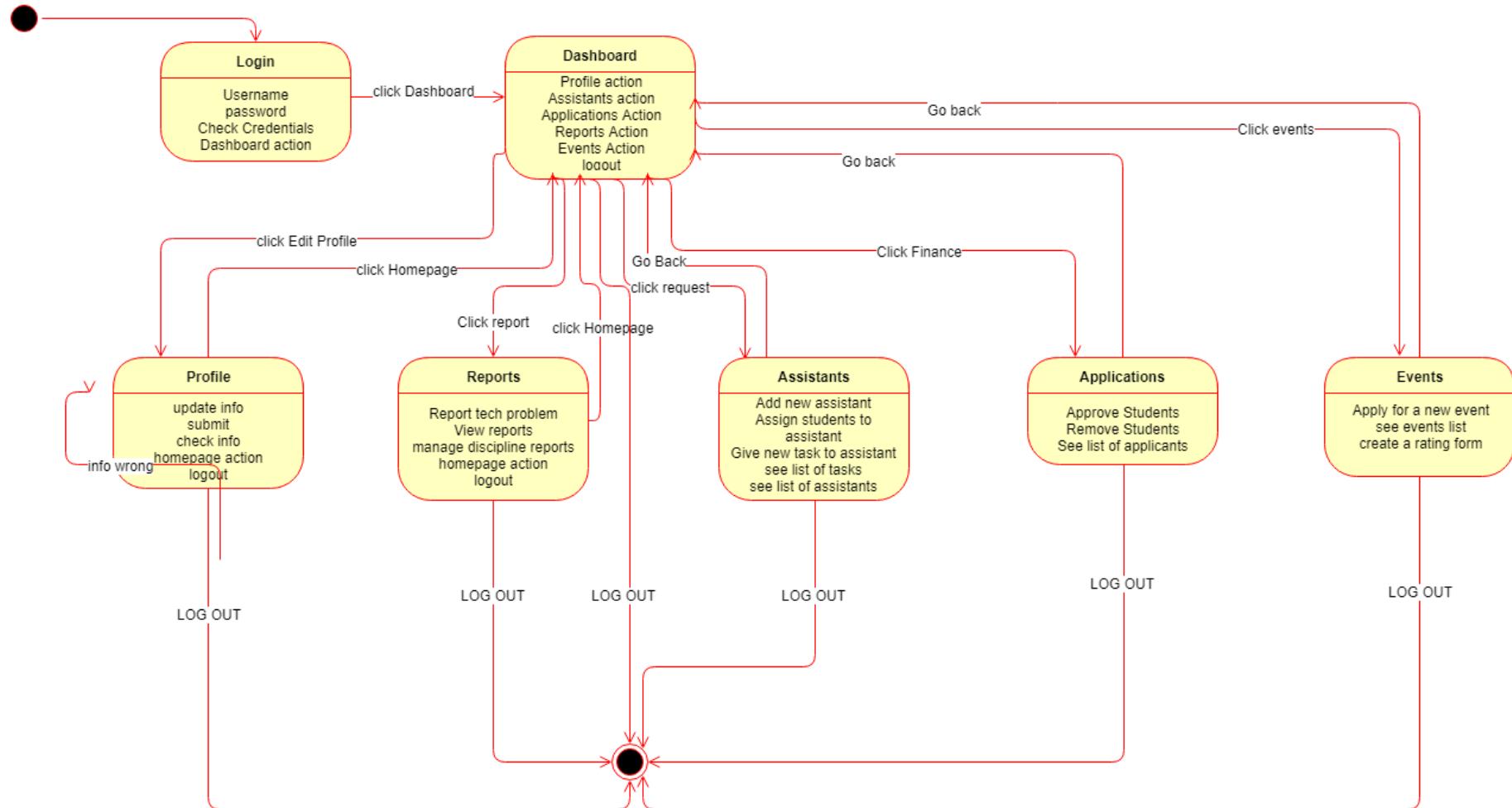
Student\_STATE\_DIAGRAM

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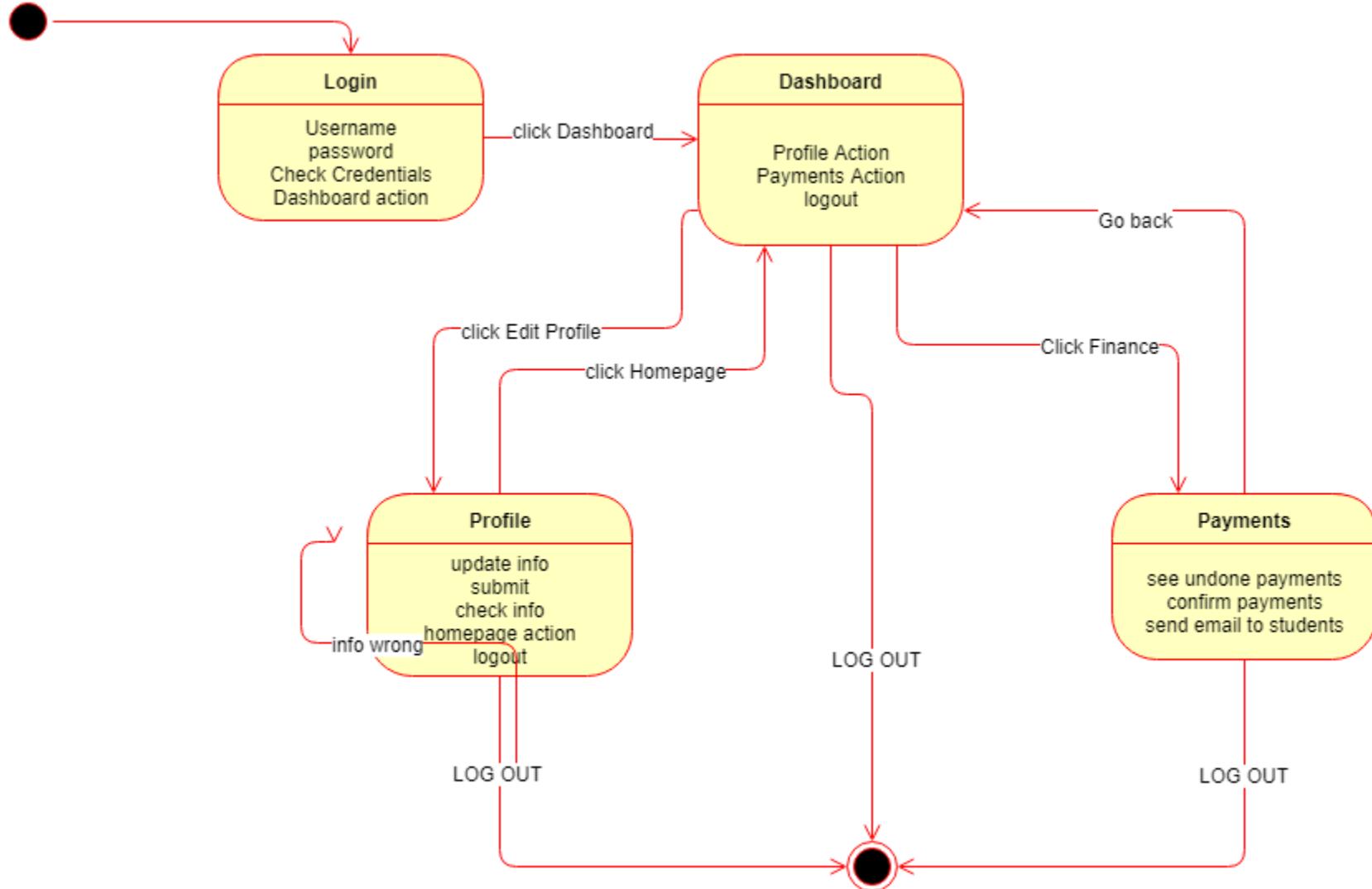


## Assistant\_STATE\_DIAGRAM



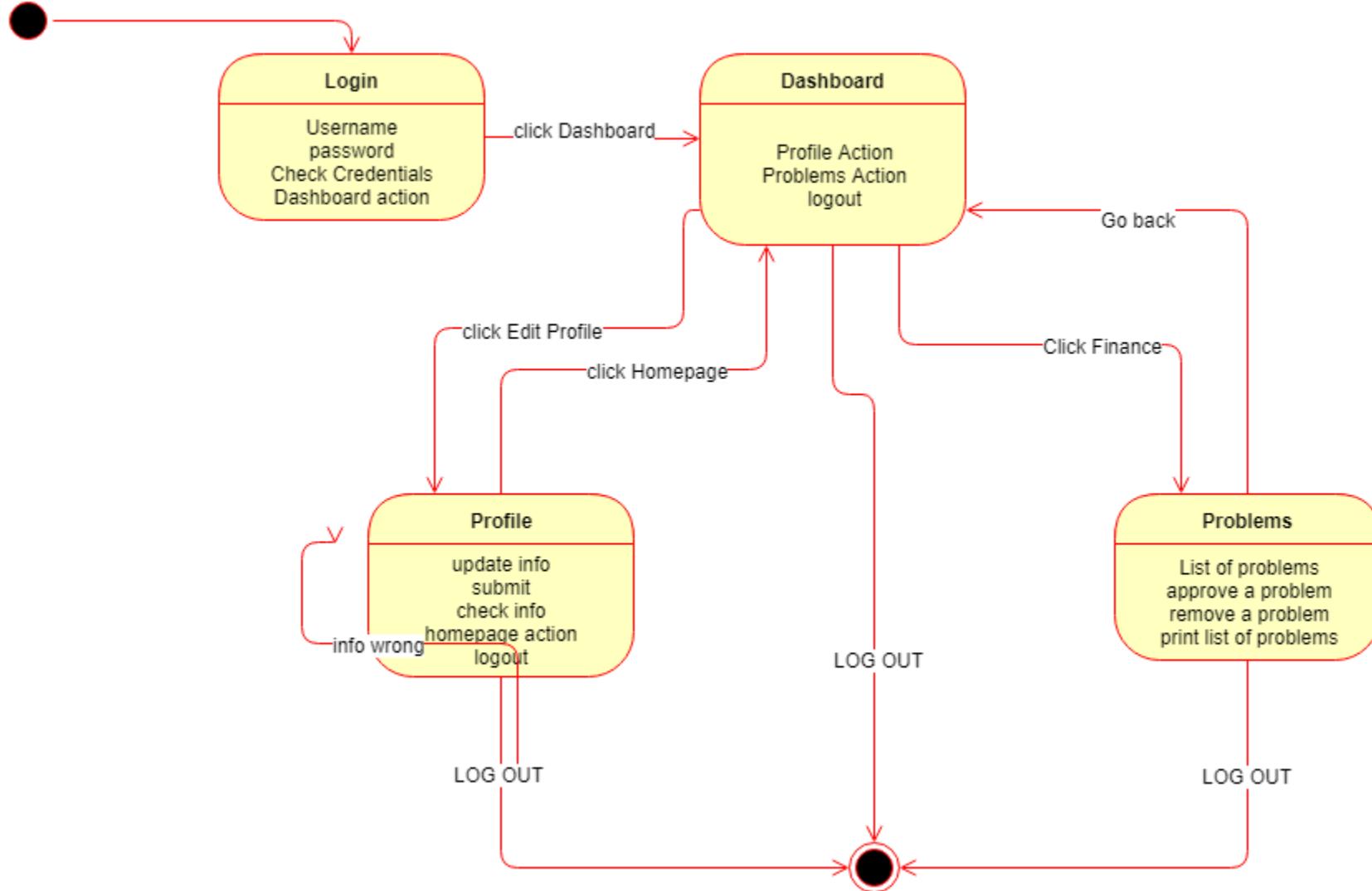


## Finance\_STATE\_DIAGRAM

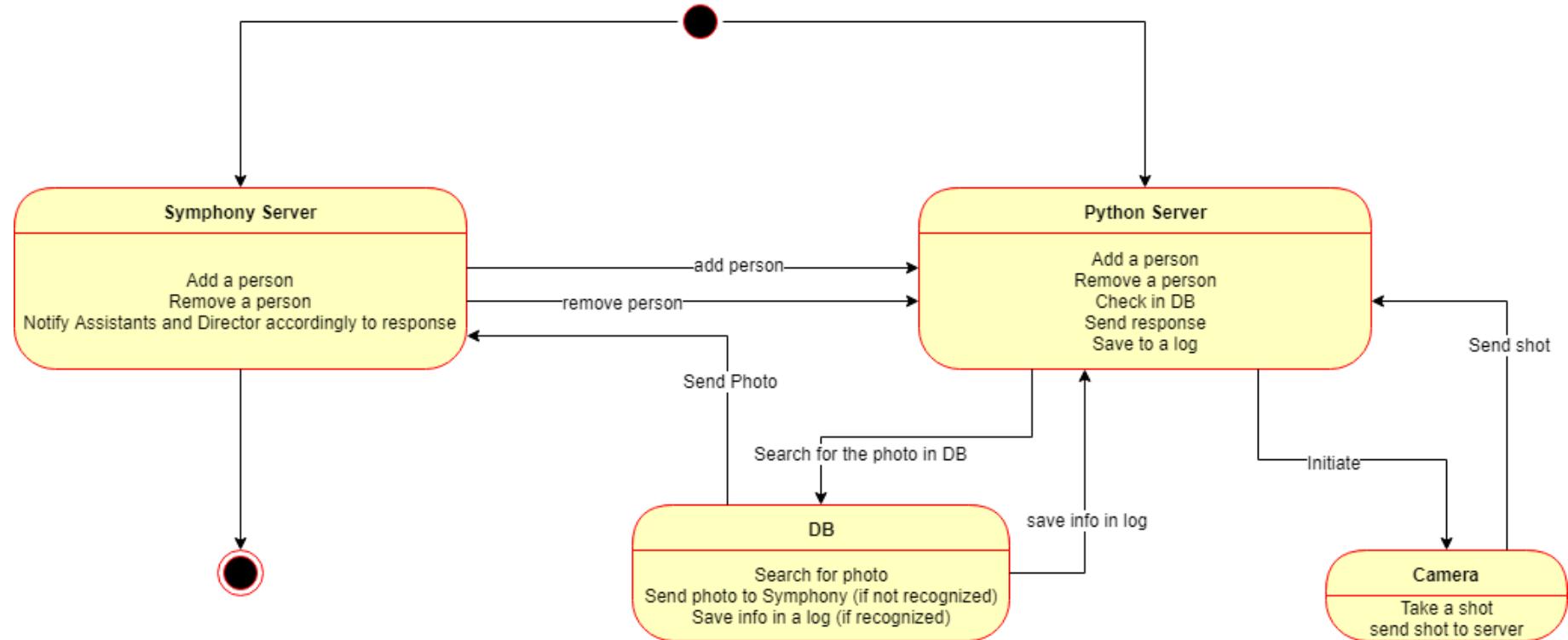


## Technical\_staff\_STATE\_DIAGRAM

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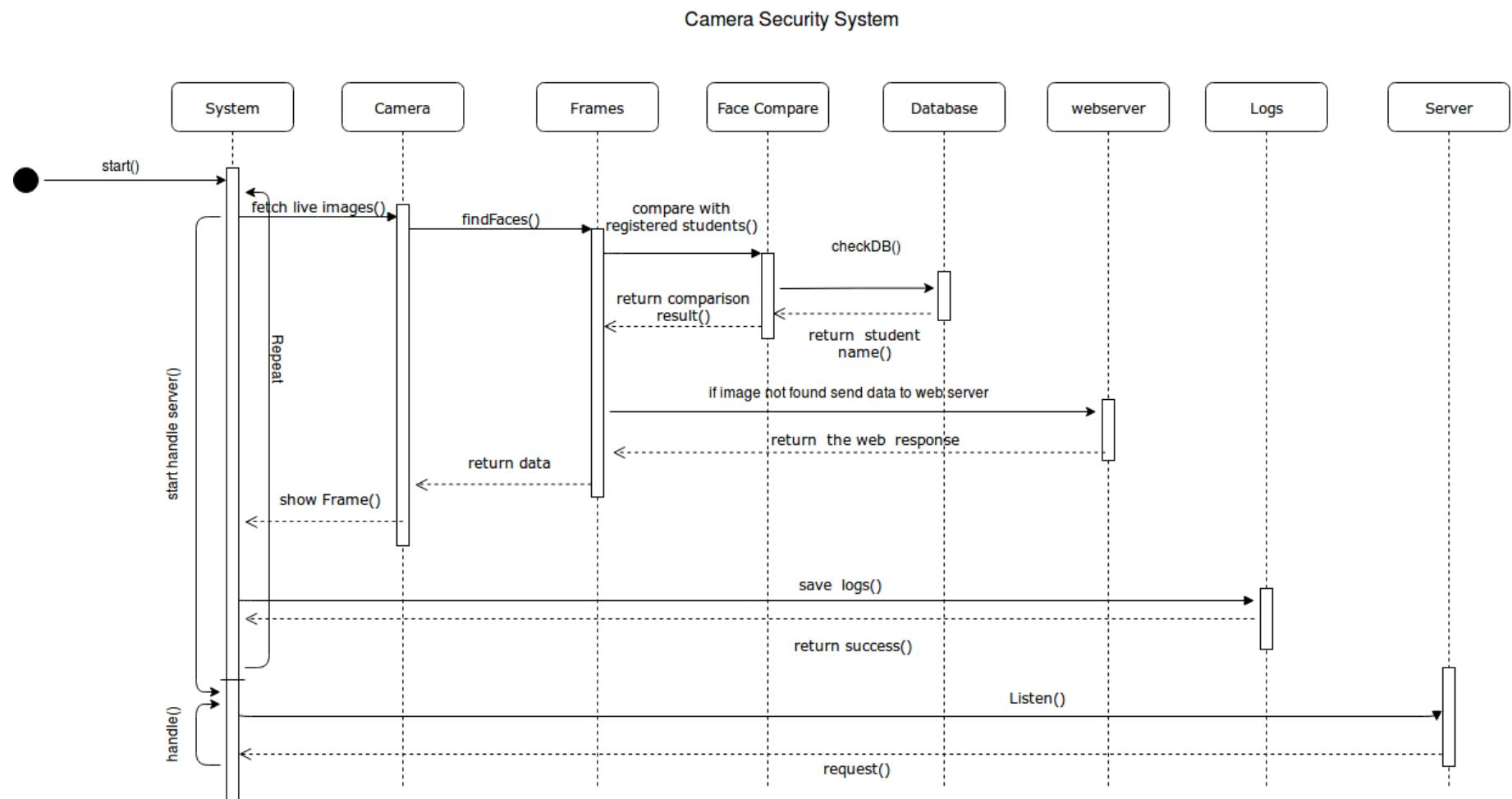


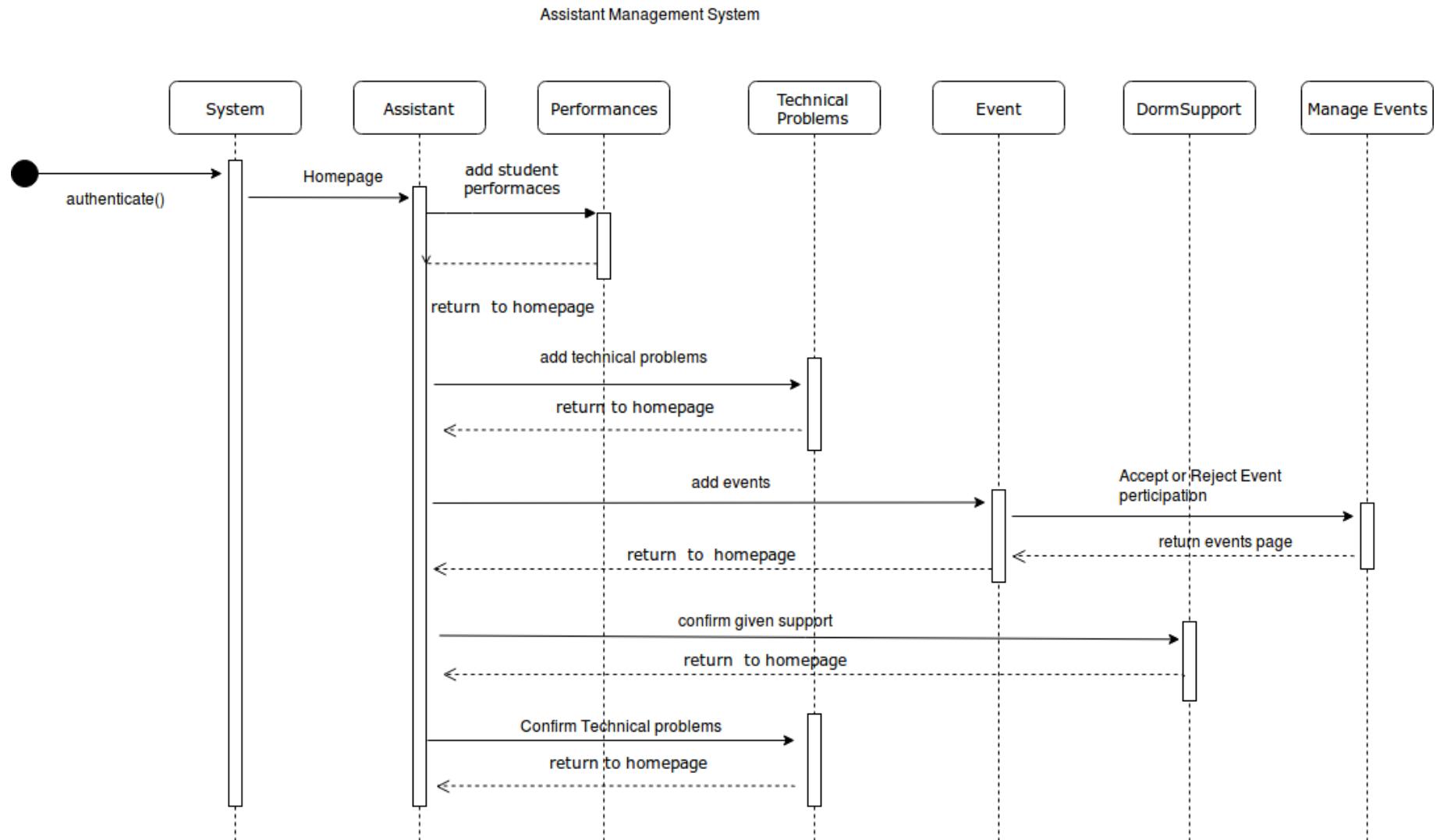
**Technical\_staff\_STATE\_DIAGRAM**



## 4.2.4 Sequence Diagrams

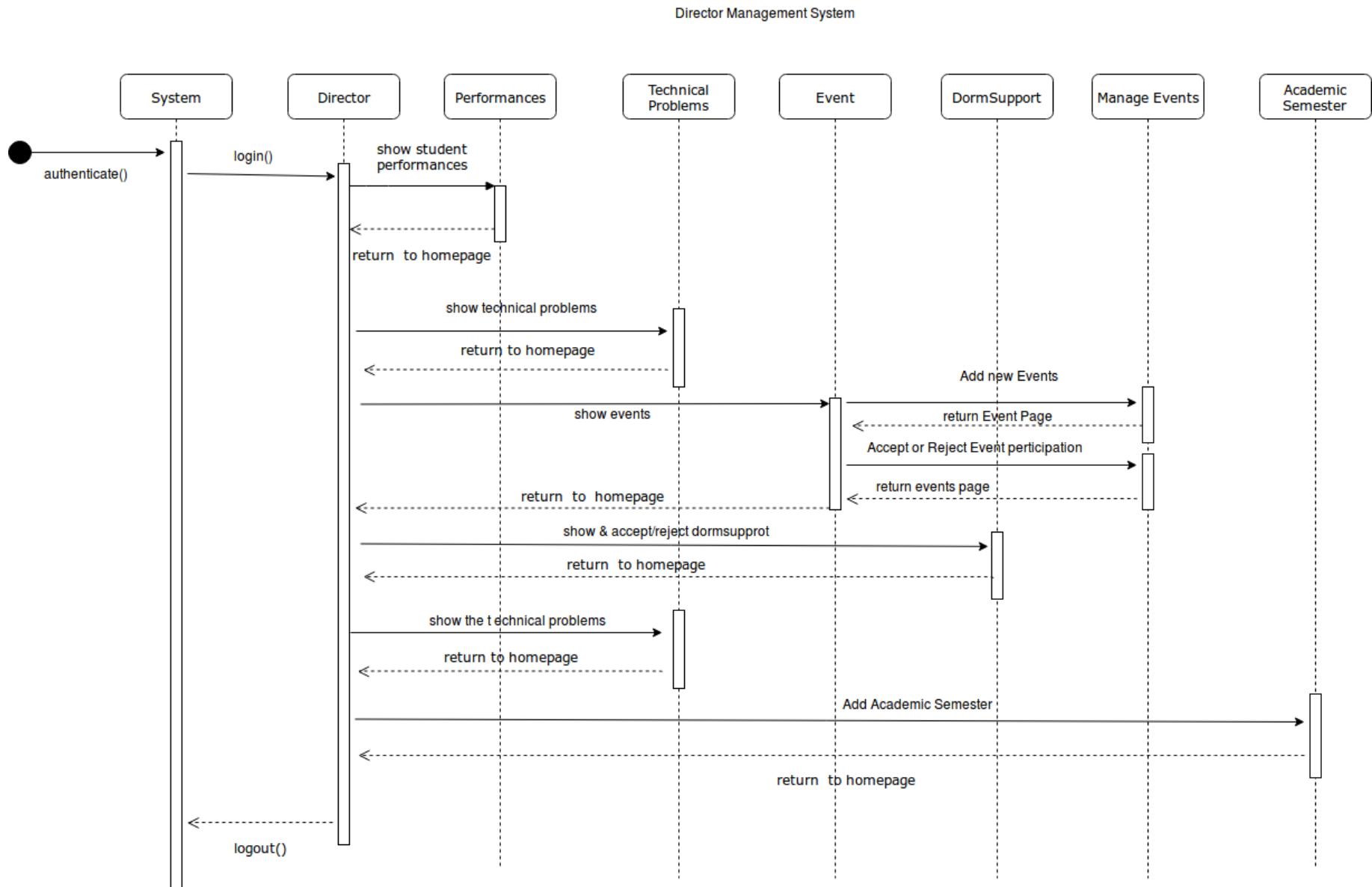
## Sequence Camera Security

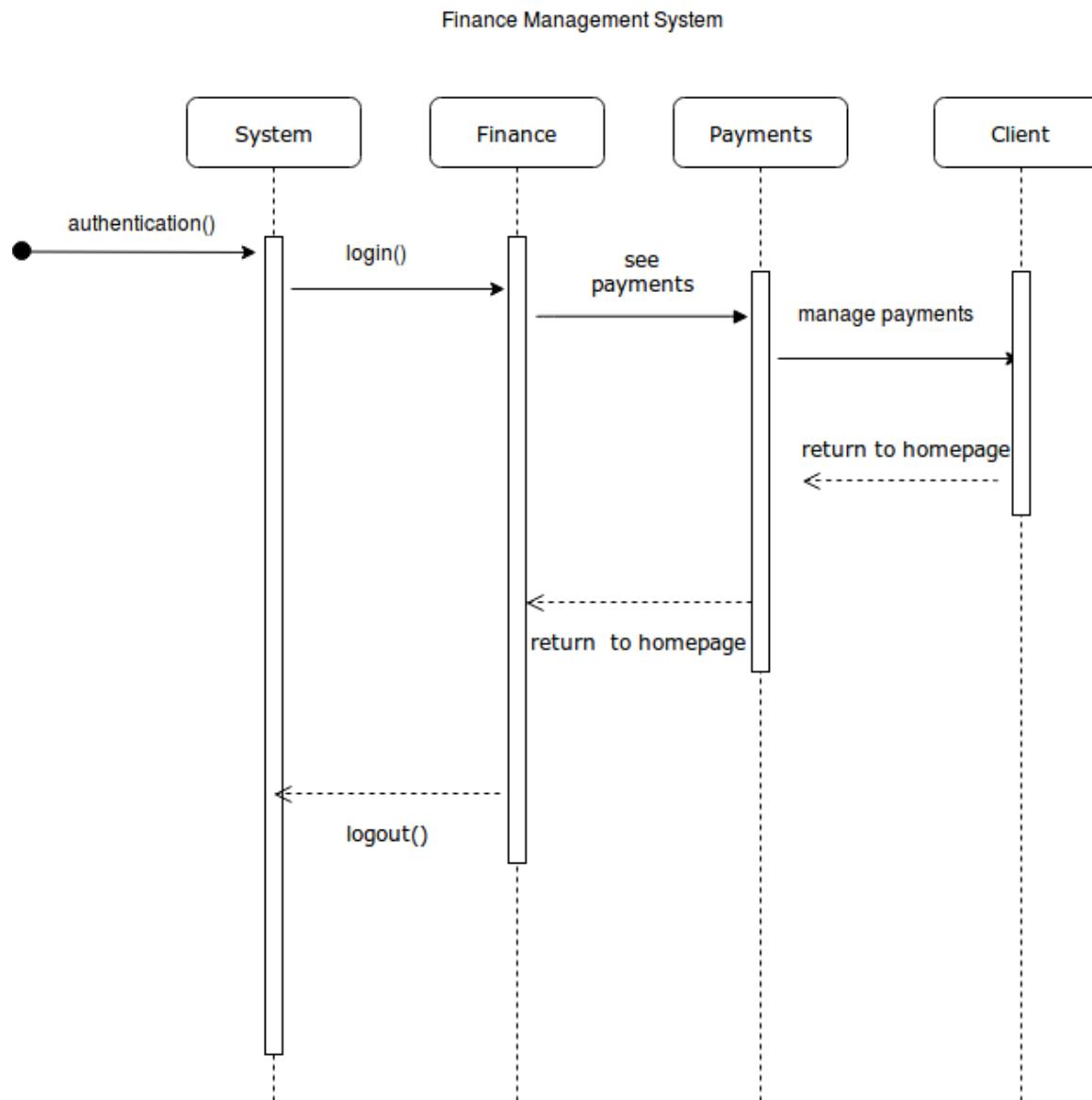




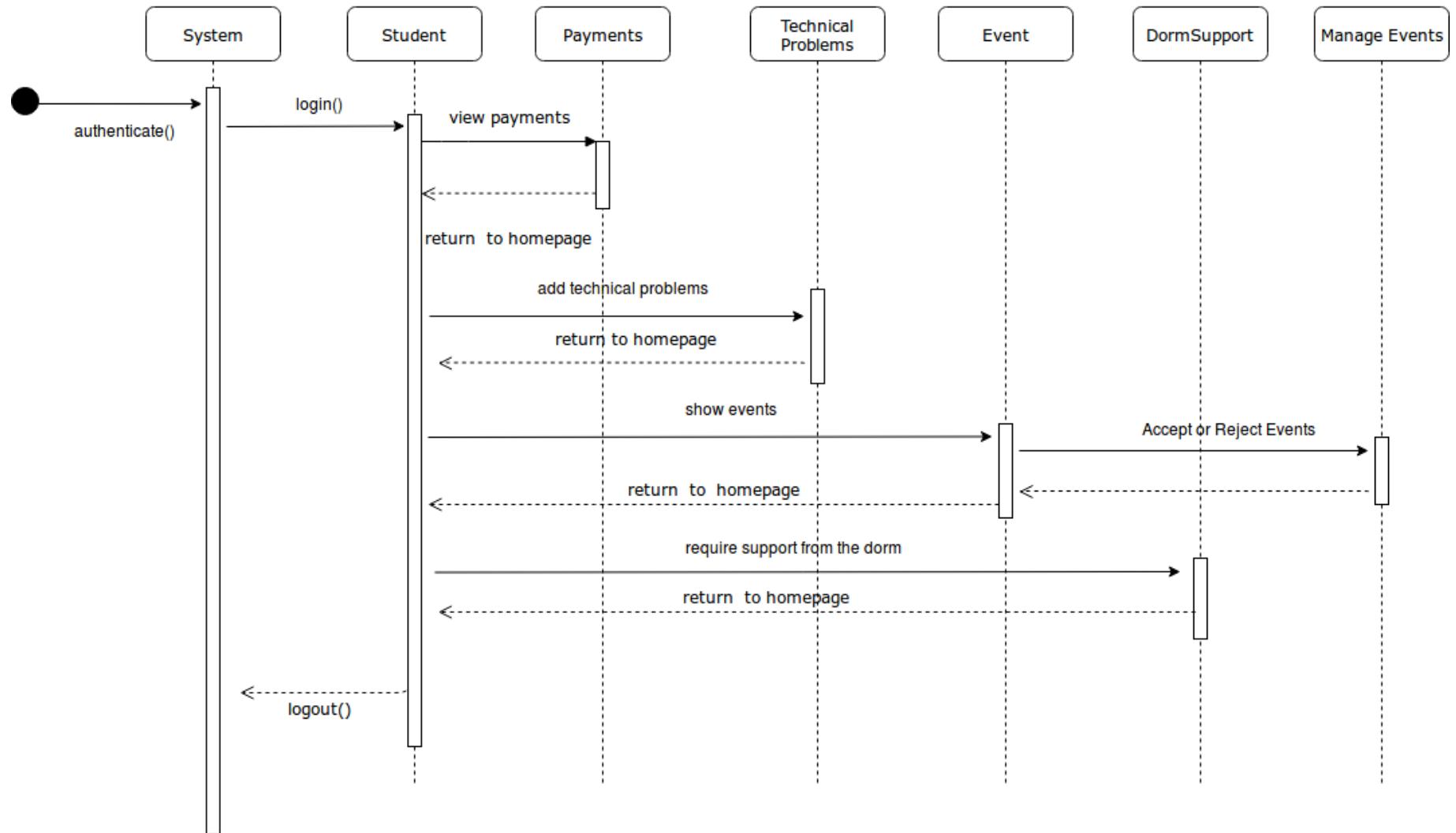
## SequenceDiagram(DirectorPage)

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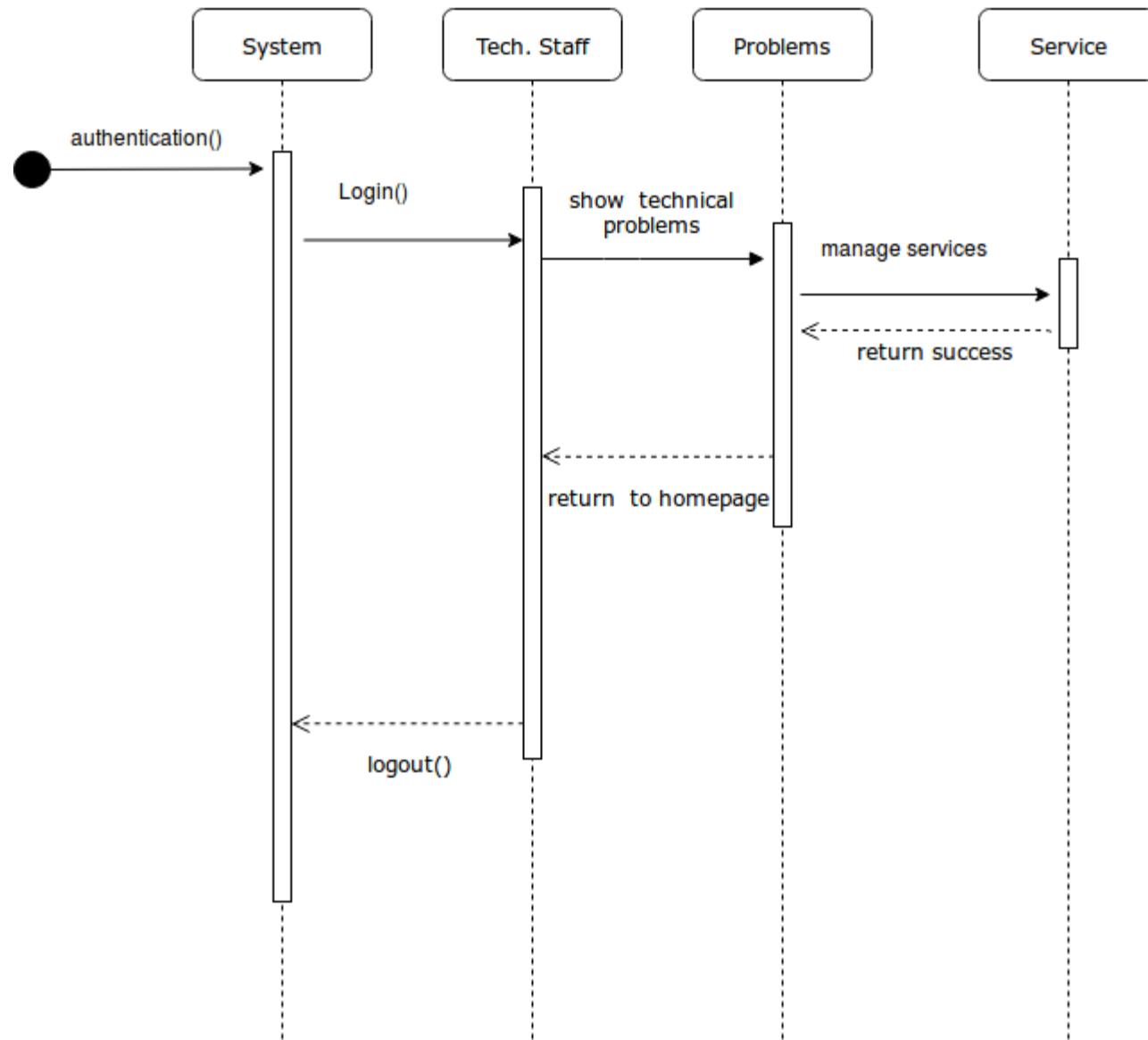




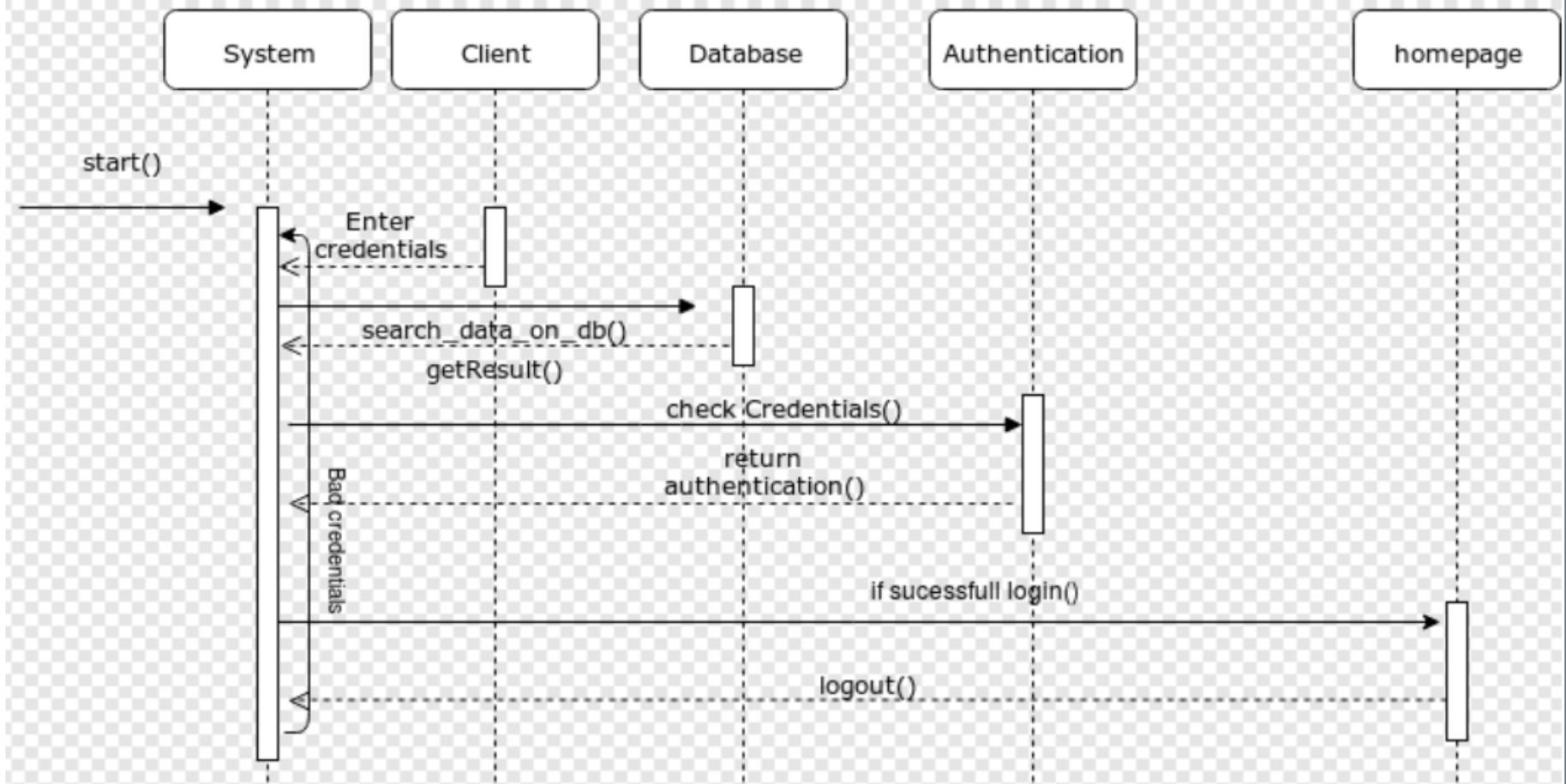
**EDMS Documentation**  
Student Management System



**EDMS Documentation**  
Tech. Staff Management System

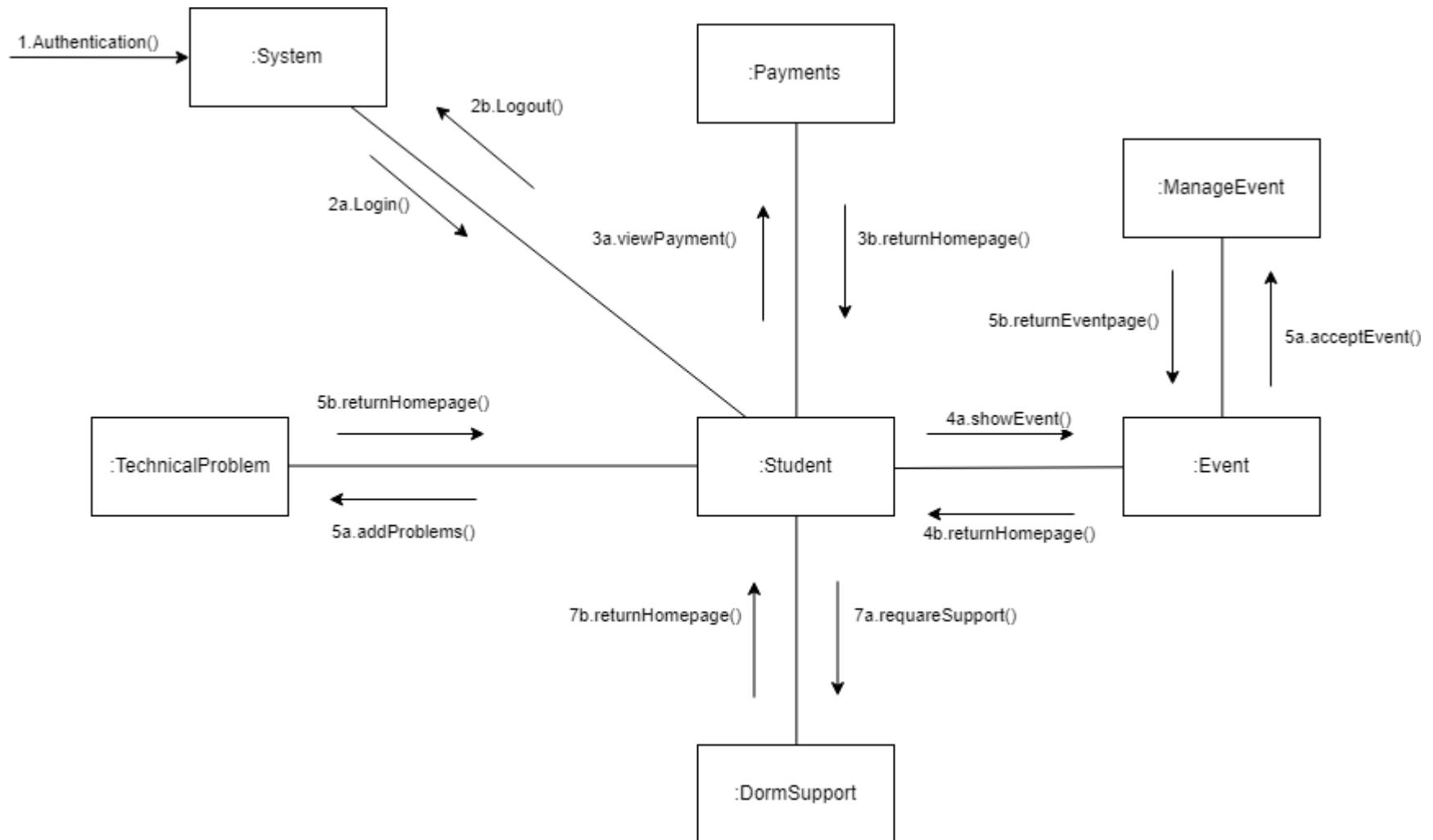


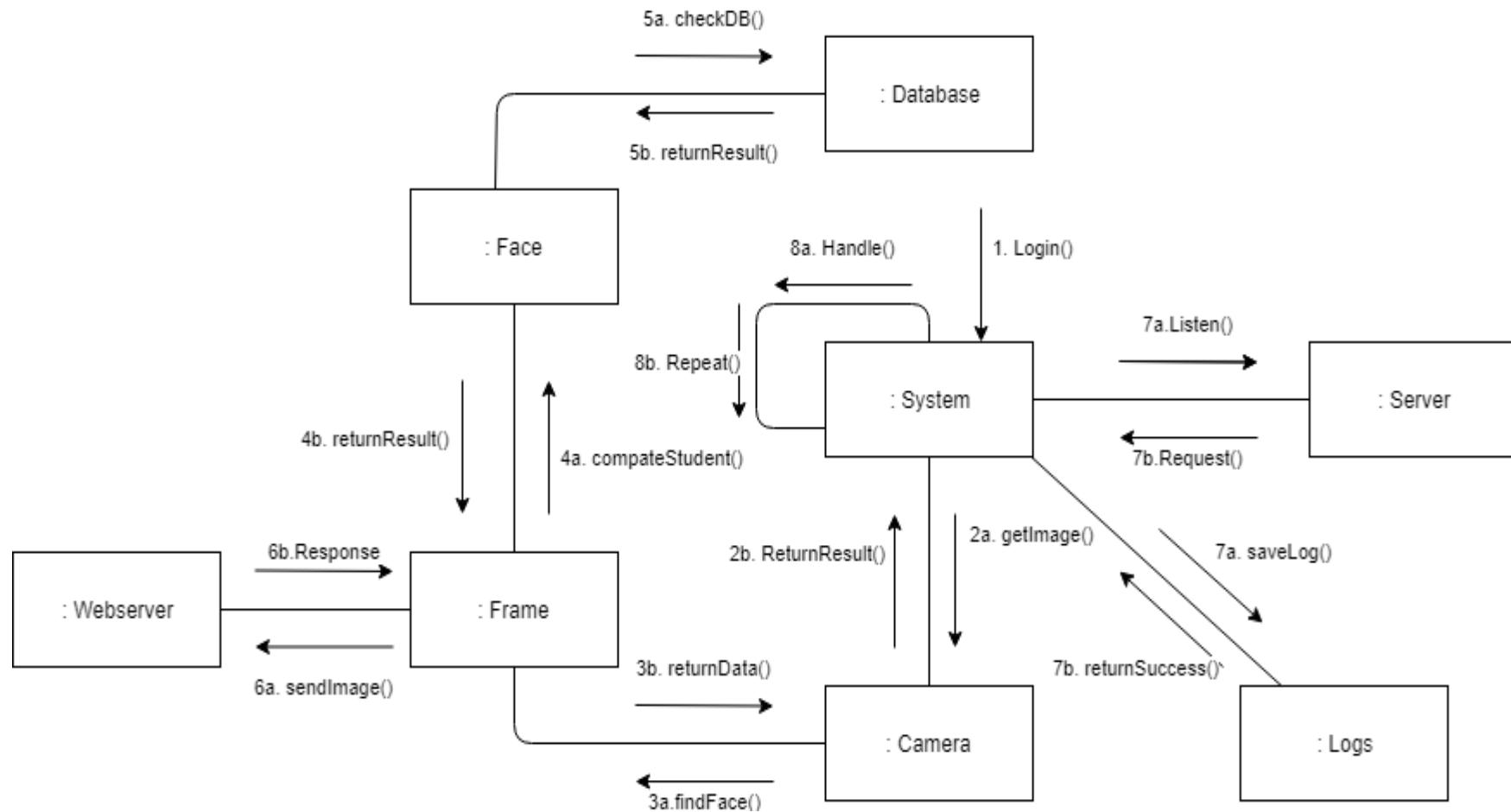
## Login part

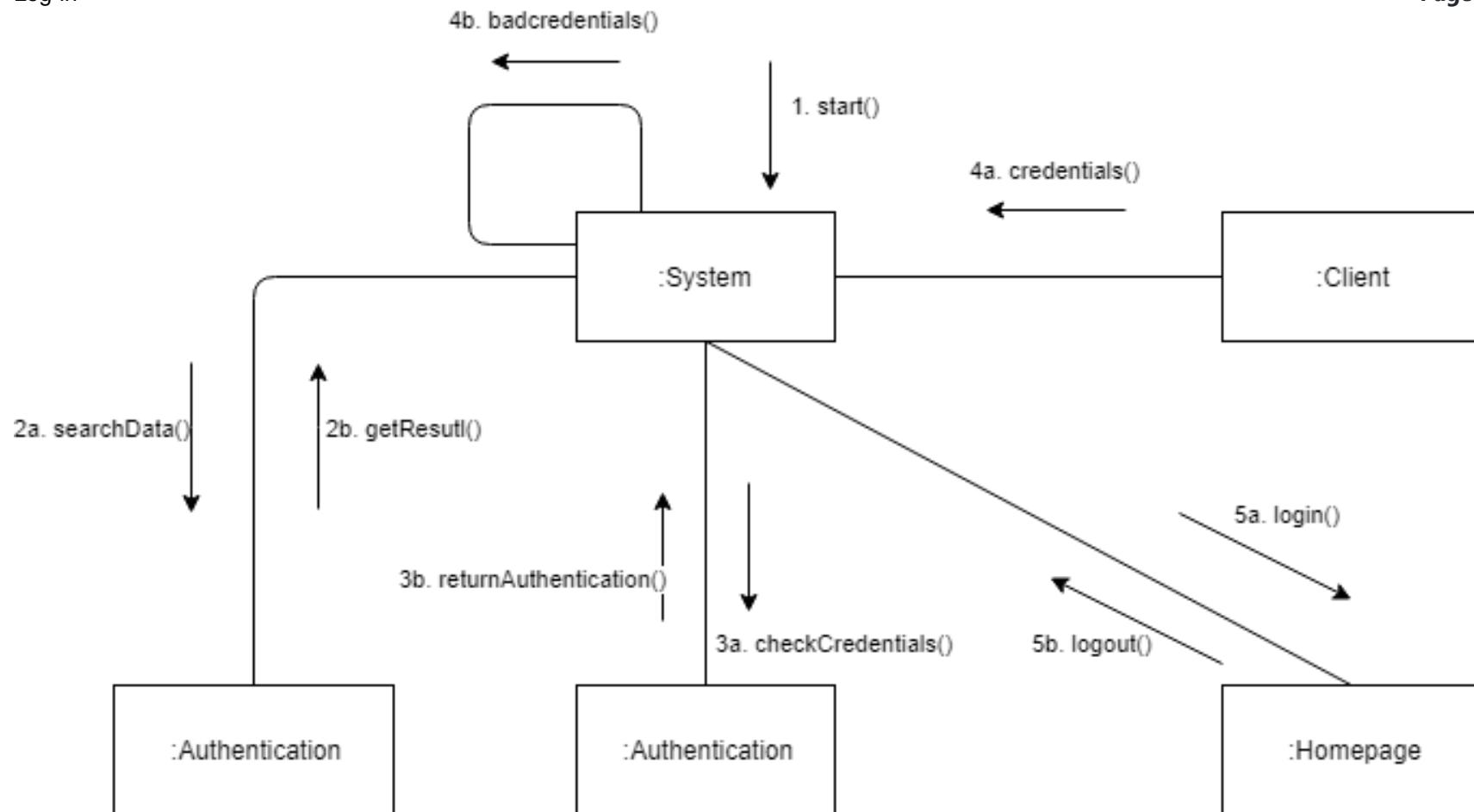


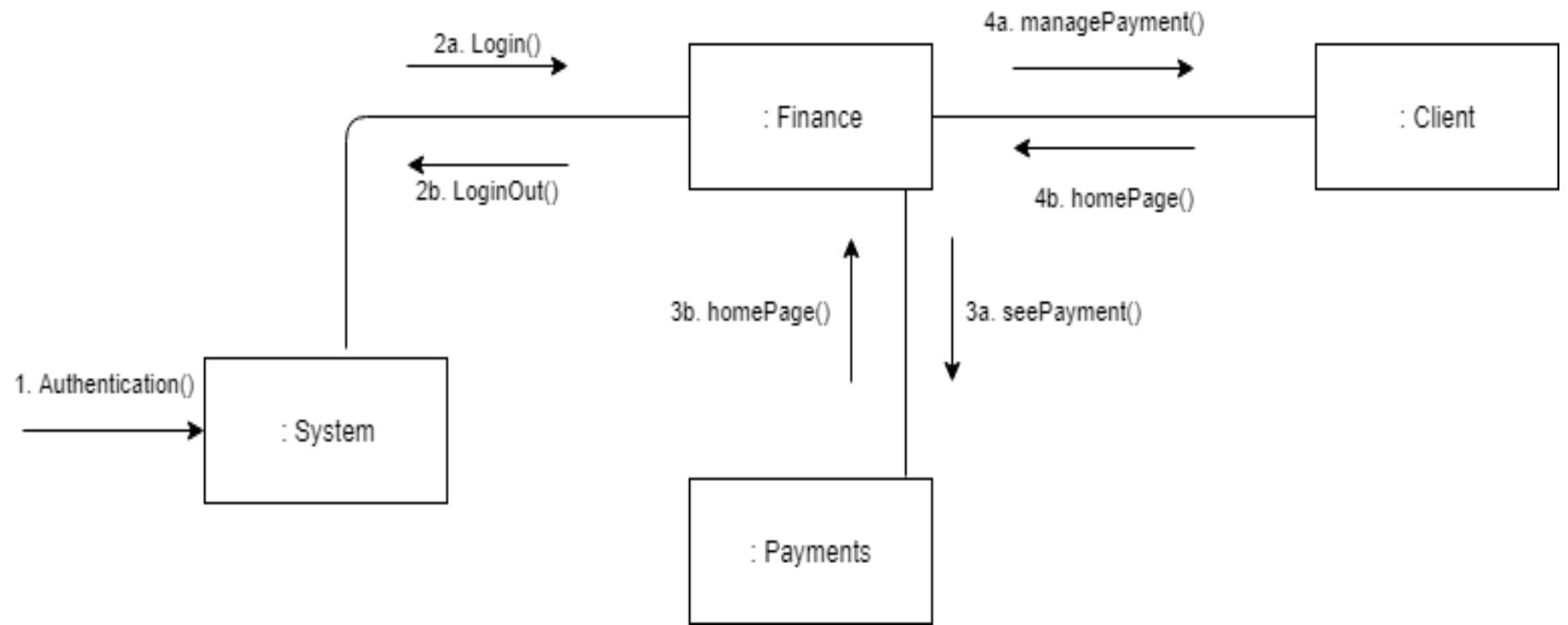
#### 4.2.5 Collaboration Diagrams

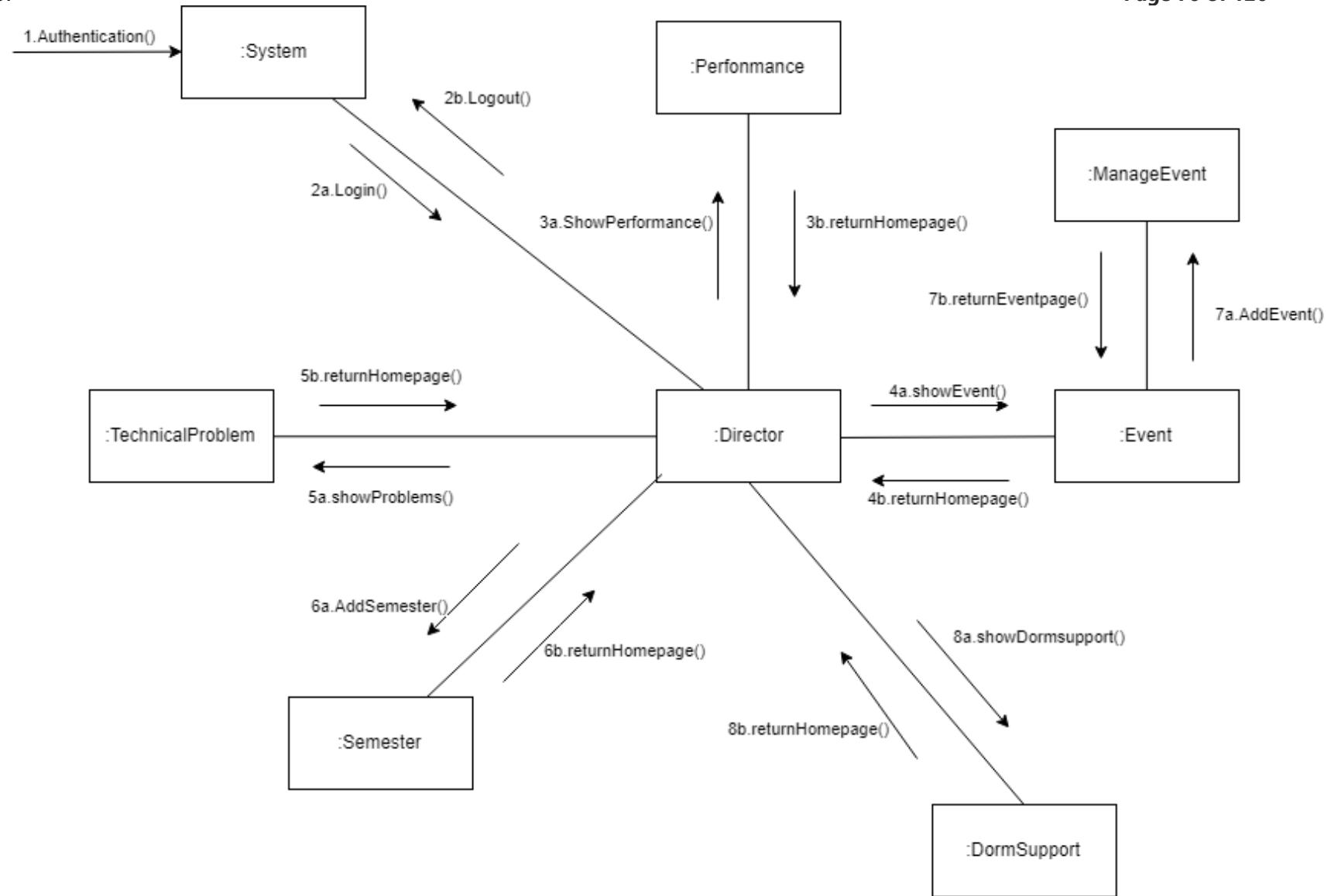
Student



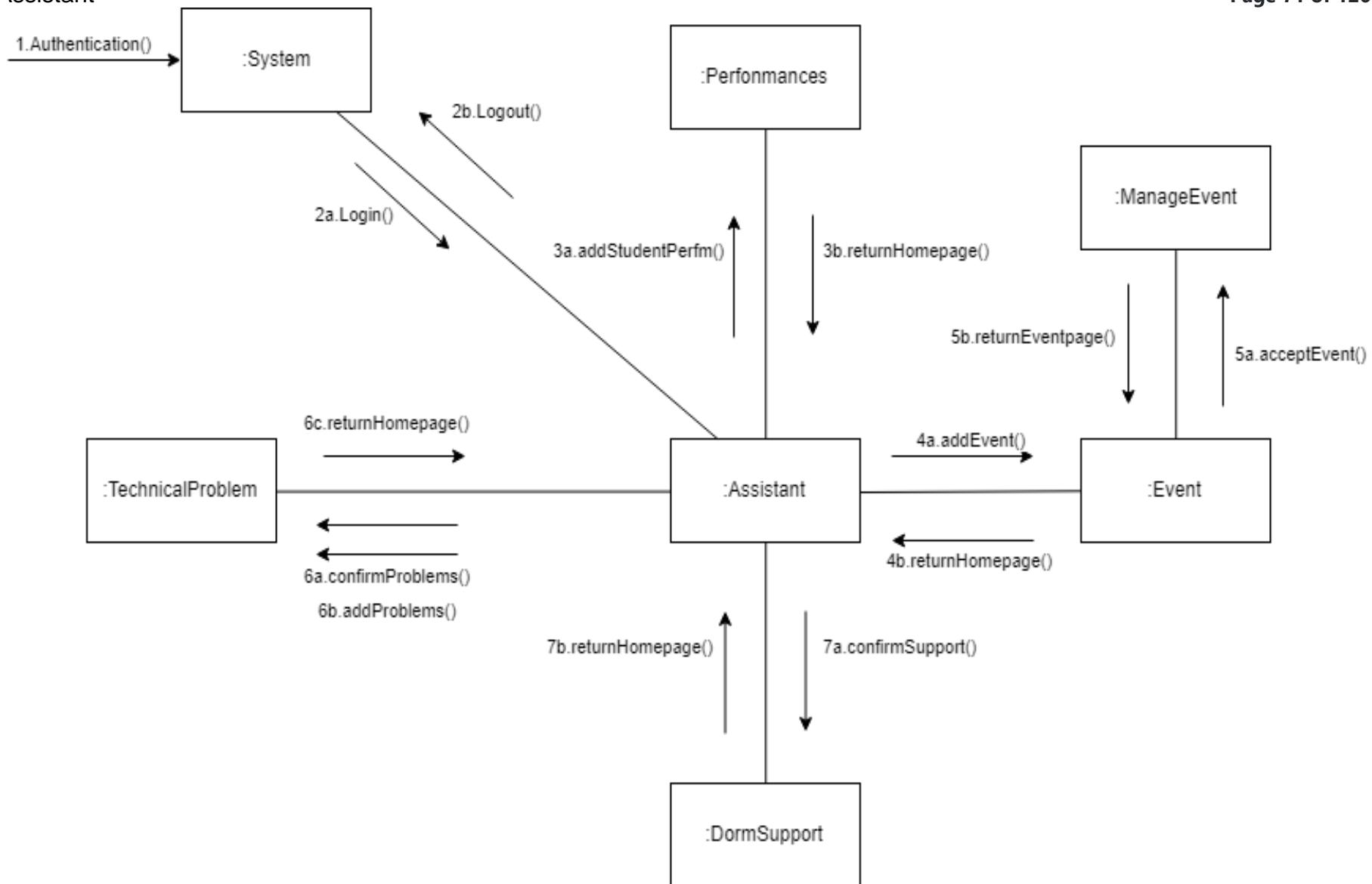


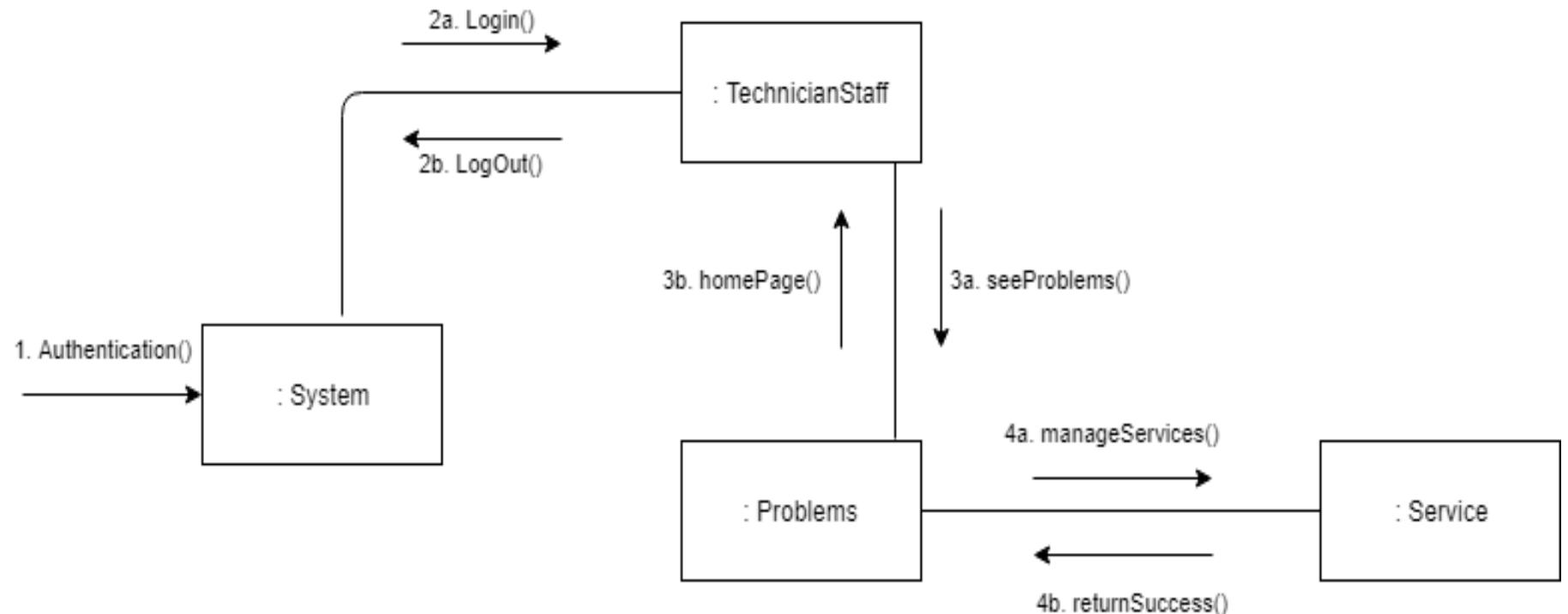




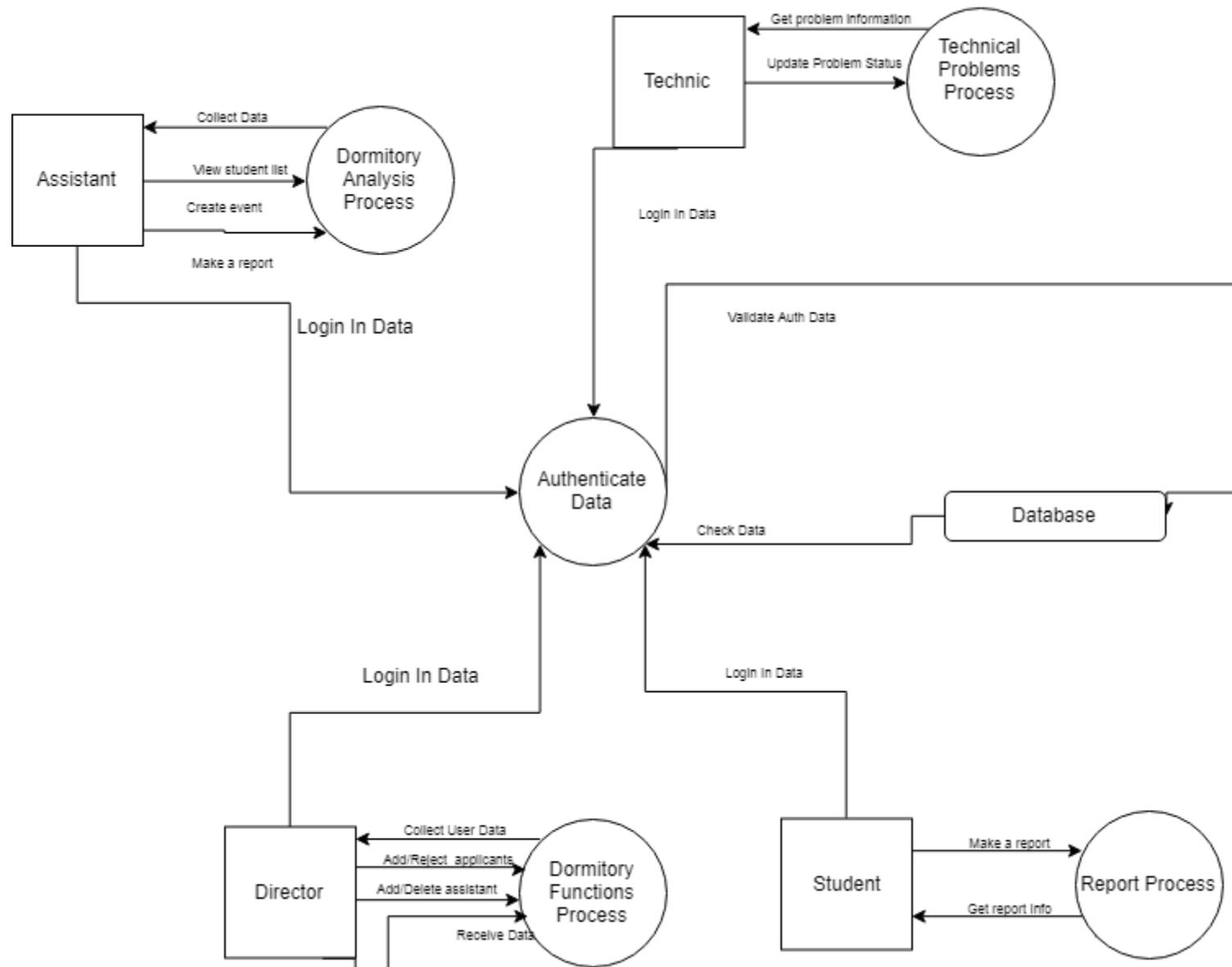


Assistant

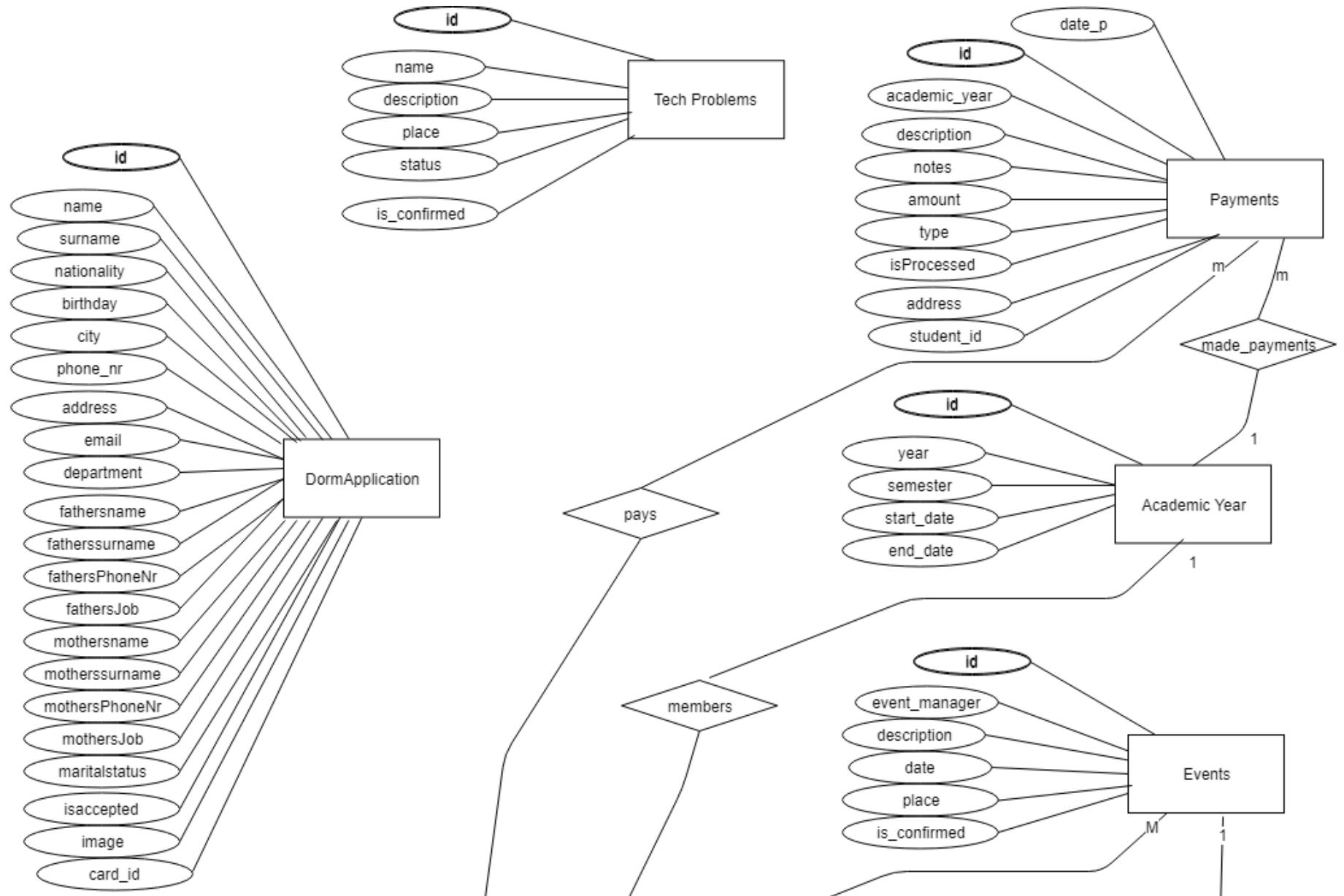


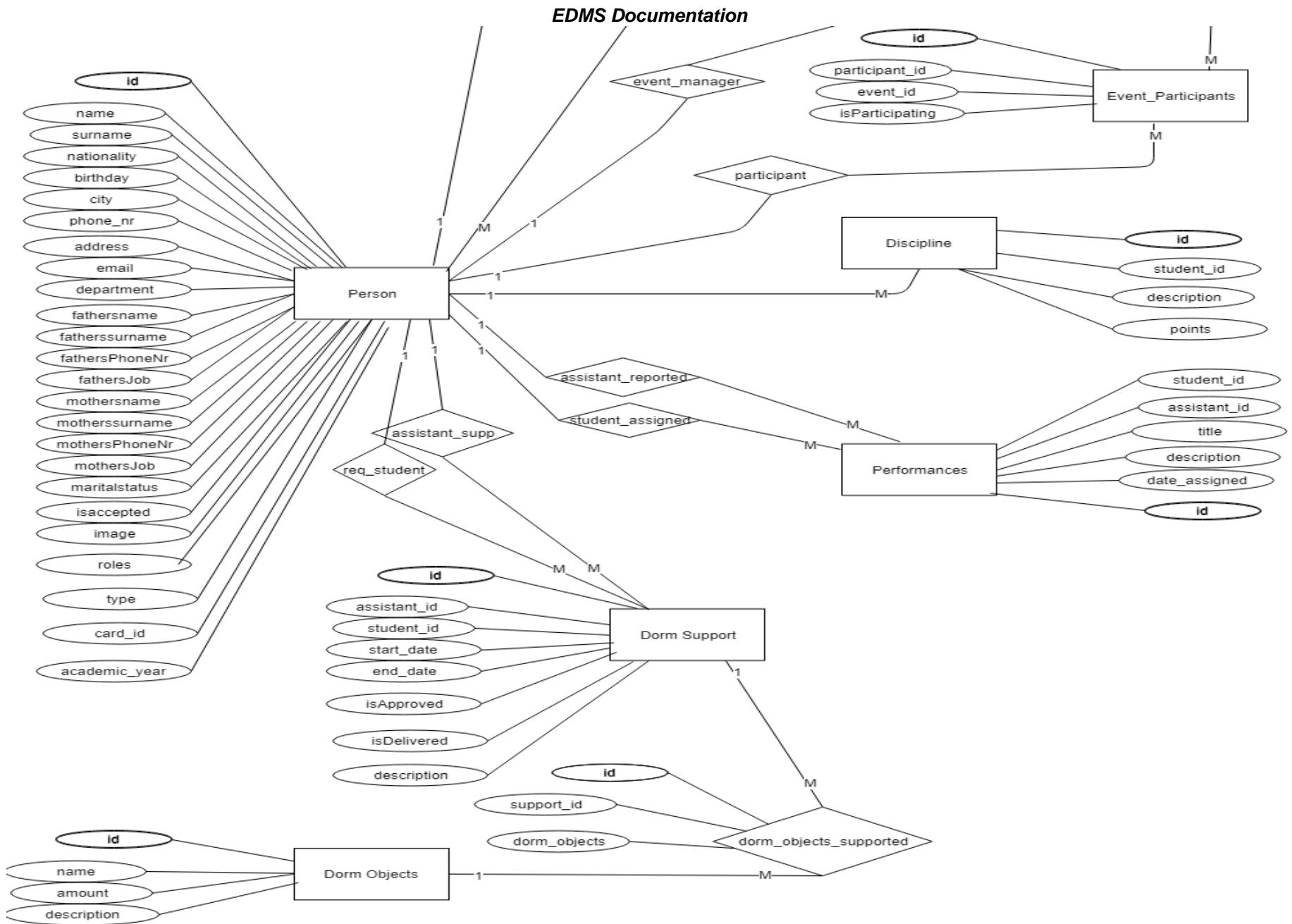


## 4.3 DFD

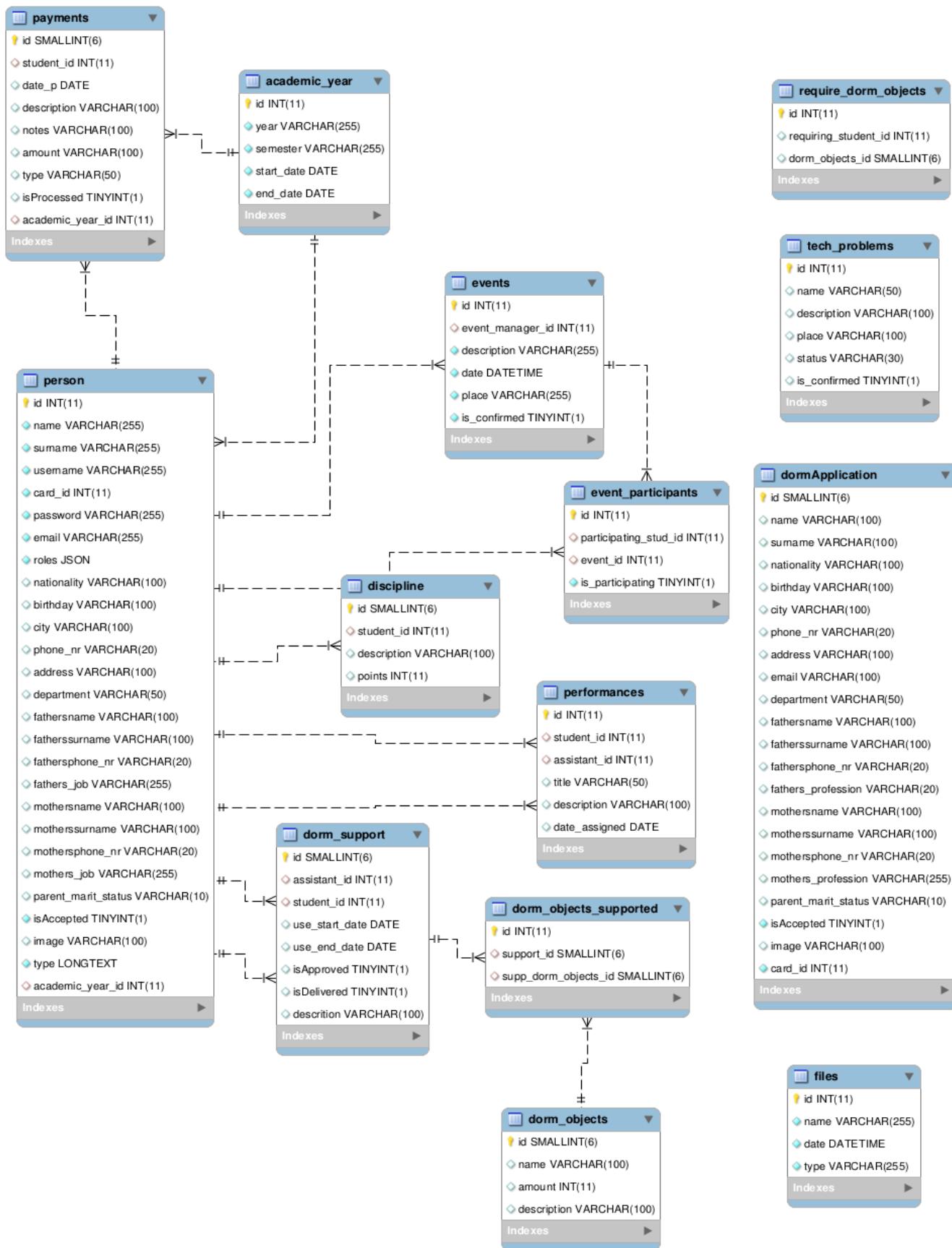


## 4.4 ERD



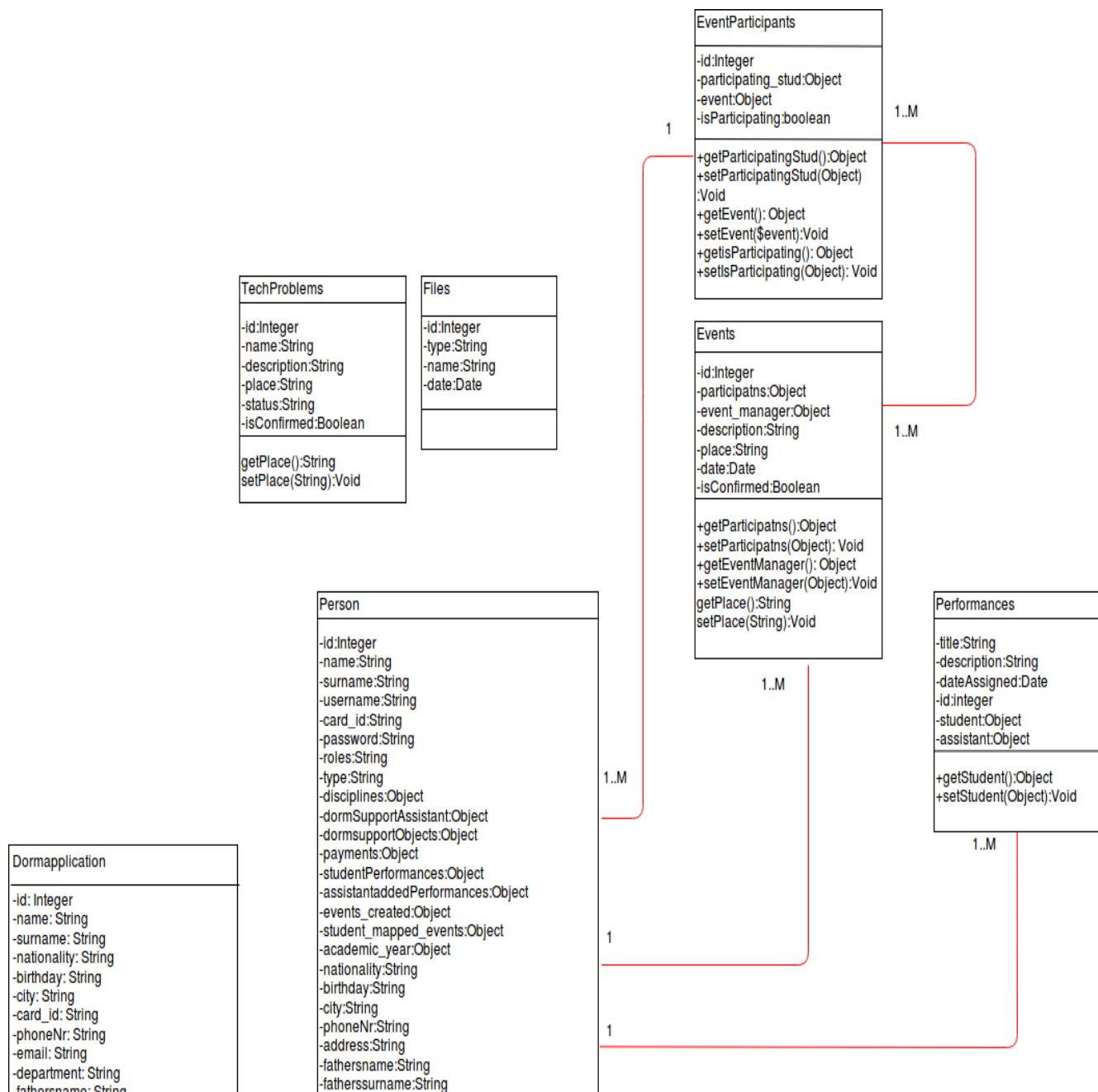


## EDMS Documentation



## 4.5 Structural Diagrams

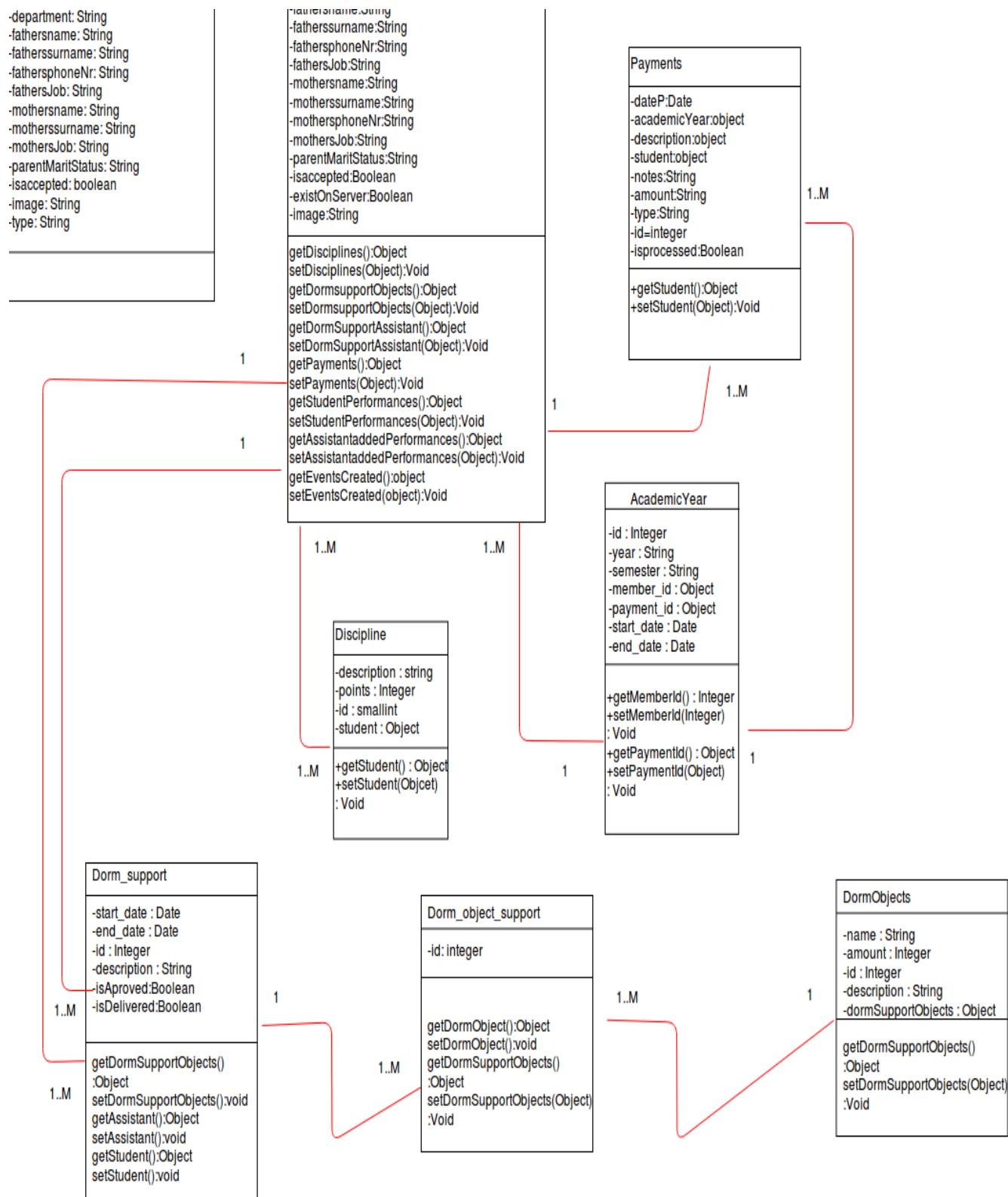
### 4.5.1 Class Diagram



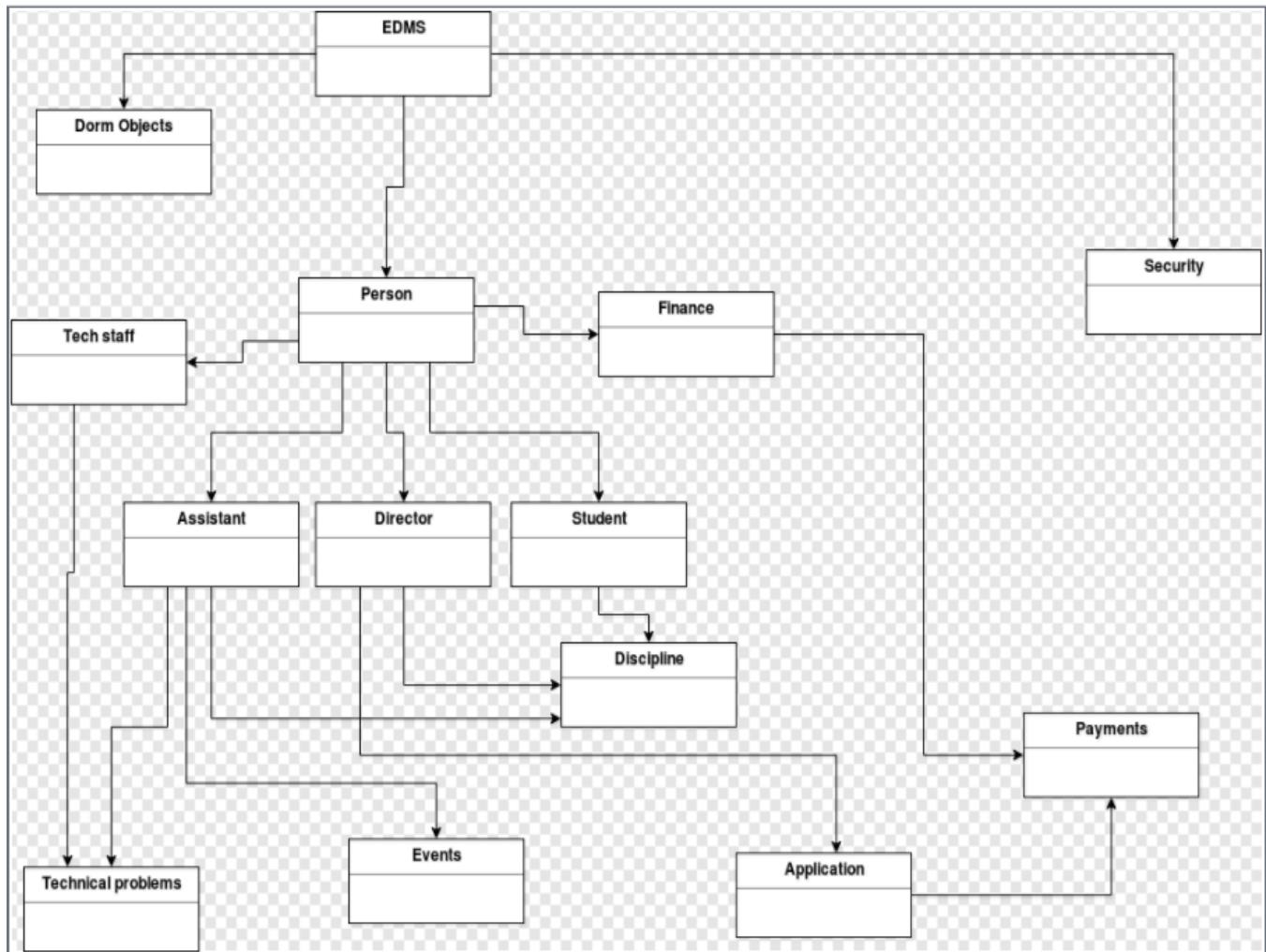
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## Class Diagram

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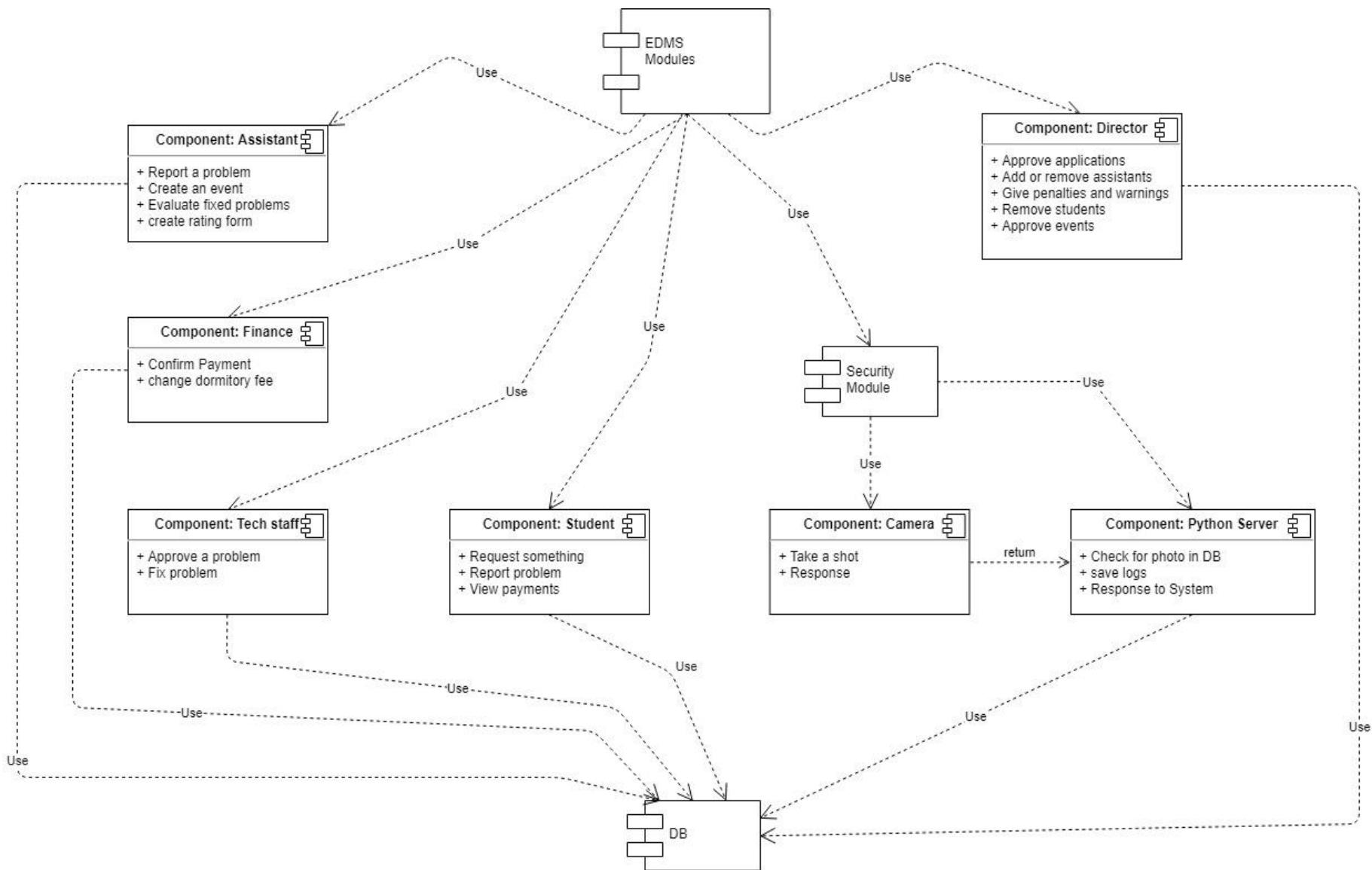


#### 4.5.2 Object Diagram

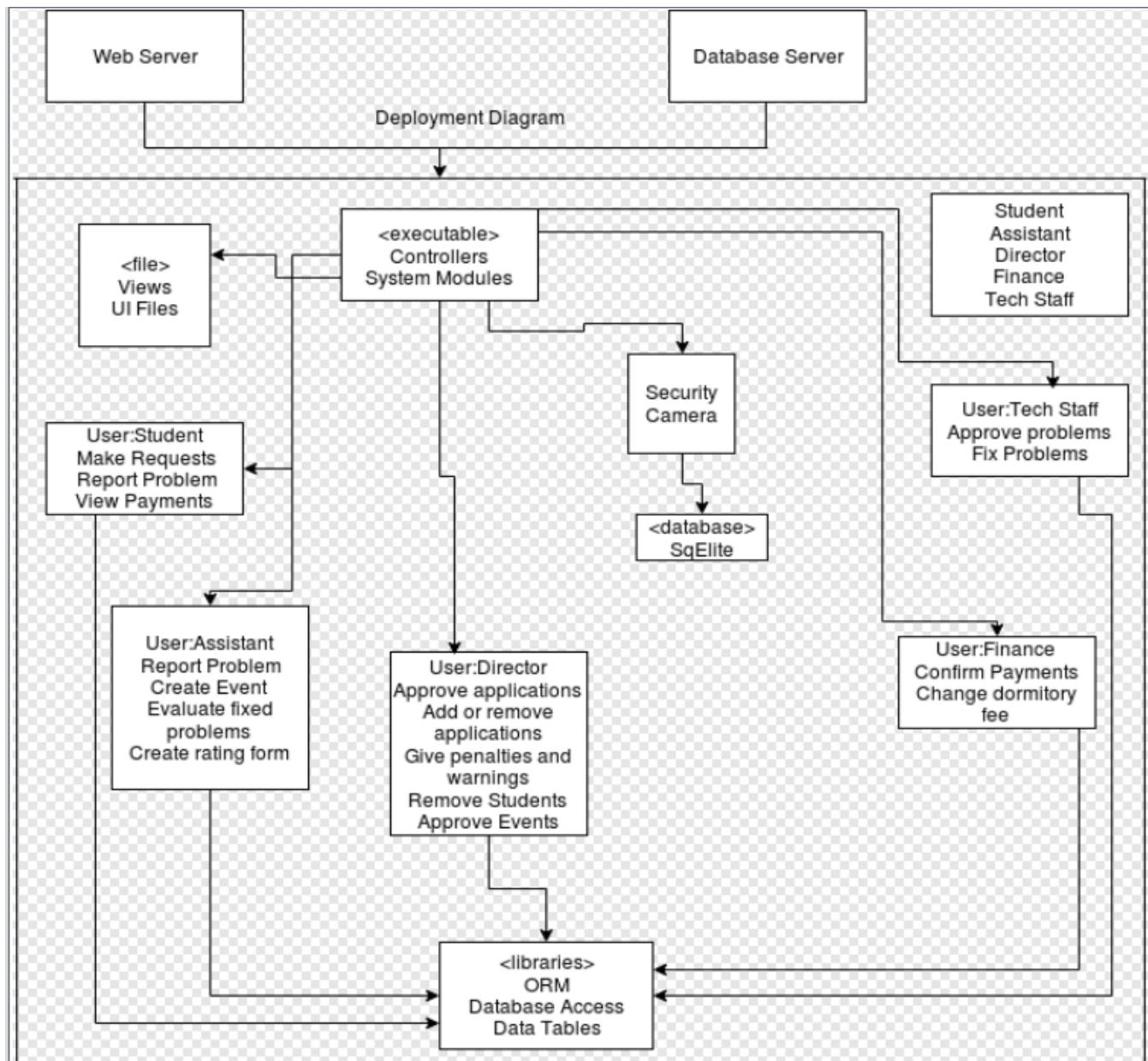


## 4.5.3 Component Diagram

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#### 4.5.4 Deployment Diagram



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## **5. Implementation**

The EDMS is php server and python script application. The php server is implemented by using the symfony framework. They provide many functionalities such as Face recognition at the entrance security, socket to socket communication, messages encryption, messages decryption. And the most important is the usability and the modularity. Since we are using the symfony framework, it is making easy the group working process since everyone has its own parts.

Some of the technologies used for our projects are:

- PHP 7.2 .0 > \*
- Symfony 3.4
- HTML
- HTML5 (HyperText Markup Language)
- CSS 3 (Cascading Style Sheets)
- JavaScript 5
- jQuery (JavaScript Framework Library - commonly used in Ajax development)
- Bootstrap 3
- Python 2.7
- Mysql server

The applications used for this project were:

1. Mysql workbench
2. Phpstorm
3. Pycharm
4. Mozilla Browser
5. Chrome Browser

The administration of MYSQL will be by using the mysql server on one the Epoka server supported by. prof. IGLI HAKRAMA.

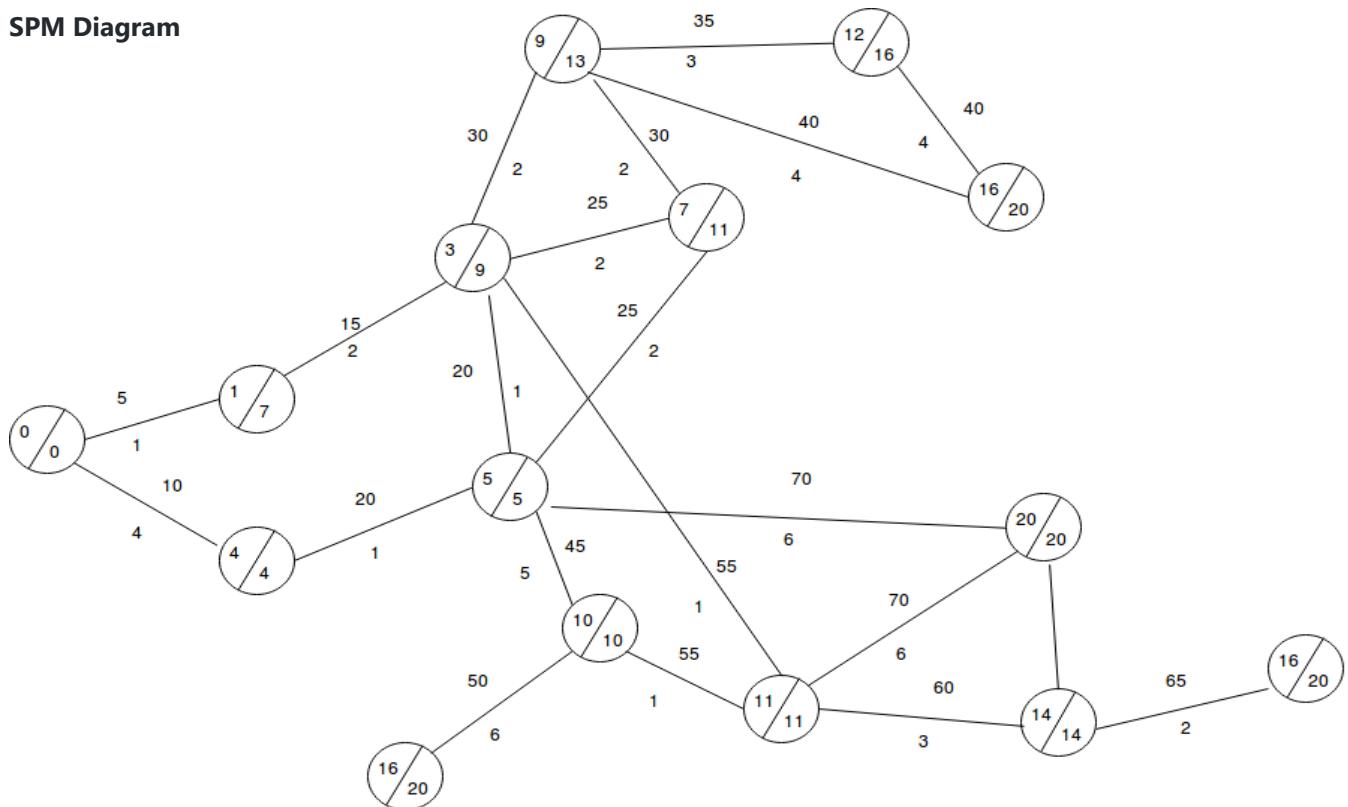
The web project, in our case the symfony part is going to be held on the same server. And the python project part is going to be implemented on one of the computer labs.

Being conceived as Web application, the communication over two parties - client and the server - is going to take place via the HTTPS protocol.

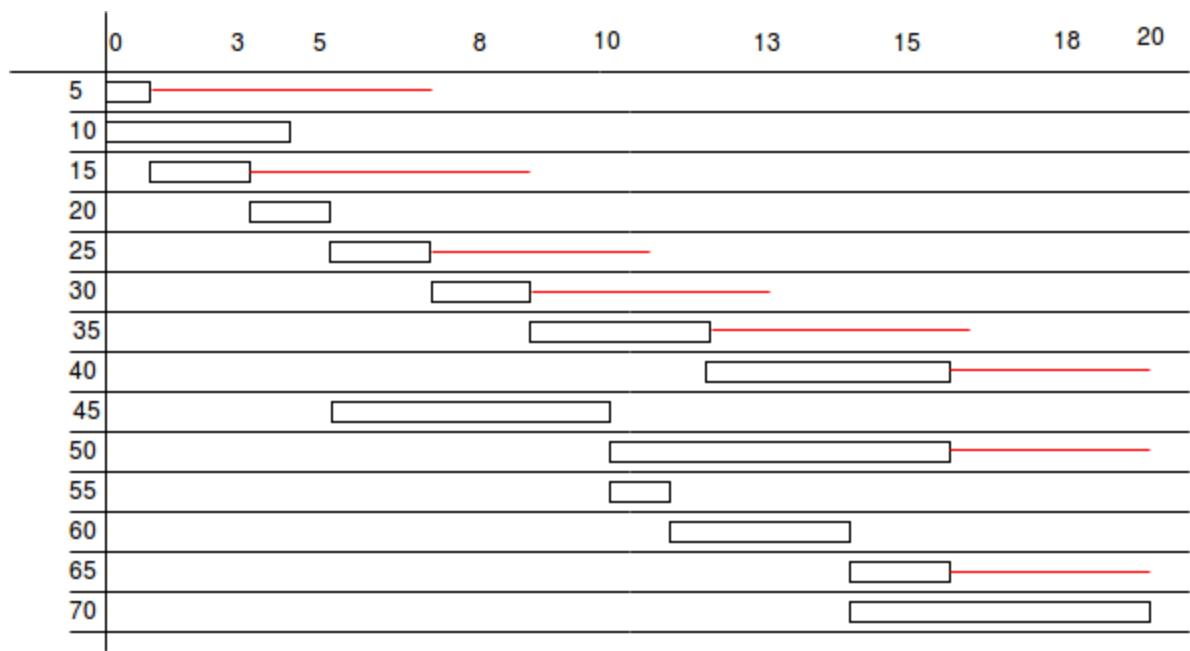
## 6. SPM Diagram

Number	Activity	Duration	Dependencies
5	Topic Selection	1	
10	Technology	4	
15	Project Description	2	5
20	Project Structure	1	15,10
25	Requirements Specification	2	15,20
30	Use cases	2	15,25
35	State Diagrams	3	30
40	Sequence & Collaboration diagrams	4	30,35
45	Camera Security Structure	5	20
50	Camera Security Implementation	6	45
55	Database Structure	1	15,45
60	Doctrine implementation	3	55
65	Security Login	2	60
70	Web project implementation	6	60,20,55

**SPM Diagram**



**Table SPM Diagram**



## **APPENDIX**

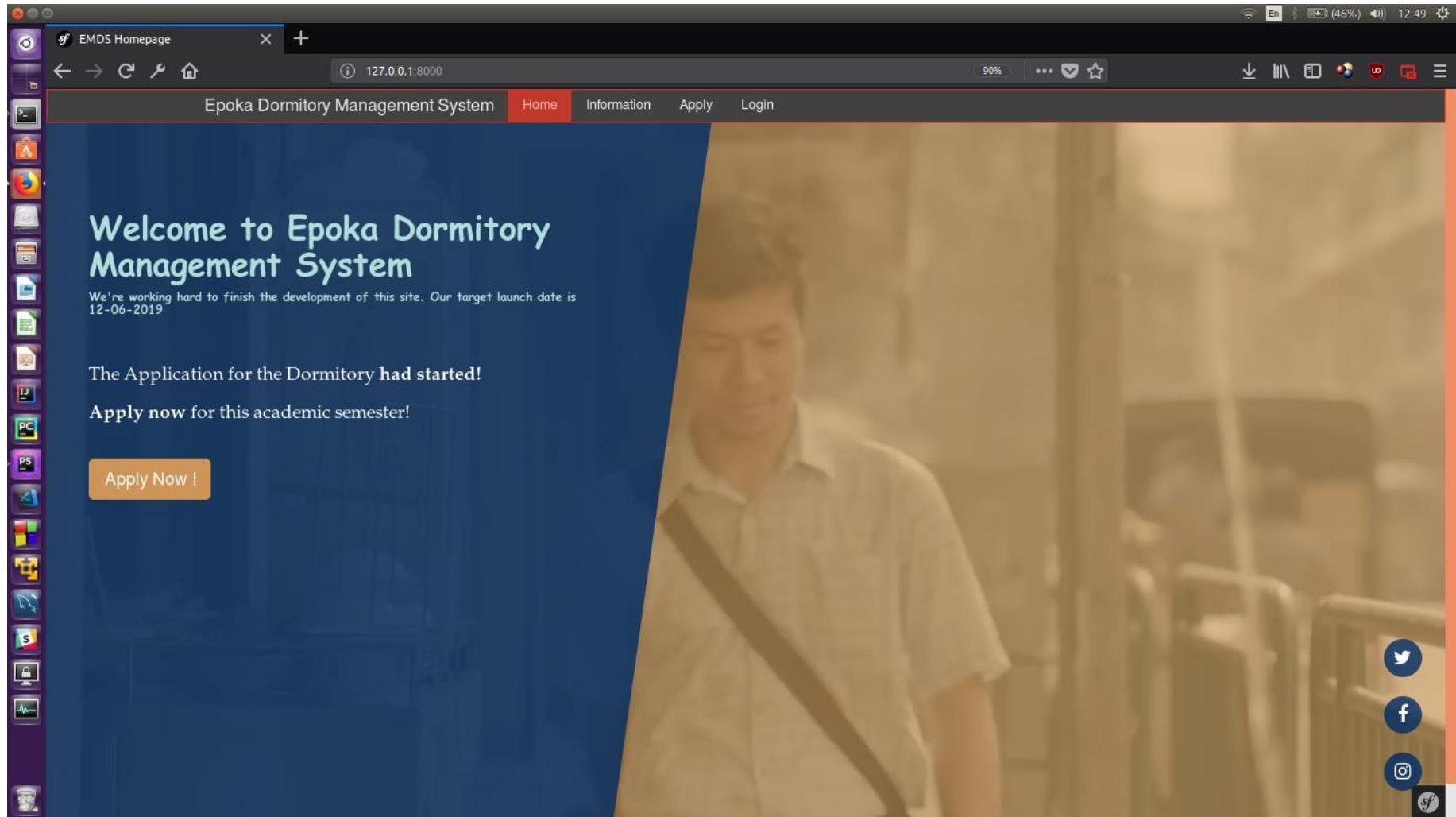
## APPENDIX A. REFERENCES

- ✓ <https://symfony.com/doc/3.4/controller.html>
- ✓ <https://twig.symfony.com/>
- ✓ <https://getbootstrap.com/docs/3.3/>
- ✓ <https://www.python.org/downloads/>
- ✓ <https://pypi.org/project/opencv-python/>
- ✓ <http://opencv-python-tutroals.readthedocs.io/en/latest/>
- ✓ [https://docs.opencv.org/3.0-beta/doc/py\\_tutorials/py\\_tutorials.html](https://docs.opencv.org/3.0-beta/doc/py_tutorials/py_tutorials.html)

## **APPENDIX B. SCREENSHOTS**

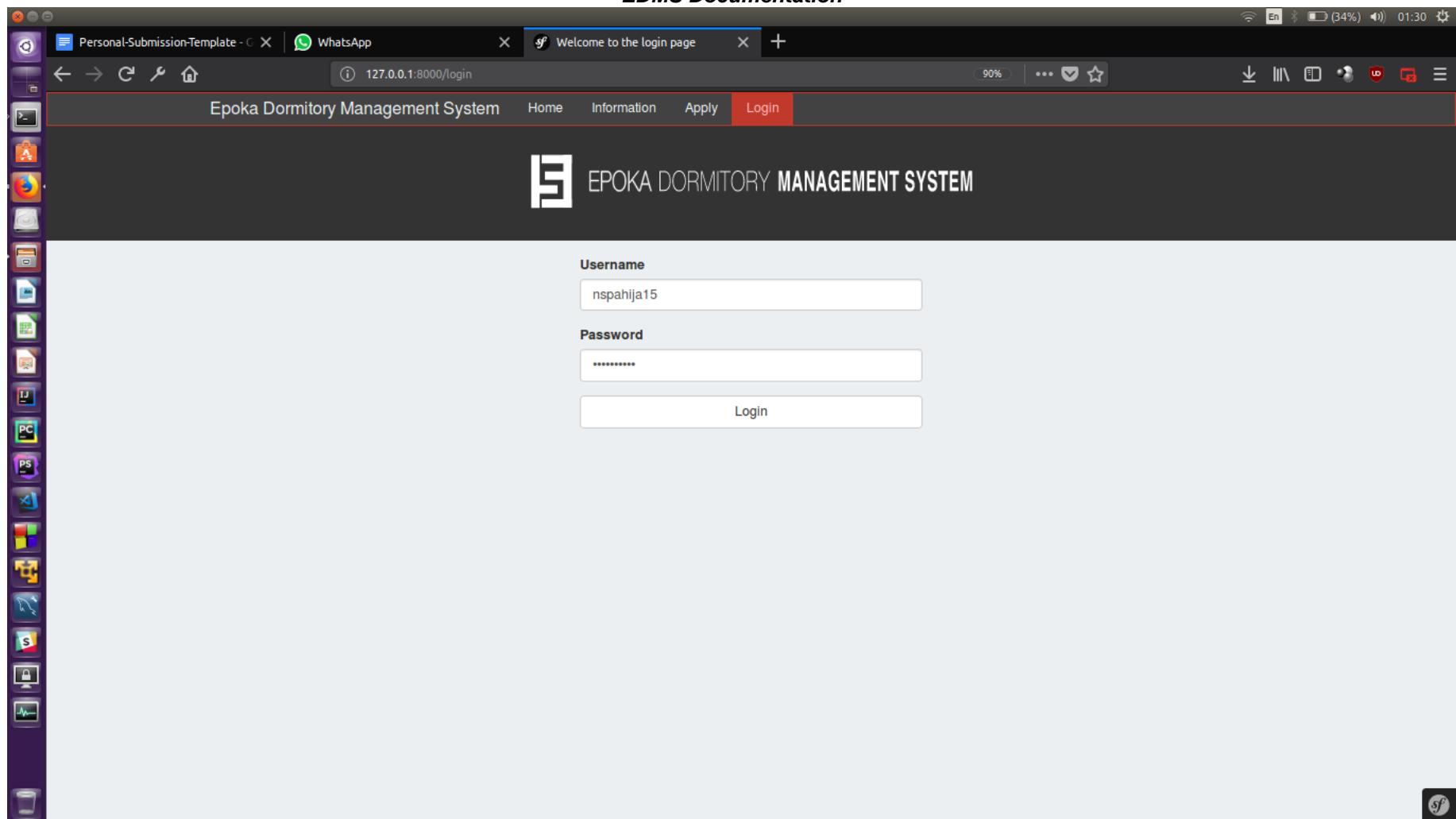
*(Screenshots will be in landscape orientation in the following pages ... )*

# Main Page

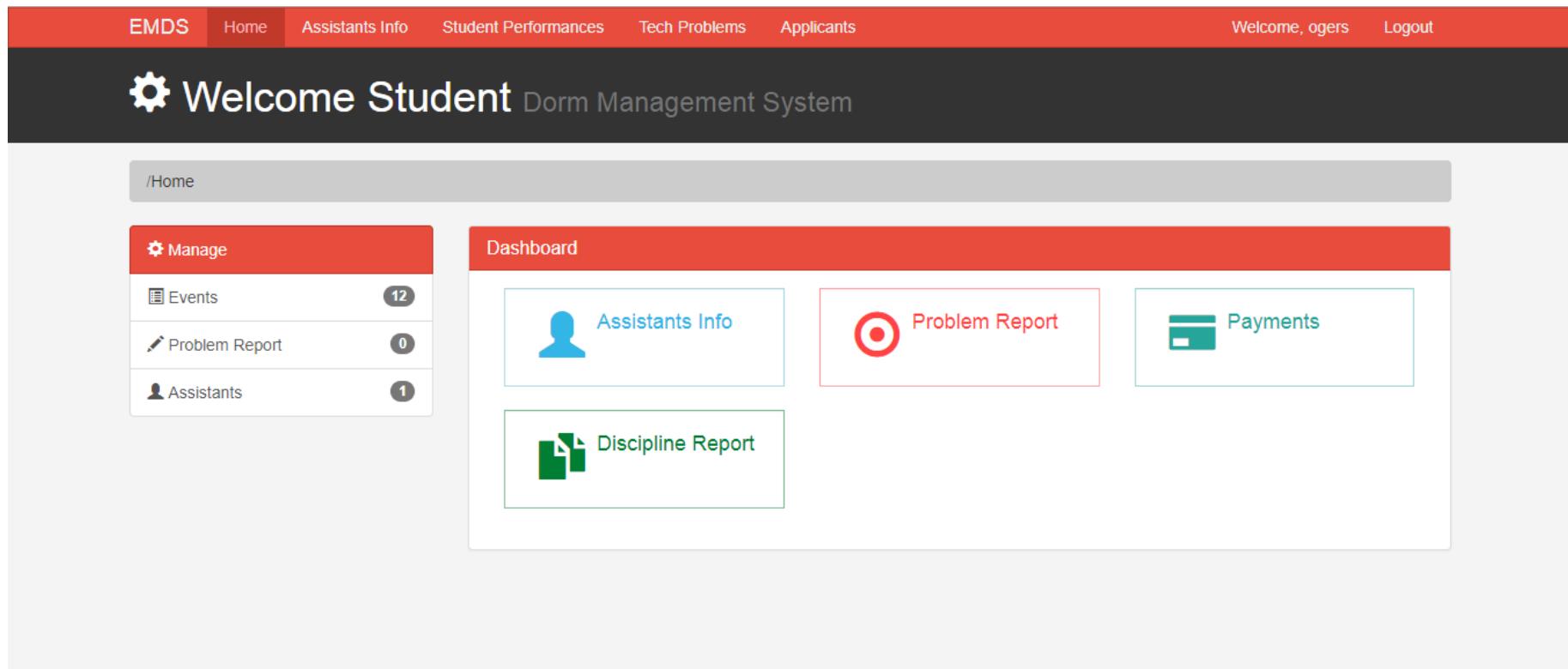


# Login

## *EDMS Documentation*



## Student Page Screenshots



The screenshot shows the student dashboard of the EDMS system. At the top, there is a red header bar with the following navigation links: EMDS, Home, Assistants Info, Student Performances, Tech Problems, Applicants, Welcome, ogers, and Logout. Below the header is a dark banner with the text "Welcome Student" and "Dorm Management System" next to a gear icon. The main content area has a light gray background. On the left, there is a sidebar titled "Manage" with three items: "Events" (12 notifications), "Problem Report" (0 notifications), and "Assistants" (1 notification). To the right of the sidebar is a "Dashboard" section with four cards: "Assistants Info" (blue card), "Problem Report" (red card), "Payments" (green card), and "Discipline Report" (light green card).

EMDS Home Assistants Student Performances View Payments Applicants [Logout](#)

# ⚙️ Welcome Student Dorm Management System

/Home

**Manage**

- Events (12)
- Problem Report (0)
- Assistants (1)

**Problem**

**FORM**

Name

Problem type

Place

Description

EMDS Home Assistants Info Student Performances Tech Problems Applicants Logout

## ⚙️ Welcome Student Dorm Management System

/Home /Assistants

**Manage**

- Events (12)
- Problem Report (0)
- Assistants (1)

### Assistants

#### Registered Assistants

Name	Email	Actions
Kristian Pashollari	kpashollari16@epoka.edu.al	Show Info

## Assistant Page Screenshots

### Assistant's Dashboard

The screenshot shows the 'Assistant's Dashboard' of the EDMS system. At the top, there is a red header bar with the 'EMDS' logo, 'Home', 'Students', 'Events', and 'Tech Problems' buttons, and 'Welcome, criss' and 'Logout' links. Below the header is a dark header section with a gear icon and the text 'Welcome Assistant' and 'Dorm Management System'. On the left, a sidebar titled 'Manage' lists 'Students' (12), 'Events' (33), and 'Technical problems' (48). The main area is titled 'Dashboard' and contains four cards: 'Students' (blue icon), 'Student-Performance' (red icon), 'Technical-Problems' (green icon), and 'Events' (green icon).

# ⚙️ Welcome Assistant

Dorm Management System

**Manage**

- Students 12
- Events 33
- Technical problems 48

Dormitory Students				
Filter Students...				
Name	Surname	Email	Birthday	Phone nr.
Semih	Zengini	sz@epoka	3	82932932
				<b>Report</b>

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**Page 95 of 126**

## Assistant - Report performance

The screenshot shows the 'Assistant - Report performance' page of the EDMS system. At the top, there is a red header bar with the 'EMDS' logo and navigation links for 'Home', 'Students', 'Events', and 'Tech Problems'. On the right side of the header, there are 'Welcome, criss' and 'Logout' links. Below the header, the main content area has a dark header with the text 'Welcome Assistant' and 'Dorm Management System'. To the left, there is a sidebar titled 'Manage' with three items: 'Students' (12), 'Events' (33), and 'Technical problems' (48). The main form area contains fields for 'Student' (a dropdown menu), 'Title' (a text input field), and 'Description' (a text input field). A green button labeled 'Report performance' is at the bottom of the form. An orange button labeled 'Go to Performances' is located on the right side of the form.

**Page 96 of 126**

## Assistant - Performances reported

EMDS Home Students Events Tech Problems Welcome, criss Logout

## Welcome Assistant

Dorm Management System

**Manage**

- Students** 12
- Events** 33
- Technical problems** 48

**Your reported performances**

Filter Performances...

Student	Title	Description	Assigned Date	Edit	Delete
Semih Zengini	HEHE	Te zuna	31-Mar-2018	<a href="#">Edit</a>	<a href="#">Delete</a>
Semih Zengini	Yakaladim	seni	02-Jun-2018	<a href="#">Edit</a>	<a href="#">Delete</a>
criss criss	asdqwe	asda	31-Mar-2018	<a href="#">Edit</a>	<a href="#">Delete</a>

**All student performances**

Filter Performances...

Student	Title	Description	Assigned Date	Reporter
Semih Zengini	HEHE	Te zuna	31-Mar-2018	criss criss
Semih Zengini	Yakaladim	seni	02-Jun-2018	criss criss
criss criss	erqe	erwer	31-Mar-2018	nspahija nspahija
nspahija nspahija	qewqe	adsad	31-Mar-2018	Semih Zengini
criss criss	asdqwe	asda	31-Mar-2018	criss criss

## Assistant - Create an event

The screenshot shows the 'Assistant - Create an event' page of the EDMS system. At the top, there is a red header bar with the 'EMDS' logo and navigation links: Home, Students, Events, and Tech Problems. To the right of these links are 'Welcome, criss' and 'Logout'. Below the header is a dark grey banner with a gear icon and the text 'Welcome Assistant' followed by 'Dorm Management System'. On the left, there is a sidebar titled 'Manage' with three items: 'Students' (12 notifications), 'Events' (33 notifications), and 'Technical problems' (48 notifications). The main content area contains fields for 'Description' (an empty text input), 'Date' (a date/time picker showing '2013 Jan 1 00:00'), 'Place' (an empty text input), and 'Event Manager' (a dropdown menu). A green 'Create event' button is at the bottom of the form. An orange 'Back' button is located in the top right corner of the main content area.

EMDS Home Students Events Tech Problems

Welcome, criss Logout

# Welcome Assistant

Dorm Management System

**Manage**

- Students (12)
- Events (33)
- Technical problems (48)

Description

Date

Place

Event Manager

Create event

Back

## DIRECTOR SCREENSHOTS

The screenshot shows a web browser window for the 'Director' application at the URL [127.0.0.1:8000/director/log/45](http://127.0.0.1:8000/director/log/45). The browser's status bar indicates a battery level of 66% and the time 13:20. The page title is 'Entrance Security Information' under 'Dorm Management System'. The top navigation bar includes links for EMDS, Home, Assistants, Student Performances, Tech Problems, Applicants, and Logout. A sidebar on the left, titled 'Manage', lists 'Applicants' (2), 'Members' (2), 'Events' (0), and 'Entrance Security' (selected). The main content area displays 'Security Logs' with a 'Log Information' sub-section. This section includes a 'Filter Cameras...' input field and a table with columns Log, Date, Type, and Actions. One log entry is shown: a file icon next to the date '2018-05-30' and type 'log', with a red 'Delete' button. Below the table, text logs state: 'the system started up at time -> 2018-05-30 21:09:24.744192' and 'the system ended at time -> 2018-05-30 21:09:35.152031'. The bottom right corner features a user profile icon.

## EDMS Documentation

The screenshot shows a web browser window titled "EDMS Documentation" with the URL [127.0.0.1:8000/director/camera/show](http://127.0.0.1:8000/director/camera/show). The browser interface includes a toolbar with various icons on the left and top right.

The main content area displays the "Entrance Security" section. A sidebar on the left, titled "Manage", contains links for "Applicants" (2), "Members" (2), "Events" (0), and "Entrance Security" (selected). The "Logs" tab is active in the main content area, showing a table of log entries:

Log	Date	Type	Actions
	2018-05-30	log	<a href="#">Delete</a>
	2018-05-26	log	<a href="#">Delete</a>
	2018-05-20	log	<a href="#">Delete</a>
	2018-05-14	log	<a href="#">Delete</a>
	2018-05-10	log	<a href="#">Delete</a>
	2018-05-09	log	<a href="#">Delete</a>
	2018-05-08	log	<a href="#">Delete</a>

## EDMS Documentation

Dormitory Events

127.0.0.1:8000/director/events/show

Dorm Management System

/Home /Events

Manage

- Applicants 2
- Members 2
- Events 0**
- Entrance Security

### Events

#### Events With Your Participation

Filter Problems...

E. Manager	Description	Place	Date	Invitation
Nail Spahija	asdjfjhjksdhflkhasljkdhf lskdhflakjs dfhlas ll;k;g;jjioasfdcxmlz.,cv jsdfioxvcvokl	dormitory	16-Mar-02 02:03	Accepted

#### Manage Events

Filter Problems...

E. Manager	Description	Place	Date	Status
Nail Spahija	asdjfjhjksdhflkhasljkdhf lskdhflakjs dfhlas ll;k;g;jjioasfdcxmlz.,cv jsdfioxvcvokl	dormitory	16-Mar-02 02:03	Ocurred

## EDMS Documentation

The screenshot shows a web-based application titled "EDMS Documentation" running on a local host at 127.0.0.1:8000. The interface is a dashboard for managing student applications.

**Left Sidebar:** A vertical sidebar contains icons for various applications, including a file manager, browser, and system tools. The "Student Applications" icon is highlighted.

**Header:** The title bar displays "Student Applications" and the URL "127.0.0.1:8000/director/show/applications". The status bar shows battery level (65%), signal strength, and the time (13:18).

**Left Panel (Manage):** A sidebar titled "Manage" lists four items: "Applicants" (selected), "Members" (with 2 notifications), "Events" (with 0 notifications), and "Entrance Security".

**All Applicants:** This section displays a table for "Approved Students".

Name	Email	Actions
Prek Call	pcall15@epoka.edu.al	<a href="#">Info</a> <a href="#">Contract</a>

**Student Applications:** This section displays two tables: "Accepted Students" and "Pending Students".

**Accepted Students:**

Name	Email	Actions
Aldo Lisi	alisi15@epoka.edu.al	<a href="#">Info</a> <a href="#">Reject</a>

**Pending Students:**

Name	Email	Actions
adsfasjkl alsdfhjasjkhl	ali15@epoka.edu.al	<a href="#">Info</a> <a href="#">Accept</a>

## EDMS Documentation

The screenshot shows a web browser window titled "EDMS Documentation" displaying the "Technical Problems" section of the "Dorm Management System". The URL in the address bar is 127.0.0.1:8000/director/technical/problems.

The page has a dark header with navigation links: EMDS, Home, Assistants, Student Performances, Tech Problems (which is the active tab), Applicants, Profile, and Logout.

The main content area features a sidebar on the left with a "Manage" section containing links: Applicants (2), Members (2), Events (0), and Entrance Security.

The main content is divided into two sections: "Pending Problems" and "Fixed Problems".

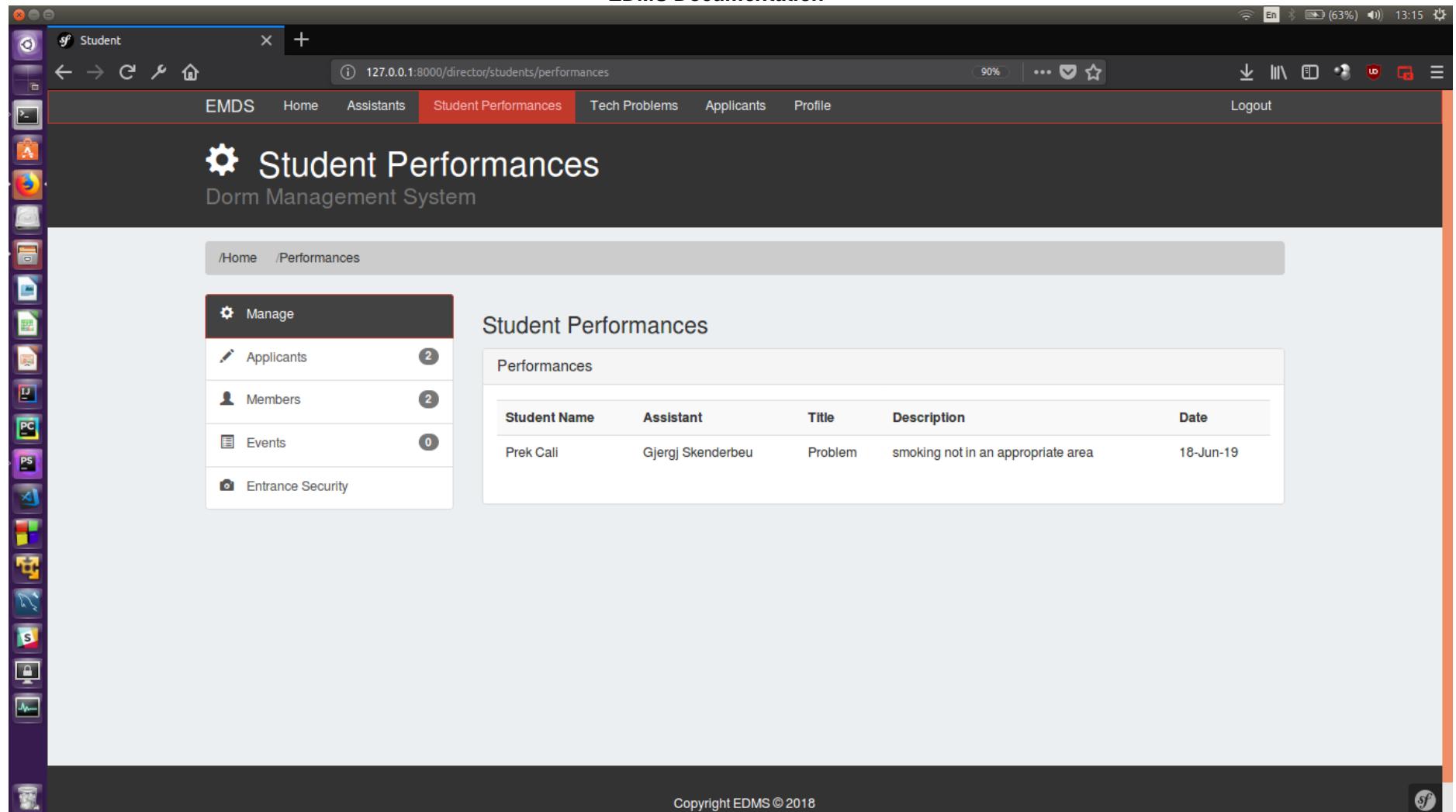
**Pending Problems:**

Problem	Description	Place	Status
door	broken	room 204	pending

**Fixed Problems:**

Problem	Description	Place	Status	Confirmed
bla	unknown	blalblab	fixed	No

## EDMS Documentation



The screenshot shows a web browser window titled "EDMS Documentation" displaying the "Student Performances" page of the "Dorm Management System". The URL in the address bar is 127.0.0.1:8000/director/students/performances.

The top navigation bar includes links for EMDS, Home, Assistants, Student Performances (which is the active tab), Tech Problems, Applicants, Profile, and Logout. On the far left, there is a vertical sidebar with various icons representing different system modules.

### Student Performances

Dorm Management System

Breadcrumbs: /Home /Performances

**Manage**

- Applicants (2)
- Members (2)
- Events (0)
- Entrance Security

#### Student Performances

Performances

Student Name	Assistant	Title	Description	Date
Prek Cali	Gjergj Skenderbeu	Problem	smoking not in an appropriate area	18-Jun-19

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## EDMS Documentation

The screenshot shows a web browser window titled "EDMS Documentation" with the URL [127.0.0.1:8000/director/add/assistant](http://127.0.0.1:8000/director/add/assistant). The browser's address bar also displays "/Home /Assistants /Add new". The page title is "Add Assistant" under "Dorm Management System". On the left, there is a vertical sidebar with various icons. The main content area has a breadcrumb navigation bar with "/Home /Assistants /Add new". A sidebar on the left titled "Manage" lists "Applicants" (2), "Members" (2), "Events" (0), and "Entrance Security". The main form is titled "New Assistant" and contains fields for "Card id", "Name", "Surname", "Email", "Phone nr", "Birthday" (with dropdown menus for Year, Month, and Day), and "Nationality". A "Back" button is located in the top right corner of the form area.

EDMS Documentation

127.0.0.1:8000/director/add/assistant

EMDS Home Assistants Student Performances Tech Problems Applicants Logout

# Add Assistant

Dorm Management System

/Home /Assistants /Add new

Manage

- Applicants (2)
- Members (2)
- Events (0)
- Entrance Security

New Assistant

Card id

Name

Surname

Email

Phone nr

Birthday

Year Month Day

Nationality

Back

## EDMS Documentation

The screenshot shows a web browser window titled "EDMS Documentation" with the URL "127.0.0.1:8000/director/manage/assistants". The main content area displays a "Manage Assistants" page for the "Dorm Management System". A modal dialog box is centered over the page, prompting the user to "Please Reconfirm" if they want to remove an assistant. The dialog contains the message "Are you sure that you want to remove this assistant" and two buttons: "Yes , I am sure" (red) and "No , i am not" (blue). The background page shows a sidebar with "Manage" options like "Applicants" (2), "Members" (2), "Events" (0), and "Entrance Security". The main table lists "Registered Assistants" with one entry: Gjergj Skenderbeu (Email: gjkastrioti15@epoka.edu.al), with "Info" and "Delete" buttons.

Please Reconfirm

Are you sure that you want to remove this assistant

Yes , I am sure   No , i am not

Add New Assistant

### Assistants

Name	Email	Actions
Gjergj Skenderbeu	gjkastrioti15@epoka.edu.al	<a href="#">Info</a> <a href="#">Delete</a>

**EDMS Documentation**

The screenshot shows a web browser window titled "EDMS Documentation" with the URL "127.0.0.1:8000/director". The page is titled "Welcome Director" and "Dorm Management System". On the left, there's a sidebar with various icons. The main content area has a "Manage" sidebar with "Applicants" (2), "Members" (2), "Events" (0), and "Entrance Security". The "Dorm Management" section contains five cards: "Assistants" (blue icon), "Student-Performance" (red icon, highlighted), "Tech-Problems" (green icon), "Applicants" (green icon), and "Academic Year" (brown icon). A user profile picture of a man in a red shirt is shown, labeled "DIRECTOR". The bottom status bar shows the URL "127.0.0.1:8000/director/students/performances" and a small logo.

EDMS Director Roles

EMDS Home Assistants Student Performances Tech Problems Applicants Profile Welcome, Nail Logout

# Welcome Director

## Dorm Management System

/Home

Manage

- Applicants (2)
- Members (2)
- Events (0)
- Entrance Security

Dorm Management

- Assistants
- Student-Performance
- Tech-Problems
- Applicants
- Academic Year

DIRECTOR

127.0.0.1:8000/director/students/performances

## EDMS Documentation

Application Form    +

Epoka Dormitory Management System    Home    Information    **Apply**    Login

Please try to fill all the information necessary

Your Information

Steps

Your Information

Family Information

The image was not correct! Check it to be only your face!

Image

Browse... No file selected.

Card id

Name

Surname

sf



The screenshot shows a web application window titled "EDMS Documentation" for the "Epoka Dormitory Management System". The main page is titled "Application Form". On the left, there's a sidebar with icons for various applications like a browser, file manager, and system tools. The main content area has a blue header "Your Information" and a sub-header "Your Information". A sidebar on the left lists "Steps", "Your Information" (which is highlighted in blue), and "Family Information". A message box says "Please try to fill all the information necessary". Below the message is a cartoon illustration of a man with glasses and a beard. A red error message box says "The image was not correct! Check it to be only your face!". There are input fields for "Image" (with a "Browse..." button and "No file selected." message), "Card id", "Name", and "Surname". A small "sf" logo is in the bottom right corner of the form area.

## EDMS Documentation

Application Form

Epoka Dormitory Management System Home Information Apply Login

Please try to fill all the information necessary

Steps

Your Information

Family Information

Image

Browse... No file selected.

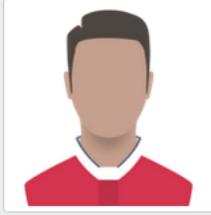
Card id

Name

Surname

Nationality

g



The screenshot shows a web-based application form titled "Application Form" from the "Epoka Dormitory Management System". The browser title bar reads "EDMS Documentation". The URL in the address bar is "127.0.0.1:8000/apply". The page header includes links for "Home", "Information", "Apply", and "Login". A sidebar on the left lists various application steps: "Steps", "Your Information" (which is currently selected and highlighted in blue), and "Family Information". A prominent message box at the top left says "Please try to fill all the information necessary". On the right side, there's a placeholder for a profile picture featuring a person in a red shirt. Below the picture are several input fields: "Image" (with a "Browse..." button and a note "No file selected."), "Card id" (an empty input field), "Name" (an empty input field), "Surname" (an empty input field), and "Nationality" (an empty input field). A small logo or icon is visible in the bottom right corner of the form area.

# Technical Staff Screenshots

The screenshot shows the EDMS Profile page for a user named 'kxhyra'. The top navigation bar includes links for 'EMDS', 'Home', 'Tech Problems', and 'Profile'. The profile section displays the user's name 'kxhyra kxhyra', their username 'kxhyra', email 'kxhyra@email', birth date '2018-06-03', nationality, city, address, and department. A sidebar on the left shows a 'Manage' section with a 'Dorm Problems' link and a notification count of 0.

Welcome, kxhyra ▾ Logout

**Welcome Tech**  
Dorm Management System

/Home

Manage

Dorm Problems 0

User profile

kxhyra kxhyra

Username: kxhyra

Email: kxhyra@email

Phone Nr.:

Birth date: 2018-06-03

Nationality:

City:

Address:

Department:

Edit

# ⚙️ Welcome Tech

Dorm Management System

/Home

⚙️ Manage

📝 Dorm Problems

## Technical Problems

### Pending Problems

Filter Problems...

Problem	Description	Place	Status	Action
---------	-------------	-------	--------	--------

### TODO Problems

Filter Problems...

Problem	Description	Place	Status	Action
---------	-------------	-------	--------	--------

### Fixed Problems

Filter Problems...

Problem	Description	Place	Status
---------	-------------	-------	--------



## EDMS Documentation

EMDS Home Tech Problems Profile

Welcome, kxhyra ▾ Logout

### ⚙️ Welcome Tech

Dorm Management System

/Home

⚙️ Manage

📝 Dorm Problems

0

Dorm Management

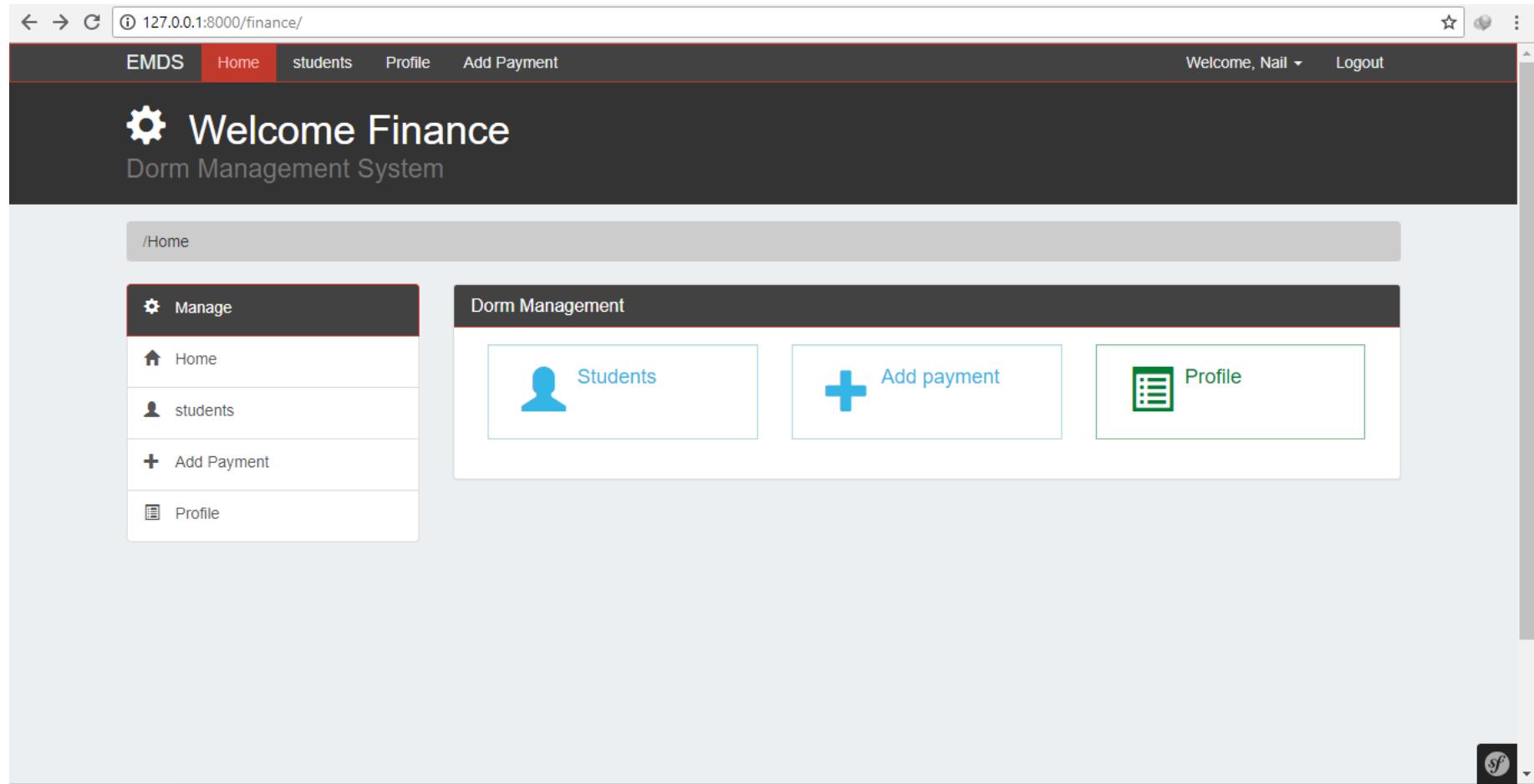


Dorm Problems

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## Finance Screenshots



The screenshot shows a web application titled "Student Finance" under the "Dorm Management System". The URL in the browser is 127.0.0.1:8000/finance/showstudent/3. The page has a dark header with "EMDS Home" and "Logout" buttons. A sidebar on the left is titled "Manage" and includes links for "Pending Payments" (with 1 notification), "Old Payments" (with 9 notifications), and "Profile" (with 2 notifications). The main content area is titled "Student Performances" and contains a table titled "Performances". The table has columns for ID, Student Name, surname, and amount. One row is shown: ID 3, Student Name Nail, surname SPAHIJA, and amount 400.

ID	Student Name	surname	amount
3	Nail	SPAHIJA	400

Performance metrics at the bottom:

- 200 @ event\_show 768 ms 10.0 MB 3 193 in 63.26 ms nspahija 12 ms 2 in 1.84 ms
- 3.4.11

EMDS Home students Profile Add Payment Logout

# ⚙️ Student Payments

Dorm Management System

/Home /Profile

**Manage**

- Home
- students
- Add Payment
- Profile

User profile



**Nail Spahija**

Username: nspahija

Email: nspahija@gmail.com

Phone Nr.:

Birth date: 2018-06-04

Nationality:

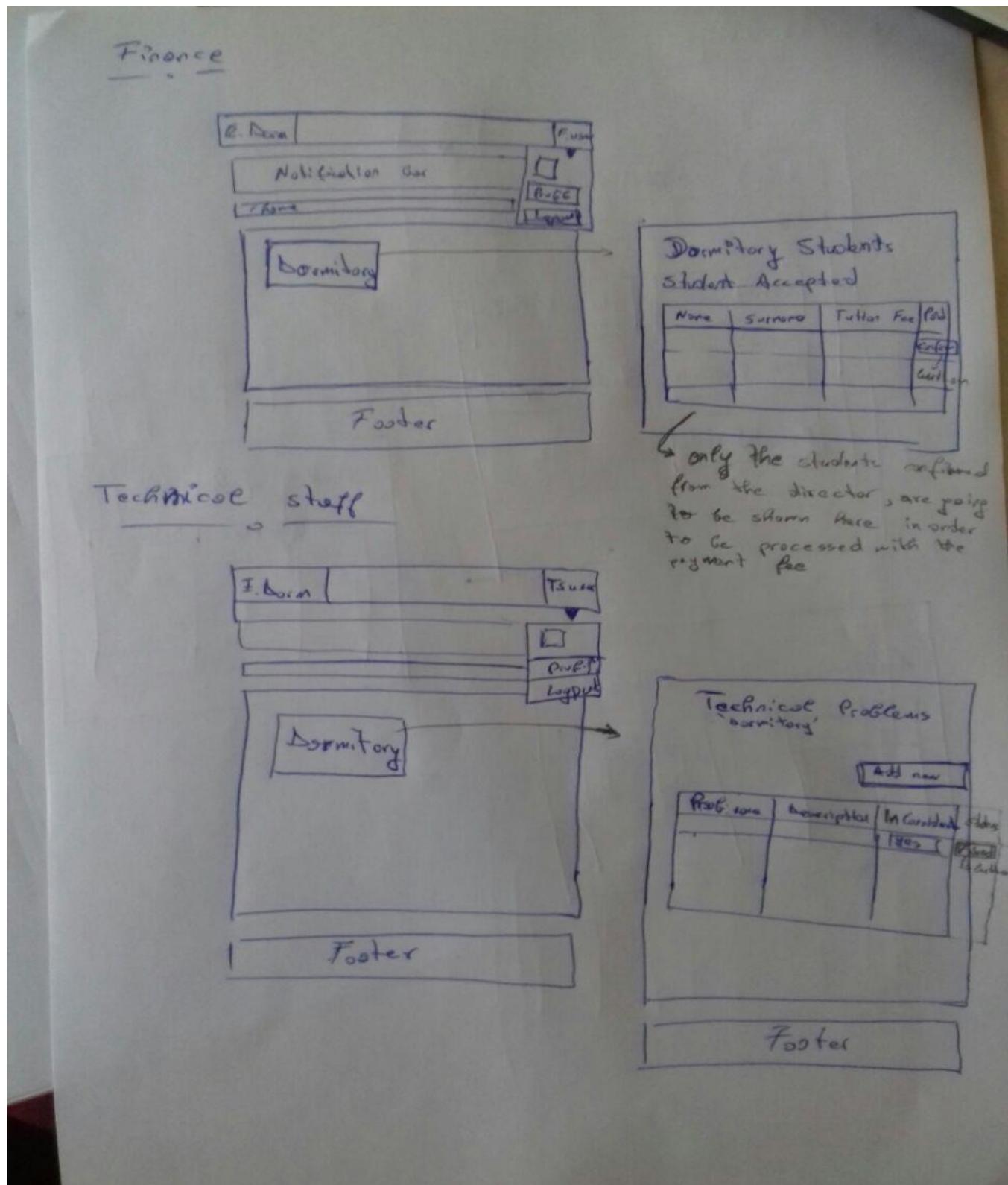
City:

Address:

Department:

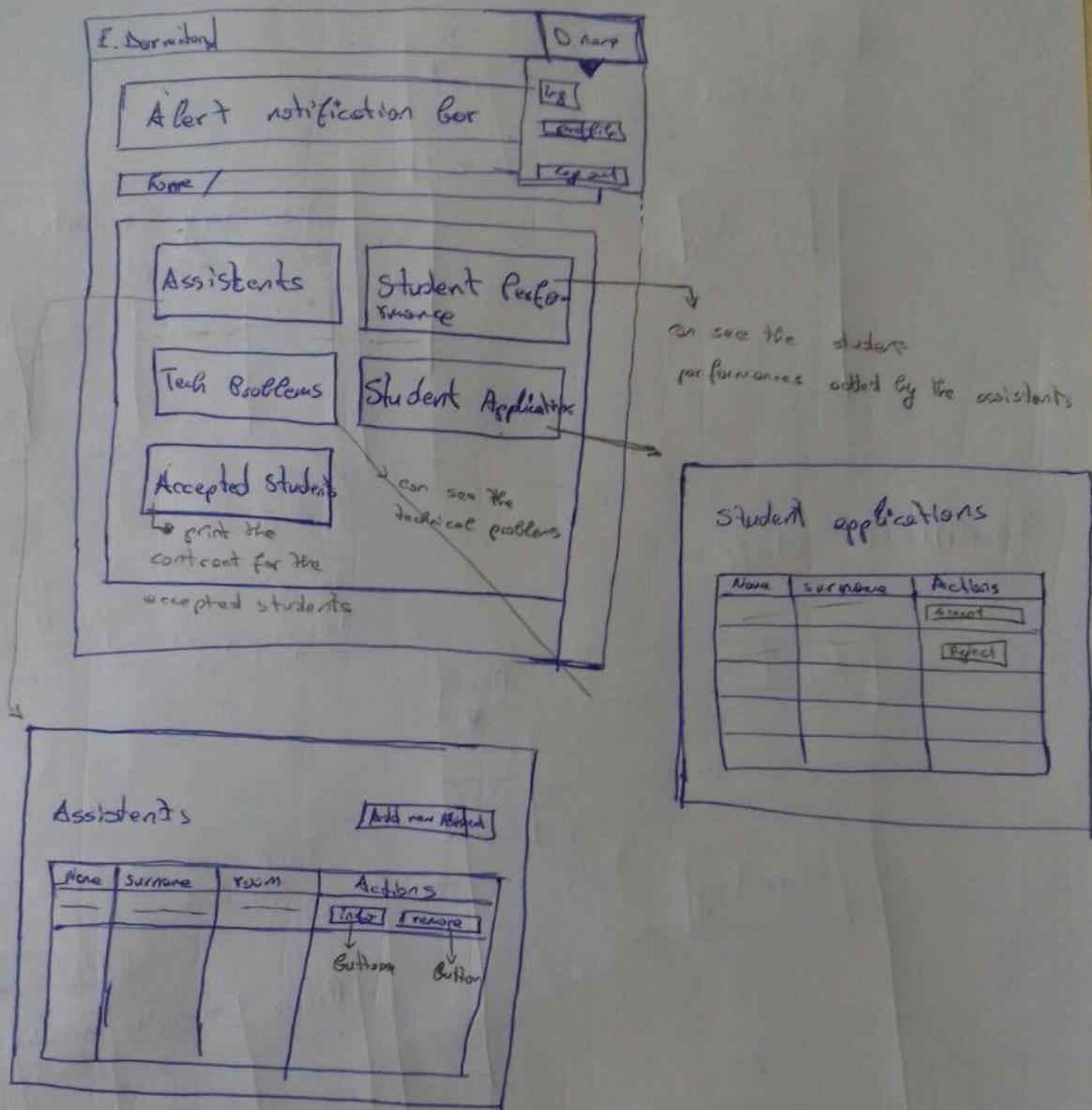
*This Page Intentionally Left Blank*

## APPENDIX C: Sketches

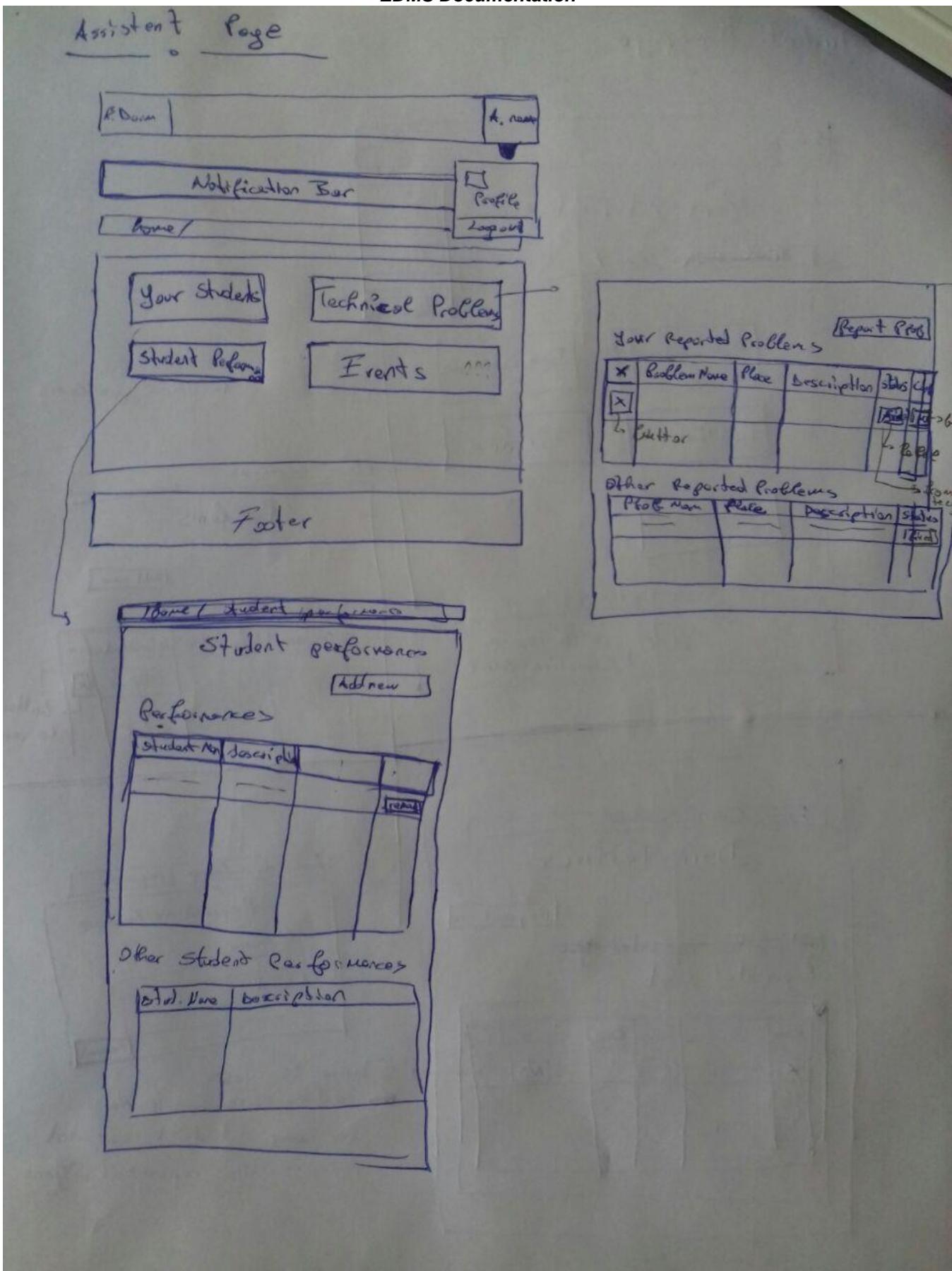


## EDMS Documentation

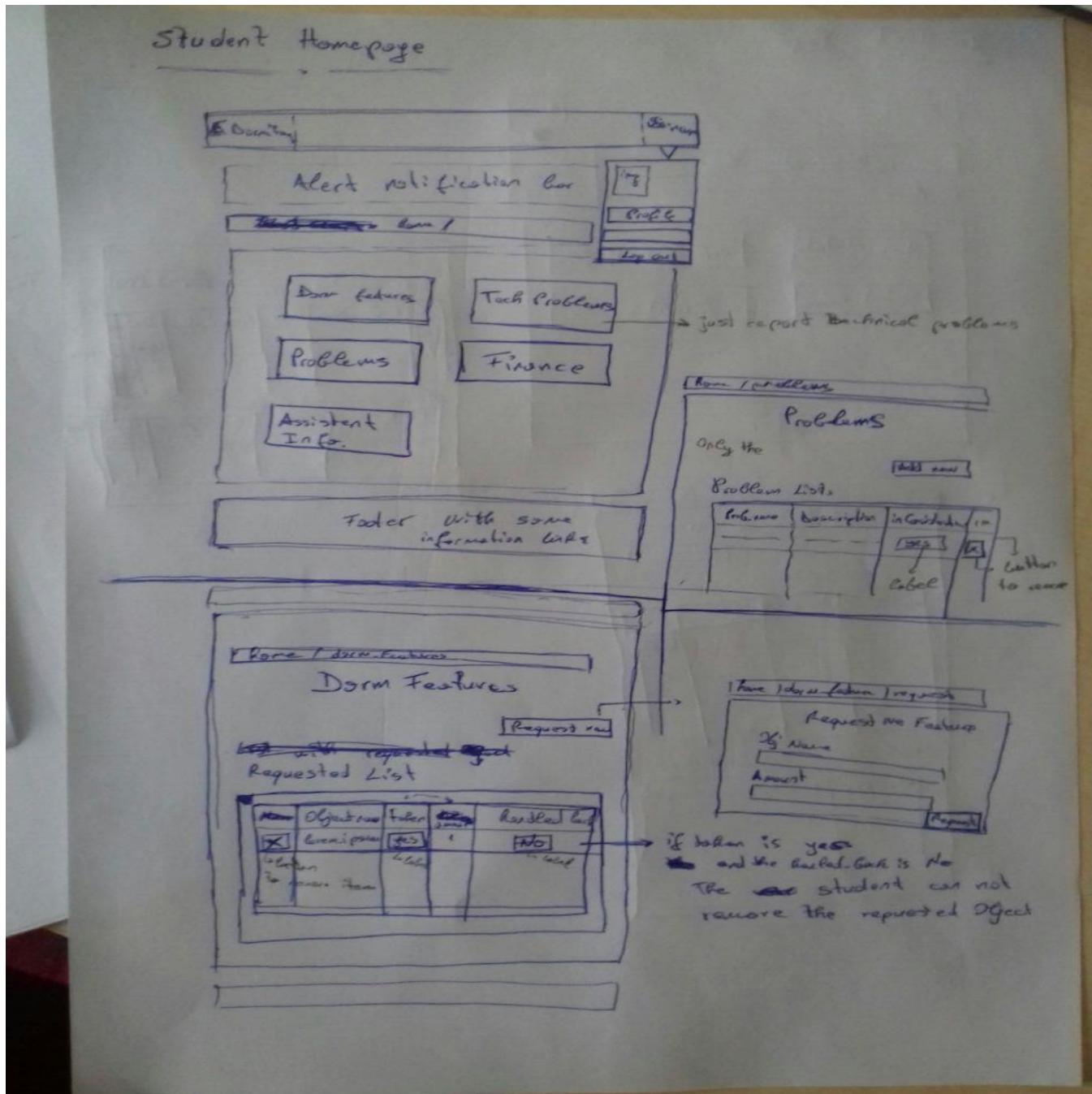
Director Page



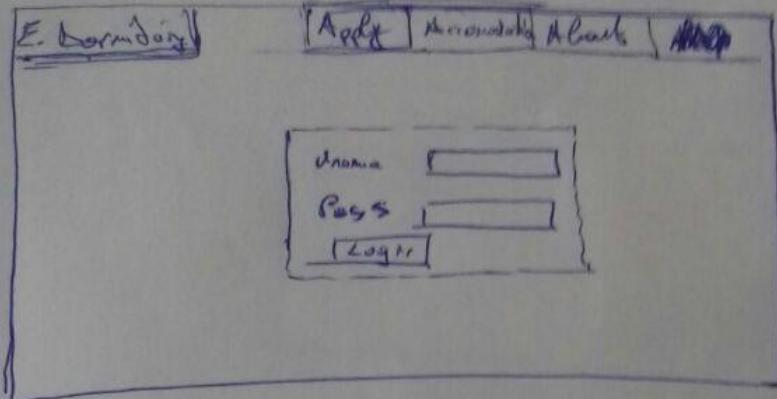
## EDMS Documentation



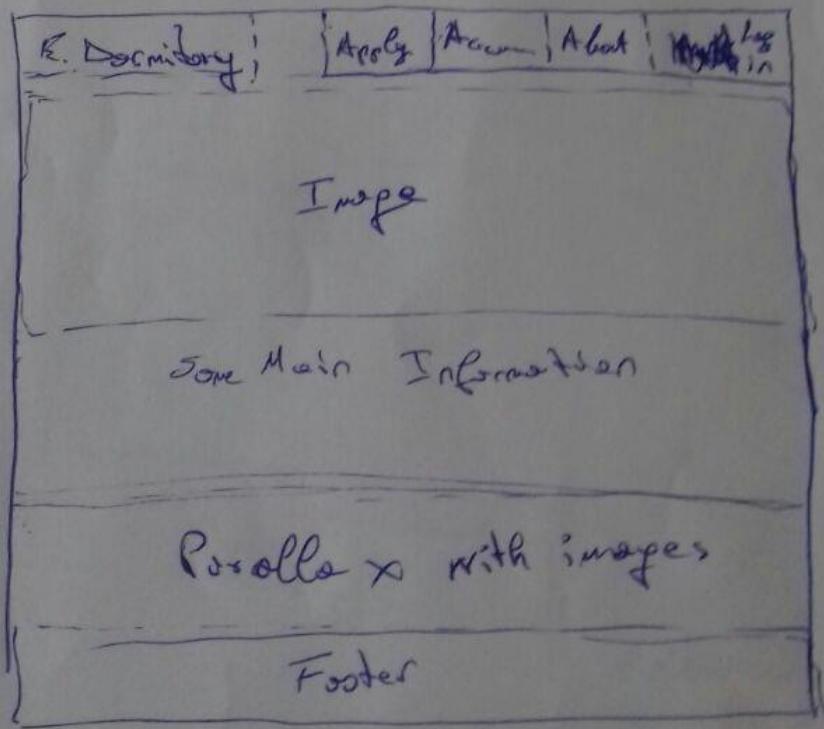
## EDMS Documentation



Login Page



Main Page



Non Ruge Application Form

~~Required~~

**Family contacts**

Father's Name

~~Father's~~ Father's profession

Father's phone nr.

Mother's Name

Mother's profession

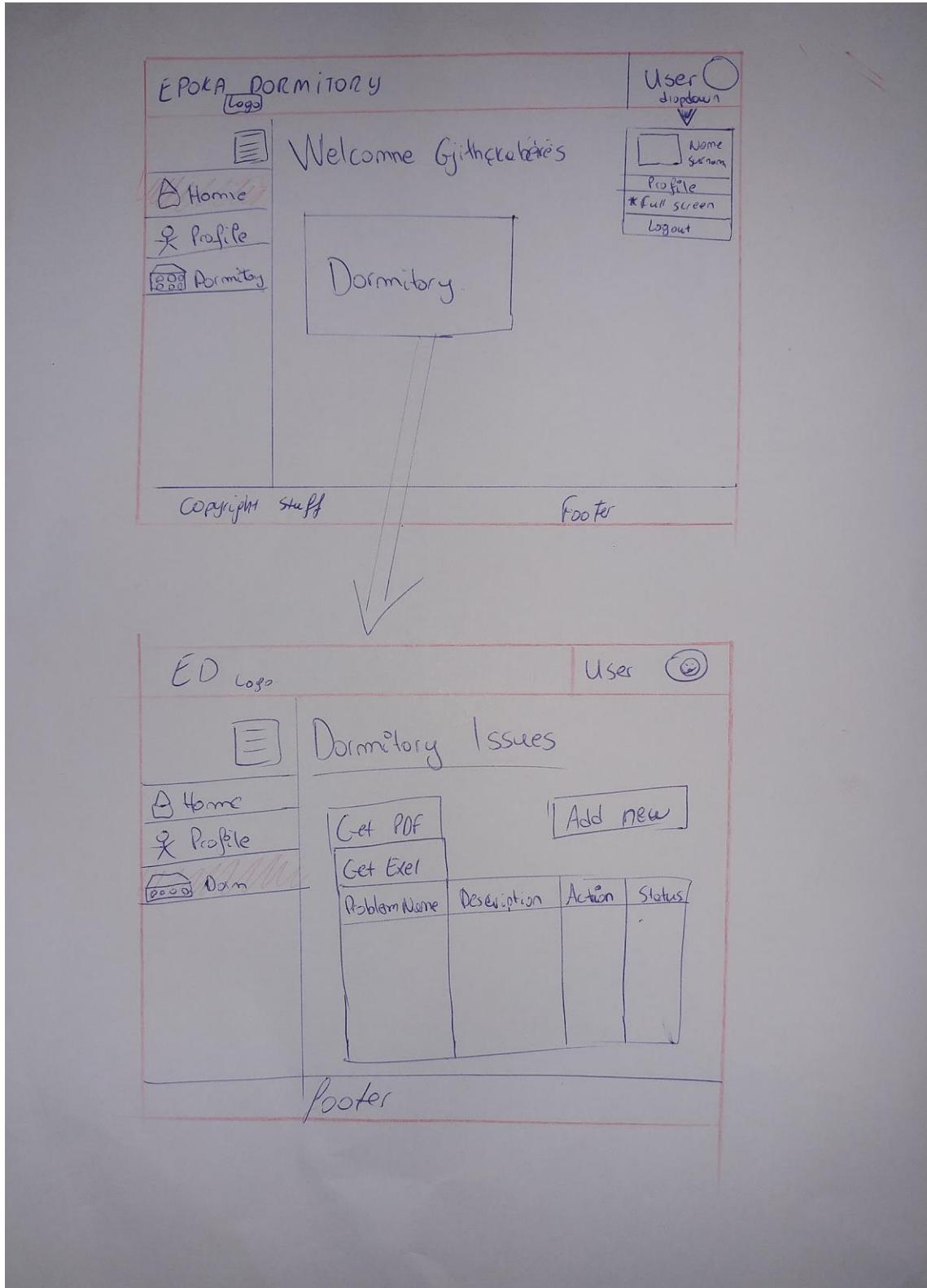
Mother's phone nr.

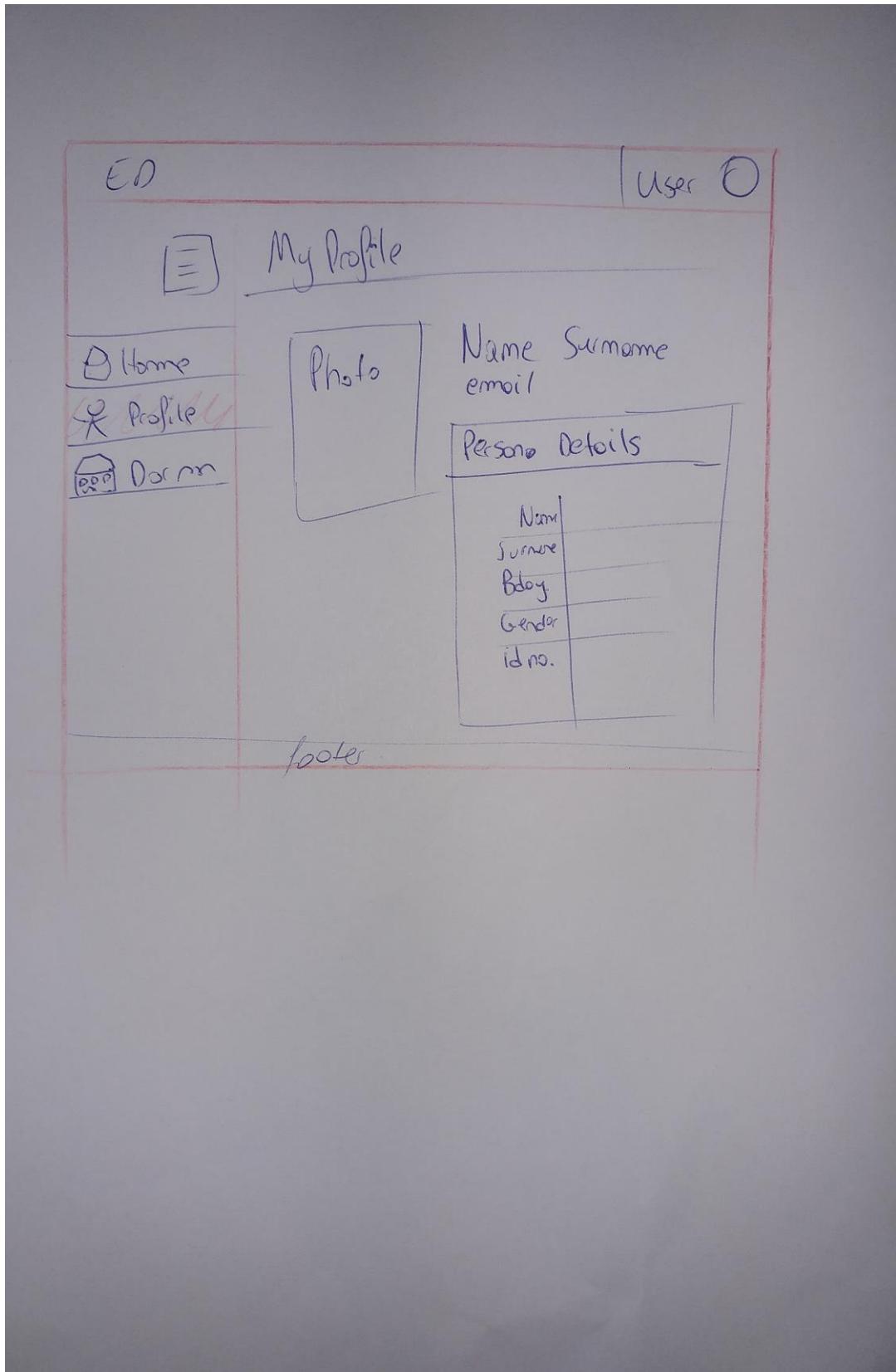
Marital status

Divorced       Together

**Apply**

## EDMS Documentation





## **EDMS TEAM:**

<b>ALDO LISI</b>	(alisi15@epoka.edu.al)
<b>KLEVIS XHYRA</b>	(kxhyra15@epoka.edu.al)
<b>KRISTJAN PASHOLLARI</b>	(kpashollari16@epoka.edu.al)
<b>NAIL SPAHIJA</b>	(nspahija15@epoka.edu.al)
<b>SEMIH ZENGINDEMIR</b>	(szengindemir14@epoka.edu.al)