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Municipality Administrators Citizen Web Application



Software Documentation

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“Për qytetin tonë.”



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1 Executive Summary

1.1 Project Overview

Management of the civilians around the city of Tirana has been very difficult during this last decade. People living in neighborhoods and flats have numerous problems and complaints about their habitat, but they don't know where to address these problems. The municipality of Tirana has been trying to manage them, by setting administrators of buildings in order to take care of problems that citizens face everyday.

Our software will ease a communication between the civilians, building administrator and the municipality itself. The software aims to facilitate the reach of municipality from the citizens and also it aims to give a way to the numerous complaints that civilians have with the municipality; all this through the building administrator.

1.2 Purpose and Scope of this Specification

The software's purpose is to facilitate communication between the people and their municipality by a web service that will make needs of the people to be heard. People living in Tirana have many restrictions when it comes to reconstructing a part of their house, or where they should park the car etc. For everything, the municipality provides permits to civilians that file for a permit based on some criteria where the permit affects other people then the person itself.

Our software will make every service from the municipality as easy a click of a button, where everything file from the civilians will be structured through the administrator and sent to the municipality.



2 Product/Service Description

With the recent work of the Municipality of Tirana on regulating the home addressing system, the assignment of administrators to buildings and the general trend of easing the means of communication between citizens and state institutions, there have been numerous campaigns lately taking the first steps towards reaching the goal of a more efficient system to link citizens to institutions.

Our proposed platform, BAQ (Bashki-Administrator-Qytetar), will provide an efficient way for building administrators and citizens to establish an official communication with the Municipality, that is void of using the traditional ways such as the postal service, and that will moreover help both the Municipality employees and citizens to keep track of documents sent and received, the dates of receipt, and other information.

This platform should also help with the timely solution of minor problems that the citizens usually report to the Municipality, such as complaints for noise nuisances (sourced from construction work, loud neighbors etc.).

This software's implementation will be done in the form of a web app.

2.1 Product context

BAQ will be an independent software, closely related to the Municipality. It will be available to three types of users, namely: Administrators, Municipality employees, Citizens.

2.2 User Characteristics

There will be 3 types of users that will access and use the platform, Administrators, Municipality Employees, and Citizens. Below is an explanation of each type of user, in logical order.



a) Citizens

Citizens will be the most basic users of the platform. They will have to create an account of themselves that will require a confirmation from the building Administrator. Through this account they can submit complaints, submit documents needed to receive a parking permit, and also submit other documentation needed in the case that a direct communication between the Citizen and the Municipality must be established. A Citizen will represent a family living in a building (one Citizen for every household).

b) Administrators

Administrators will be responsible for confirming the accounts that Citizens will create on their buildings. The Administrator will also have to submit to the Municipality documents that require the signature of every Citizen in the building for them to be processed, such as receiving a permit for the building to be reconstructed, for its facade to be painted, if a family wants to do some certain construction work, as enforced by the law. Also, the Administrator will keep the official communication with the municipality, when the law predetermines so. The Administrator will first have to submit the respective documents to be recognized by the Municipality as Administrator of a specific building

c) Municipality Employees

Municipality Employees will be responsible for reviewing requests that arrive through the ABQ platform. They will review if the documents received are enough for a request to be processed, they will notify if documents for a specific request are missing, and will also send (via the platform) documents to the concerned entity (Citizen or Administrator) after the request has been processed. They will also forward complaints to the Municipality Police, for such requests that require their intervention (e.g noise complaints).



2.3 Assumptions

It is assumed that building Administrators will confirm every Citizen account that comes to their building, if the information provided by the Citizen in his account is correct.

It is assumed that Municipality employees will keep the "professional secret", of not sharing information of Administrators/Citizens that send requests to the Municipality, after signing a confidentiality contract.

2.4 Constraints

Since this will be a web application, it is vital for the users to have a stable Internet connection, since there will be data constantly transmitted over the Internet to the database, from the users to the database and vice-versa.

2.5 Dependencies

- A building administrator will have access to his account and all its functionalities, only after he/she is confirmed as an administrator, following the documentation submission process to the Municipality. After confirmation, the administrator will have full access, even if there are no citizens registered in the building he/she administers.
- There will be no possibility for administering companies to be registered in this software. (Companies like these already have established ways of simplifying the communication with the Municipality, e. g documents that should first be reviewed by the Municipality are delivered in batches, thus decreasing the time needed to process requests).
- A citizen will have his account and functionalities activated, only after the building administrator confirms it.
- A complaint/nuisance report received, will only be marked as dealt with, after the Municipality Police has solved this problem, or after it has delegated the task to concerned entities (e. g State Police).



3 Requirements

3.1 Functional Requirements

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_01	The software will consist of three different user levels: a) The civilian b) Municipality representative c) Administrator	<i>Each user will have different views for the software.</i>	1	03/06/18	Erida and Jorgel
BR_LR_02	Each level of user will have authentication required when entering the software.	<i>To distinguish the user privileges, different authentications will be implemented.</i>	1	03/06/18	Erida and Jorgel
BR_LR_03	An administrator can sign up giving the certified documents needed for the job.	<i>The Administrator Recognition process requires documents to be submitted.</i>	2	03/06/18	Erida and Jorgel
BR_LR_04	Administrator will be notified if a building is available for management	<i>Given that some administrators may not have a building in management, the Municipality representative can assign them if buildings are in need of administration.</i>	4	03/06/18	Erida and Jorgel
BR_LR_05	The system should provide the administrator the right to add and remove family representatives.	<i>Given the circumstances of families moving in or moving out of the building, the family representative may change, so the administrator will be in charge of these changes for the update of the software database.</i>	3	03/06/18	Erida and Jorgel



Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_06	An administrator should be able to see links of available building locations to be managed. The link will redirect the administrator to a map view of the building location.	<i>In order to have the consent of the administrator for job availability, he/she should have information about the building whereabouts.</i>	4	03/06/18	Erida and Jorgel
BR_LR_07	Each family representative will be linked with the building when the administrator confirms him or her as part of the building.	<i>The family member that lives in an administrated building will request to join a building the administrator manages and then will have a personal page.</i>	1	03/06/18	Erida and Jorgel
BR_LR_08	Each registered family member has the options of filing a complaint or a request to the administrator.	<i>Depending on their needs, the family member will have options with the required automated generated format for the Municipality.</i>	1	03/06/18	Erida and Jorgel
BR_LR_09	Each user will be able to see the process of their requests.	<i>By clicking their filed request, the user will be given a feedback from the software to see the progress of the request.</i>	1	03/06/18	Erida and Jorgel
BR_LR_10	The Municipality representative side will be able to see a list of all administrators, managing or not managing a building.	<i>Given this list, the Municipality member can keep track of managed buildings and can assign administrators to buildings.</i>	3	03/06/18	Erida and Jorgel



Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_11	The Municipality member will be shown lists of complaints and requests divided in the respective sections from all administrators.	<i>Given the list, the municipality member will perform the actions needed for each type of filing, such as confirmation for request or take care of complaints.</i>	1	03/06/18	Erida and Jorgel
BR_LR_12	The system will not allow administrators that haven't filed the required documents to file request for managing buildings.	<i>To be a certified administrator some documents should be uploaded by the administrator in order to be given full access of administrator page.</i>	1	03/06/18	Erida and Jorgel
BR_LR_13	The municipality member will be provided with a list of all administrators that lack documents required for being an administrator.	<i>If the documents are not certified and missing, the Municipality member shall notify the user to complete their documents.</i>	2	03/06/18	Erida and Jorgel
BR_LR_14	After each request is completed, it will be visible in the completed request list.	<i>In order to keep a clean list and keep track of work, completed requests will be deleted.</i>	4	03/06/18	Erida and Jorgel
BR_LR_15	Every end of month payments needed will be automatically generated.	<i>In order to reduce the administrator's workload, the software will generate the payments required itself.</i>	3	03/06/18	Erida and Jorgel
BR_LR_16	The administrator will keep track of payments completed by the family member.	<i>The administrator will mark a payment as completed on the software, once it has been completed in real life.</i>	3	03/06/18	Erida and Jorgel



Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_17	The family member will have the option of checking his payment history.	<i>Such an option ensures transparency and leaves no room for misunderstandings or conflict related to these payments.</i>	2	03/06/18	Erida and Jorgel
BR_LR_18	The family member's payment history section will portray both paid and unpaid tariffs.	<i>The interface will allow a simple view of all payments. Besides the general view, the payments can also be viewed divided into completed and pending ones.</i>	2	03/06/18	Erida and Jorgel
BR_LR_19	The Citizen and Administrator will be able to submit complaints	<i>Such an option enables communication of administrator or citizen with the municipality regarding problems faced.</i>	1	3/06/18	Erida and Jorgel
BR_LR_20	The municipality employee can view complaints from administrators or citizens	<i>To ensure the visibility of all complaints, the most recent complaint will be shown first and complaints will be divided according to the user that has submitted them</i>	1	3/06/18	Jorgel and Erida
BR_LR_21	During signup process, the addresses will be entered in a pre-defined format	<i>The format will be street, generated from the municipality database and a building number.</i>	4	3/06/18	Erida and Jorgel



3.2 Non-Functional Requirements

3.2.1 Product Requirements

3.2.1.1 Usability Requirements

The software aims to be easy to use as it tries to have a user-friendly approach for the family member providing all the buttons and help for any misleading information.

As family users aren't very aware of what services they can require from the Municipality, a list of all services will be visible to these users.

Municipality users of this software require a minimum training, as the software will be an automated version of their previous workload and process.

As for the administrators as well as for family members all functionalities of their user level will be visible in a help section of their account.

Operations offered:

1. Notification of Municipality members of certain requests
2. Daily update on request lists
3. Add/Remove family members from the building administrator
4. Gathering of complaints and requests
5. Geographical view of the address specified

3.2.1.2 Efficiency Requirements

3.2.1.2.1 Performance Requirements

It is expected that multiple Municipality members and also other users can access their account in the same time.

The software process time will depend on hardware components of the users computers.

The software will upload requests from the administrator to the Municipality member in real time restricted in the working hours.



It is necessary that the system doesn't lose any of the requests done by users.

However, certain malfunctions may occur and the team will try to make reliable system in order not to delay work processes.

3.2.1.2.2 Space Requirements

Depending on the number of users using the software, which will be built to support the city of Tirana, accessing the database when uploading requests to the Municipality will be the main capacity issue if not handled correctly.

3.2.1.3 Dependability Requirements

Our software will depend on Drejtoria e Pergjithshme e Gjendjes Civile (DPGJC) so that Municipality employees can verify the citizens ID.

3.2.1.4 Security Requirements

User data will be hashed in the database in order to make it more secure.

If a family member is moving to a new building, both the old and the new administrator are to be notified.

Also when logging in, every specific field required for the action should be validated first in order to redirect the user too their appropriate account view.

In order to keep the user data safe and not to disorganize the data, certified people of IT department of the Municipality should be in charge of system management.



3.2.2 Organizational Requirements

3.2.2.1 Environmental Requirements

The software will be able to run on every browser that the user might want to use.

3.2.2.2 Operational Requirements

The software will be designed so that requests can be filed at any hour. This will enable the citizens to use the system more effectively and freely, without being restricted to the Municipality working hours. The latter would cause a limitation in the number of citizen complaints; therefore, we have decided to proceed with the 24/7 availability alternative.

The Municipality of Tirana will use this system so every geographical location governed by the Municipality will be in reach.

Users need to authenticate themselves using their ID card, for the software to be reliable and fully functional.

3.2.2.3 Development Requirements

The user interface will be accessible through every browser that the user can have. Every user will have a login interface which he/she will enter the required fields to identify him/her as what type of user is logging in. Each user, after being authenticated will be directed to their specific layout view.

In case of an administrator logging in, their view will consist various fields, which include lists of family members and their contact information, tasks that they might have to do during the day and also a list of complaints and requests made from the family members.

In case of Municipality member logging in, he/she will have an interactive and organized view, which will display administrators that manage buildings with their requests and also administrators that what to manage a building.

In case of a family member logging in, the view will have simple functionalities such as information of what the Municipality services, and request buttons that



will redirect into a page with a pre-prepared format to be recognized by the Municipality.

We will use MySQL and Apache server to maintain data of the users.

In case of bugs and malfunctions the software will crash and need to reload to a login phase.

3.2.3 External Requirements

3.2.3.1 Regulatory Requirements

3.2.3.2 Ethical Requirements

Users of this software will not be permitted to use derogatory or offensive language.

3.2.3.3 Legislative Requirements

According to Law nr 10 112, dt 09.04.2009, “Per administrimin e bashkepronesise ne ndertesat e banimit”, article 19:

1. The headship of a building, as a representative of the assembly, may sign a contract for the co-ownership administration with:
 - a) An administering company
 - b) An administrator, natural person that may be one of the co-owners or a third party person.
2. Any private person, natural or legal, whose object of action includes building administering, shall be registered in the book of administrators of the municipality, commune, under whose jurisdiction this activity shall be carried out.

According to Law nr 10 112, dt 09.04.2009, “Per administrimin e bashkepronesise ne ndertesat e banimit”, article 20, the duties of the administrator include, among others:



- a) Taking action to maintain the common property, including hiring tertiary companies to carry out services
- b) Collecting, and controlling monthly tariffs
- c) Checking costs and bill payments
- d) Preparing reports on the financial situation
- e) Preparing a yearly action plan for common budget

According to Law nr 10 112, dt 09.04.2009, “Per administrimin e bashkepronesise ne ndertesat e banimit”, article 23, the mayor has the right to assign an administrator or administering company to a building if:

- a) The co-owners assembly is not constituted
- b) The assembly does not make a decision regarding the form of administration within 6 months of the law coming into force.

The mayor has the right of exercising this competency for three months, with the right of extension, until the assembly is constituted or the headship contracts an administrator or administering company.

3.3 Domain Requirements

The system tends to be used from almost every citizen in the city of Tirana from the family member part, however it requires Internet access in order to function. Also it will not accept wrong input of requests such as some that don't fulfill the required format.



4 Software Analysis and Design

4.1 Analysis

4.1.1 Scenarios Extended

1. Successful Login

- The user is first redirected to Sign In page when opening the page
- The user is prompted to enter email and password.
- If user credentials match to data in database, user is redirected to his Home Page.

2. Failed Login

- The user is first redirected to Sign In page when opening the page
- The user is prompted to enter email and password.
- If user credentials do not match to data in database, the user is prompted to reenter credentials.

3. Administrator wants to be recognized

- Administrator logs in to his page.
- Administrator chooses "Apply for administrator recognition" option.
- Administrator clicks on "Submit Documents"
- Administrator uploads the necessary scanned documents according to form.
- Administrator is prompted to wait until check from Municipality worker.

4. Administrator documentation is insufficient

- Administrator receives email saying that his documentation is insufficient.
- Administrator logs in to his page.
- Administrator receives a message within the platform containing comments from the Municipality worker and/or the documents that are missing.

5. Administrator is recognized

- Administrator receives email saying that he has been recognized by the Municipality.
- Administrator logs in to his page.
- Administrator receives a message within the platform informing him that the Municipality has recognized him, and that all functionalities are active.



6. User Sign Up

- User opens the platform.
- User clicks on "Sign Up".
- User is prompted to enter his/her data (email address, password, address).
- User clicks on what role they belong to (options are Citizen or Administrator).

7. Citizen confirmation successful

- Administrator logs in to his account
- Administrator has a new notification that a citizen wants to register in the building he administers.
- Administrator reviews the information the Citizen has provided.
- If the information is correct, Administrator clicks on "Confirm".

8. Citizen confirmation failed

- Administrator logs in to his account
- Administrator has a new notification that a citizen wants to register in the building he administers.
- Administrator reviews the information the Citizen has provided.
- If the information is not correct, Administrator clicks on "Deny".

9. Citizen confirmed

- Citizen logs in to his account.
- Citizen receives a notification saying that his account has been confirmed, and all functionalities are available.

10. Citizen not confirmed

- Citizen logs in to his account.
- Citizen receives notification saying that his account has been denied, and that he should reenter his data.

11. Citizen wants to report a nuisance

- Citizen logs in to his account.
- Citizen clicks on "Report Nuisance".
- Citizen is prompted to fill a "Comments" text box, describing his problem.
- Citizen clicks on "Send".

12. Administrator submits a request to Municipality

- Administrator clicks on "New Request" (for requests that require the entire building to agree upon).
- Administrator chooses an option from drop-down menu (e.g Building Structural Change).
- Administrator clicks on "Upload".
- Administrator uploads necessary documents, as described when clicking on the desired option.
- Administrator clicks on "Submit".



13. Municipality worker reviews requests

- Municipality worker opens the platform using credentials given by system administrators (us). Municipality worker account can only be open from work computer.
- Municipality worker receives notification that a new request has been made.
- Municipality worker clicks on "Review".

14. Request is accepted

- Municipality worker reviews the documentation that has been submitted.
- If it is sufficient and correct, Municipality worker clicks on "Accept".
- Notification is erased.

15. Request is denied

- Municipality worker reviews the documentation that has been submitted.
- If it is insufficient or incorrect, Municipality worker clicks on "Deny", adding comments regarding the missing documents or problems with the existing.
- Notification is erased.

16. Administrator request is accepted

- Administrator logs in to his page.
- Administrator receives notification saying that the request has been accepted.

17. Administrator request is denied

- Administrator logs in to his page.
- Administrator receives notification saying that the request has been denied, including the comment by the Municipality worker.

18. Citizen submits a request to Administrator

- Citizen clicks on "New Request"
- Citizen chooses an option from drop-down menu (e.g Parking Permit).
- Citizen clicks on "Upload".
- Citizen uploads scanned necessary documents, as described when clicking on the desired option.
- Citizen clicks on "Submit".



19. Administrator receives Citizen request

- Administrator logs in to his page.
- Administrator receives notification about the request that has come from the Citizen.
- Administrator reviews the documentation that has been uploaded by the Citizen.
- If the documentation is correct, the Administrator clicks on "Forward to Municipality" to forward request to Municipality in order for it to be processed.
- If the documentation is incorrect and/or insufficient, the Administrator adds a comment explaining what is wrong with the request and clicks on "Deny" so that the request is not sent to be processed.

20. Citizen request is accepted by Municipality

- Citizen logs in to his page.
- Citizen receives notification saying that the request has been accepted.

21. Citizen request is denied by Municipality

- Citizen logs in to his page.
- Citizen receives notification saying that the request has been denied.

22. Municipality Alerts Police Worker

- Municipality Police Worker logs in to his page using credentials provided by system administrators (us).
- Municipality Police Worker receives notifications on the nuisance reports that have been sent by Citizens, including address.
- Municipality Police Worker sends a unit of the Municipality Police to check on the nuisance, or delegates the job to the concerned entity (e.g State Police).
- After the unit responds back that the report has been dealt with, or it has been delegated to another entity, the Municipality Police Worker clicks on "Complete".



23. Payment Tracking – Administrator

- Administrator logs in to his account
- Administrator clicks on Payment Tracking
- All families in the building will be listed, along with the specific number of checkboxes, indicating whether that family has done that specific payment.
- If a payment is done, the Administrator checks the respective checkbox
- These checkboxes will be reset on the beginning of the next month.
- Administrator can choose to see an automatically generated document indicating payment history for every family in the building in the format: "Payment Status", "Payment Date", "Payment Description" for the past 6 months.

24. Payment Tracking – Citizen

- Citizen logs in to his account
- Citizen clicks on Payment Tracking
- Citizen will see an automatically generated document, indicating his own payment history, in the format "Payment Description", "Payment status", "Payment Date" for the past 6 months.

4.1.2 Use Cases

ID:	uc1
Name:	Successful Login
Summary:	The user tries to enter the system by entering correct credential information
Actor:	The administrator, the municipality employee, Citizen
Description:	For each level of user to enter the system, it is required that these users must log in, which is made by entering their individual email and password.
Precondition:	Each level of user must already have an existing account for the login with their private information.
Alternative:	There will not be another way of accessing the system, so the login is mandatory.
Postcondition:	The user gains access to their specific profile depending on their role in the system (citizen, administrator or Municipality representative)



ID:	Uc2
Name:	Failed Login
Summary:	The user fails to enter the correct credentials for accessing the system
Actor:	The administrator, the municipality employee, Citizen
Description:	The user might enter wrong credentials for the login, so they will not be allowed to enter the system, but instead will be given another chance for their credentials,
Precondition:	User must have clicked sign in in order for the credentials to be checked
Alternative:	
Postcondition:	The user will not gain access to system and will be asked to enter credentials again.

ID:	Uc3
Name:	Administrator wants to be recognized
Summary:	The administrator wants to be confirmed by submitting the required documents.
Actor:	The administrator
Description:	The administrator is required to have the specific documents in order to be recognized by the Municipality as an official administrator. The administrator will submit these documents in the system for review.
Precondition:	The administrator must have logged in system and must have the required documents as pdf, or jpeg files.
Alternative:	The administrator cannot be a working administrator if they do not have the required documents and the approval of the Municipality.
Postcondition:	The administrator waits for approval from the Municipality.

ID:	Uc4
Name:	Administrator documentation is insufficient
Summary:	Administrator might not have submitted all the required documents for their recognition from the Municipality
Actor:	The administrator
Description:	Administrator faces the problem of incomplete documentation for their recognition and they will be notified what they are missing.
Precondition:	The administrator must have clicked submit button, in order for the system to check the number of documents needed.
Alternative:	Each field for the submission of files can be always required and no need for the system to check.
Postcondition:	Administrator will be asked to fulfill the missing requirements



ID:	Uc5
Name:	Administrator is recognized.
Summary:	Administrator will receive a message that their status is recognized,
Actor:	The administrator
Description:	After approval of their documents, the administrator is given full access to their accounts with functions such as add or delete families, notify them of payments, see which family hasn't paid their dues etc.
Precondition:	Documents of the administrator must be recognized from Municipality.
Alternative:	By legislation, each administrator must be recognized from the municipality so there is no other alternative.
Postcondition:	Administrator is given full access to their accounts.

ID:	Uc6
Name:	User sign up.
Summary:	The user is opening the system for the first time and will provide information to create an account.
Actor:	The administrator, the municipality employee, Citizen.
Description:	For first time users that want to join the system, it is required that they must create an account first by providing personal information depending of the user level.
Precondition:	The user does not have an account.
Alternative:	No other alternative way to join the system for first time.
Postcondition:	The user has been provided with a unique account

ID:	Uc7
Name:	Citizen confirmation successful.
Summary:	The administrator will confirm that a user is part of the building he manages.
Actor:	The administrator.
Description:	The administrator will have a notification saying that a citizen wants to join their building and judging by the information given from the citizen, the administrator confirms the request.
Precondition:	The citizen must have sent a request to the administrator.
Alternative:	The citizen may request many administrators.
Postcondition:	The citizen is accepted and given confirmation to his profile.



ID:	Uc8
Name:	Citizen not confirmed.
Summary:	Administrator chooses to deny the request of the citizen
Actor:	The administrator.
Description:	The administrator will receive the request and based on the citizen's information, he/she does not belong to the same address as the building. In this case, the citizen cannot be part of the requested building.
Precondition:	The citizen must have sent a request to the administrator.
Alternative:	The administrator chooses to ignore the request
Postcondition:	Citizen is notified that administrator has not accepted the request and given a hint for editing the real address.

ID:	Uc9
Name:	Citizen confirmed.
Summary:	The citizen will be recognized as part of a building when the administrator confirms the request.
Actor:	The citizen
Description:	The citizen will be part of the list of family members that live in the building and will be given additional features to their profile.
Precondition:	The citizen must have an account first in order to be confirmed
Alternative:	The citizen can be granted account rights when administrator creates one account for them
Postcondition:	The citizen will see many fields in their account along with the right of request and complaints etc.

ID:	uc10
Name:	Citizen not confirmed.
Summary:	The administrator does not recognize the citizen.
Actor:	The citizen
Description:	The citizen will fail to be a part of a building if the administrator does not recognize him as part of the building and therefore cannot be a part of the system.
Precondition:	The citizen has asked to join the building managed by the administrator.
Alternative:	The citizen can be granted account rights when administrator creates one account for them
Postcondition:	It is assumed by us that people from other building will not want to join other buildings.



ID:	uc11
Name:	Citizen wants to report a nuisance
Summary:	The citizen will be filing a complaint.
Actor:	The citizen
Description:	The citizen has the option of reporting a nuisance in his/her profile. He/she provides personal details first and then the comment about the nuisance.
Precondition:	User must be logged in in order to have access to this feature.
Alternative:	Given a specific format for each type of complaint the citizen just submits the type of nuisance.
Postcondition:	The report will be submitted to the Municipality member.

ID:	uc12
Name:	Administrator submits a request to Municipality
Summary:	The administrator submits a request to the Municipality about a permit or concern of the building.
Actor:	The administrator.
Description:	The administrator clicks new request to be submitted to the Municipality and uploads the required documents for the chosen request.
Precondition:	Administrator must be logged in.
Alternative:	There is no alternative in submitting requests.
Postcondition:	A request is submitted to the Municipality side to be reviewed and given a feedback.

ID:	uc13
Name:	Municipality member reviews requests.
Summary:	A list of requests is generated in the Municipality member's profile.
Actor:	Municipality member.
Description:	The municipality member clicks on individual requests made by administrator to check the uploaded documents and proceeds with validating it.
Precondition:	Municipality member must be logged in to review requests.
Alternative:	Municipality member is notified each time a request is made so it can be reviewed.
Postcondition:	The request after being reviewed will be accepted or not depending on the requirements for that request.



ID:	uc14
Name:	Request accepted
Summary:	The municipality member chooses to grant the request of the administrator.
Actor:	Municipality member.
Description:	After examining the request, the Municipality member chooses to accept the request by clicking Grant button.
Precondition:	A request must be made from the administrator.
Alternative:	A request cannot proceed without the approval of the Municipality member so no other alternative is available.
Postcondition:	The administrator is notified about the acceptance of their request.

ID:	uc15
Name:	Request denied
Summary:	The municipality member chooses to deny the request of the administrator.
Actor:	Municipality member.
Description:	After examining the request, the Municipality member chooses to deny the request, as the criteria stated by the law are not satisfied.
Precondition:	A request must be made from the administrator.
Alternative:	If the request does not fulfill the requirements stated by law there is no other alternative.
Postcondition:	The administrator is notified about the denial of their request.

ID:	uc16
Name:	Administrator accepted request
Summary:	The Administrator receives the successful feedback from Municipality.
Actor:	Administrator
Description:	The successful feedback is given in the administrator profile after the evaluation of the request made before. Then this information will be shared with citizens of that specific building in their profiles.
Precondition:	The Municipality member should accept the request.
Alternative:	Notification of the administrator can be through email.
Postcondition:	Administrator continues his everyday use of the profile normally.



ID:	uc17
Name:	Administrator denied request
Summary:	The Administrator receives the negative feedback from Municipality.
Actor:	Administrator
Description:	The negative feedback is given in the administrator profile after the evaluation of the request made before. Then this information will be shared with citizens of that specific building in their profiles.
Precondition:	The Municipality member should deny the request.
Alternative:	Notification of the administrator can be through email.
Postcondition:	Administrator continues his everyday use of the profile normally.

ID:	uc18
Name:	The citizen submits request to Administrator
Summary:	The citizen requests a need to the administrator.
Actor:	The citizen
Description:	The citizen creates a new personal request to be received by the administrator of the building. The citizen provides documents required for this request.
Precondition:	The citizen must be logged in the system.
Alternative:	The citizen informs administrator of a new request he/she has.
Postcondition:	The citizen waits and request is transmitted to the administrator's profile.

ID:	uc19
Name:	The administrator receives request.
Summary:	The administrator receives request made from the citizen.
Actor:	The administrator
Description:	The administrator logged in his/her profile, receives a notification for a request made of a citizen with the option to be clickable.
Precondition:	A request should be submitted from the citizen.
Alternative:	
Postcondition:	The administrator should validate the request for documentation purposes and transmit request to Municipality member



ID:	uc20
Name:	Municipality accepts Citizen request
Summary:	The request made from the citizen through the administrator is accepted
Actor:	Municipality member
Description:	The municipality member check requests according to administrators and accepts the ones that fulfill all the required criteria.
Precondition:	The full documented requested is submitted by the citizen.
Alternative:	The municipality informs the citizen him/herself directly.
Postcondition:	Administrator is notified about the acceptance and he shares notification with the citizen that requested the file.

ID:	uc21
Name:	Request denied by Administrator
Summary:	The Administrator denies the request made from citizen of his/her building.
Actor:	The administrator
Description:	The administrator verifies that the request lacks documentation so he/she denies the requests.
Precondition:	A citizen must submit a request.
Alternative:	
Postcondition:	The administrator notifies the citizen of what the request is missing.

ID:	uc22
Name:	Municipality Member alerts Police workers.
Summary:	The Municipality member alerts about complaints.
Actor:	The municipality member
Description:	The municipality member, based on the complaint taken from citizens, or administrator alerts the Municipality Police Workers in order to deal with the problem.
Precondition:	Citizen must have submitted a valid complaint.
Alternative:	
Postcondition:	Municipality member waits for confirmation from police and alerts administrator for the problem progress.



ID:	uc23
Name:	Payment Tracking - Administrator
Summary:	Administrator checks payments on the families in his/her building.
Actor:	Administrator
Description:	The administrator will be able to track monthly payments for each family and check the payment that is conducted from a family.
Precondition:	
Alternative:	
Postcondition:	Administrator after checking the box, citizen of that payment is notified by making this payment colored green.

ID:	uc24
Name:	Payment Tracking - Citizen
Summary:	Citizen checks his personal payment history
Actor:	The citizen
Description:	The citizen logs in his/her account to be able to check his/her payment history, and to be notified of any delayed payment.
Precondition:	Citizen must be a part of the bulding.
Alternative:	
Postcondition:	Municipality member waits for confirmation from police and alerts administrator for the problem progress.



4.2 Behavioral Diagrams

4.2.1 Use Cases Diagrams

Figure.UC1

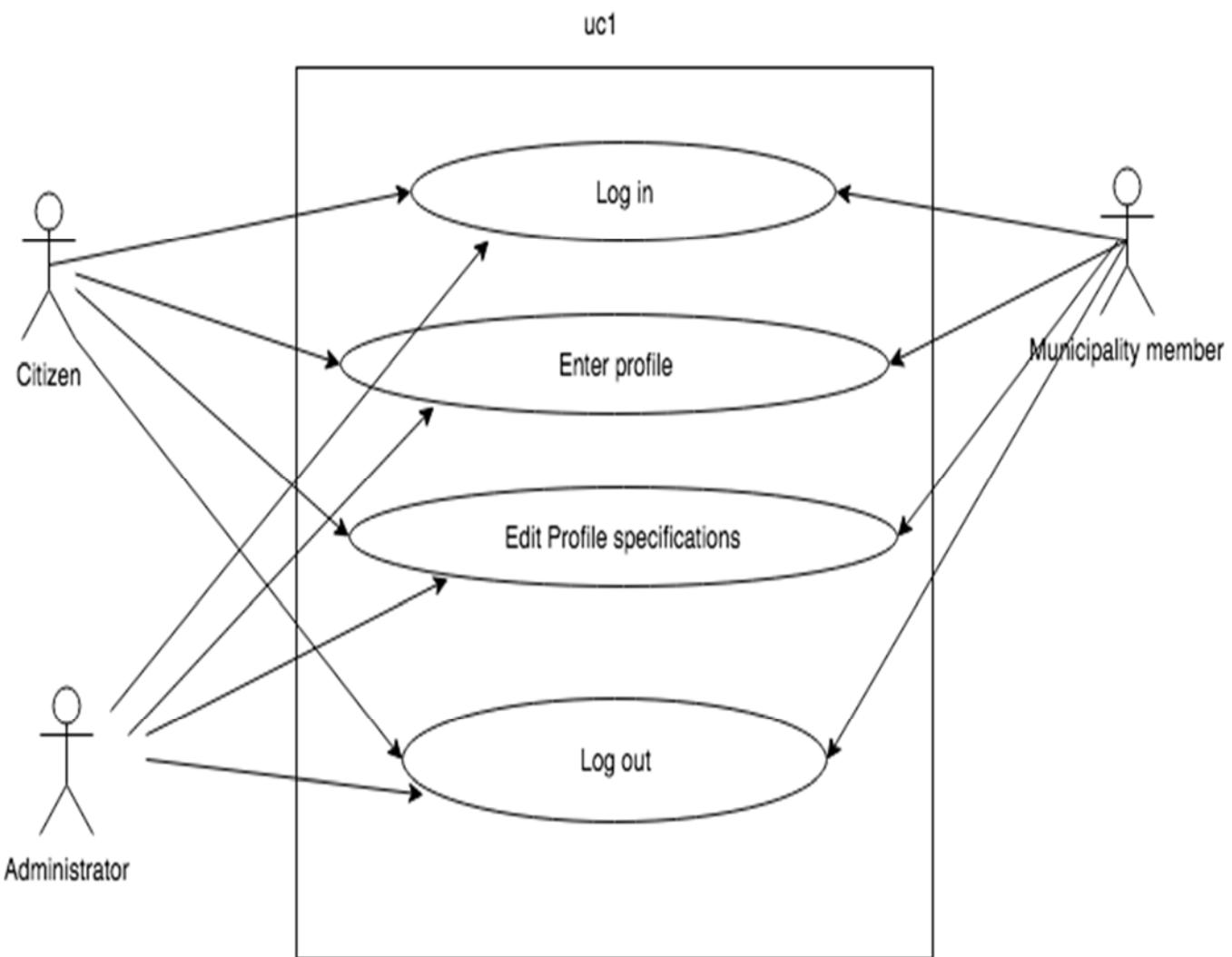




Figure.UC2

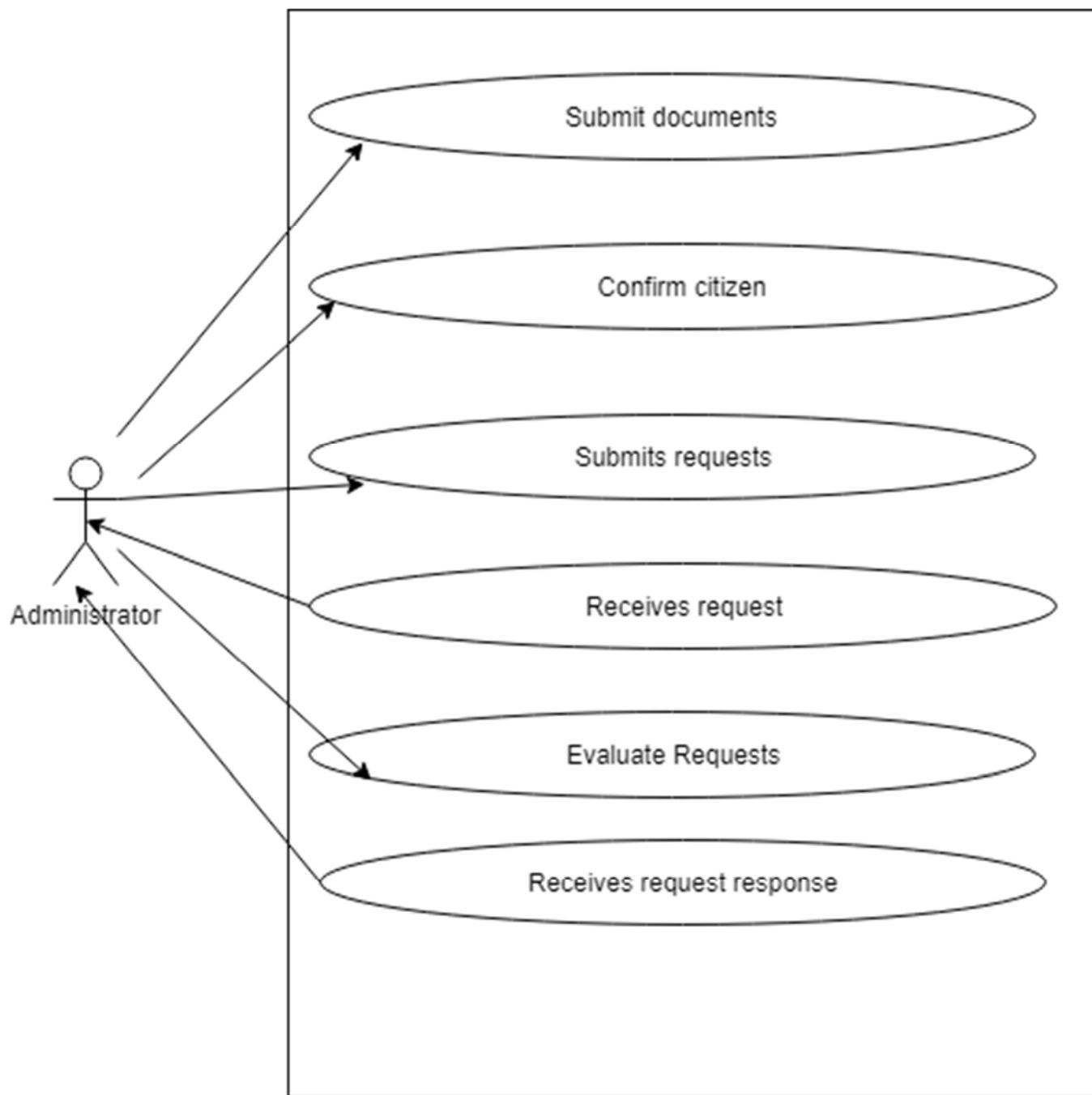




Figure.UC3

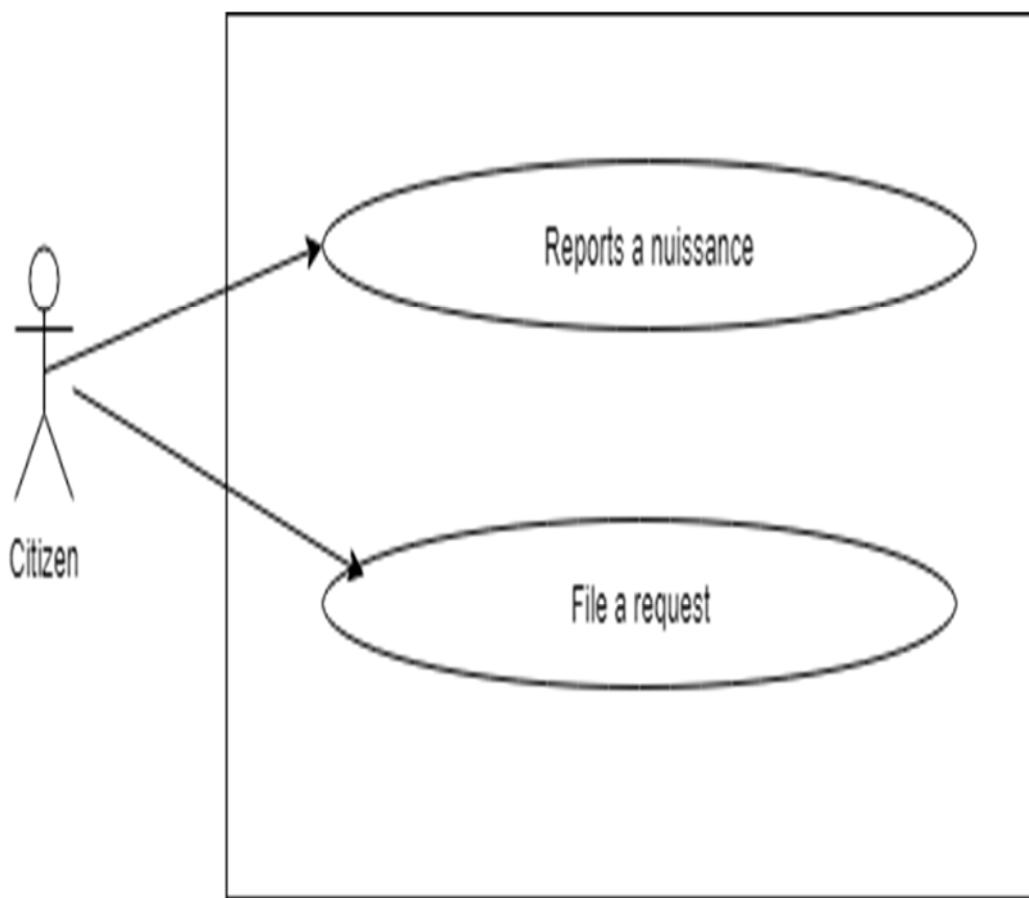




Figure.UC4

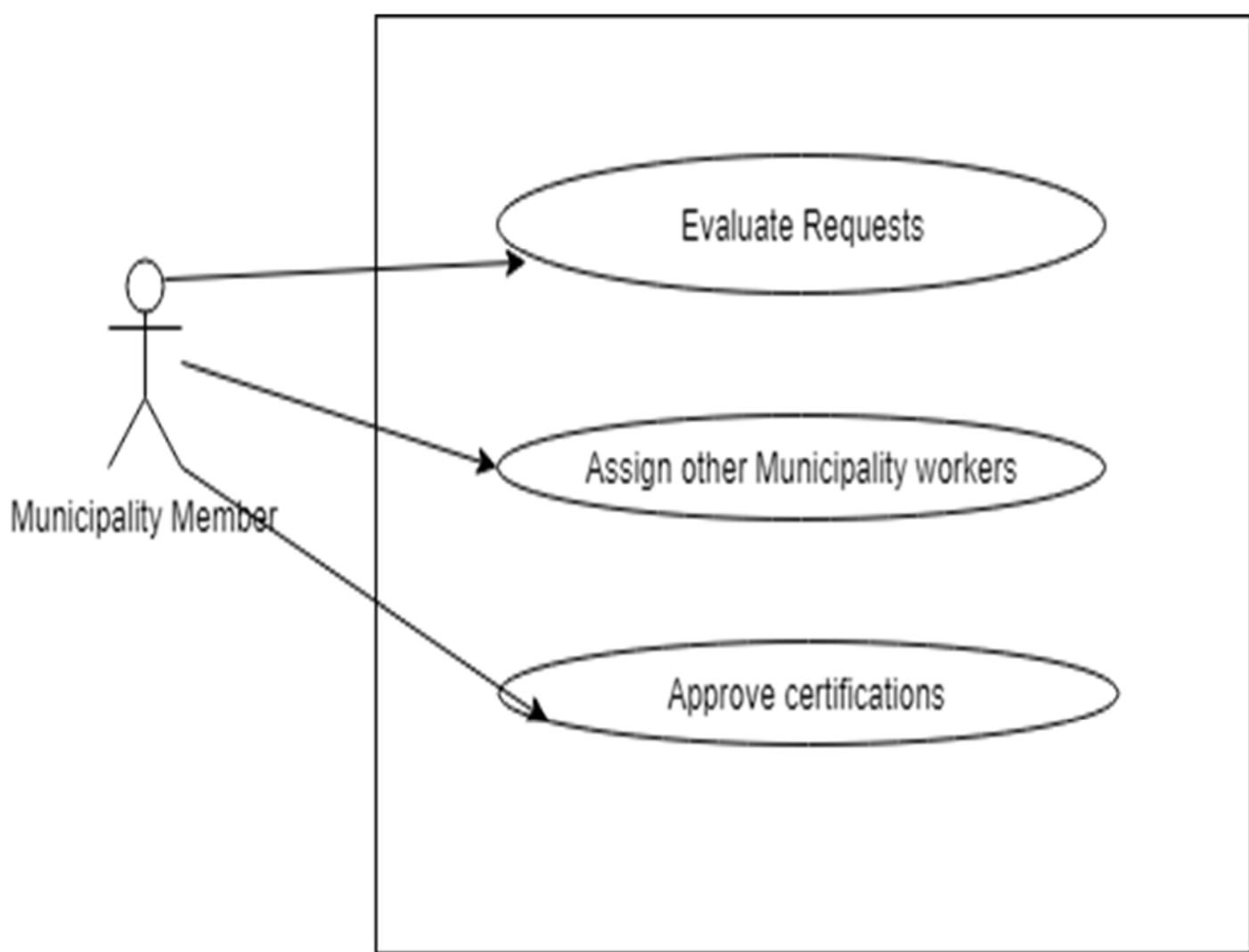
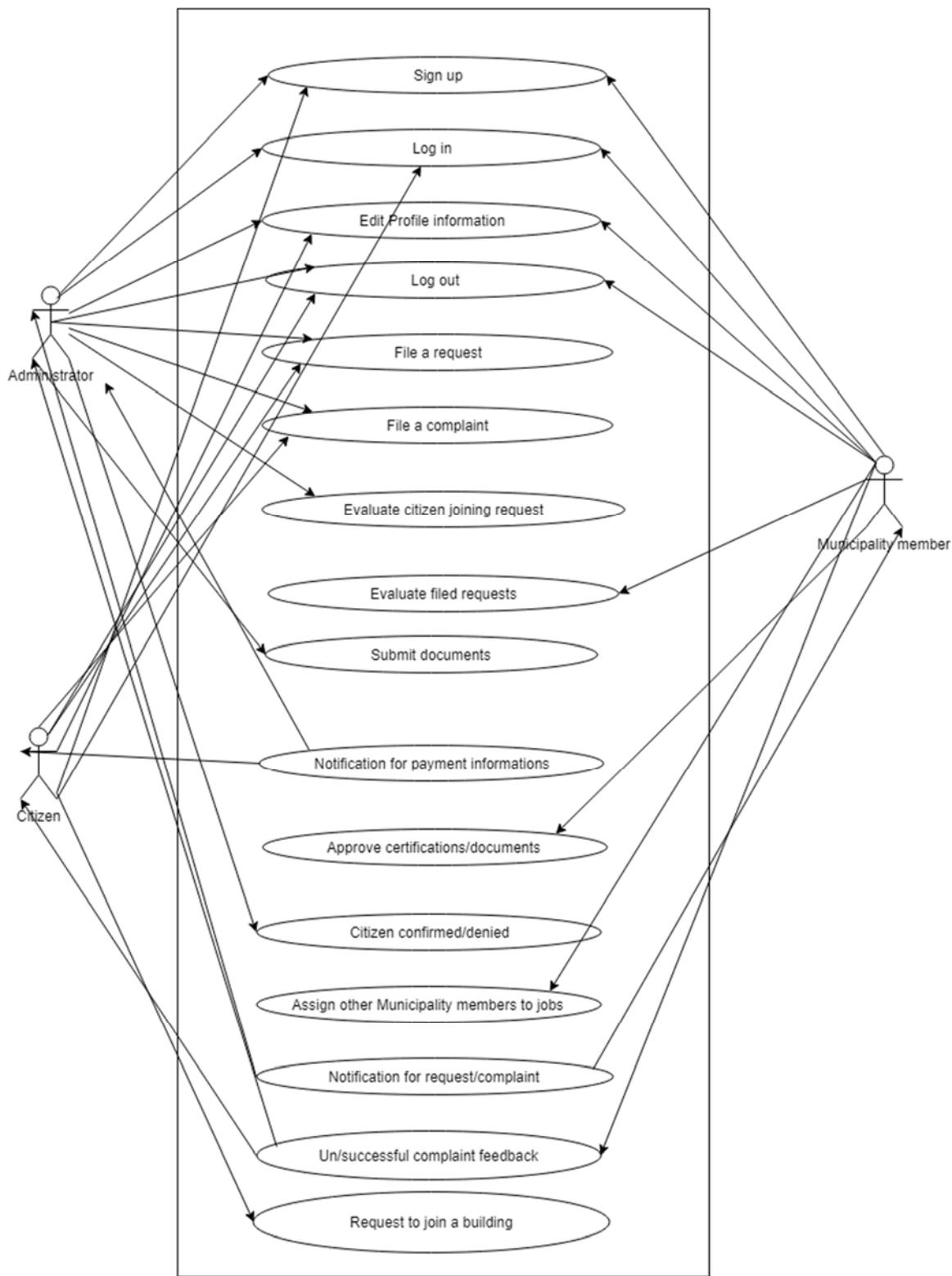




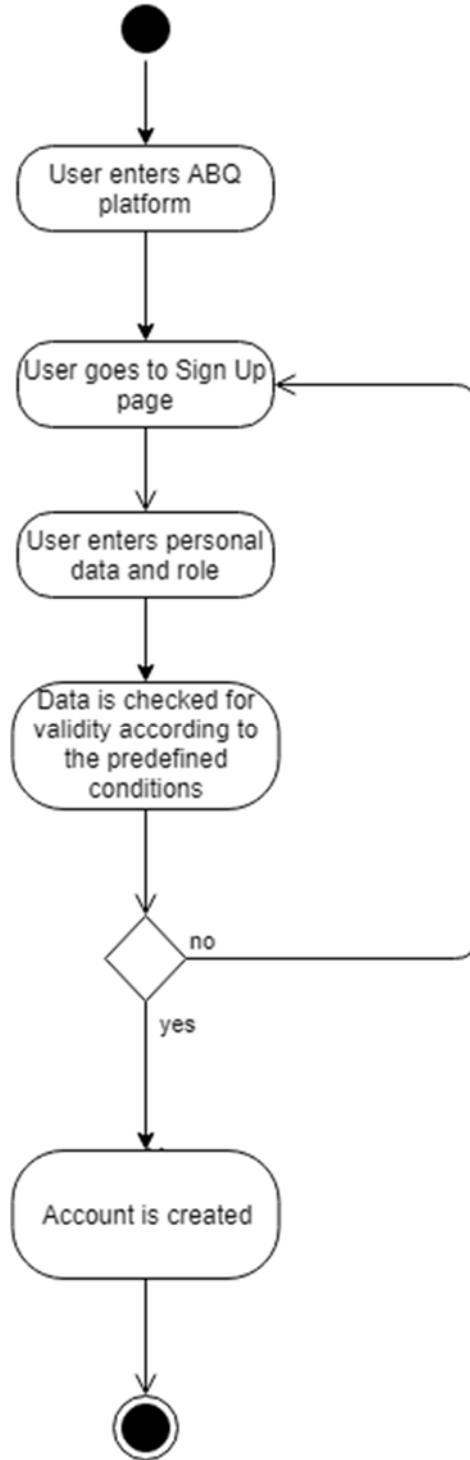
Figure.UC5





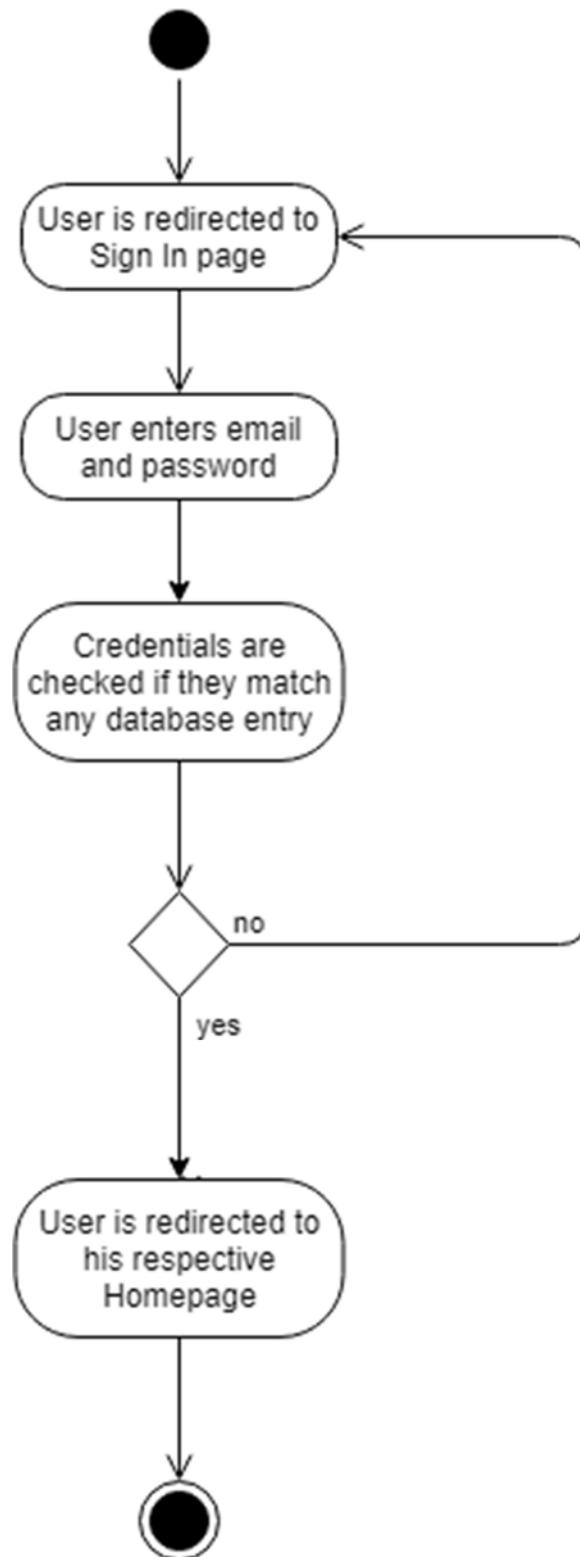
4.2.2 Activity Diagrams

AD1 - SignUp_ActivityDiagram



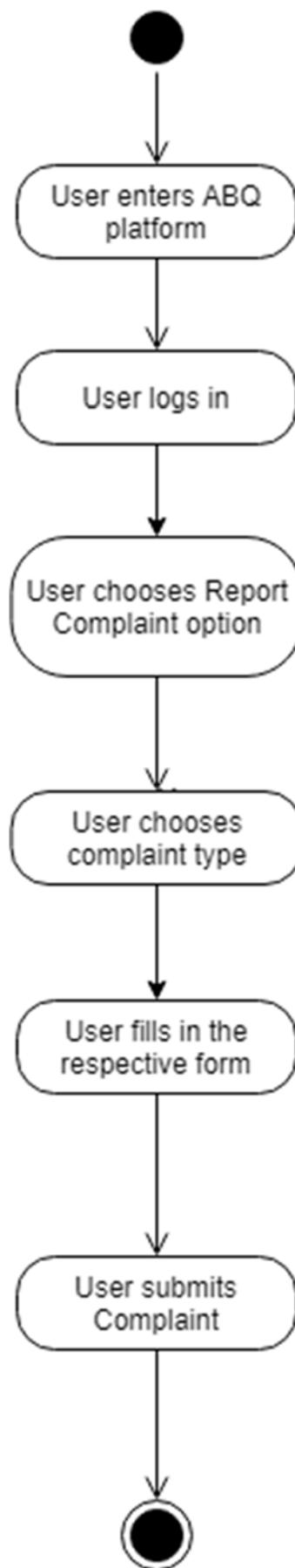


AD2 - Login_ActivityDiagram



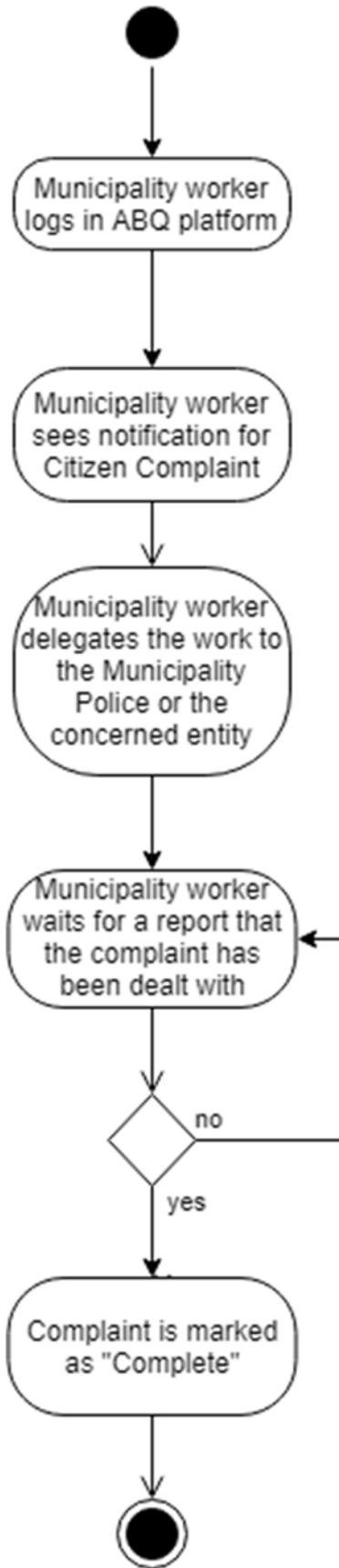


AD3 - NuisanceReport_ActivityDiagram

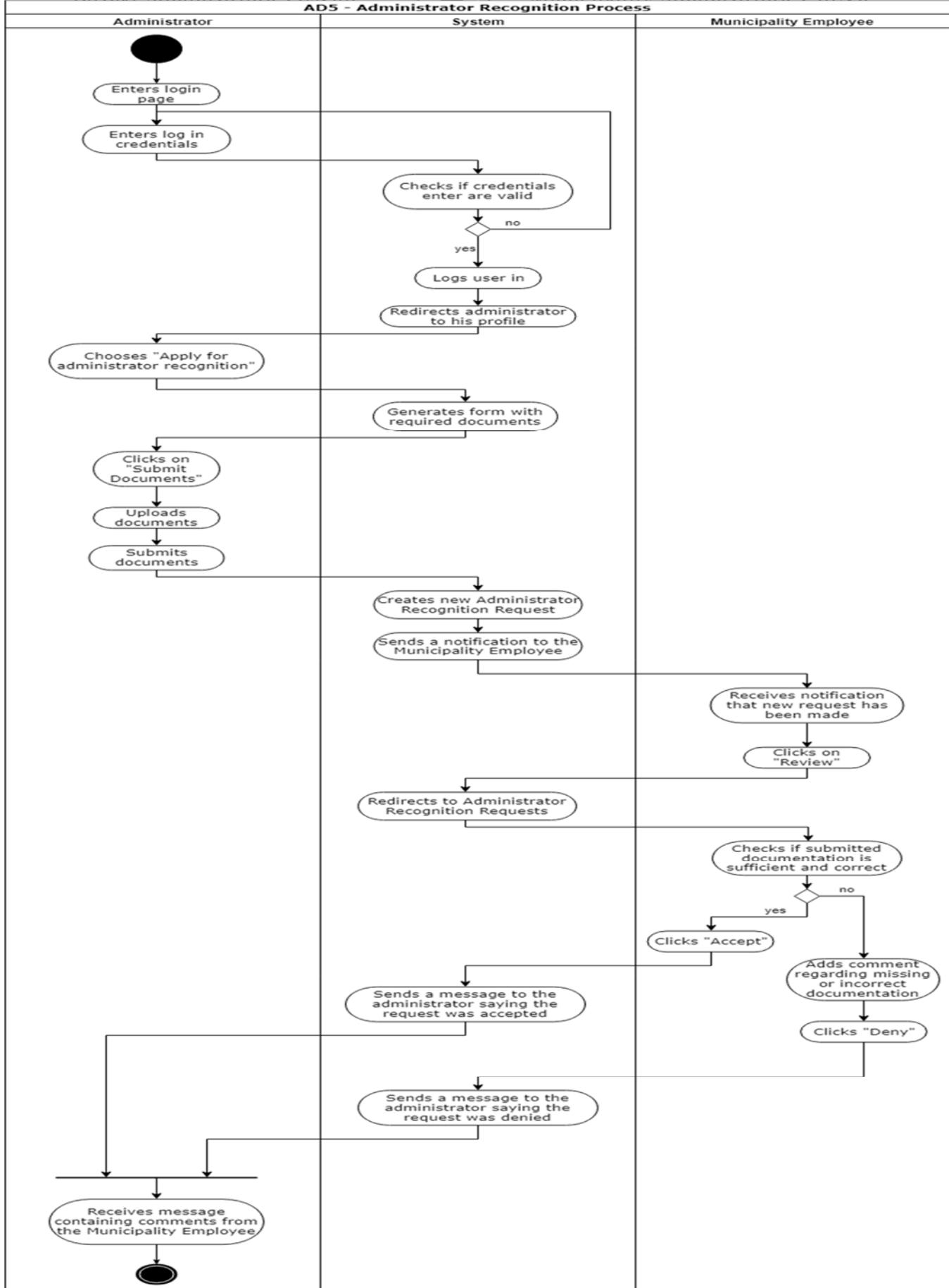


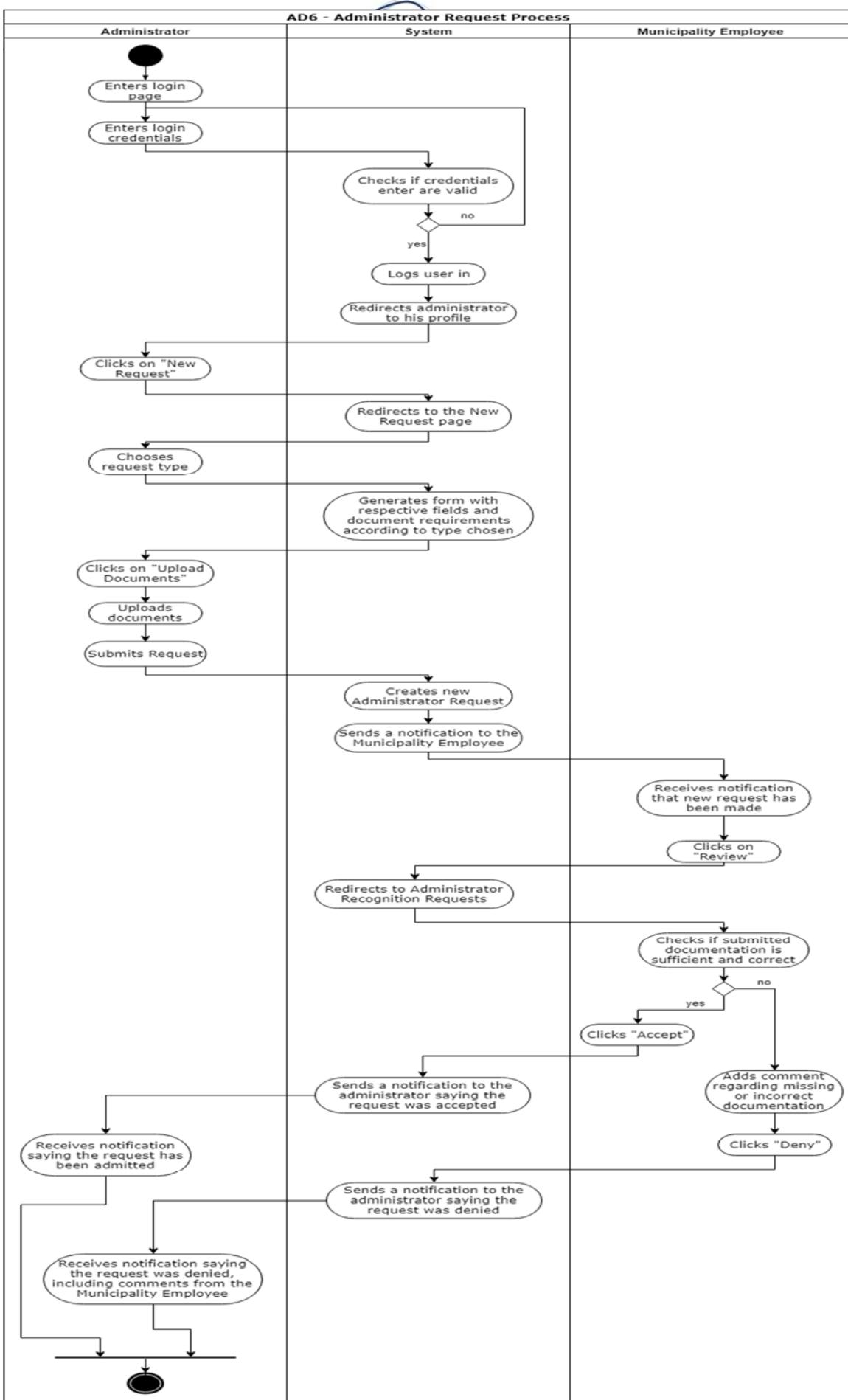


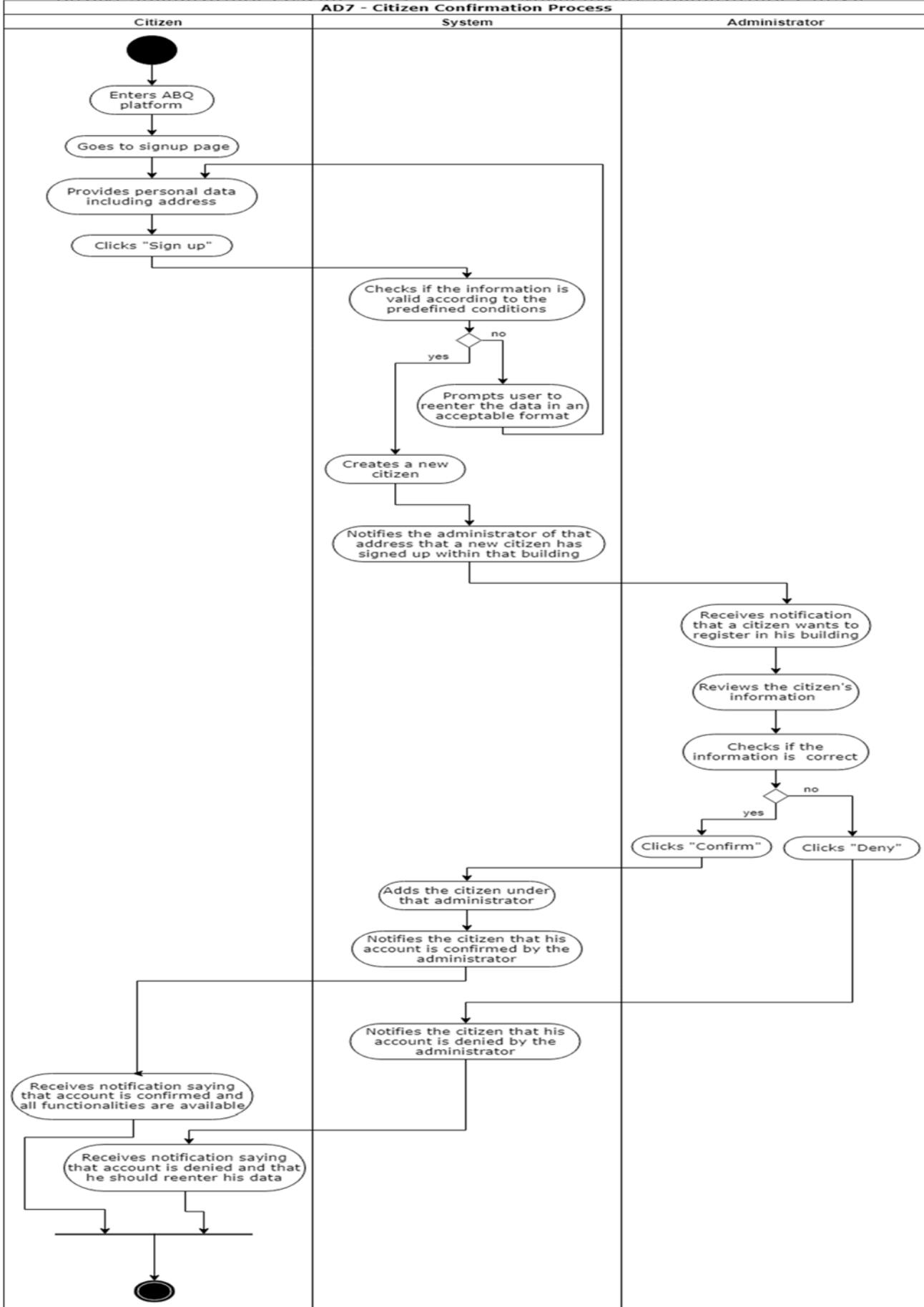
AD4 - Municipality-Alerts Police _ ActivityDiagram

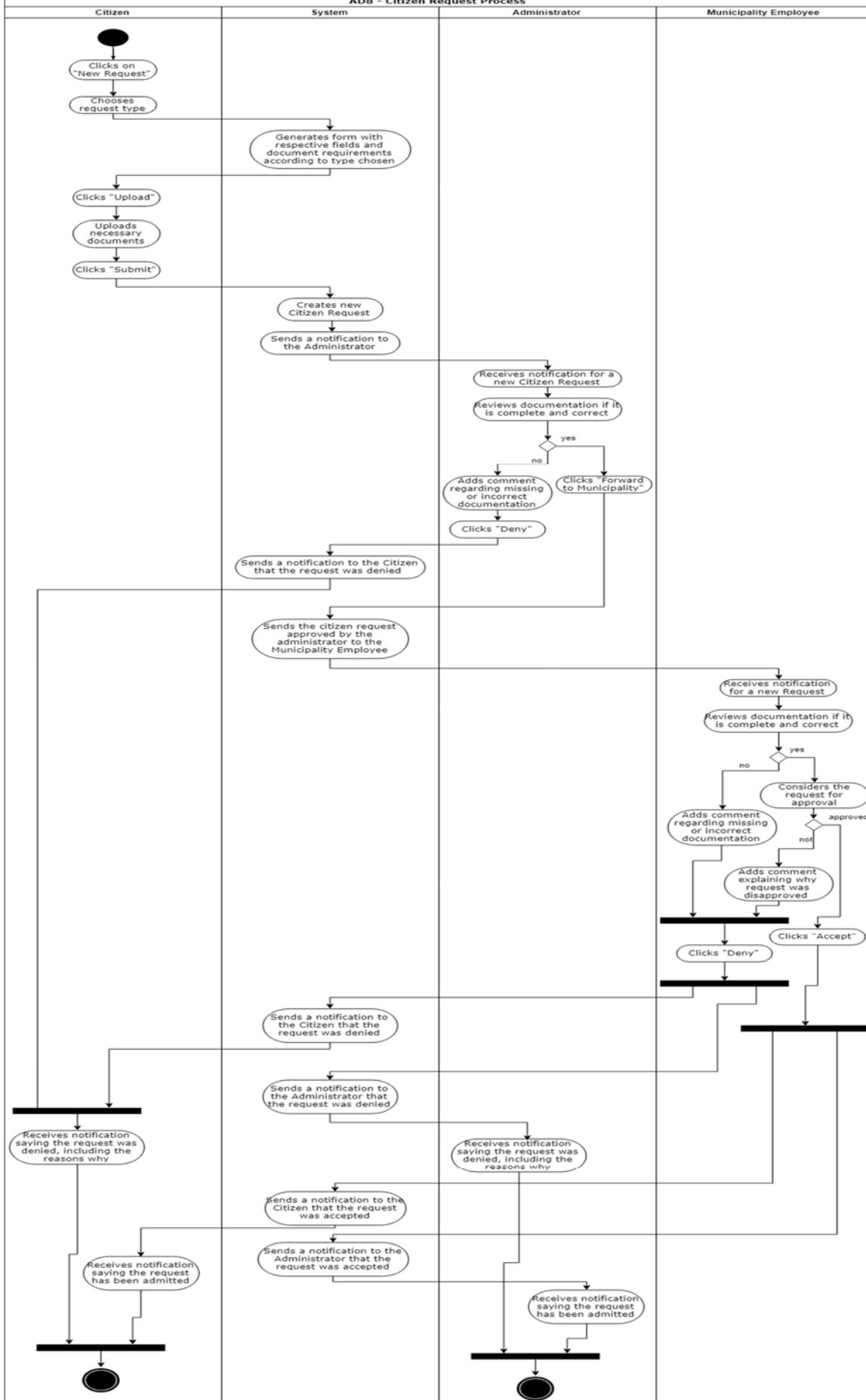


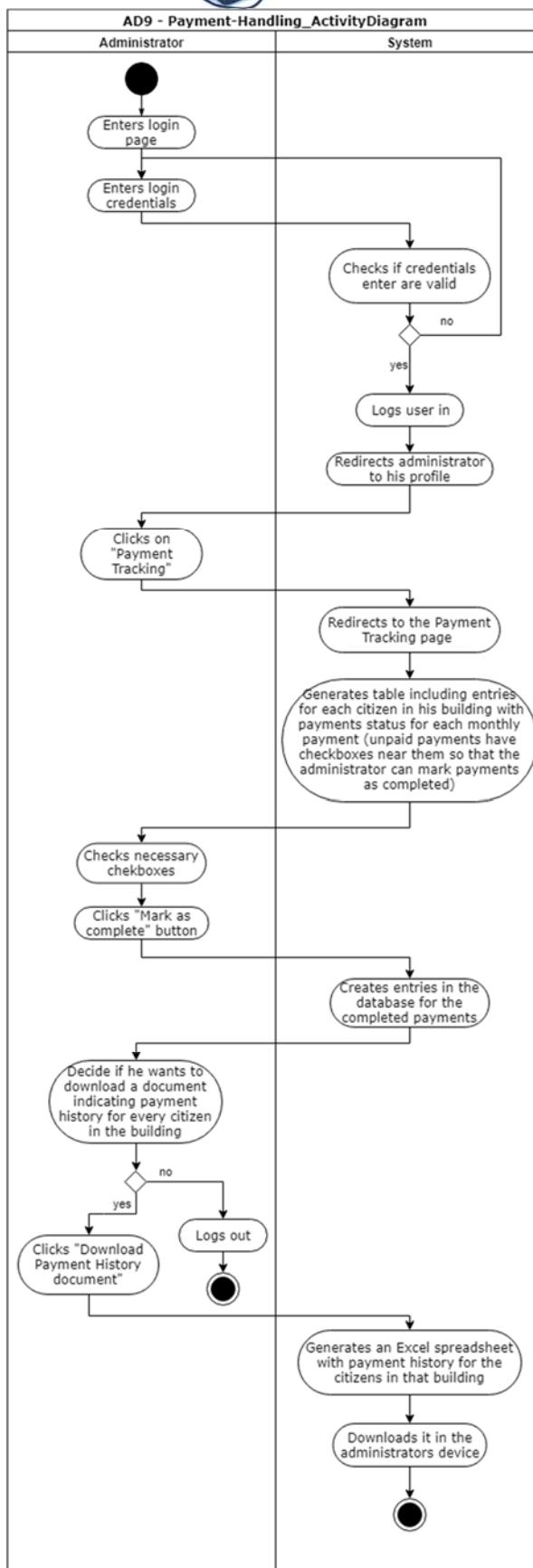
ADS - Administrator Recognition Process

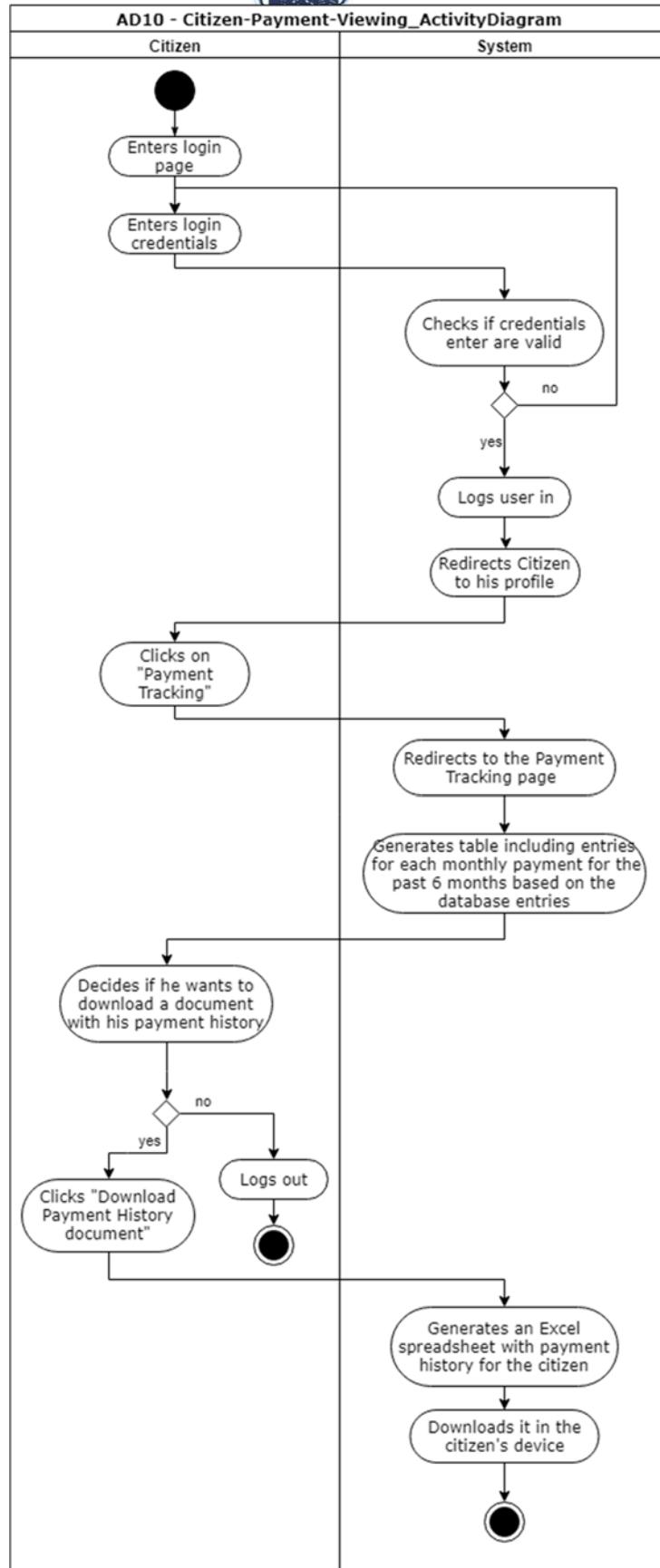








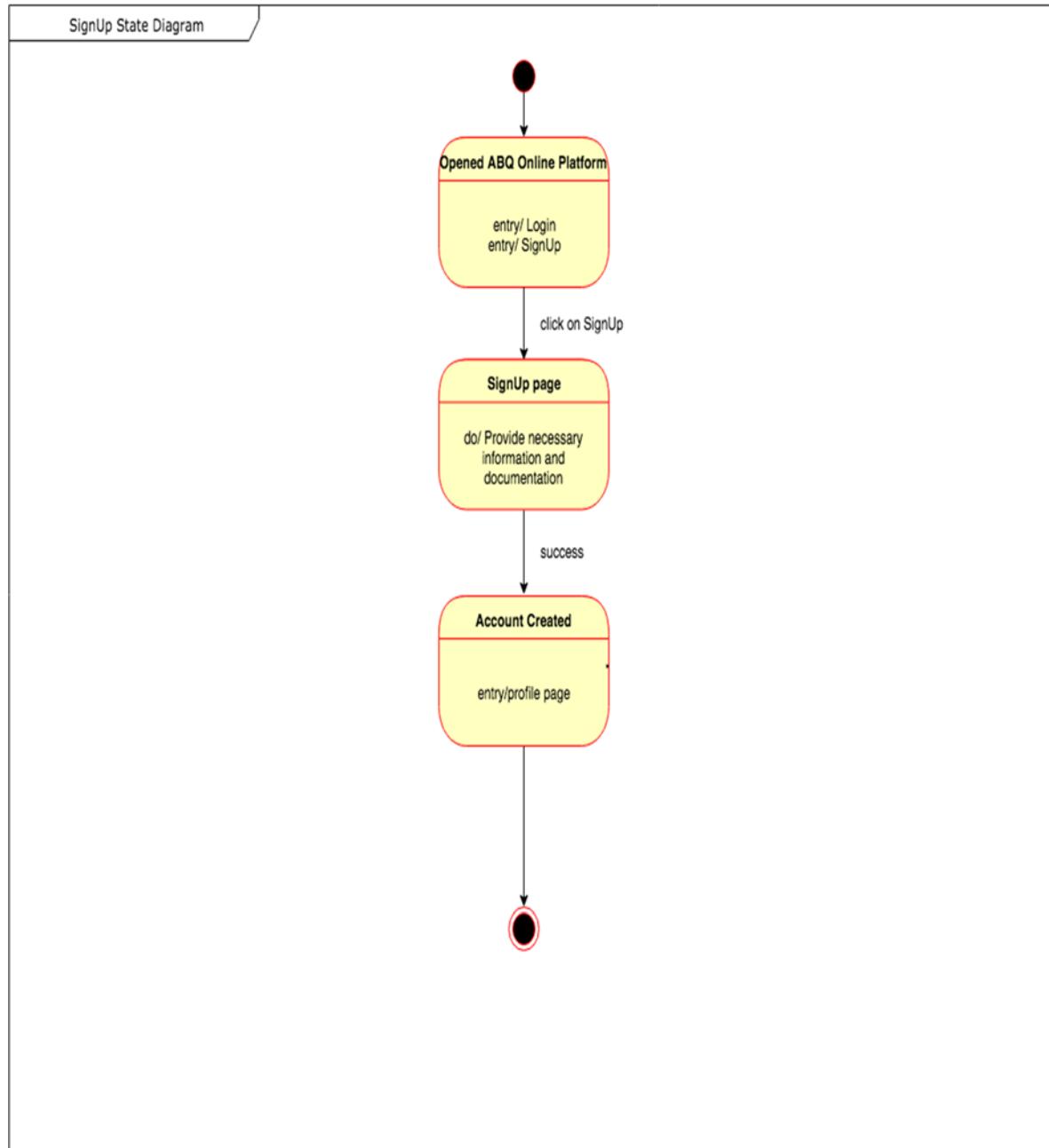






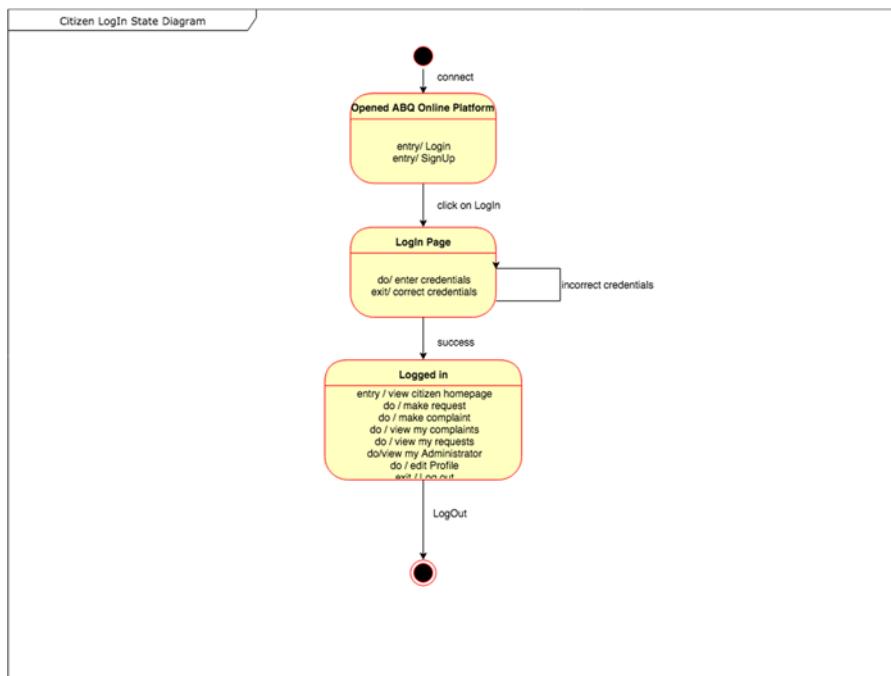
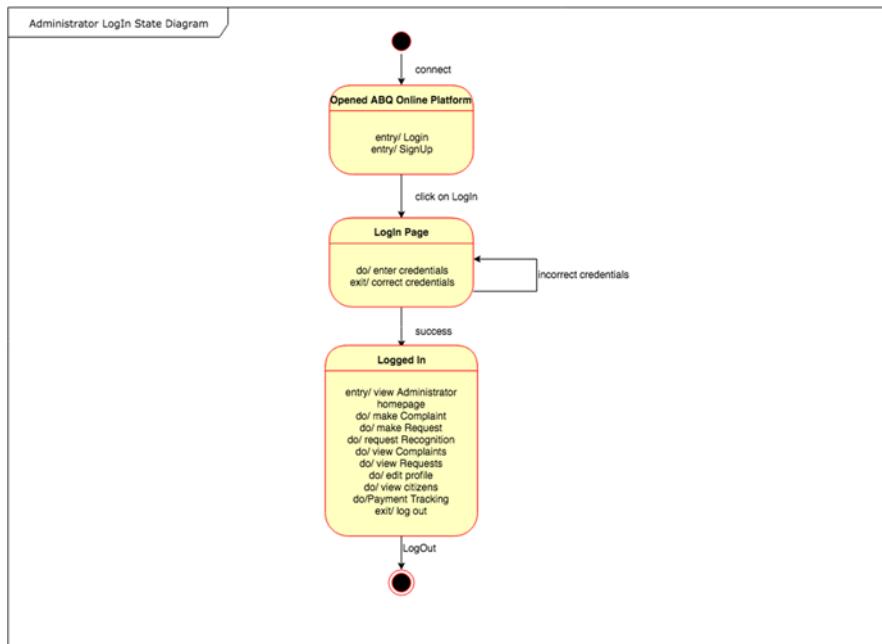
4.2.3 State Diagrams

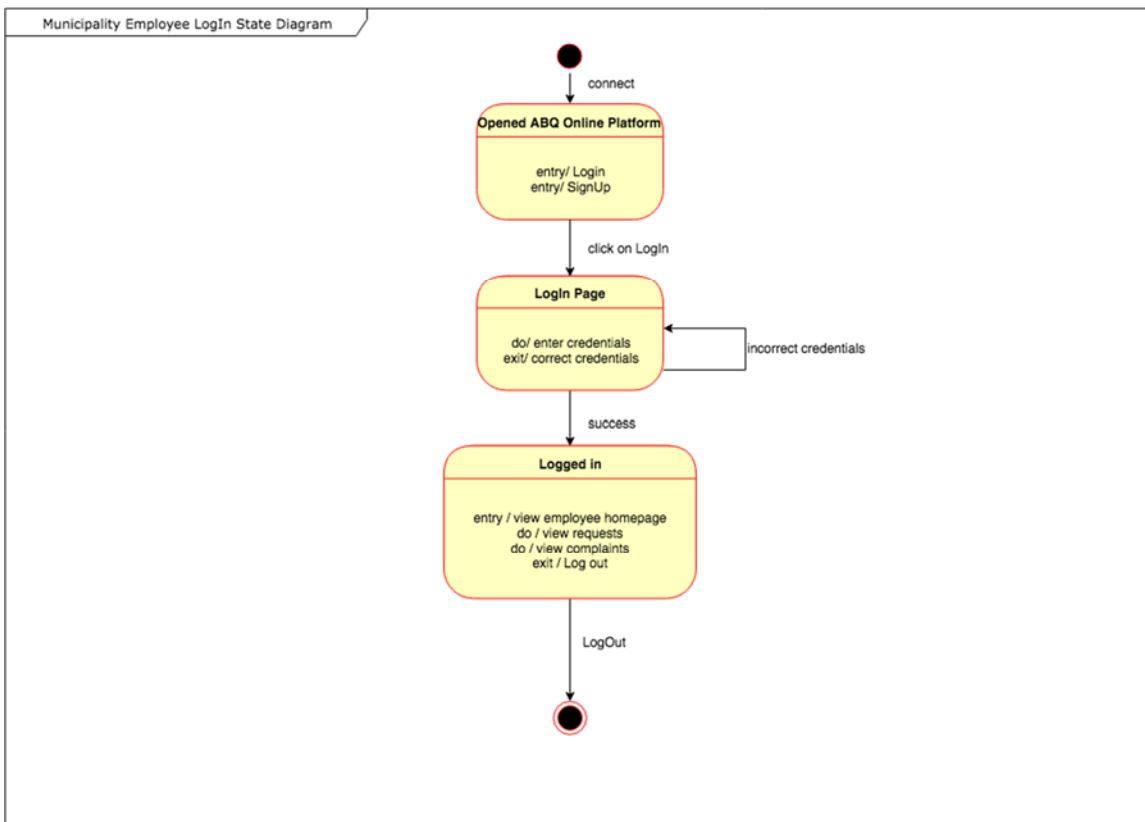
4.2.3.1 SD-1





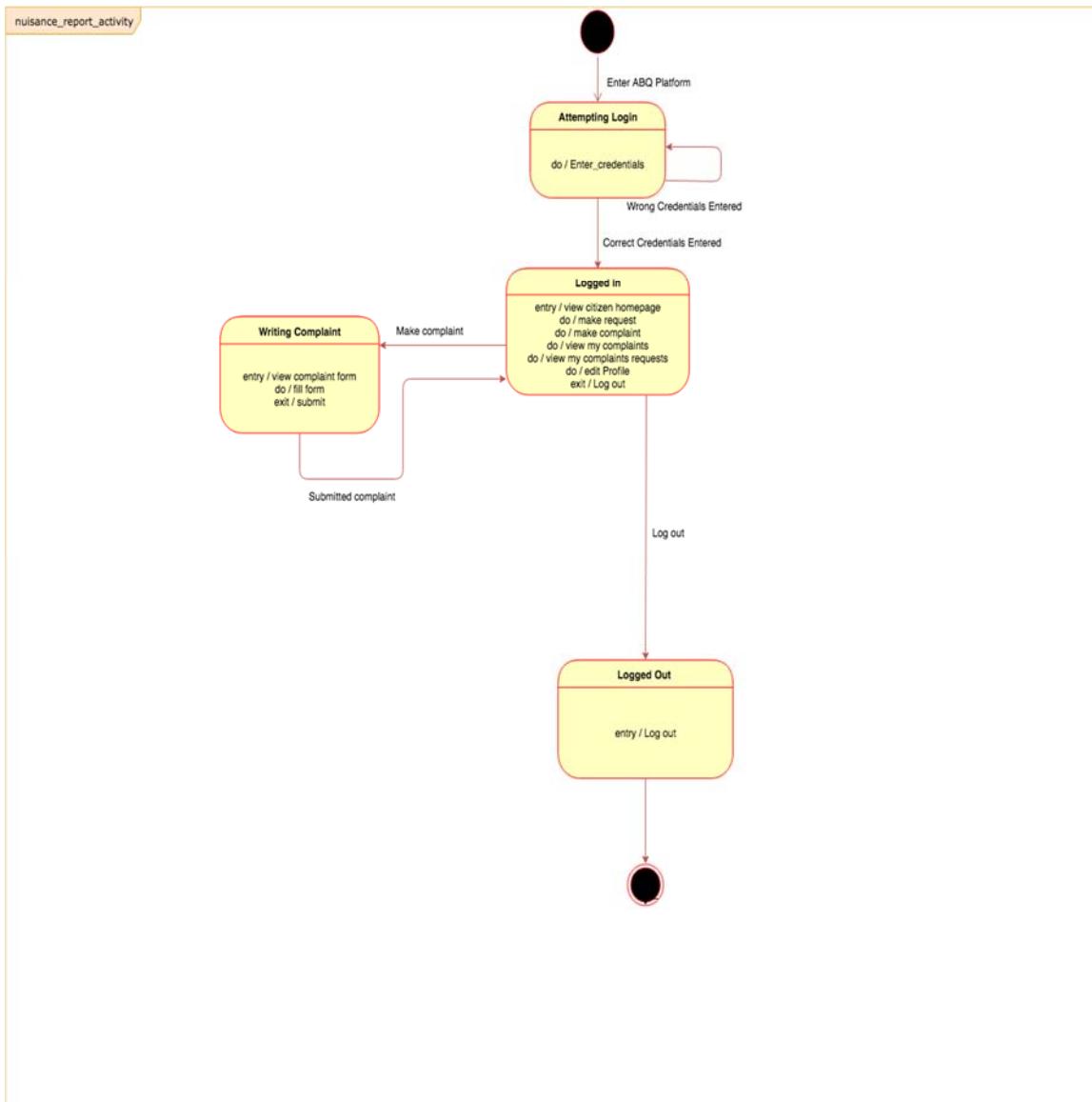
4.2.3.2 SD-2





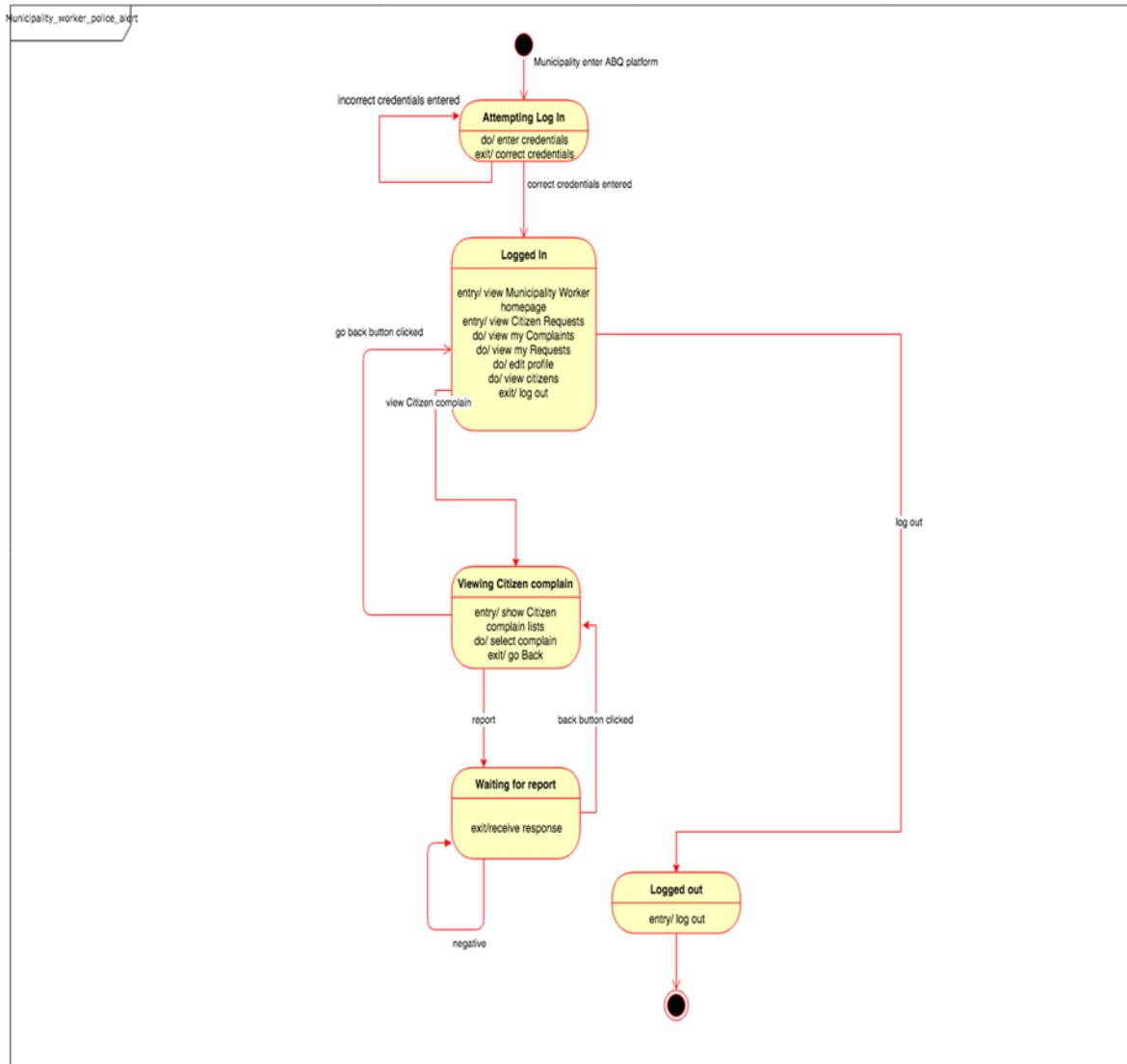


4.2.3.3 SD-3



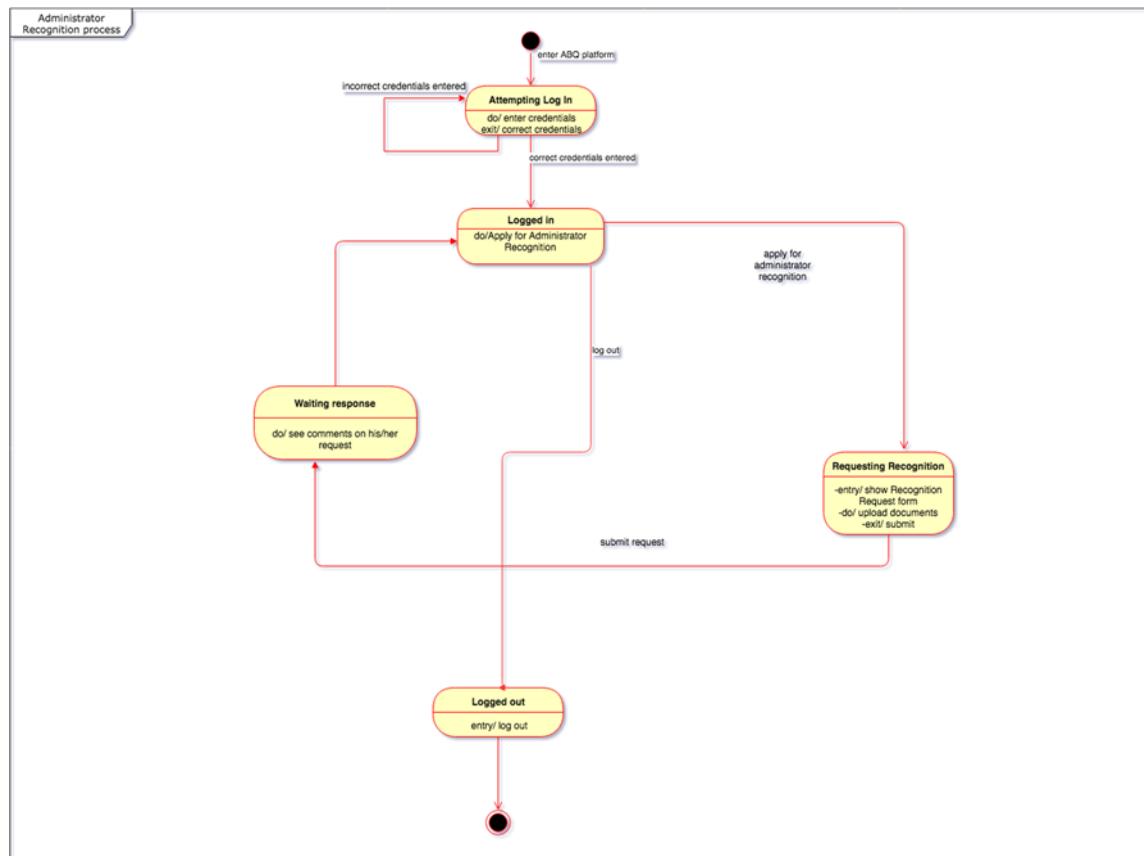


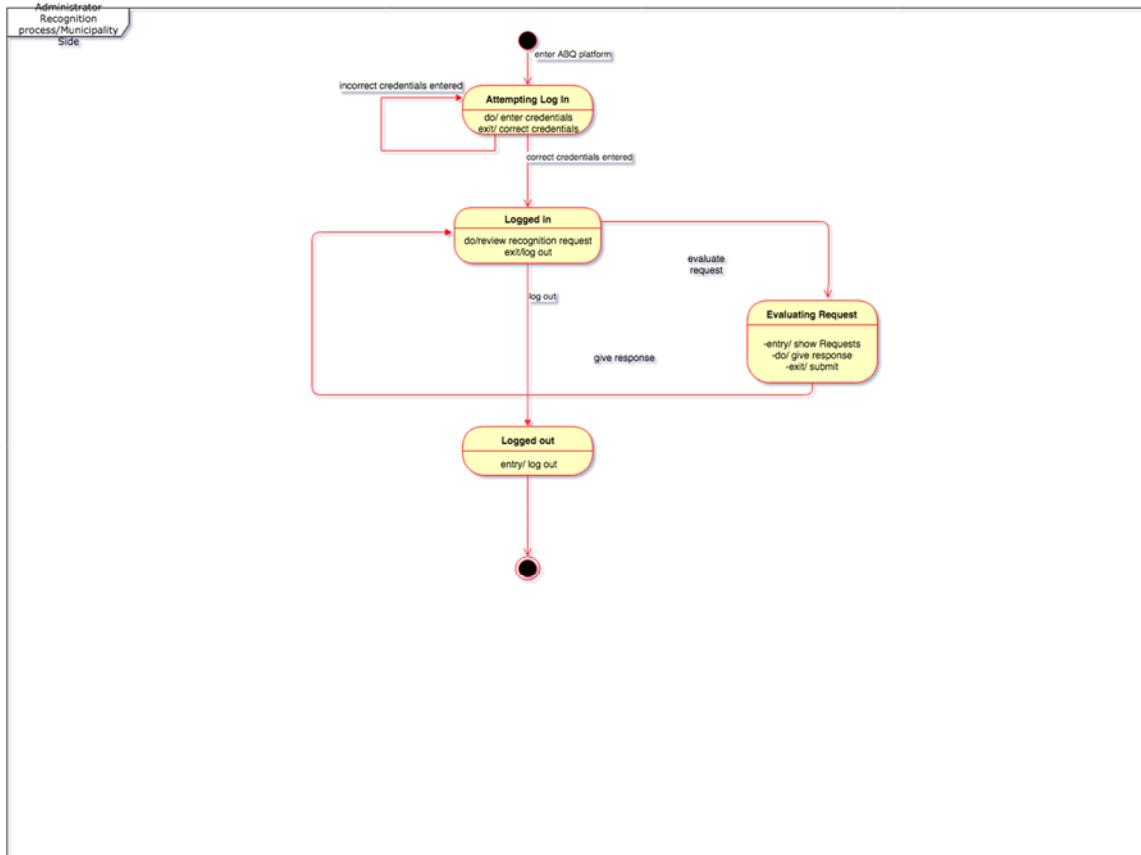
4.2.3.4 SD-4





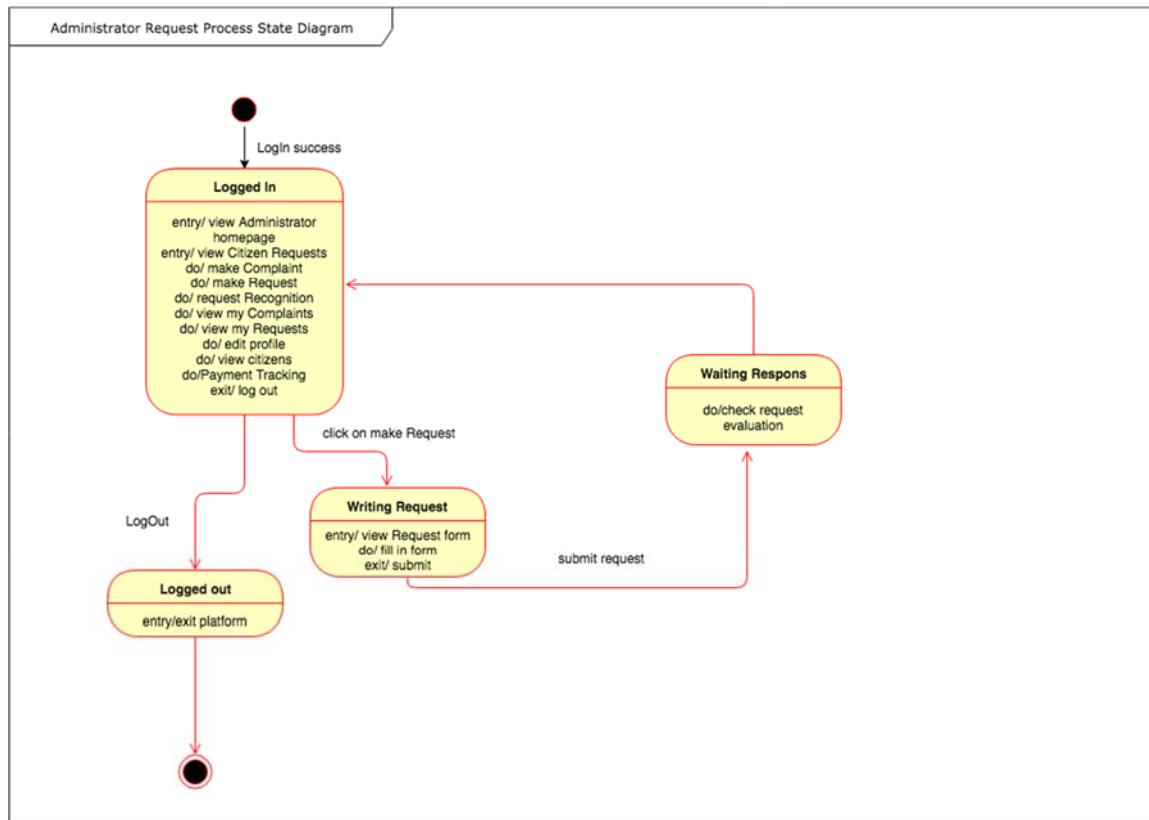
4.2.3.5 SD-5

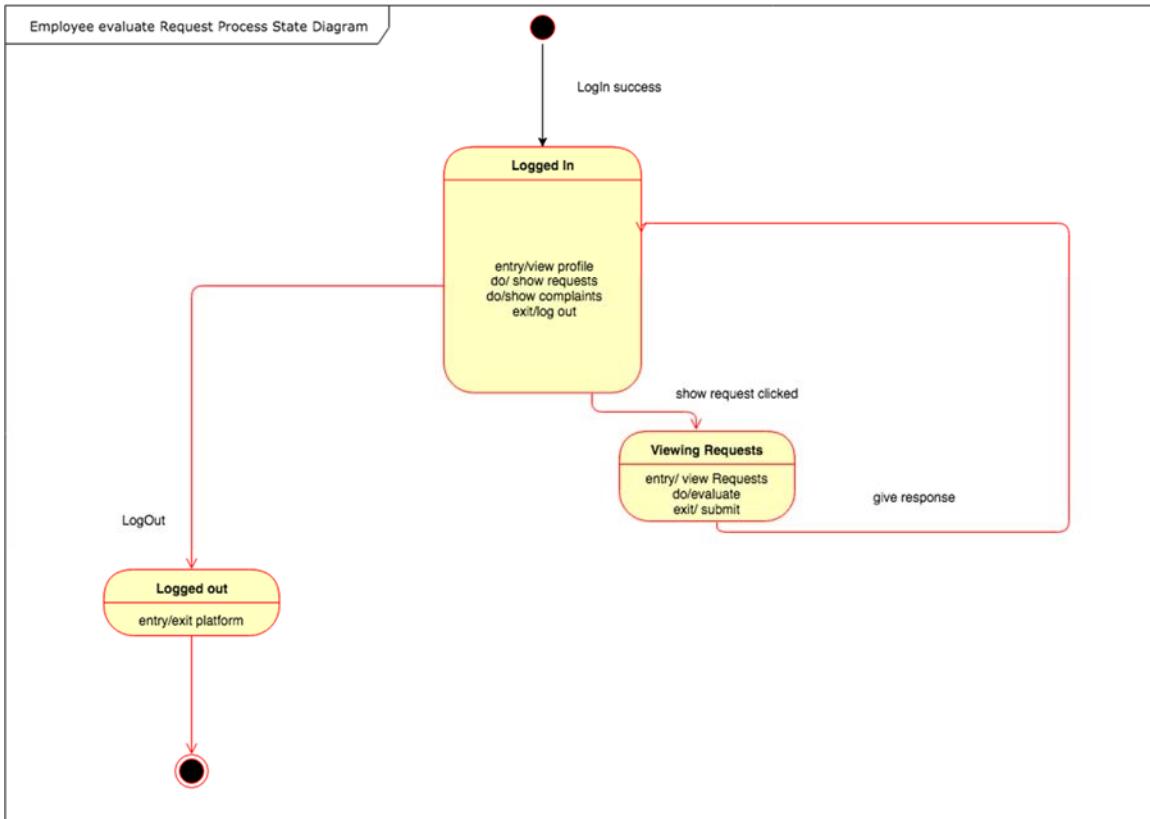






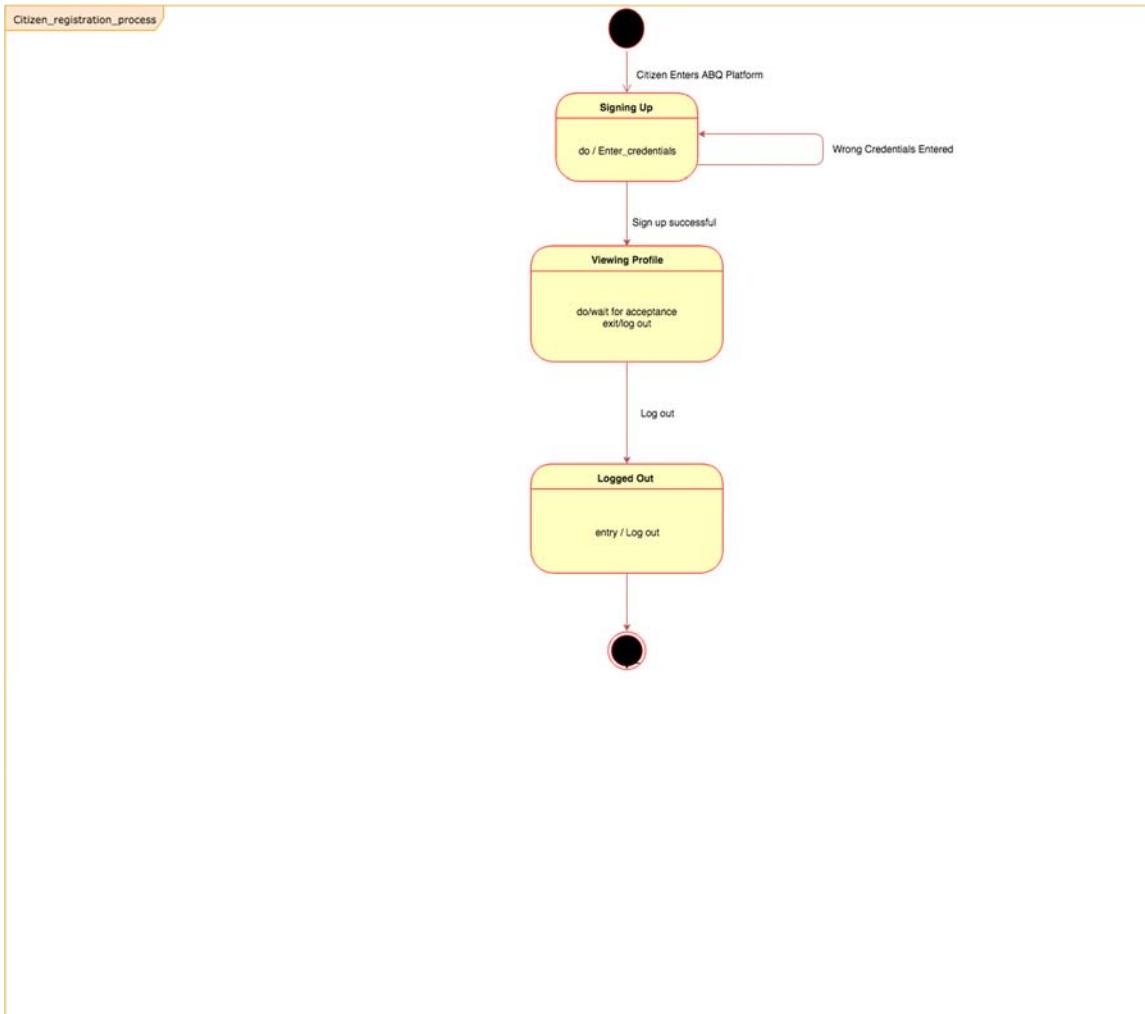
4.2.3.6 SD-6

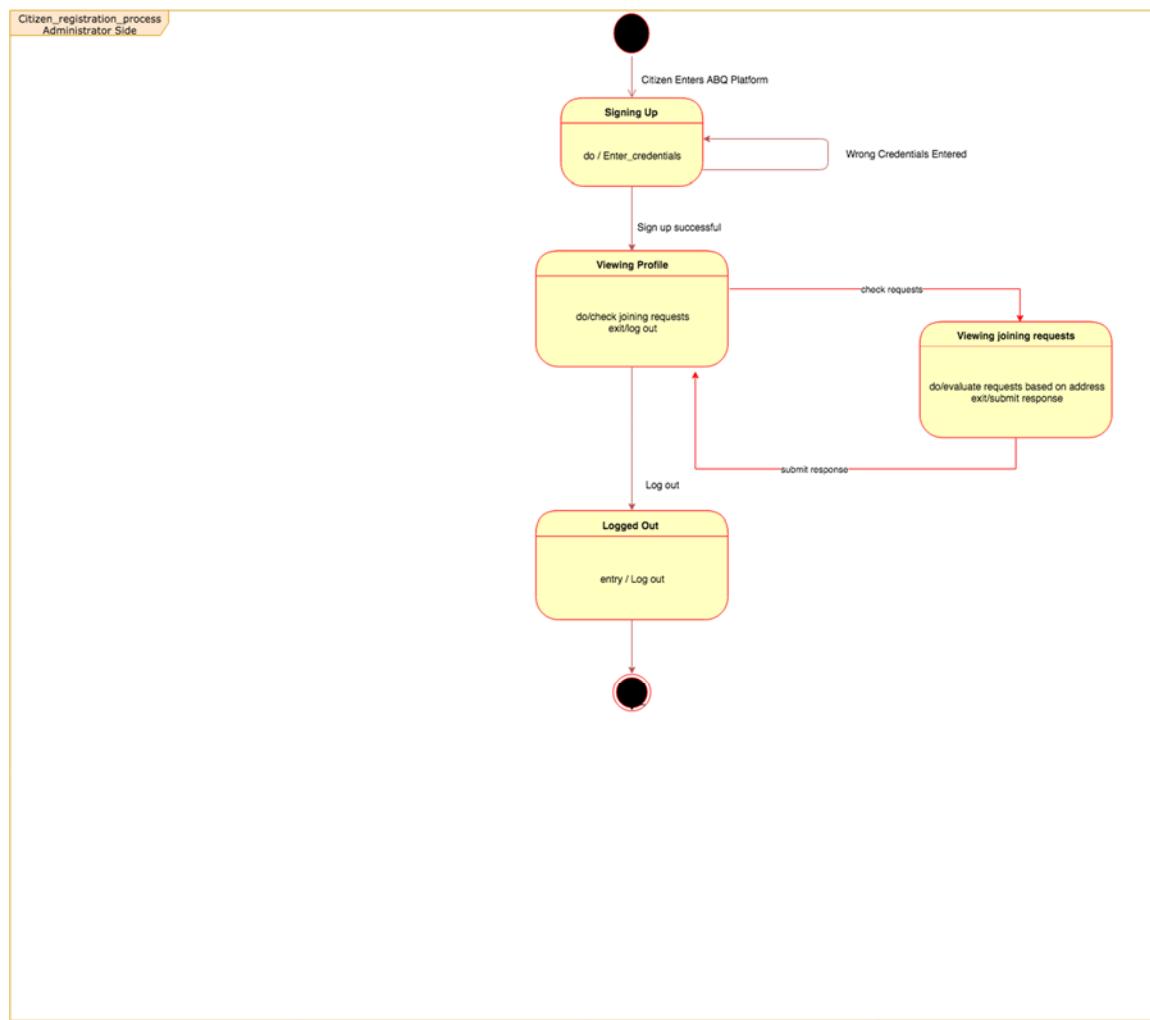






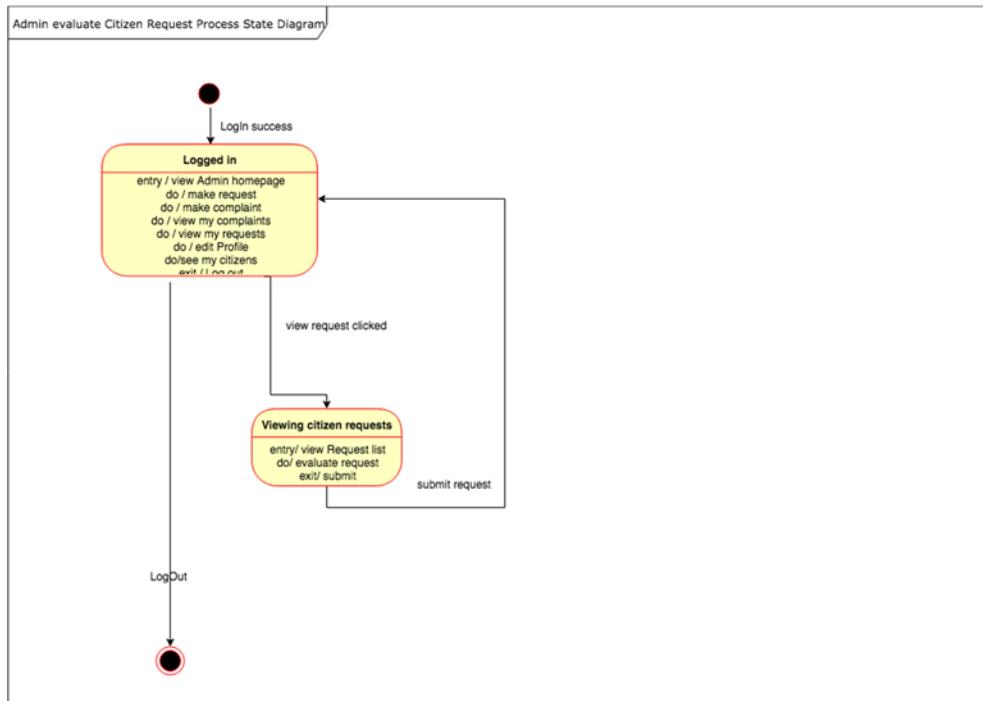
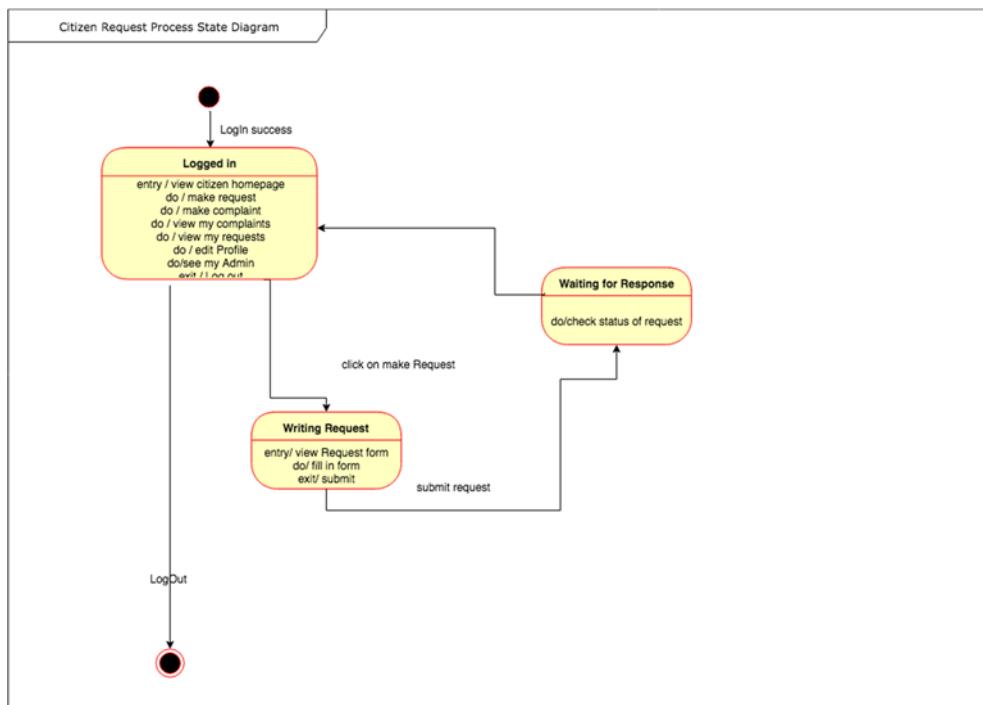
4.2.3.7 SD-7

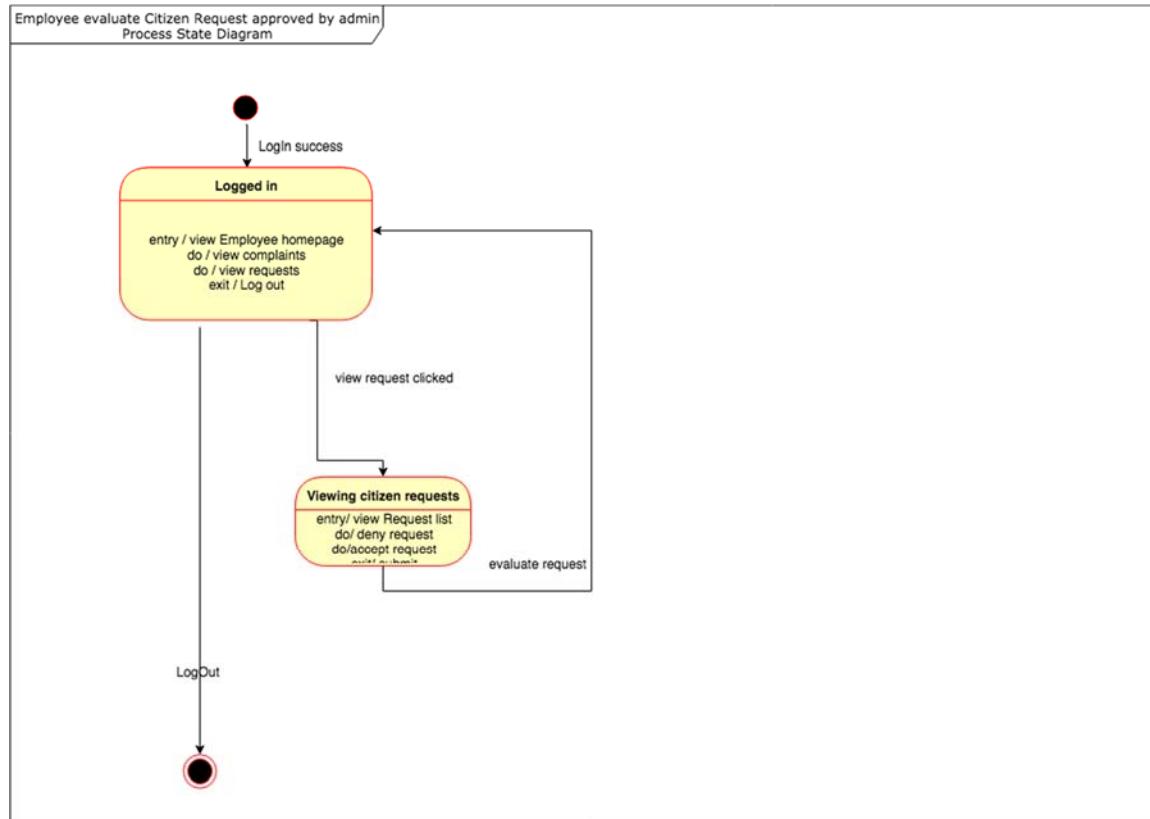






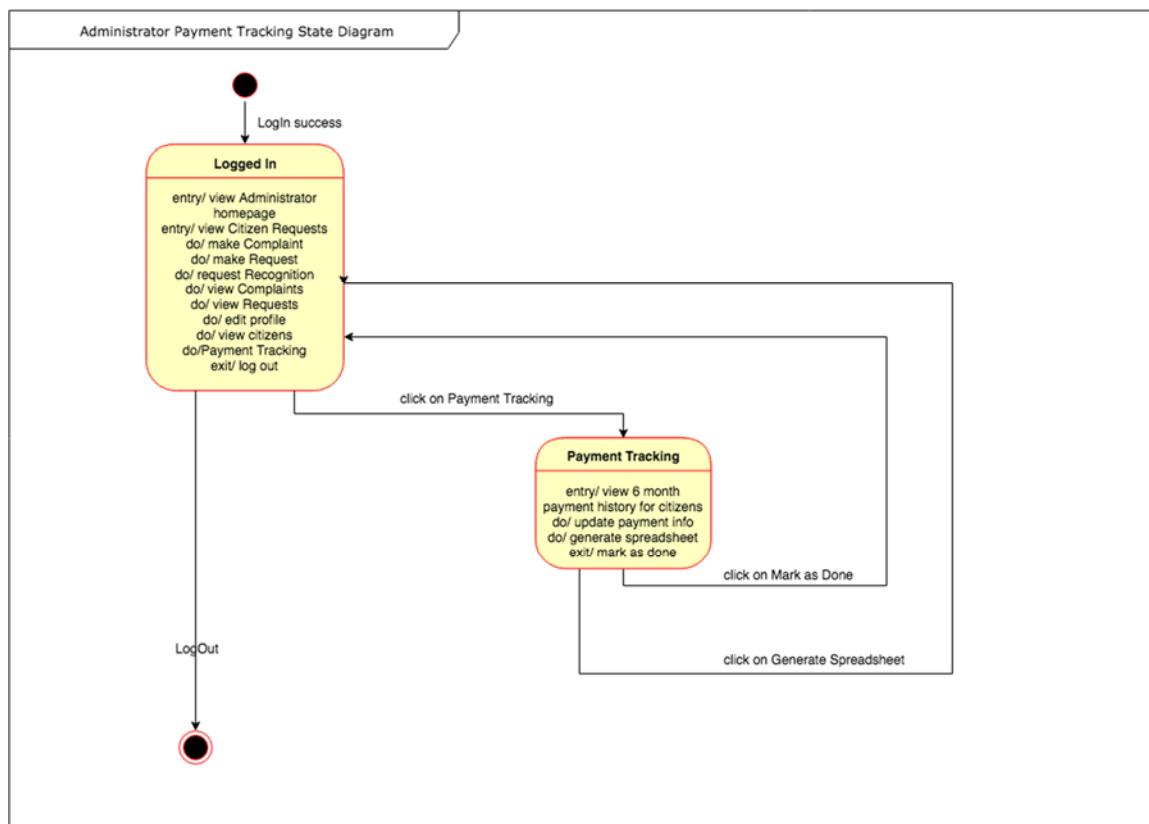
4.2.3.8 SD-8





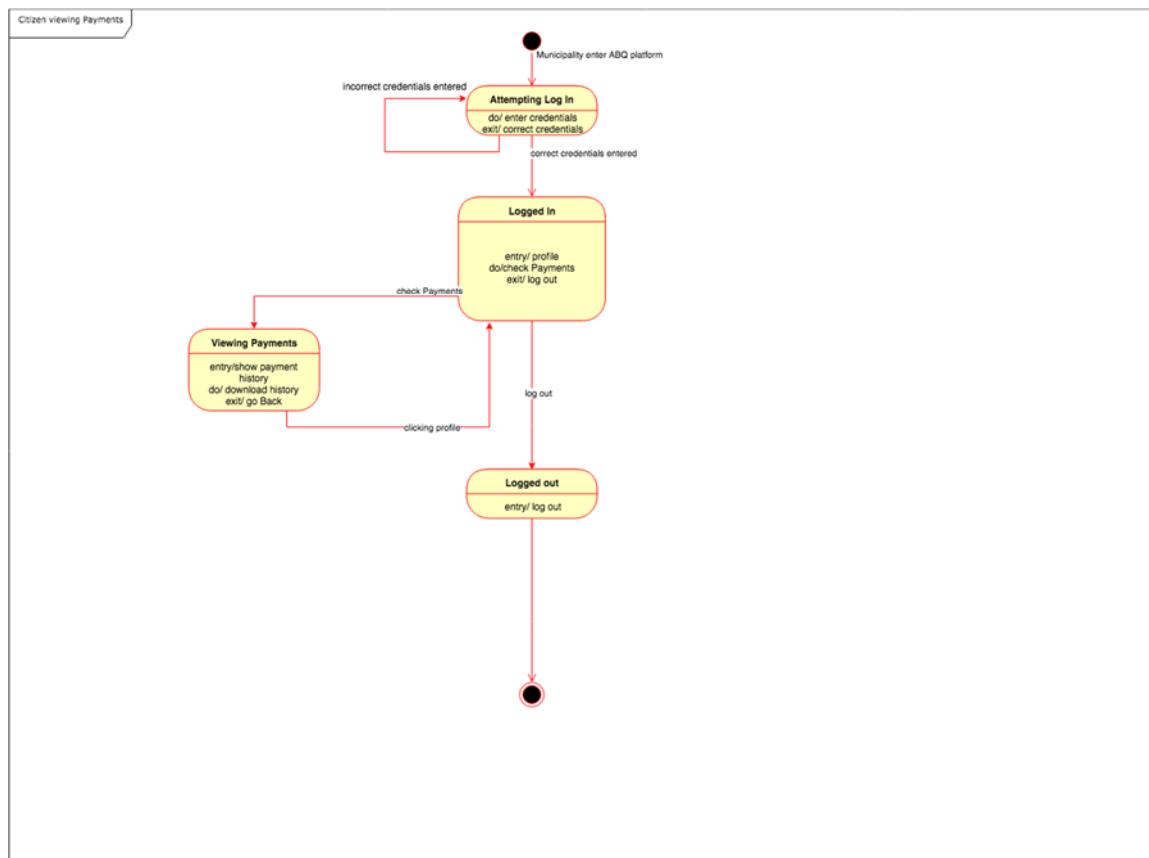


4.2.3.9 SD-9



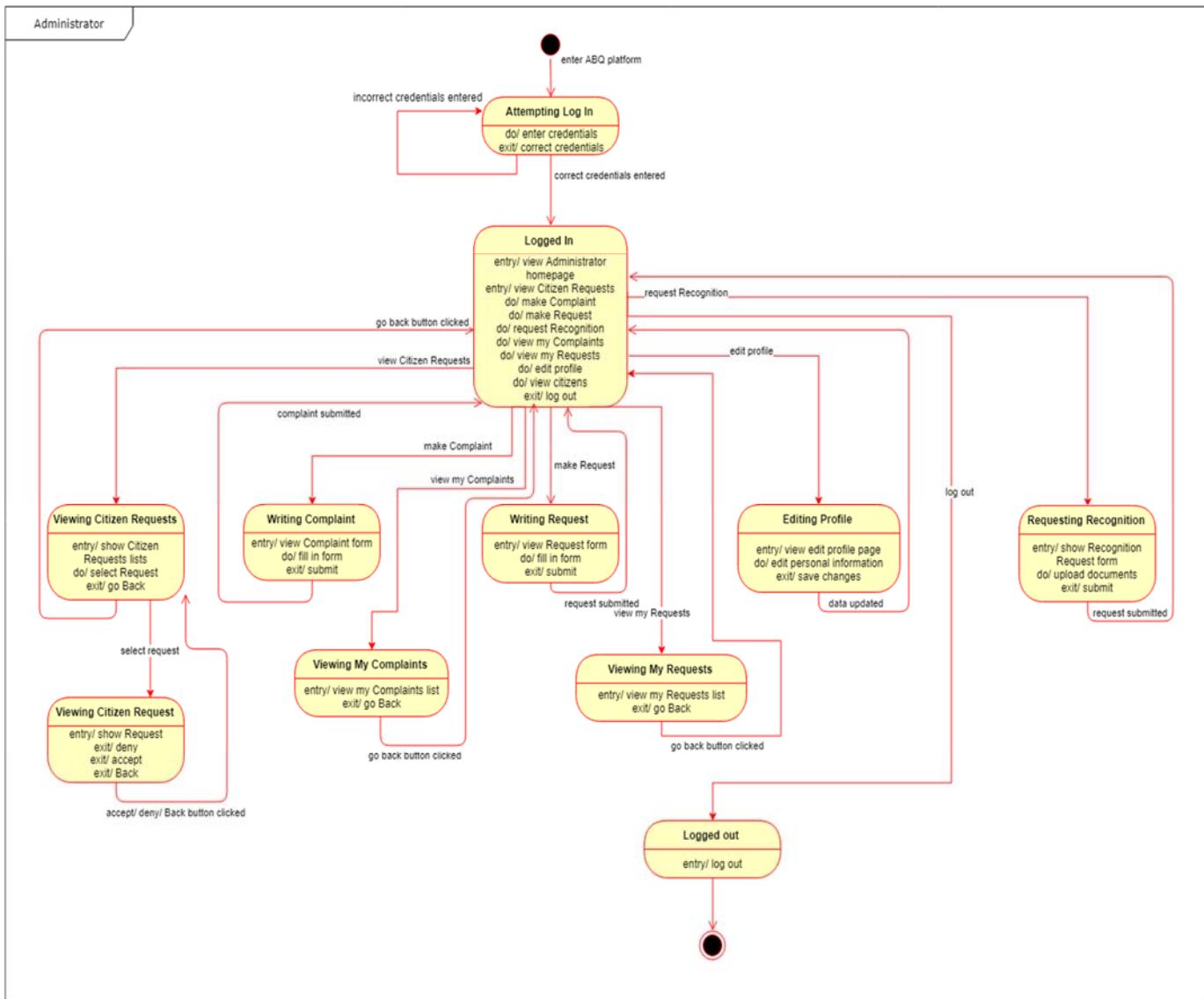


4.2.3.10 SD-10



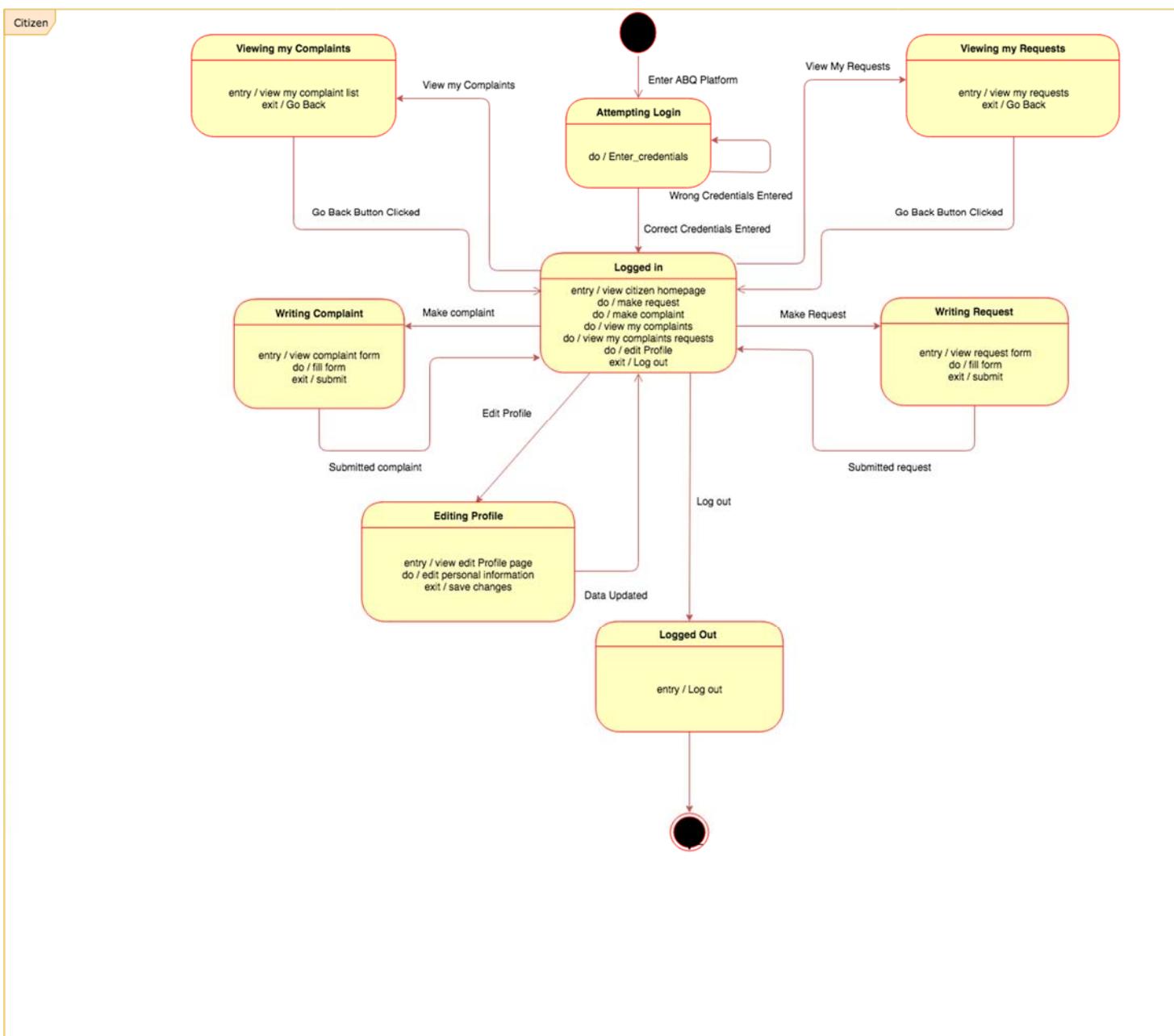


4.2.3.11 General State Diagram for the Administrator



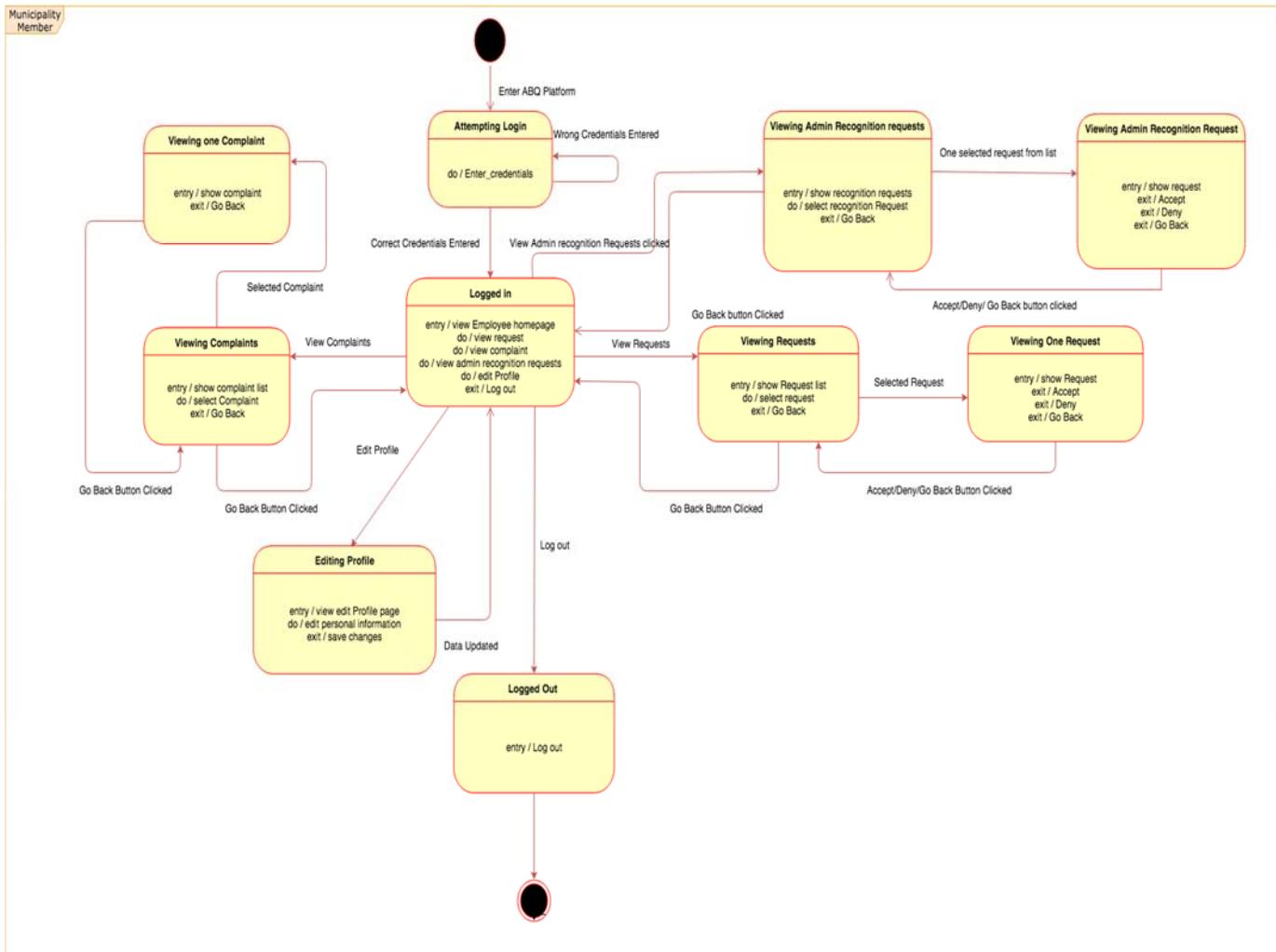


4.2.3.12 General State Diagram for the Citizen





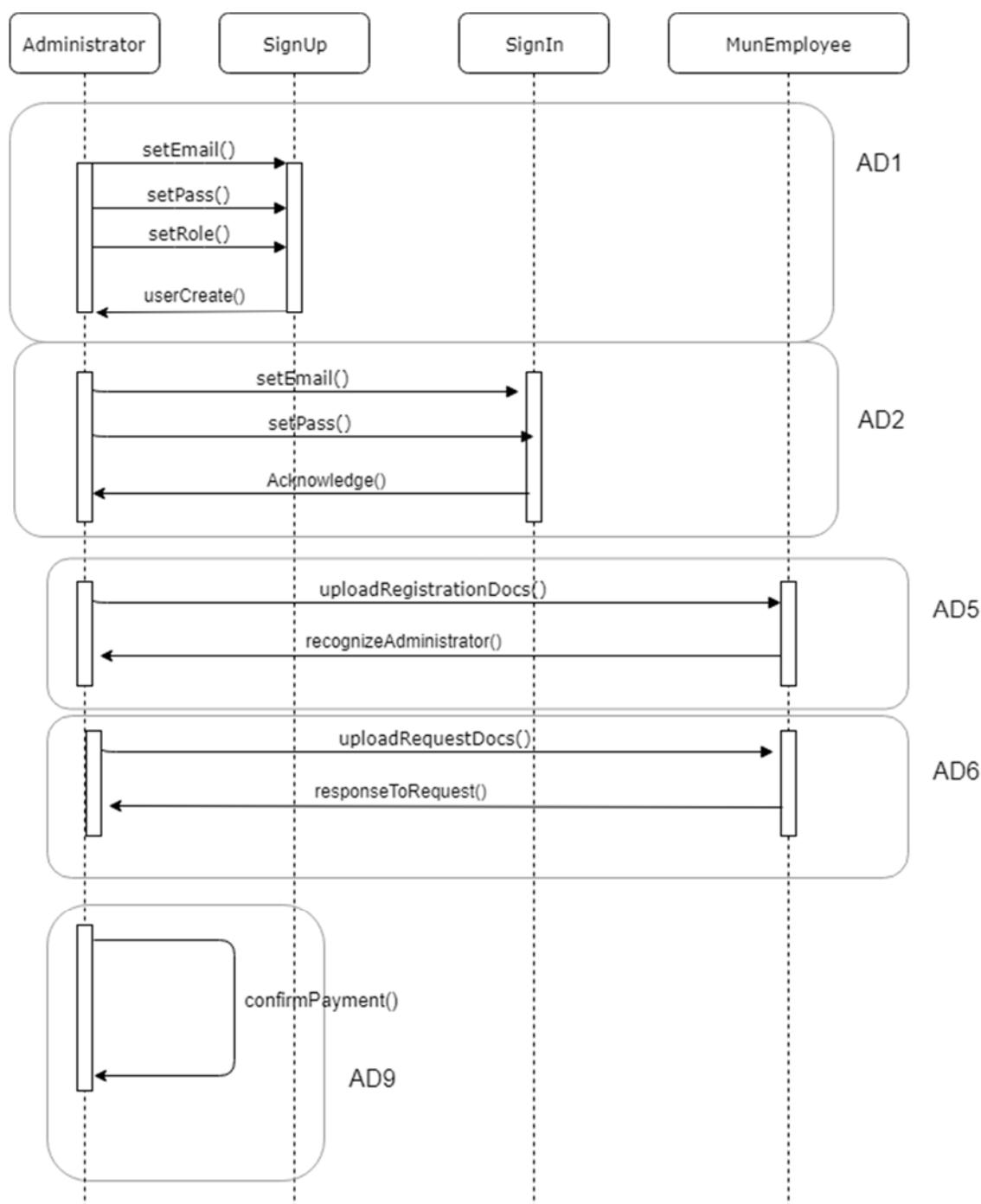
4.2.3.13 General State Diagram for the Municipality Employee





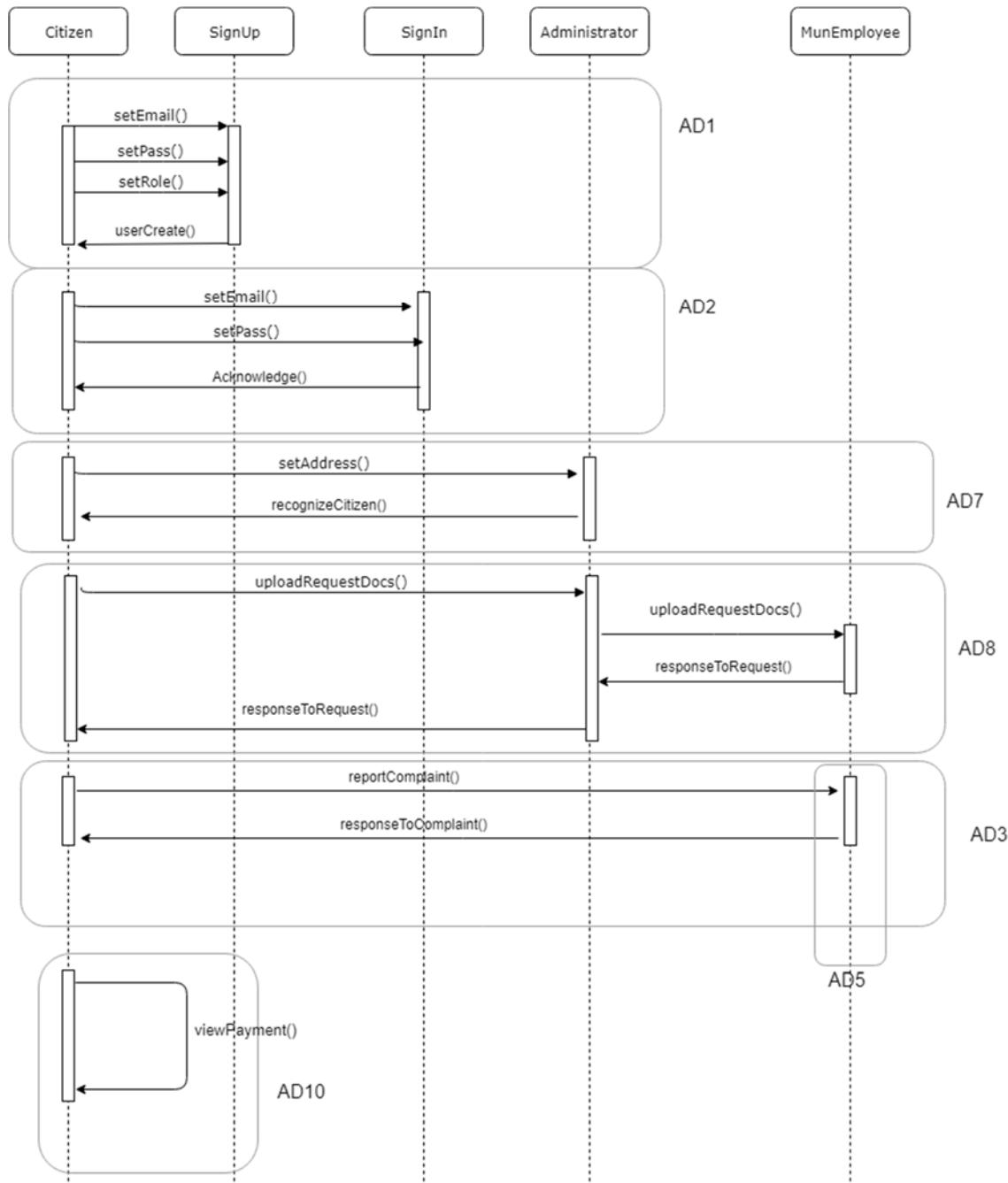
4.2.4 Sequence Diagrams

Administrator Sequence



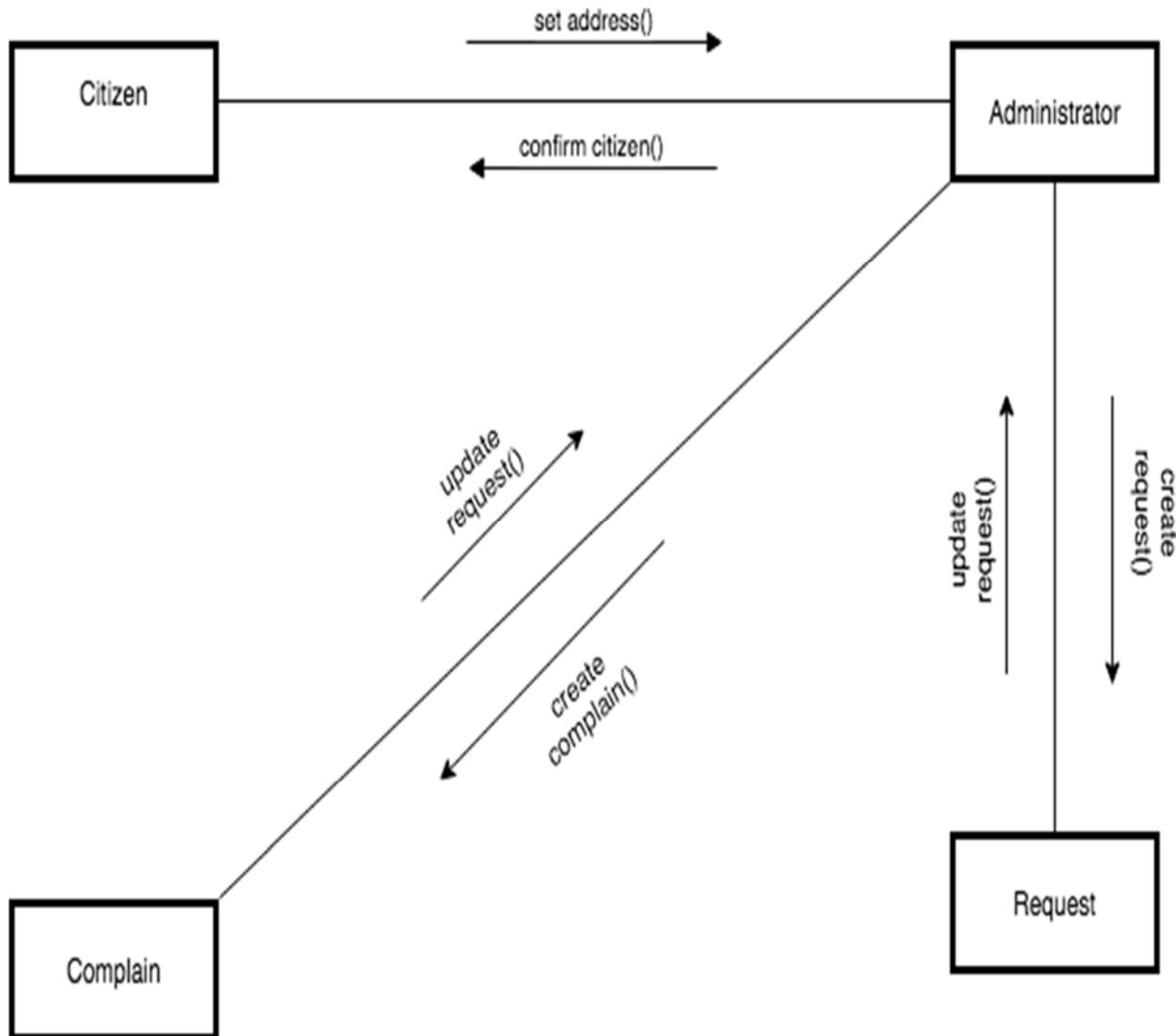


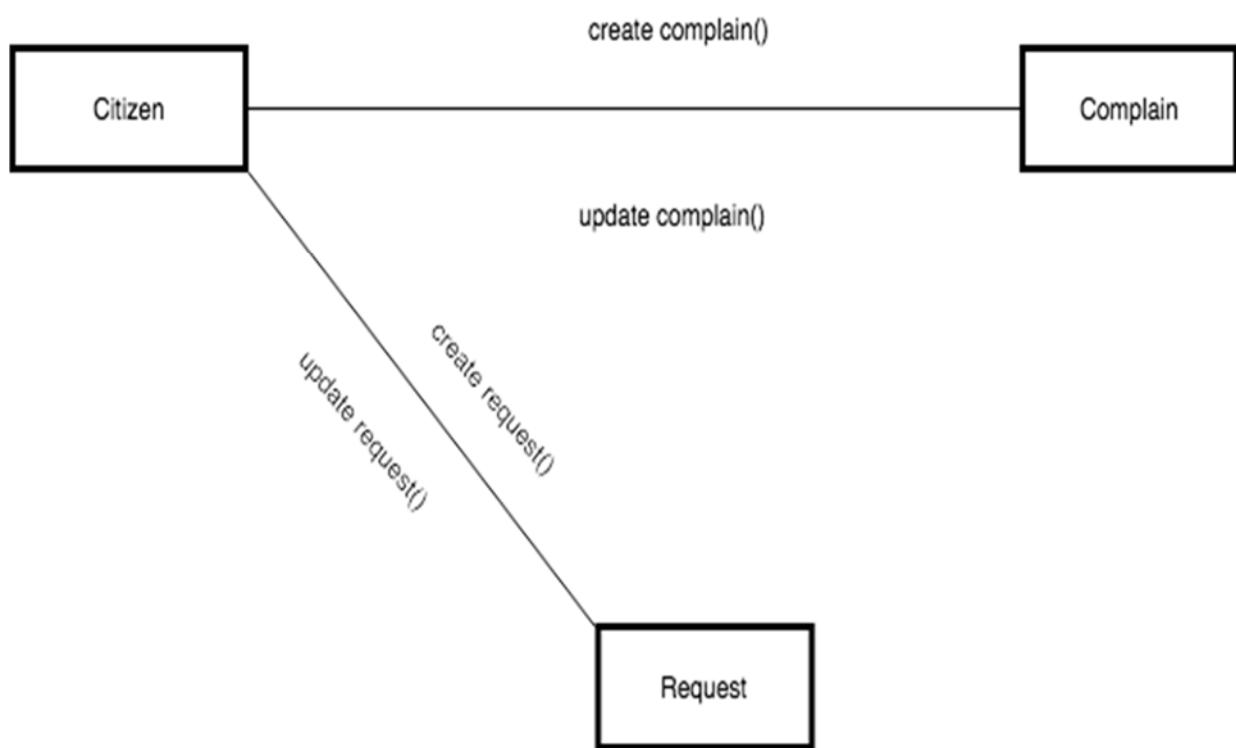
Citizen Sequence





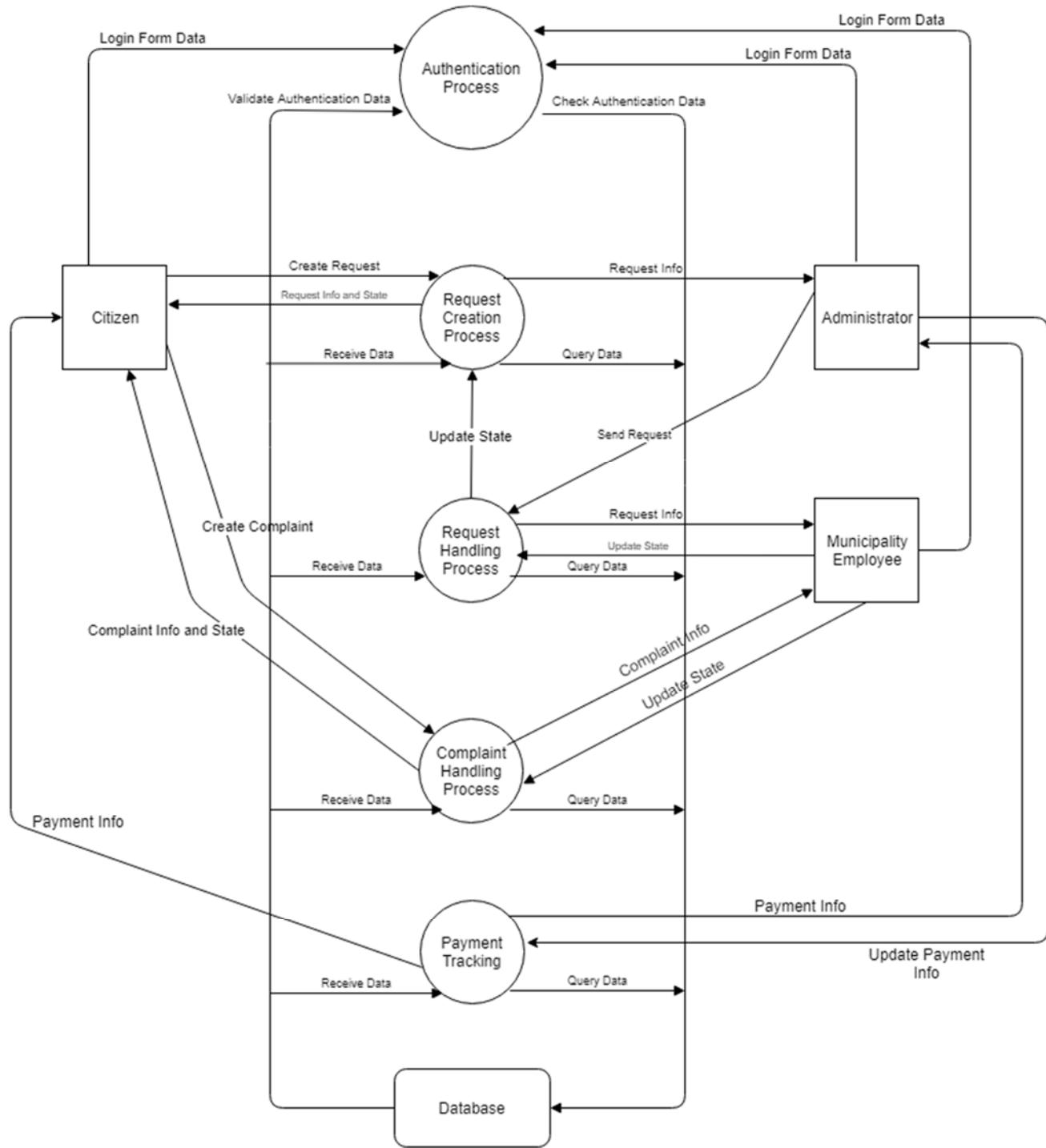
4.2.5 Collaboration Diagrams







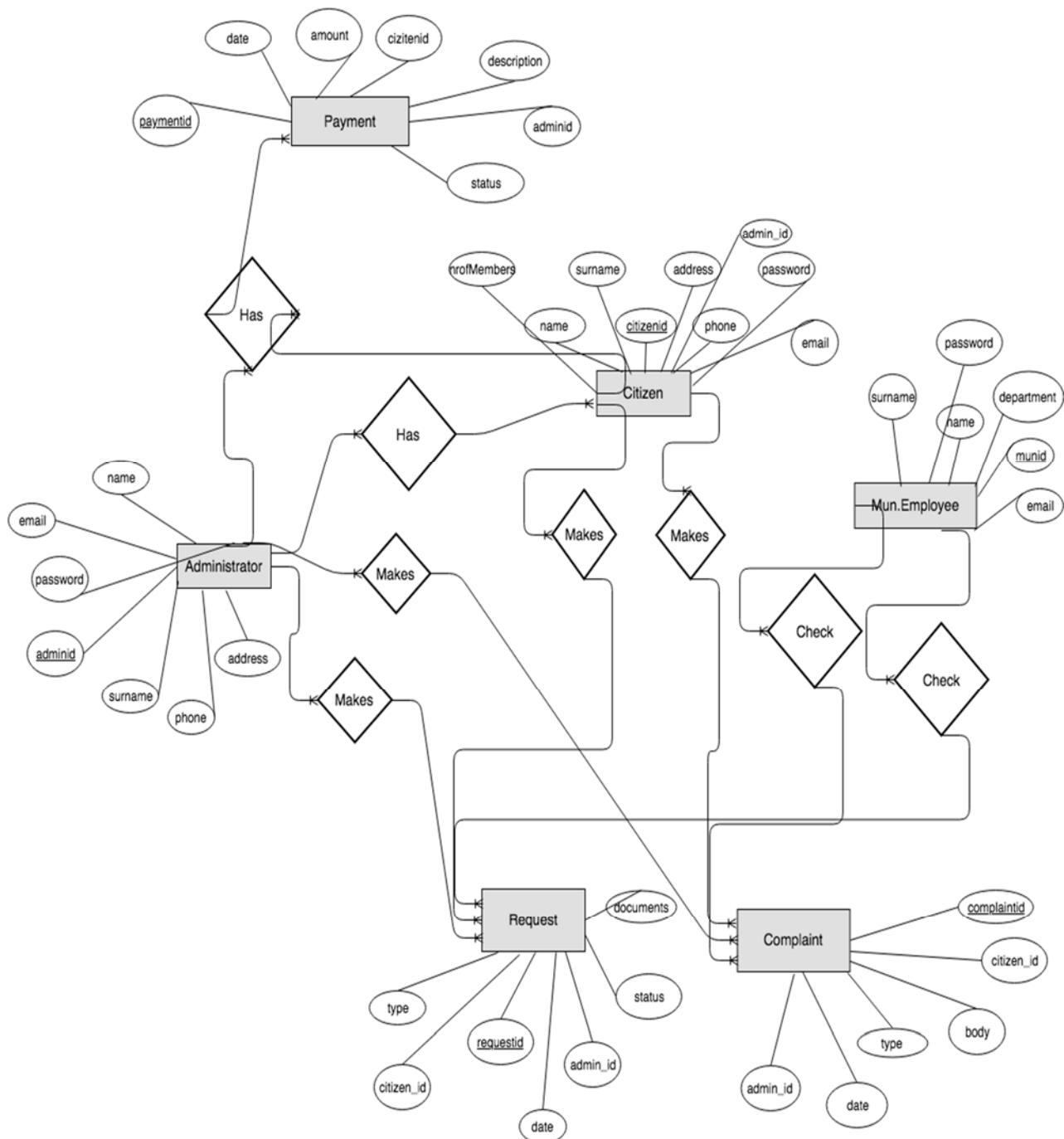
4.3 Data Flow Diagrams





4.4 Entity Relation Diagram

4.4.1 Relations





4.4.2 Tables

admin	
PK	<u>adminid</u>
	name
	surname
	address
	password
	phone
	email

complaint	
PK	<u>complaintid</u>
FK1	<u>citizen_id</u>
FK2	<u>admin_id</u>
	subject
	description
	date

employee	
PK	<u>munid</u>
	name
	surname
	password
	email
	department

citizen	
PK	<u>citizenid</u>
FK	<u>admin_id</u>
	name
	surname
	address
	password
	phone
	email
	nrMembers

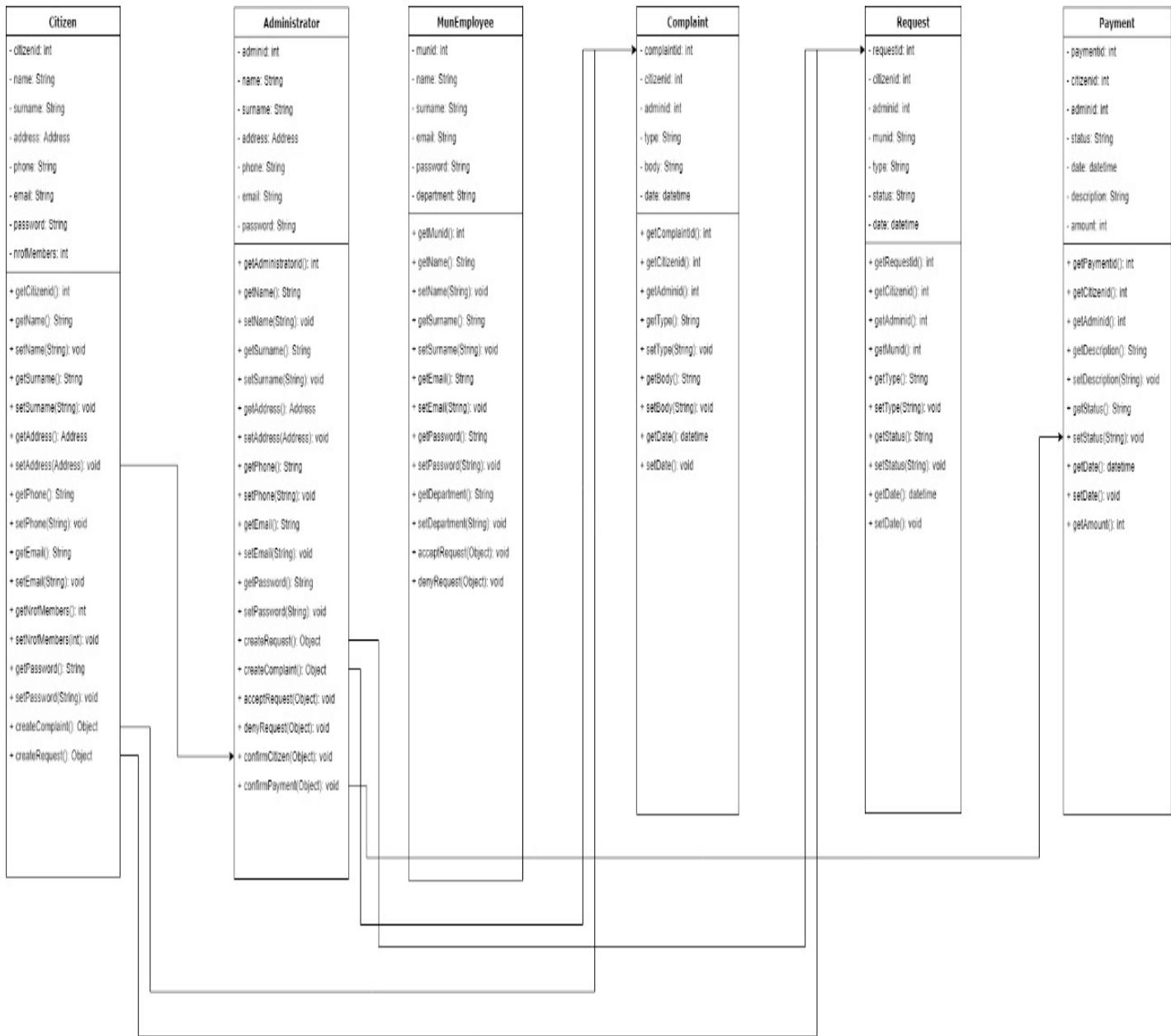
payment	
PK	<u>paymentid</u>
FK1	<u>admin_id</u>
FK2	<u>citizen_id</u>
	date
	status
	description
	amount

request	
PK	<u>requestid</u>
FK1	<u>citizen_id</u>
FK2	<u>admin_id</u>
	type
	documents
	description
	status
	date



4.5 Structural Diagrams

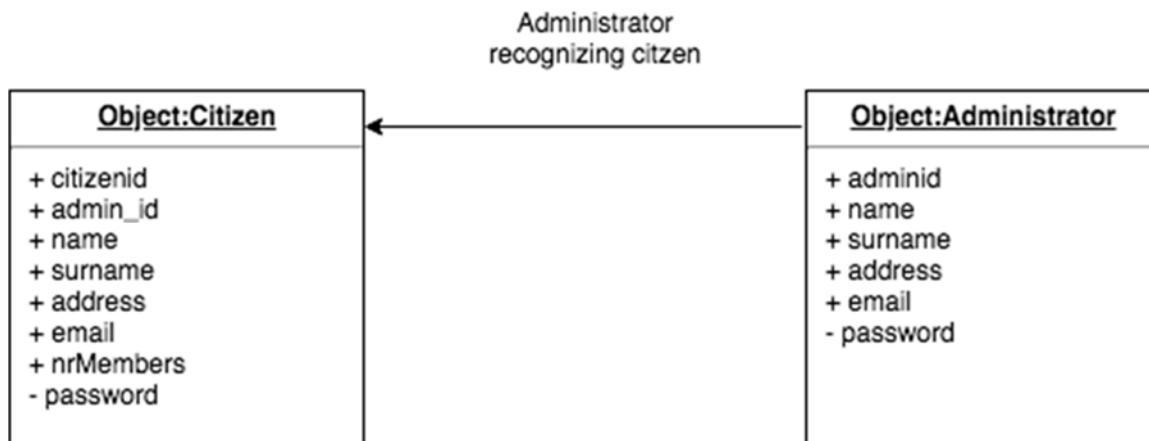
4.5.1 Class Diagram



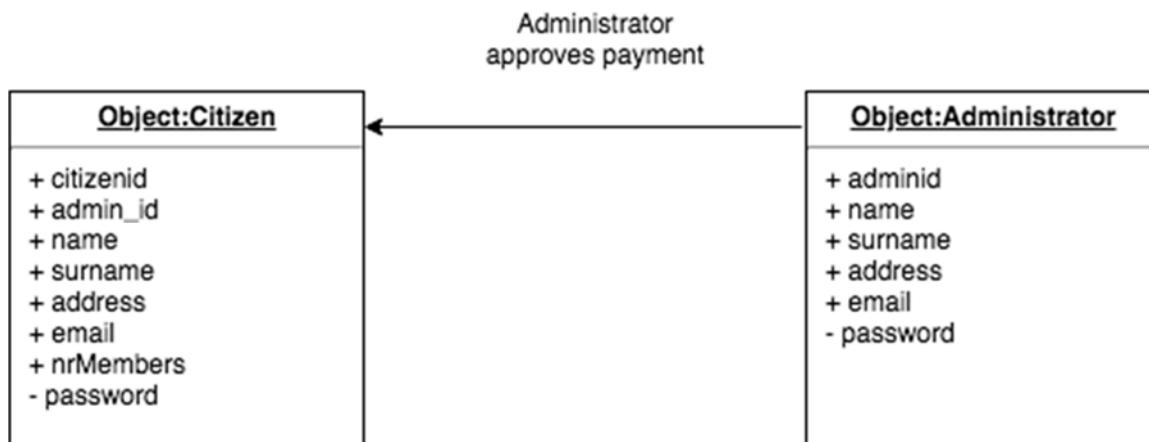


4.5.2 Object Diagram

OD1.Administrator Recognize Citizen

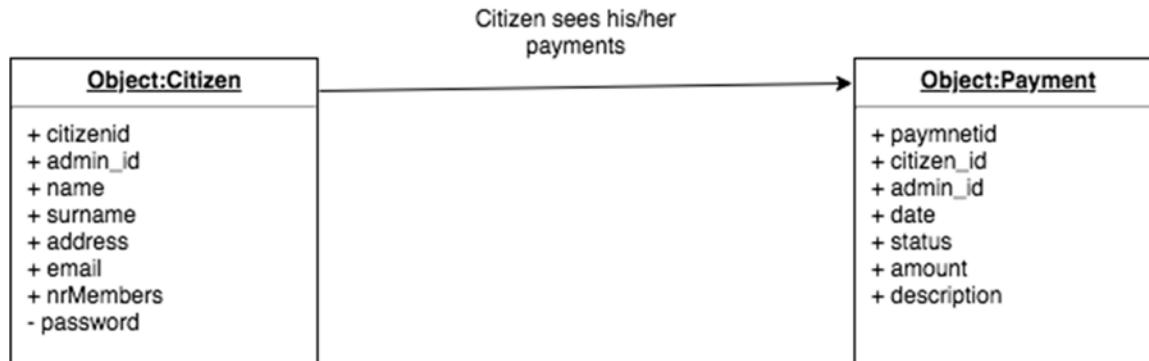


OD2.Administrator Approves Citizen Payment

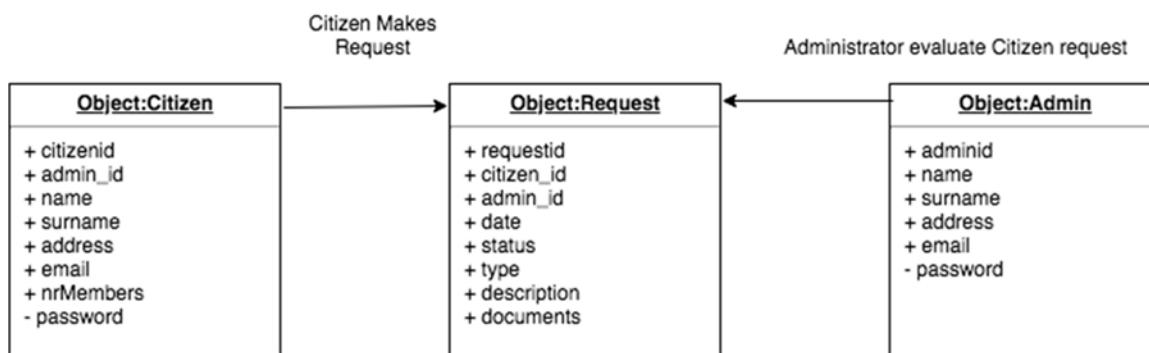




OD3.Citizen Sees Payments

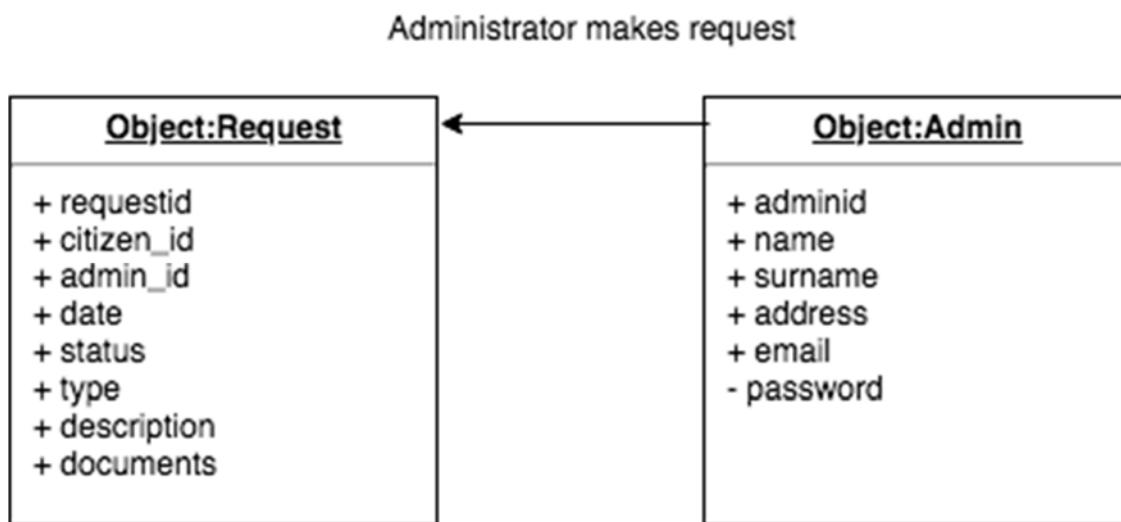


OD4. Citizen makes request and Administrator evaluates that request

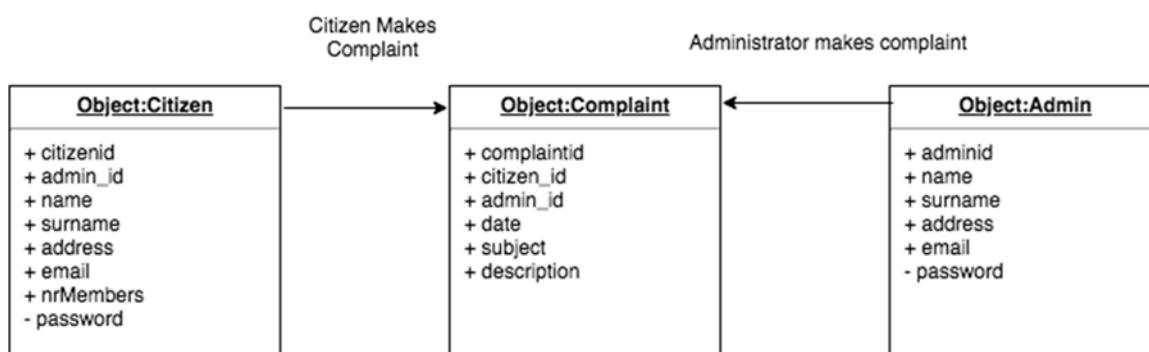




OD5. Administrator makes Request

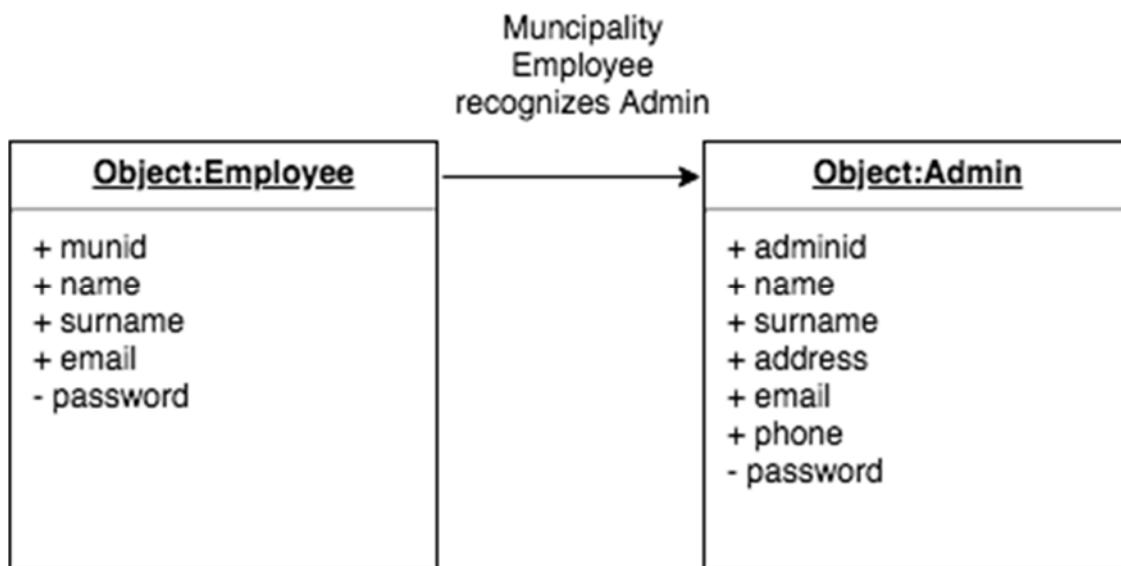


OD6. Citizen and Administrator make Complaints

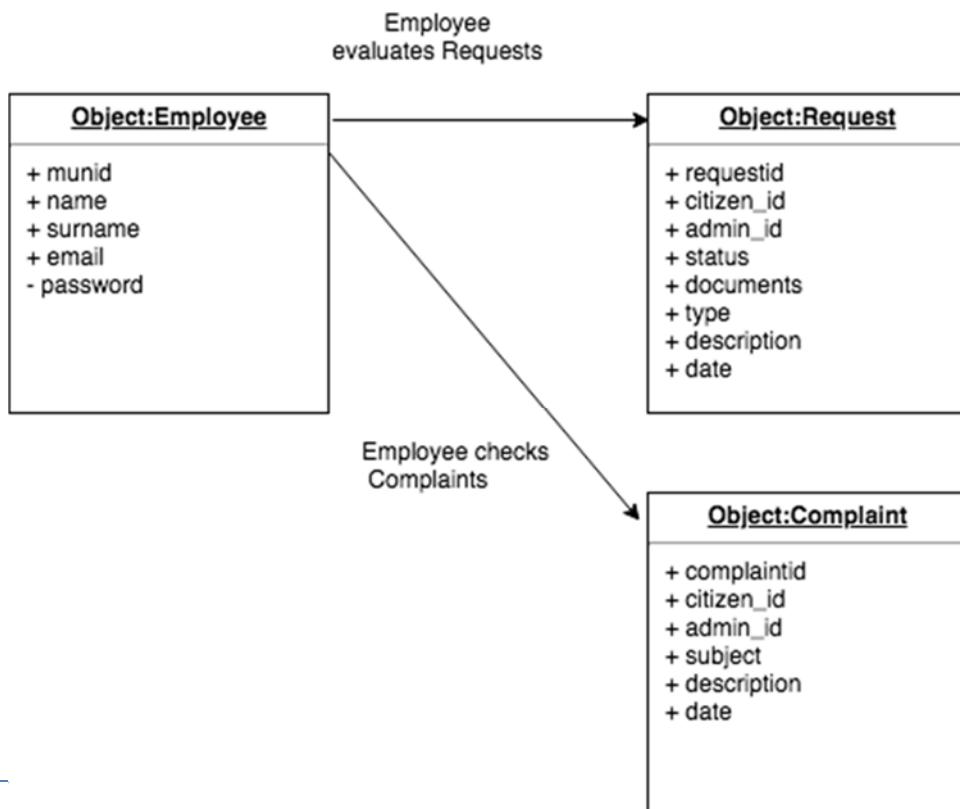




OD7. Employee Recognizes Administrator

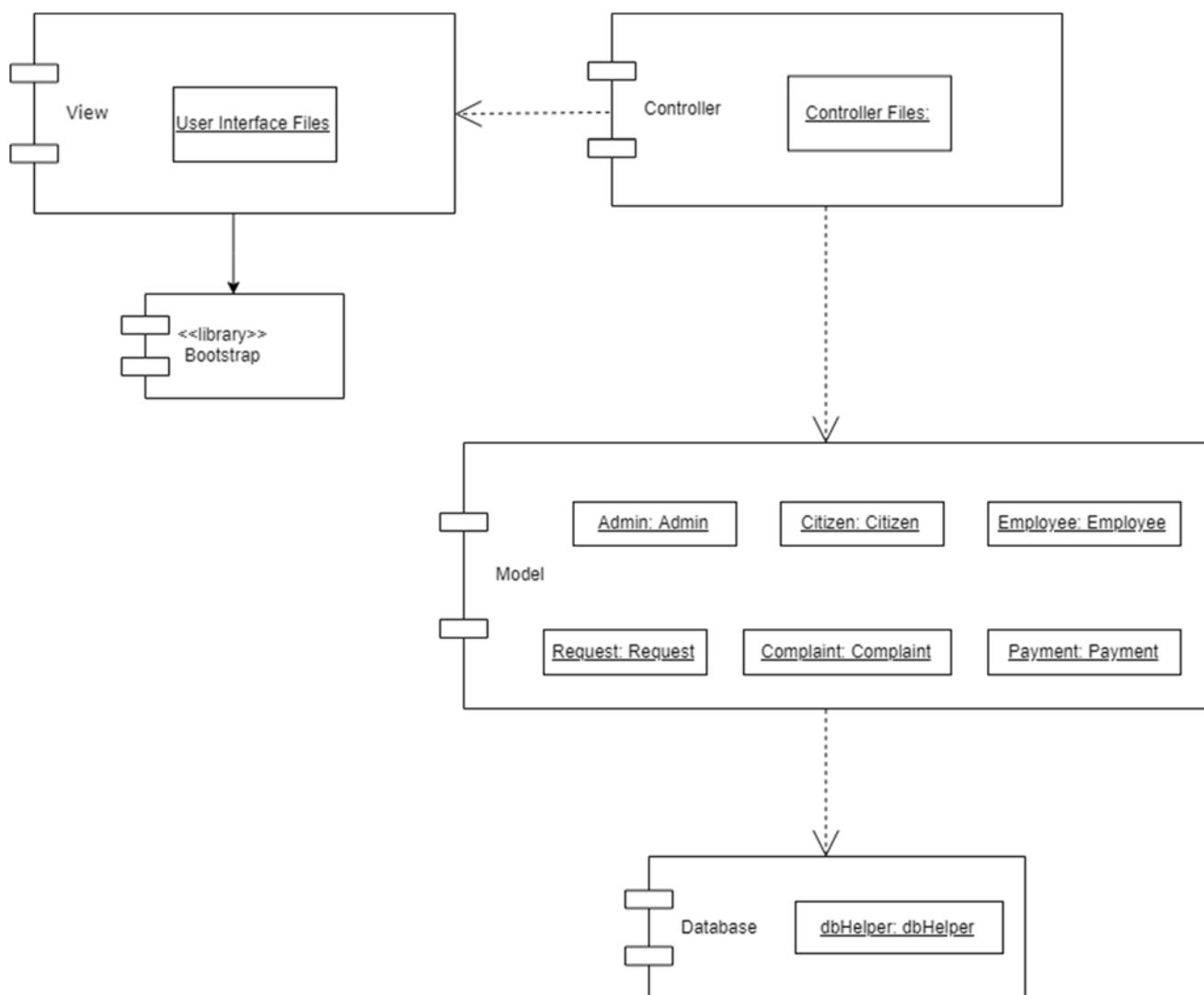


OD8. Employee sees Complaints and evaluates Requests



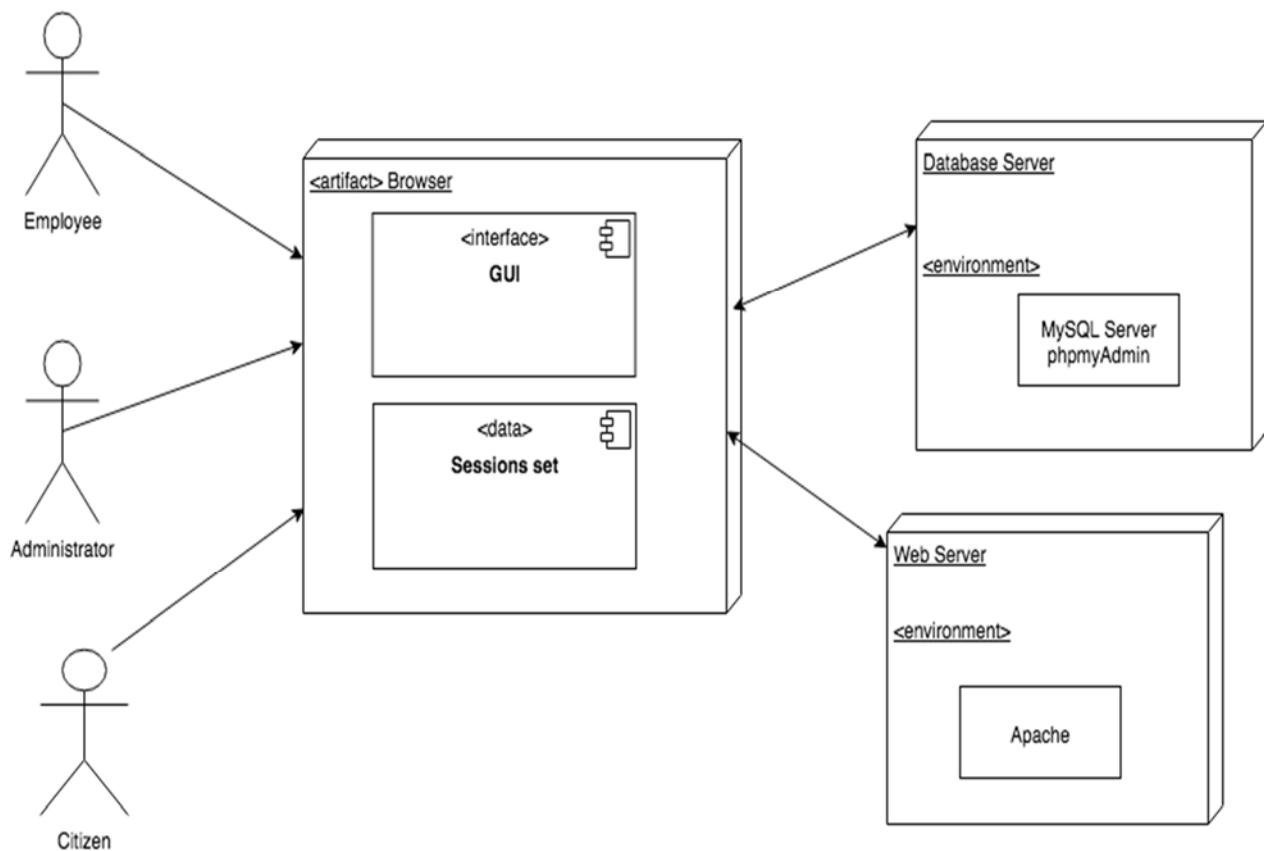


4.5.3 Component Diagram





4.5.4 Deployment Diagram





5 Implementation

5.1 Short Summary

To develop this software, we used PHP server-side scripting following the MVC structure.

Firstly, for the Model part of the code we used PHP-Object-Oriented to ensure integrity of data with the database, in a way that each class is an exact match of the respective database table.

Secondly, for the View part of the code, our client-side scripting combines HTML, CSS, JavaScript and makes use of the Bootstrap libraries to deliver a visually attractive and user-friendly interface. The website was designed with a minimalistic view in mind, in order to make all features easy to use and understand.

Thirdly, the Controller part of the code was implemented in PHP to ensure that data checking and processing is done in files not visible or accessible by the user.

The databases are implemented in MySQL. Despite the various user types and different features available to each one, we are managing all functionalities offered in only six tables. This was done to optimize storage space required by a software intended to be used by hundreds of thousands of users.



5.2 Software Screenshots

5.2.1 Sign Up and Login

The screenshot shows a login interface titled "Please login". At the top, there is a dropdown menu labeled "Account Type" with "Citizen" selected. Below the dropdown are two input fields: "Email" and "Password". A large "Login" button is centered below the input fields. Below the "Login" button, a link says "Don't have an account?". Underneath that link is a "Sign up" button.

Bashki Administrator Qytetar

Please login

Account Type Citizen

Email

Password

Login

Don't have an account?

Sign up

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Bashki Administrator Qytetar

Sign Up

Account Type: Citizen

Name:

Surname:

Number of Members:

Number of Family Members:

Email:

Password:

Address:

Phone:

Sign up

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5.2.2 Citizen Side

Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator Alba Tujani ▾

Displaying Information

Alba Tujani
Address: Rr. Testing street, p.2
Cel: +355676767111
Email: tester@gmail.com
Family Members: 5
Administrator: Elvi Cela

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator Alba Tujani ▾

Create Request

Request Type:

Reconstruction Permit

Description:

Write your Request

Dokumenti i Pronesise:

Choose File No file chosen

Projekti:

Choose File No file chosen

Please submit all required documents as pdf files only.

Submit Request

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator Alba Tujani ▾

All Requests

My Requests

ID	Type	Description	Documents	Status	Date
3	Parking Permit	Parking Permit for Vehicle with license plate AA 111 BB for Myslym Shyri		Accepted	June 2, 2018, 1:40 am
1	Other	Bla bla bla		Denied	June 1, 2018, 12:00 am

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator

Alba Tujani ▾

Create Complaint

Subject:

Description:

Submit Complaint

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator Alba Tujani ▾

All Complaints

My Complaints

ID	Subject	Description	Date
5	bla	hello testing description	June 2, 2018, 11:22 am
8	Makinat e parkura perballë hyrjes se pallatit	Njerezit lene makinat perballë hyrjes të garazhdit ku nuk lejohet parkimi dhe shkaktojne probleme me qarkullimin. Nese nje banor i pallatit do te parkoje makinën ne garazhdin e tij, ai duhet te lere makinën e te kerkonte shoferin e mjetit, gjë që rendon akoma me teper trafikun.	June 2, 2018, 1:09 am
1	Loud noises at night	Ne lagjen tone lokalet e nates vendosin gjithmone muzike me volum te larte gjate oreve te vona te nates.	May 31, 2018, 3:17 am

© Erilda Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi



All Payments

Payment Description	Amount	Status	Confirmation Date
Administration Fee for Jun, 2018	500	Paid	02 Jun, 2018
Administration Fee for May, 2018	500	Paid	02 Jun, 2018
Administration Fee for Apr, 2018	500	Paid	02 Jun, 2018
Administration Fee for Mar, 2018	500	Paid	02 Jun, 2018
Administration Fee for Feb, 2018	500	Unpaid	-
Administration Fee for Jan, 2018	500	Unpaid	-



 Bashki Administrator Qytetar [Profile](#) [Create Request](#) [Show Requests](#) [Create Complaint](#) [Show Complaints](#) [Payments](#) [Administrator](#) [Alba Tujani](#) ▾

This is your Administrator Information



Elvi Cela
Address: Rr. Testing street, p.2
Cel: +355686868666
Email: admintest@gmail.com

© Erida Nurce, Jorgel Kec, Elvi Cela, Giuliano Ballshi



Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments Administrator Alba Tujani ▾

Edit Profile Data

Name:

Surname:

Number of Members:

Email:

Password:

Phone:

Address:

Save Changes

© Erida Nure, Jorgel Kec, Bvi Cela, Giuliano Balshi



5.2.3 Administrator Side

Screenshot of the Bashki Administrator Qytetar application interface showing a citizen profile.

The top navigation bar includes:

- Bashki Administrator Qytetar
- Profile
- Create Request
- Show Requests
- Create Complaint
- Show Complaints
- Payments
- My Citizens

A dropdown menu on the right shows "Elvi Cela".

The main content area displays the following information:

Displaying Information

Elvi Cela

Address: Rr. Testing street, p.2

Cel: +355686868666

Email: admintest@gmail.com

At the bottom of the page, a footer bar contains the text: © Erida Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi



Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments My Citizens Elvi Cela ▾

All Requests

Citizen Requests

ID	Citizen	Type	Description	Documents	Date	Status
3	Alba Tujani	Parking Permit	Parking Permit for Vehicle with license plate AA 111 BB for Myslym Shyri		June 2, 2018, 1:40 am	Accepted
1	Alba Tujani	Other	Bla bla bla		June 1, 2018, 12:00 am	Denied

My Requests

ID	Type	Description	Documents	Status	Date
2	Other	Request for elevator installation in my building		Denied	June 1, 2018, 5:00 pm

© Erida Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi



Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments My Citizens Elvi Cela ▾

All Complaints

Citizen Complaints

ID	Citizen	Subject	Description	Date
2	Gladiola Ago	Zhurme ne pallat	Disa prej banoreve bejne shume zhurme naten.	June 2, 2018, 11:16 am
8	Alba Tujani	Makinat e parkuara perballte hyrjes se pallatit	Njerezit lene makinat perballte hyrjes te garazhidit ku nuk lejohet parkimi dhe shkaktoje probleme me qarkullimin. Nese nje banor i pallatit do te parkoje makinen ne garazhdin e tij, ai duhet te lere makinen e te kerkoje shoferin e mjetit, gje qe rendon akoma me teper trafikun.	June 2, 2018, 1:09 am
1	Alba Tujani	Loud noises at night	Ne lagjen tone lokalet e nates vendosin gjithmone muzike me volum te larte gjate oreve te vona te nates.	May 31, 2018, 3:17 am

My Complaints

ID	Subject	Description	Date
7	Koshat e plehrave nuk	Ne lagjen tone, makina e pastrimit qe merret me zbrazjen e kazaneve nuk vjen regullisht dhe kjo	January 1, 1970, 1:00

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments My Citizens Elvi Cela ▾

All Payments

Citizen	Dec, 2017	Jan, 2018	Feb, 2018	Mar, 2018	Apr, 2018	May, 2018
Alba Tujani	Paid	Paid	Paid	Paid	Confirm	Confirm
Gladiola Ago	Paid	Paid	Paid	Paid	Confirm	Confirm

© Erida Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi



Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments My Citizens Elvi Cela ▾

Your Building Citizens

Name	Surname	Family Members	Phone Nr.	Email
Alba	Tujani	5	+355676767111	tester@gmail.com
Gladiola	Ago	6	+355686868888	tester2@gmail.com

New Citizen Requests

You do not have any new citizen requests.

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Bashki Administrator Qytetar Profile Create Request Show Requests Create Complaint Show Complaints Payments My Citizens

Elvi Cela ▾

Edit Profile Data

Name:

Surname:

Email:

Password:

Phone:

Address:

Save Changes

© Erida Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi



5.2.4 Municipality side

The screenshot shows a user interface for a municipality administrator. At the top, there is a navigation bar with the text "Bashki Administrator Qytetar" and "Profile Show Requests Show Complaints". On the right, there is a dropdown menu with the name "Erida Nurce". The main content area has a title "Displaying Information" and features a card with an illustration of a city hall building and the text "CITY HALL". Below this, the user's profile information is displayed: "Erida Nurce", "Department: CEN", and "Email: enurce15@epoka.edu.al". At the bottom of the page, there is a footer with the text "© Erida Nurce, Jorgel Keci, Elvi Cela, Giuliano Ballshi".



Bashki Administrator Qytetar Profile Show Requests Show Complaints Enda Nuruza

All Complaints

ID	Citizen	Administrator	Subject	Description	Date	
1	Gjatëta Agj - Elvi Celaj		Zhurma ne pallat	Dita prej banorave bejne shume zhurmë rriten.	June 2, 2018, 11:16 am	
8	Alba Tujani	Elvi Celaj		Illegjekt llore malinat perballë hyrje te parkitit ku nuk lejohet parkimi dhe pshakizje probleme me malinat e parkura perballë hyrje se pallat	Illegjekt llore malinat perballë hyrje te parkitit ku nuk lejohet parkimi dhe pshakizje probleme me malinat e parkura perballë hyrje se pallat	June 2, 2018, 1:59 pm
1	Alba Tujani - Elvi Celaj		Loud noise at night	Vendosin gjithrone muzyka me volum te larta gjate oreve te vora te rates.	Vendosin gjithrone muzyka me volum te larta gjate oreve te vora te rates.	May 31, 2018, 2:17 am

Administrator Complaints

ID	Administrator	Subject	Description	Date		
9	Giuliano Salihu		My citizens don't want to use this website.	None of my building's citizens wants to sign up and join Bashki Administrator Qytetar platform. Please help me!	June 1, 2018, 1:24 pm	
7	Elvi Celaj		Kohat e pëlhurve nuk pozhoshen regulist	Illegjekt llore, malinat e perballë që merret me shqipjen e Kazanave nuk rjet regjullimit që kjo pshakizje nuk jetë rende, që mës benet e pakushtëm.	Illegjekt llore, malinat e perballë që merret me shqipjen e Kazanave nuk rjet regjullimit që kjo pshakizje nuk jetë rende, që mës benet e pakushtëm.	January 1, 1970, 1:00 am

© Enda Nuruza, Jorgji Kavaj, Elvi Celaj, Giuliano Salihu



Bashki Administrator Qytetar Profile Show Requests Show Complaints Erida Nurce ▾

All Requests

Citizen Requests

ID	Citizen	Administrator	Type	Description	Documents	Date	Status
3	Alba Tujani	Elvi Cela	Parking Permit	Parking Permit for Vehicle with license plate AA 111 BB for Myslym Shyri		June 2, 2018, 1:40 am	Accepted
1	Alba Tujani	Elvi Cela	Other	Bla bla bla		June 1, 2018, 12:00 am	Denied

Administrator Requests

ID	Administrator	Type	Description	Documents	Date	Status
2	Elvi Cela	Other	Request for elevator installation in my building		June 1, 2018, 5:00 pm	Denied

© Erida Nurce, Jorge Keci, Elvi Cela, Giuliano Ballshi



6 SPM

6.1 Work Distribution

Throughout this project, our team has tried to keep a balance of work distribution. Every member has participated in every stage of the software development, from the brainstorming of ideas until the final product was delivered. From the start, Erida and Elvi have been our client representative for the Municipality part of the software. Jorgel and Giuliano have kept in touch with some administrators for direct feedback from both users. Then the whole team gathered to plan the strategy to be tackled for the software to become a reality. After carefully inspecting all the requirements gathered from the customers, we designed the specific user scenarios and use cases of the software. Being in full coherence of the project, we also distributed the work for the diagrams with constant feedback from our team leader, Erida, and vice leader Jorgel.

The distribution of diagrams is as follows:

- Jorgel created the Use Cases Diagrams
- Erida created the Activity, Swim lane Diagrams
- Erida and Jorgel started working with the State Diagrams
- Elvi and Giuliano redesigned State Diagrams with feedback from the other two members to match each Activity Diagram
- Elvi implemented the sequence Diagrams
- Giuliano and Elvi worked on the Collaboration Diagrams and DFD respectively
- Erida and Jorgel worked on the ER Diagrams
- Class Diagrams were created by Erida
- Object Diagrams were created by Jorgel
- The other part of the document was a shared work between all members.

As for the implementation part, Jorgel and Erida worked on developing the web application using pair programming to get live feedback and suggestions for the code implementation and created the database relations; and Giuliano and Elvi were responsible for testing the components of the software.

Thus, as being described here, we have followed a Spiral Software Developing Life Cycle where every step was reviewed on a regular basis.

6.2 Duration of Project

This project was started on March and for the past three months we have developed a product that is fully functional according to the requirements described above.



6.3 Future Work

A part of the future work to be done in the software has to do with the maintenance. We will keep updating the software if bugs occur.

Also, we will work on adding more functionality such as the Administrator can generate the payment history for statistical analysis, to provide a list of all active Administrators in the city for the Municipality to have information about which buildings around the city is being administrated. We also plan on integrating a mapping system, which will allow citizens the administrators to be easily located with respect to their buildings. In order to achieve this, a stronger collaboration with the Municipality is required for their databases to be integrated in our software, thus providing us with the exact address of each building. By doing so, we will have a more structured information about buildings, their respective administrators and citizens. This will enable a more accurate citizen to administrator matching and will give the Municipality an exact knowledge where the citizens and administrators are located.

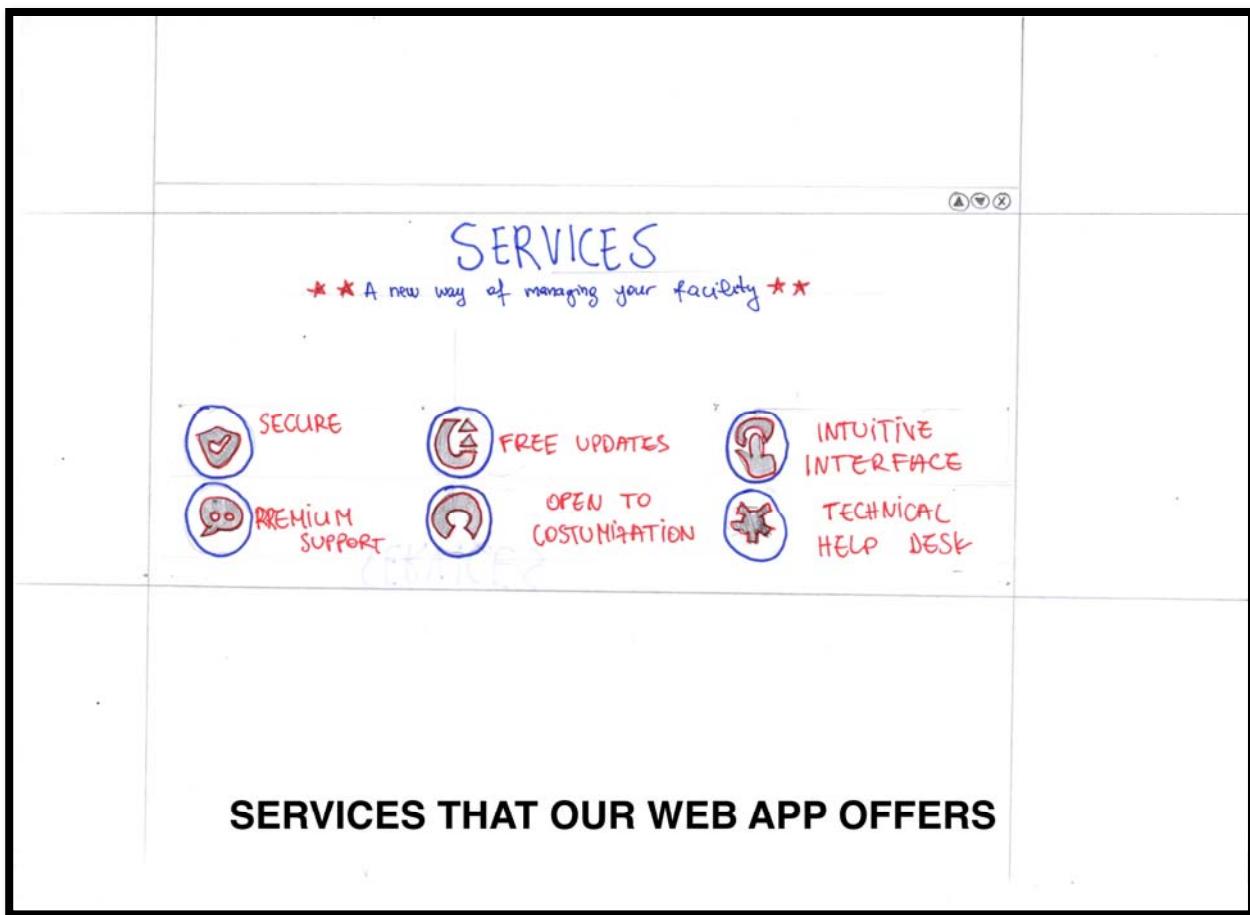
Apart from the functionalities, we will also focus on the integrity and security of the data being used and processed by our software.

Keeping in mind that this software can grow in scale from one city to the whole country's managing Administrators and Citizens from the Municipality, we expect the project to extend in more than a year of developing.



Appendix

Appendix A. User Interface Sketches





USER ACCOUNT

<p>NAME</p> <p> TRANA</p>	<p>SEARCH <input type="text"/> <input type="button" value="🔍"/></p> <p> Emri: Mbienimi: Data lindje:</p> <p> Administator</p>	<p></p> <p></p>
		<p>KONTAKT</p> <p>CEL: <input type="text"/> ADD: <input type="text"/> E-MAIL: <input type="text"/></p>
<p>FRIENDS</p>		
<p>INFO</p>		

VIEW OF ADMINISTRATOR PROFILE FROM USER ACCOUNT

ADMINISTRATOR ACCOUNT

<p>NAME</p> <p> TRANA</p>	<p>Search <input type="text"/> <input type="button" value="🔍"/></p>	<p>Krijov <input type="button" value="⟳"/></p>	<p> YOU ARE LOGGED IN AS ADMIN </p>
<p>< MARS 2018 ></p>			
<p>ADMIN MENU</p> <p> DETAJE</p> <p> TARIFAT E ADMINISTRIMIT</p> <p> KERKESA NGA BANORET</p>	<p>120 Numb i banoreve </p> <p> Numb i apartamenteve </p> <p> </p> <p>10 Numb i tarifave </p> <p> </p>		
<p>INFORMACION</p>			

ADMINISTRATOR DETAILS ABOUT THE BUILDING HE MANAGES

USER ACCOUNT

USER VIEW ACCOUNT

Kërkesa të miratuarë : 2 ✓

1.
2.
3.

ME POSITË DO TE GJEM KERKESAT E NEVOJSH ME PËR NDRYSHIME.

1.
2.
3.
4.

LINK PER FORM

KERKESA

KALENDARI

INFO

Kërkesa të Miratuarë : 2 ✓

Ankesë : 0

Kërkesa të Pantritare : 0

PAGE WHERE A USER CAN REQUEST NECESSARY DOCUMENTS



USER ACCOUNT

NAME		Tē Papagwara Tē Pagwara Tē gritha Faturet v		
#	Data	Shuma	Administrator	Pagwara
1	20-03-2018	1000.00	Filani	80
2	20-01-2019	1000.00	Filani	30

FATURA

FACEBOOK

INFO

PAGE WHERE THE USER CAN SEE EVERY INFORMATION NEED ABOUT BILLS.



Appendix B. User Interface Detailed Sketches

This is Your Profile Information

Giuliano Ballshi

068 20 46 587

seoproject@gmail.com

L4, Ruga Hamit Hoxha,Durres

Number of Family Members: 4

Administrator: John Mitchel

The screenshot shows a user profile page with a dark blue header bar. The header contains a city icon, a 'Profile' button (which is highlighted in blue), and several menu items: 'Create Request', 'Show Requests', 'Create Complain', 'Show Complains', 'Payments', 'Administrator', 'Services' (in green), and a user icon with 'Welcome BB'. The main content area has a white background and displays the user's profile information in a grid-like format. Each item consists of an icon and text. The email address 'seoproject@gmail.com' is highlighted with a teal background.



The screenshot shows the 'Your Administrator Profile' page. The profile information is as follows:

- Name: Arber Shehu
- Phone Number: 068 20 46 587
- Email: asheshu@gmail.com
- Address: LG, Rruga Perlat rexhepi Apt 5, Tirane



The screenshot shows a dark-themed web application interface. At the top, there is a navigation bar with the following items: Profile, Create Request, Show Requests, Create Complain (which is highlighted with a blue background), Show Complains, Payments, Administrator, Services, and a user icon with the number '8' and the text 'Welcome GB'. Below the navigation bar is a large white rectangular form area with rounded corners. The title 'PLEASE WRITE YOUR COMPLAINT' is centered at the top of this area. Inside the form, there are two input fields: one labeled 'WRITE YOUR SUBJECT:' and another labeled 'WRITE YOUR COMPLAINT:'. Below these fields is a teal-colored button labeled 'UPLOAD A FILE'. At the bottom of the form, there are two small buttons: 'SUBMIT COMPLAIN' and 'RESET ALL TEXT'.



Profile Create Request Show Requests Create Complain Show Complains Payments Administrator Services Welcome GB

PLEASE WRITE YOUR REQUEST

CHOOSE YOUR TOPIC: Choose your Topic

Request for Parking
Request for Reconstruction Permit
Other

WRITE YOUR REQUEST:

The Required Documents For this request are:
1.Photo of your ID
2.Home Blueprint

UPLOAD A FILE

SUBMIT REQUEST RESET ALL TEXT





Profile Create Request Show Requests Create Complain Show Complains **Payments** Administrator Services Welcome 68

All Payments

Payments Made	Status	Date Of Payment
*Description Of Payments	Not Paid	01-05-2017
*Description Of Payments	Not Paid	01-04-2017
*Description Of Payments	Paid	01-03-2017



Profile Create Request Show Requests Create Complain Show Complains Payments Administrator Services Welcome BB

All Complaints Made

Complaints Made	Status	Date Of Request
*Description Of Complaint	Received	21-05-2017
*Description Of Complaint	Received	10-04-2017
*Description Of Complaint	Received	22-03-2017



Profile Create Request Show Requests Create Complain Show Complains Payments Administrator Services Welcome 68

All Requests Made

Requests Made	Status	Date Of Request
Description Of Request	YES	21-05-2017
Description Of Request	WAITING	10-04-2017
Description Of Request	NO	22-03-2017