

**DPSHTRR e-services Requirements Specification**  
**Version 2.0**

**Department of Computer Engineering**

**CEN 302 – Software Engineering**

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## Table of Contents

<b>1.</b>	<b>EXECUTIVE SUMMARY.....</b>	<b>3</b>
1.1	PROJECT OVERVIEW.....	3
1.2	PURPOSE AND SCOPE OF THIS SPECIFICATION .....	3
<b>2.</b>	<b>PRODUCT/SERVICE DESCRIPTION.....</b>	<b>4</b>
2.1	PRODUCT CONTEXT.....	4
2.2	USER CHARACTERISTICS.....	4
2.3	ASSUMPTIONS .....	5
2.4	CONSTRAINTS .....	6
2.5	DEPENDENCIES .....	6
<b>3.</b>	<b>REQUIREMENTS .....</b>	<b>6</b>
3.1	FUNCTIONAL REQUIREMENTS .....	6
3.2	NON-FUNCTIONAL REQUIREMENTS .....	9
3.2.1	<i>User Interface Requirements</i> .....	9
3.2.2	<i>Usability</i> .....	9
3.2.3	<i>Performance</i> .....	10
3.2.4	<i>Manageability/Maintainability</i> .....	10
3.2.5	<i>Security</i> .....	11
3.2.6	<i>Data Management</i> .....	11
3.2.7	<i>Standards Compliance</i> .....	11
3.2.8	<i>Portability</i> .....	11
3.2.9	<i>Other Non-Functional Requirements</i> .....	12
3.3	DOMAIN REQUIREMENTS .....	12
<b>4.</b>	<b>USER SCENARIOS/USE CASES.....</b>	<b>12</b>
<b>APPENDIX .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>	
APPENDIX A.	DEFINITIONS, ACRONYMS, AND ABBREVIATIONS .....	ERROR! BOOKMARK NOT DEFINED.
APPENDIX B.	REFERENCES .....	ERROR! BOOKMARK NOT DEFINED.
APPENDIX C.	REQUIREMENTS TRACEABILITY MATRIX.....	ERROR! BOOKMARK NOT DEFINED.
APPENDIX D.	ORGANIZING THE REQUIREMENTS .....	ERROR! BOOKMARK NOT DEFINED.

# 1. Executive Summary

## 1.1 Project Overview

The purpose of this software is divided into 2 main parts:

- 1) To solve problems the majority of Tirana citizens have by providing automated services from DPSHTRR.
- 2) To help the DPSHTRR staff in:
  - a) Processing services
  - b) Management Part
  - c) Communication between sectors.

DPSHTRR e-services is a software which aims to make it easier and less time consuming specific services that “Drejtoria e Përgjithshme e Shërbimit të Transportit Rugor” offers to Tirana citizens. Everybody that has an account in this web application will have the opportunity to choose among several services. After choosing the desired service, a list of required documents will be shown. The client has to scan these documents and submit them in our web application. However, for the application to be complete, the client has to pay a certain fee. This fee can be paid either by bank or by credit Card. Now, the client has to wait until the employees on the other side check their documents. If the documents are accurate, then the status of the application will appear as “READY” and the client may go at the “DPSHTRR” office to pick up his service. Otherwise, the client will be informed about the missing/not accurate documents.

Our software will offer a wide specter of services that are provided by DPSHTRR and will select among all services the ones that are appropriate and fulfill all the criteria that is required by DPSHTRR structure and Albanian law. This software will come in help also to the employees of DPSHTRR in the manner of processing, management, communication and organization between different sectors of DPSHTRR. The modules of this software will be divided between sectors, where each sector has its own employees including the manager of that sector and the services that are provided by that specific sector.

The Graphic User Interface will be very easy in terms of usability, for both the citizens and the employees. The software will come in the format of a web application in which technologies like PHP, JavaScript, jQuery, AJAX, MySQL will be used.

## 1.2 Purpose and Scope of this Specification

The purpose of this document is to give a detailed description of the requirements for the “DPSHTRR e-services” software. It will illustrate the purpose and declaration for the development of system in different phases. It will also explain system constraints, interface and interactions with other external applications.

The DPSHTRR e-services Requirements Specifications document will have 3 major releases:

1. Version 1.0 which will behave as a draft version consisting in the first level of designing the software in terms of Executive Summary, Service Description and Requirements
2. Version 2.0 which will consist in a high-level designing framework of our software
3. Version 3.0 which focuses on detailing a low-level view of each component of the software and how the components interact with each other.

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

There will be general factors that will affect the product and its requirements such as:

- 1) People and Action
  - Developers
  - Users
  - Top management
  - Project Team
- 2) Development Processes
  - Requirements Determination
  - Project Management
  - User Participation
  - User Training
  - Management of change
- 3) Project Content
  - Project characteristics
  - Project scope, goals & objectives
  - Resources
  - Technology

### **2.1 Product Context**

This product is independent and self-contained. It can behave as a one single platform but it has the feasibility to merge with the existing platforms or modules of DPSHTRR.

### **2.2 User Characteristics**

DPSHTRR e-services will have different types of users according to their role

- Users from Drejtoria e Regjistrimit, Licensimit, Certifikimit
- Users from Drejtoria e Drejtuesve te Mjeteve
- Users from Drejtoria Ekonomike
- Users from Drejtoria e Teknologjise dhe Informacionit(Admin)
- Clients

*It is important to specify that:*

- **Drejtoria e Regjistrimit, Licensimit, Çertifikimit** will be divided into 2 sectors so there will be 2 subcategories of users in this department as listed below:
  - i. Sektori i Regjistrimit te Mjeteve
  - ii. Sektori i Licensimit dhe Certifikimit

Users from the first sector can nor see neither process applications related to the other sector.
- **Drejtoria e Drejtuesve te Mjeteve** will be divided into 2 sectors so there will be 2 subcategories of users in this department as listed below:
  - i. Sektori i drejtuesve te mjeteve
  - ii. Sektori i kontrollit te autoshkollave

First type of users will take care of services related to Individual Persons. The other one will process applications related to 'Autoshkolla Clients'
- **Users from Drejtoria Ekonomike** will have the duty to check if the client has paid the fee for the certain application. They will change the application's status of payment to "Yes" only if the full fee is paid. Without the approve of the finance, an application will not be processed by the respective sector. They will also have access in all transactions and payrolls.
- **Users from Drejtoria e Teknologjise dhe Informacionit** will act as administrators. In other words, they will be in charge of creating users according to sectors. Every problem concerning the system will be their task.
- **Clients** will be classified as:
  - i. Person Fizik - Every citizen of Albania will have the opportunity to register in the portal and create applications. By Application we mean request for a service. Once an account is created, a certain ID number will be generated to identify the user. The user cannot change the basic information such as Surname, ID number etc.

### **2.3 Assumptions**

- A reliable internet connection is assumed to be available from both parts, the normal users(citizens) and the users that work for DPSHTRR.
- Minimum computer specifications to ensure the ability to run the basic software for most end users:
  - Processor – dual core @ 2.4 GHz (i3, i5 or i7 Intel processor or equivalent AMD)
  - RAM – 4GB
  - Hard Drive – 320GB 5400 RPM hard drive
  - Wireless (for lap tops) – WPA2 support required
  - Operating System – Windows 7, Apple OS X 10.11 or Ubuntu 10.10 (or equivalent Linux OS)
  - Backup Device – External hard drive or USB flash drive
- It is assumed that all actions through this platform are performed according to the law.
- It is assumed that "Programi I Transparencës" according to "nëni 7 te ligjet nr.199/2014 per Te drejten e Informimit" is public to all citizens of Albania from DPSHTRR official page.

## **2.4 Constraints**

- Time constrain might force team members to compromise quality of the DPSHTRR e-services software.
- Stakeholders lack of cooperation might lead to project failure
- Server Specifications might lead to compromise in efficiency
- Labor Laws of Albania might lead into updating a module or the entire product
- A very high flux of users might affect the software quality in terms of performance

## **2.5 Dependencies**

- Module of Services will depend on module of Structures of DPSHTRR
- In order to start processing the service, the user has to make the payment which will be confirmed by financial sector.
- In order to get a service, the user should sign up for the first time and prove his identity by one of the several options offered by the software.

# **3. Requirements**

## **3.1 Functional Requirements**

<b>Req#</b>	<b>Requirement</b>	<b>Comments</b>	<b>Priorit y</b>	<b>Date Rvwd</b>	<b>SME Reviewed / Approved</b>
FR_01	DPSHTRR e-services website	DPSHTRR e-services must have a website which everyone can access without registering in it. Different Categories such as Services offered, Procedures, Contact, Log in have to be displayed in it.	1		
FR_02	User Registration	The user must be able to register in the portal by providing: Passport Number/Personal Number, Name, Surname, Birthdate, Birthplace, Gender, e-mail address and password.	1		
FR_03	Random Unique Number generated after registration	Once a user is registered in the portal, a random ID will be automatically generated. The user cannot change this unique number.	1		

**DPSHTRR e-services Requirements Specification**

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FR_04	Basic information of the user cannot be changed after registration	After registering, user cannot change basic info such as Name/Surname, Birthdate and Birthplace. Other information like phone number, email, Zip code may be changed.	1		
FR_05	Friendly account after logging in	When logged in, a nice and friendly front end page will be displayed to the user.	2		
FR_06	Several Modules offered	When logged in, modules like: Basic Information, All Applications and Create a new Application will be offered to the user.	1		
FR_07	'Create new Application' features	When clicking on 'New Application' a dropdown box filled with all the services offered by the system will be shown. After choosing a service, the price of that service and a list of required documents will be shown below.	1		
FR_08	Uploading the documents	At the right of each document an Upload button resides. If the user uploads a certain doc, a green Tick will appear next to that doc.  Format allowed: JPEG, pdf	1		
FR_09	Constraints on sending the application	If the user tries to send the application without submitting all the required doc, an error message will pop up and the application will not be sent.	1		

**DPSHTRR e-services Requirements Specification**

<b>Req#</b>	<b>Requirement</b>	<b>Comments</b>	<b>Priorit y</b>	<b>Date Rvwd</b>	<b>SME Reviewed / Approved</b>
FR_10	Payment features	Without payment, the application will not be processed. The user must have the opportunity to pay electronically by credit card.	1		
FR_11	Check for the status of application	When submitting the application, the user can check for its status at the 'All Applications' module. He can check for the status of payment as well as for the status of application's process.	1		
FR_12	Financier approves the payment	All the applications done by users will be sent first to the finance office. When the financier changes the status of payment to 'Paid', the application is sent only to the specific sector of employees.	1		
FR_13	Updating the status of the application	The account page for an employee must have at least the section of 'Completed Applications' and 'Pending Applications'. If an employee changes the status of application to 'complete' the application will be moved to the table of 1 <sup>st</sup> section.	1		
FR_14	Coordination of employees' work	When an employee of a specific sector opens an application of a client, other employees will see a symbol beside it meaning that someone else is processing it and would not be able to open.	1		

## **DPSHTRR e-services Requirements Specification**

<b>Req#</b>	<b>Requirement</b>	<b>Comments</b>	<b>Priorit y</b>	<b>Date Rvwd</b>	<b>SME Reviewed / Approved</b>
FR_15	SMS and Email Notification	After the application has been processed, the user will get notified via SMS and Email for the status of his/her application.	2		
FR_16	Retrieve forgotten password through email	If the user forgot the password of his account, he can use a temporary password sent to him through email and change it later.	1		
FR_17	Registration restriction	The system shall not allow registration of a user with the same first name, father's name and last name of an existing user.	2		
FR_18	Admin Access	The admin shall have access in all information and perform CRUD operations of all sectors	1		

### **3.2 Non-Functional Requirements**

#### **3.2.1 User Interface Requirements**

The domain of DPSHTRR will redirect the user to the front-end web page of DPSHTRR where they can information about services and operations that our software does. In this view, there will be different categories from the information side and also this page will include a section where the users will sign up for the first time and a section where they sign in. The Sign In interface will be responsible for the sign in from both parts, the citizens and the management. If the user inputs wrong credentials there will be an alert. The sign in interface will also have a Forgot Password function. After the user(citizen) logs in, it will be shown the dashboard interface with a menu from where the users will request their services and where they can get detailed information about the services and their account. From the management part of DPSHTRR different views and functionalities will came up depending on the sector that the employee works. Different sectors will deal with different services, they will have a dashboard interface where they can get all the general information, inside this view will be a menu that will offer the different operations that the employee can do. All interfaces have to be very simple for every kind of users that the system will have by giving detailed descriptions in every interaction that the system has with the users.

#### **3.2.2 Usability**

The software shall have a simple usability in terms of:

- 1) Accessibility
- 2) Efficiency

- 3) Learnability
- 4) Responsiveness (including different devices)
- 5) Performance

### **3.2.3 Performance**

On behalf of performance we will make sure our program performs at its highest speed.

- The software should support unlimited users and data to be loaded, since we know the environment in which it will work so building a strong server is a must.
- The performance of the software is going to depend on the server used. JavaScript and Ajax will be used which means that it will be light weighted and the browser won't crash.
- Beside this we will specify minimum required system capabilities for each user using our software.
- Also, we will clarify the minimum upload to be used in order to avoid system crash.

#### **3.2.3.1 Capacity**

The software will operate in the whole region of Albania state where thousands of people can achieve online service without being in line or losing time. Multiuser will be supported and they can perform their tasks without any problem, performance will be on top of everything.

#### **3.2.3.2 Availability**

The Software will be available nonstop 24/7 for everyone than need service. Since our Software project is for general purposes, it will cover and operate in whole region of Albania state. People will realize at the end (after getting serviced) the amount of time that is saved but it will have a big impact in society for further problems raised. They even can check their status online, so when everything is ready they can go and pick their service.

#### **3.2.3.3 Latency**

The response time for the program to process some data will be very efficient and very fast, but as mentioned above it will be explained when completed about minimum system requirement for the software to be usable.

### **3.2.4 Manageability/Maintainability**

#### **3.2.4.1 Monitoring**

The program as we have previously mentioned will be user friendly, and very easy to use. Also, a "?" button will be available on top corner of the program's window so the user can check for solutions in case they have some problems with the program. Also we will provide a channel for users to directly contact with a person responsible with the way the system works.

#### **3.2.4.2 Maintenance**

We will provide simplicity of "coding structure" which will make easy to go back and improve the software.

### **3.2.4.3 Operations**

Everybody that has an account in this web application will have the opportunity to choose among several services. After choosing the desired service, a list of required documents will be shown. The client has to scan these documents and submit them in our web application. However, for the application to be complete, the client has to pay a certain fee. This fee can be paid either by bank or by credit Card. Now, the client has to wait until the employees on the other side check their documents. If the documents are accurate, then the status of the application will appear as "READY" and the client may go at the "DPSHTRR" office to pick up his service. Otherwise, the client will be informed about the missing/not accurate documents.

### **3.2.5 Security**

#### **3.2.5.1 Protection**

The factors that will protect the system from malicious or accidental access, modification, disclosure, destruction, or misuse. For example:

- Encryption
- activity logging, historical data sets
- data integrity checks

Security provided to the access of user private information.

Security provided to access of data.

Restriction provided to access of data.

### **3.2.6 Data Management**

There will be variety types of data which will be places in our database:

1. Firstly we will have the data for the user such is name, surname, email address, telephone number etc. The user can be an employer of the company or a client.
2. There will be data for all the types of services that can be offered to the client.
3. There will be financial data for all the services that the client will need.
4. Certain data will be accessed by certain users respect to the tasks they must perform, so not all the data can be accessed by everyone.

For example, economist or finance office will take carry about the fees if they are paid correct or not.

5. The system will also require some different document format uploads, such as PDFs, words, .jpg, etc.

### **3.2.7 Standards Compliance**

The user in order to sign in to the web to make the request for the desired service, he must register firstly, with his personal data. Then he can proceed to request the service, after that he need to complete all the document that are required for that specific service and also the fee needed to be paid. The user has to wait until the employer approves the documents and after that all is done.

### **3.2.8 Portability**

Our software can be running on different platform without an additional effort. Our web application which is developed mainly in PHP will be accessed by Safari, Chrome, Mozilla, etc. so the application will be portable even from smart phones. Other technologies that will be used in our web application is HTML, CSS, BOOTSTRAP, MYSQL, JAVASCRIPT, AJAX etc. The whole database will be saved in 'DSHPTRR' server.

### **3.2.9 Other Non-Functional Requirements**

#### **3.2.9.1 Environmental Requirement**

- The software will be operating all the time nonstop. So, a client can make his request at what time he is able and comfort to do it. Its performance is measured when a subsystem fails, so the ability it has to restore in the previous or normal state is a manner that eliminates or at least minimizes down time.

#### **3.2.9.2 Operational Requirement**

- Reporting in the real time
- Backup and recovery information

#### **3.2.9.3 External Requirement**

- The system shall not disclose any personal information about customers
- The database should be encrypted

### **3.3 Domain Requirements**

Domain requirement is about the environment that the system will operate. In our case, we have to deal with requesting and processing services.

Our system has to take into account:

- unclear documents submitted by the clients
- Poor desktop resolution
- Documents without appropriate seal

## 4. Software Design/Diagrams

### 4.1 User Scenarios

#### 1. Scenario – Client Successful Registration

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Log In/Sign Up button
- c. Gets redirected to the log in page
- d. The log in page is displayed with a register button at the bottom
- e. Clicks the register button
- f. Gets redirected to the Sign-Up page
- g. The Sign-Up page is displayed with the appropriate fields to be filled by the client
- h. Fills the fields with the correct format
- i. Clicks the Register button
- j. A message that shows that the register is successfully done pops

#### 2. Scenario – Client Unsuccessful Registration

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Log In/Sign Up button
- c. Gets redirected to the log in page
- d. The log in page is displayed with a register button at the bottom
- e. Clicks the register button
- f. Gets redirected to the Sign-Up page
- g. The Sign-Up page is displayed with the appropriate fields to be filled by the client
- h. Fills the fields with an incorrect format
- i. Clicks the Register button
- j. A message that shows that the register is unsuccessful because of the x-incorrect format filled by the user

#### 3. Scenario – Client Successful Log In

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Log In/Sign Up button
- c. Gets redirected to the log in page
- d. The Id and password field is displayed
- e. Client fills his ID correctly
- f. Client fills his password correctly
- g. Gets redirected to the Client profile

## **DPSHTRR e-services Requirements Specification**

### **4. Scenario – Client Unsuccessful Log In**

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Log In/Sign Up button
- c. Gets redirected to the log in page
- d. The Id and password field is displayed
- e. Client fills his ID or password incorrectly
- f. Credentials don't match, an alert is shown
- g. Gets redirected to the log in page again to enter his credentials

### **5. Scenario – Employee Successful Log In**

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Employee Log In button
- c. Gets redirected to the log in page for employees
- d. The Id, sector dropdown and password field is displayed
- e. Employee enters his Id
- f. Employee chooses his sector
- g. Employee enters his password
- h. If credentials match, employee is successfully logged in
- i. Gets redirected to his profile of the sector that he works

### **6. Scenario – Employee Unsuccessful Log In**

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Employee Log In button
- c. Gets redirected to the log in page for employees
- d. The Id, sector dropdown and password field is displayed
- e. Employee enters his Id
- f. Employee chooses his sector
- g. Employee enters his password
- h. Credentials don't match, an alert is shown
- i. Gets redirected to the log in page again to enter his credentials

### **7. Scenario – Client Forgot Password**

- a. Navigates to the DPSHTRR e-services front page
- b. Clicks Log In/Sign Up button
- c. Gets redirected to the log in page
- d. The log in page show a Forgot Password? option
- e. Client clicks Forgot Password link
- f. Gets redirected to the Forgot Password page
- g. Enters his email
- h. If email match, a new generated password will be sent to him via his email

## **DPSHTRR e-services Requirements Specification**

### **9. Scenario – Admin Add Employee**

- a. Administrator is logged in
- b. Clicks the Employees section
- c. An Add Employee button at the bottom of the employees' information table will be shown
- d. Administrator clicks the Add Employee Button
- e. Registration form is shown
- f. Complete the registration form with the appropriate format
- g. Clicks the Add Employee button at the bottom
- h. Gets redirected to the updated list of employees
- i. The registered employee will be shown at the top of the list

### **8. Scenario – Admin View Employee**

- a. Administrator is logged in
- b. Clicks the Employees section
- c. A table with all employees' information will be displayed
- d. Clicks on a specific employee for more details

### **9. Scenario – Admin Edit Employee**

- a. Administrator is logged in
- b. Clicks the Employees section
- c. An Edit button will be shown at the Actions Column for each employee
- d. Clicks the edit button for that specific employee
- e. A form will be shown with the existing values of that employee
- f. Administrator edits the desired employee fields
- g. Clicks the edit button
- h. An "Are you sure" alert will pop up
- i. Clicks the confirm button of the alert
- j. Gets redirected to the updated list of employees
- k. Email the employee for the changes or his new credentials

### **10. Scenario – Admin Delete Employee**

- a. Administrator is logged in
- b. Clicks the Employees section
- c. A Delete button will be shown at the Actions Column for each employee
- d. Clicks the delete button for that specific employee
- e. An "Are you sure" alert will pop up
- f. Clicks the confirm button of the alert
- g. Gets redirected to the updated list of employees

11. Scenario – Admin Add Service

- a. Administrator is logged in
- b. Clicks the Services section
- c. An Add Service button at the bottom of the Services' information table will be shown
- d. Administrator clicks the Add Service Button
- e. Registration form is shown
- f. Complete the registration form with the appropriate format
- g. Clicks the Add Service button at the bottom
- h. Gets redirected to the updated list of services
- i. The added service will be shown at the top of the updated list

12. Scenario – Admin View Service

- a. Administrator is logged in
- b. Clicks the Services section
- c. A table with all services' information will be displayed
- d. Clicks on a specific service for more details

13. Scenario – Admin Edit Service

- a. Administrator is logged in
- b. Clicks the Services section
- c. An Edit button will be shown at the Actions Column for each service
- d. Clicks the edit button for that specific service
- e. A form will be shown with the existing values of that service
- f. Administrator edits the desired service fields
- g. Clicks the edit button
- h. An "Are you sure" alert will pop up
- i. Clicks the confirm button of the alert
- j. Gets redirected to the updated list of services

14. Scenario – Admin Delete Service

- a. Administrator is logged in
- b. Clicks the Service section
- c. A Delete button will be shown at the Actions Column for each service
- d. Clicks the delete button for that specific service
- e. An "Are you sure" alert will pop up
- f. Clicks the confirm button of the alert
- g. Gets redirected to the updated list of services

**15. Scenario – Admin View Directories/Sectors**

- a. Administrator is logged in
- b. Clicks the Directories section
- c. Gets redirected to the directories page showing different information for each directory
- d. Clicks a specific directory for a detailed information

**16. Scenario – Admin Add Document Type**

- a. Administrator is logged in
- b. Clicks the Documents section
- c. Gets redirected to the documents page showing the list of all documents
- d. An Add Document button at the bottom of the Document's information table will be shown
- e. Clicks the add button
- f. Add a document form is shown
- g. Clicks the Add Document button at the bottom
- h. Gets redirected to the updated list of documents

**17. Scenario – Admin Edit Document Type**

- a. Administrator is logged in
- b. Clicks the Documents section
- c. Gets redirected to the documents page showing the list of all documents
- d. An Edit button will be shown at the Actions Column for each document
- e. Clicks the edit button for that specific document
- f. A form will be shown with the existing values of that document
- g. Administrator edits the desired document fields
- h. Clicks the edit button
- i. An “Are you sure” alert will pop up
- j. Clicks the confirm button of the alert
- k. Gets redirected to the updated list of documents

**18. Scenario – Admin Delete Document Type**

- a. Administrator is logged in
- b. Clicks the Documents section
- c. Gets redirected to the documents page showing the list of all documents
- d. A Delete button will be shown at the Actions Column for each document
- e. Clicks the Delete button for that specific document
- f. An “Are you sure” alert will pop up
- g. Clicks the confirm button of the alert
- h. Gets redirected to the updated list of documents

19. Scenario – Admin View Client

- a. Administrator is logged in
- b. Clicks the Clients section
- c. Gets redirected to the clients' page showing the list of all clients and basic information
- d. Clicks a specific client for a detailed information

20. Scenario – Admin Edit Client

- a. Administrator is logged in
- b. Clicks the Clients section
- c. Gets redirected to the clients' page showing the list of all clients and basic information
- d. An Edit button will be shown at the Actions Column for each client
- e. Clicks the edit button for that specific client
- f. A form will be shown with the existing values of the client
- g. Administrator edits the desired client fields
- h. An “Are you sure” alert will pop up
- i. Clicks the confirm button of the alert
- j. Gets redirected to the updated list of clients

21. Scenario – Admin Ban Client

- a. Administrator is logged in
- b. Clicks the Clients section
- c. Gets redirected to the clients' page showing the list of all clients and basic information
- d. A Ban button will be shown at the Actions Column for each client
- e. Clicks the ban button for that specific client
- f. An “Are you sure” alert will pop up
- g. Clicks the confirm button of the alert
- h. Gets redirected to the updated list of clients

22. Scenario – Client Successful Service Request

- a. Client is logged in
- b. Clicks Request a Service(Application) section
- c. Choose the desired service that is requesting for
- d. Uploads the necessary documents for the chosen service in the correct format
- e. Clicks the submit button
- f. Gets redirected to the View all Applications section and sees the updated list of his applications with the recent submitted at the top and can see the status of the application.
- g. There will be provided two options and the actions column specifically “Pay with Card” and a “Paid with Bank” for every unpaid application.

23. Scenario – Client Pay Service Requested with Card

- a. Client is logged in
- b. Client is at the View All Applications section
- c. A “Pay with Card” button will be shown at the Actions Column for unpaid Service Requests
- d. A Modal will pop up asking for Credit Card Number, Expiration Date and CVC
- e. If the client fills the correct information of the card, he will be redirected to a page that confirms his payment
- f. If the client fills incorrect information of the card, he will be redirected to a page that indicates that the payment was not done

24. Scenario – Client Paid Service Requested with Bank

- a. Client has done the payment through bank to the DPSHTRR account
- b. Client logs in
- c. Client clicks the View All Applications section
- d. A “Paid with Bank” button will be shown at the Actions Column for unpaid Service Requests
- e. Client will be redirected to a form to submit the transaction document that got from the bank
- f. Waits for the employee to approve the payment

25. Scenario – Client View All Paid Services

- a. Client is logged in
- b. Client clicks the Finance section
- c. A list of all paid services will be shown
- d. The user can see the total amount of all services that he has paid

26. Scenario – Client Submit Question/Complain

- a. Client is logged in
- b. Client is at the dashboard section
- c. A text area is displayed where he can write his question/complain
- d. Client clicks the Send button
- e. Client waits for employee to contact him through phone number or email

**27. Scenario – Employee View All Applications**

- a. Users from “Drejtoria e Regjistrimit, Liçensimit, Çertifikimit / Drejtoria e Drejtuesve te Mjeteve” is logged in
- b. All applications section will be shown
- c. A list of all applications that are related with that specific directory will be shown from the recent ones provided with additional information

**28. Scenario – Employee View Application**

- a. Users from “Drejtoria e Regjistrimit, Liçensimit, Çertifikimit / Drejtoria e Drejtuesve te Mjeteve” is logged in
- b. All applications section will be shown
- c. A list of all applications that are related with that specific directory will be shown from the recent ones provided with additional information
- d. Clicking into an application will open the application with all the information and documents submitted by the applicant
- e. Each document will have the “Download” and “Print” option
- f. Employee changes the status to the appropriate one

**29. Scenario – Employee Change Payment Status**

- a. Users from “Drejtoria Ekonomike” is logged in
- b. Clicks New Application Section to see the applications that have been submitted as paid by bank
- c. Downloads the document issued from bank that was submitted as a proof by applicant
- d. Verifies the proof of the payment
- e. Changes status to “Paid”

## **4.2 User Cases**

Use Case NO.	1
User Case Name	Client Successful Registration
Overview	Every client that needs a service from DPSHTRR is required to register in the DPSHTRR system
Actor(s)	The system of “DPSHTRR”
Description	The system registers in the database every new client who completes the registration in the “DPSHTRR” web page
Pre-condition	The client has been not registered before in the system
Alternative	In case this new client is registered already before, it will not be added into the database
Post condition	The new client is added to the database list.

Use Case NO.	2
User Case Name	Client Successful Log In
Overview	Client after registration enters in the system by providing his/her personal data. After that he can proceed to the service he wants.
Actor(s)	The client
Description	Each new client get access to the system by providing his/her ID and password correctly
Pre-condition	The client should already have created his own account before logging in
Alternative	The can log in into the system as many times as he wants or needs to log in
Post condition	The client access the system and can request the service

**DPSHTRR e-services Requirements Specification**

Use Case NO.	3
User Case Name	Employee Successful Log In
Overview	The DSHPTRR employees get access to the system by providing his/her personal credentials.
Actor(s)	DPSHTRR employees
Description	To enter in the system the employee need to provide his/her own ID, sector and the password correctly
Pre-condition	Each of the employees should have been already provided with an account before logging in the system
Alternative	The same employee can be logged in the system many times
Post condition	Than the employee access the system of the DPSHTRR

Use Case NO.	4
User Case Name	Admin Add Employee
Overview	If an employee needs to be added in the system, the admin will register and provide him/her with a personal profile in the system
Actor(s)	Administrator of the DPSHTRR
Description	For adding this employee in the system and creating the profile is responsible the administrator
Pre-condition	The employee need a personal profile in the system in order to have access in the institution functionalities
Alternative	The system will warn the admin if any of the fields is not filled properly.
Post condition	Now the employee is part of the institution and can access the system

**DPSHTRR e-services Requirements Specification**

Use Case NO.	5
User Case Name	Admin delete employee
Overview	In case an employee have to be removed from the system, administrator is the person responsible
Actor(s)	Administrator
Description	When a specific employee is no longer working in that institution or service should be deleted by the administrator
Pre-condition	The board of the institution decides that this employee will not be part of the service anymore
Alternative	The account of the employee can be deleted after he/she is logged out from the system
Post condition	The employee is removed from the database of the institution

Use Case NO.	6
User Case Name	Admin edit employee
Overview	In a case a profile or personal data of the employee needs to be modified, administrator is responsible
Actor(s)	Administrator
Description	Administrator is responsible for all data updating of the employee
Pre-condition	In order the profile to be updated the employee firstly asks for this service that he/she needs
Alternative	The update can't be done if the fields are not filled properly
Post condition	Now the user profile is updated successfully

Use Case NO.	7
User Case Name	Client forgot password
Overview	If the client has forgotten the password after being registered in the system, he can reset the password by using his/her email.
Actor(s)	Client, DPSHTRR system
Description	If a client has forgotten his/her password, in order to request a service, he/she needs to reset the password
Pre-condition	In case he/she wants to reset the password, the client needs to enter the email he/she has used when she was registered.
Alternative	There is no alternative way to reset password
Post condition	The client has received his/ her new password, now requesting a service is available

Use Case NO.	8
User Case Name	Admin add service
Overview	In case a new service will be able to complete online from the clients, it has to be added in the system
Actor(s)	Administrator
Description	When a new service needs to be added into the system, administrator is the person responsible for this
Pre-condition	In order the client to make a request for this new service, firstly is needed to be added in the system
Alternative	The system will warn to the admin if there is anything wrong while filling the form
Post condition	Now the new service is added and every client can make a request for this new service

Use Case NO.	9
User Case Name	Admin edit service
Overview	A service may need to be modified for a specific reason, for ex: to request an additional document from the client
Actor(s)	Administrator
Description	In case a service needs to be edited the administrator is responsible
Pre-condition	In order the service to be updated the administrator should be informed by the sector of that service and has to be logged in as Admin.
Alternative	There is no alternative solution
Post condition	Now the service is ready with all the documents needed to provide from the client

Use Case NO.	10
User Case Name	Admin Delete service
Overview	A service may not be offered for a specific reason, or because service needs to be fixed. At this point Service is deleted.
Actor(s)	Administrator
Description	In case a service needs to be Deleted the administrator is responsible.
Pre-condition	Administrator has gotten information that a service need to be deleted from the system, for a specific reason and should be logged in as Admin.
Alternative	No other Alternative.
Post condition	The user will no longer face anymore the service that was deleted.

Use Case NO.	11
User Case Name	Admin add Document Type
Overview	Document's change as time passes. So Admin should provide users with the appropriate documents in compliance with laws.
Actor(s)	Admin
Description	Admin is in charge to change the document type for a service (if no longer documents early given are enough)
Pre-condition	In order to update document type, the administrator should be informed by the sector of that service and has to be logged in as Admin.
Alternative	No alternative since documents are very important.
Post condition	Now the document type is ready, and can be used by users.

Use Case NO.	12
User Case Name	Admin view client
Overview	Admin chooses to have a look on client detailed information.
Actor(s)	Admin
Description	In case Admin wants to check client information
Pre-condition	Log in as Admin and click client section and chose among clients.
Alternative	When a client is not clicked, on mouse over basic information are shown.
Post condition	Now the Admin has viewed the personal information of a client.

Use Case NO.	13
User Case Name	Admin edit Client
Overview	When client is being registered some of its credentials may have been written wrong.
Actor(s)	Admin
Description	Admin has the ability to access system and edit some of clients personal information due to mistakes when was being registered.
Pre-condition	Admin should know the client, whose personal information is going to be edited and should be logged in as Admin.
Alternative	This is no other way.
Post condition	The client information is being updated when rechecked.

Use Case NO.	14
User Case Name	Client service request
Overview	A client after logging in, chooses a service, provides required documents and the service is listed among other chosen services.
Actor(s)	Client
Description	In case client want a service, he successfully logs in and provides documents for the service that he wants.
Pre-condition	Client should have an account and he should be logged in at the moment he requests services.
Alternative	There is no other Alternative
Post condition	The service that a client chose will be shown on a list among other services previous selected.

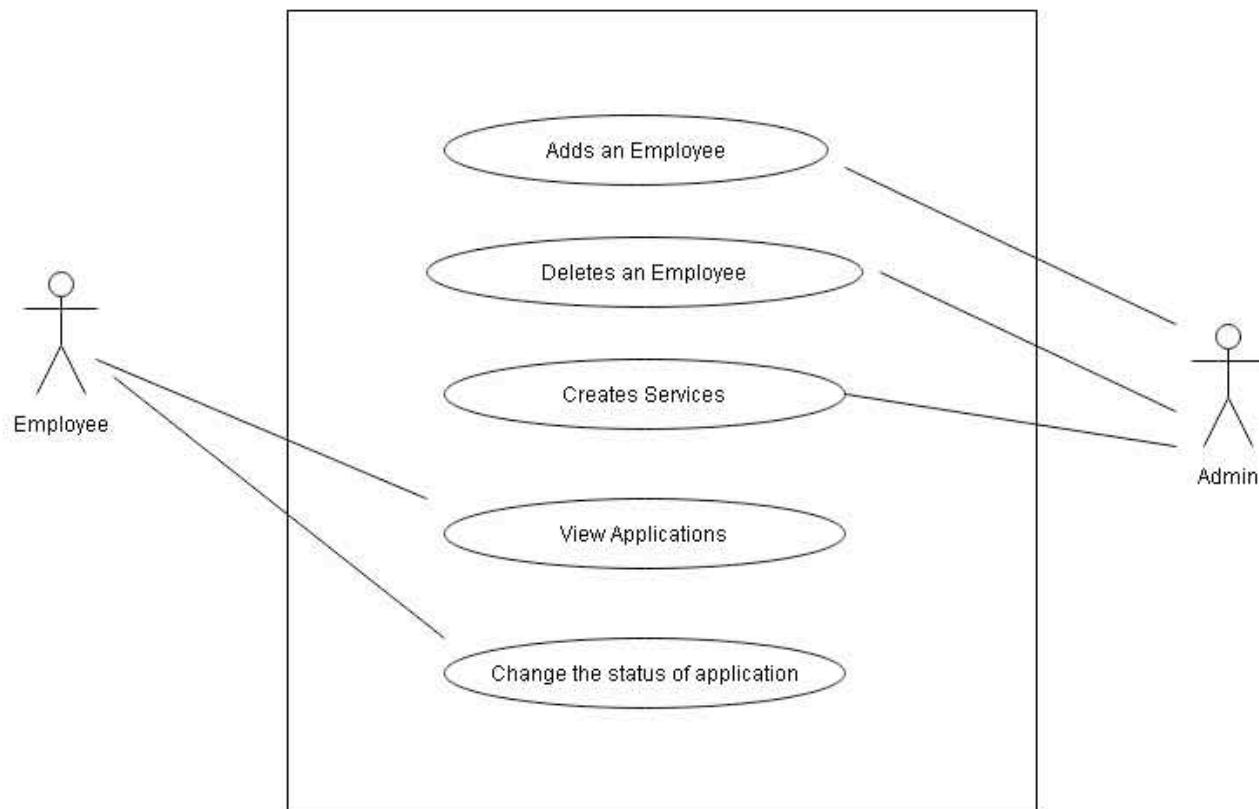
**DPSHTRR e-services Requirements Specification**

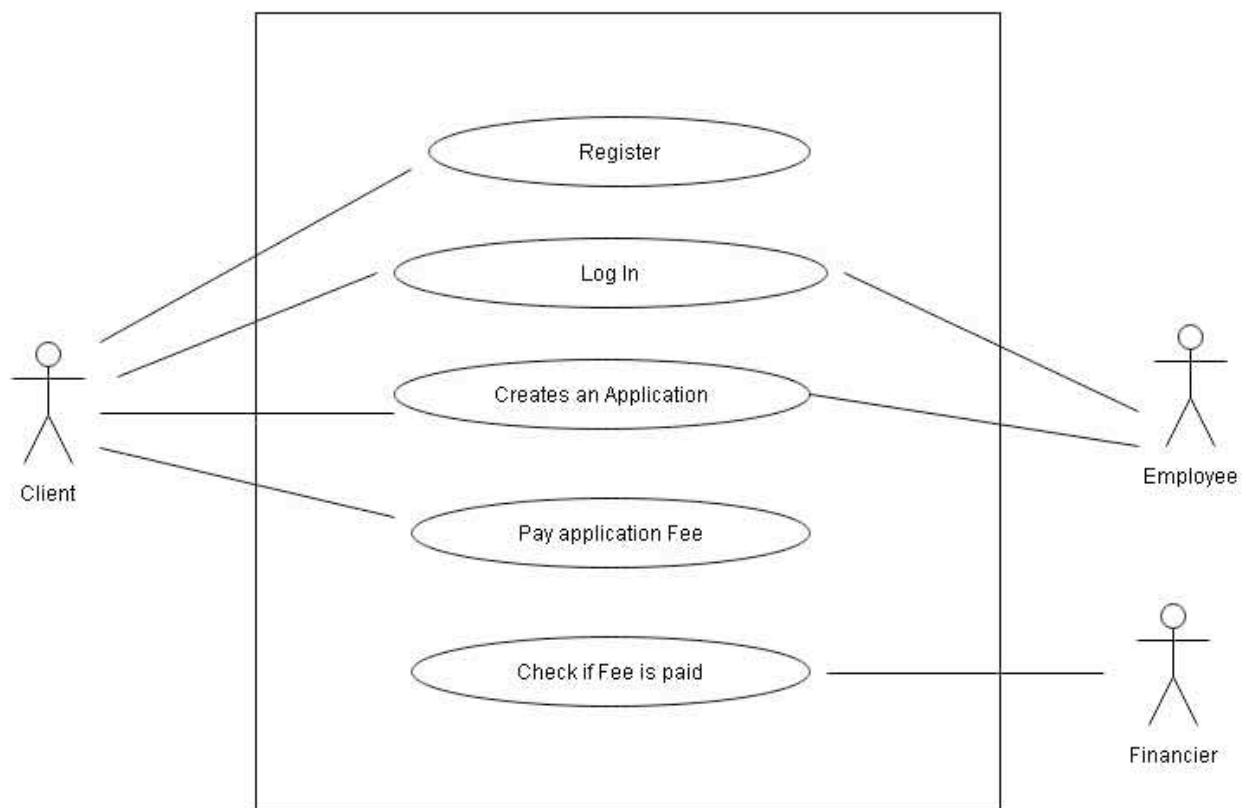
Use Case NO.	15
User Case Name	Client pay Service
Overview	After a client chooses the service, at the end he should provide a fee, which is different for different services.
Actor(s)	Client
Description	When a client successfully finishes all the steps of selecting service and provides appropriate documents required, He/She will face a payment service.
Pre-condition	Client should be logged in, and should have requested a service.
Alternative	The service will appear unpaid.
Post condition	Client will get a confirmation message for the payment made and his service is successfully requested.

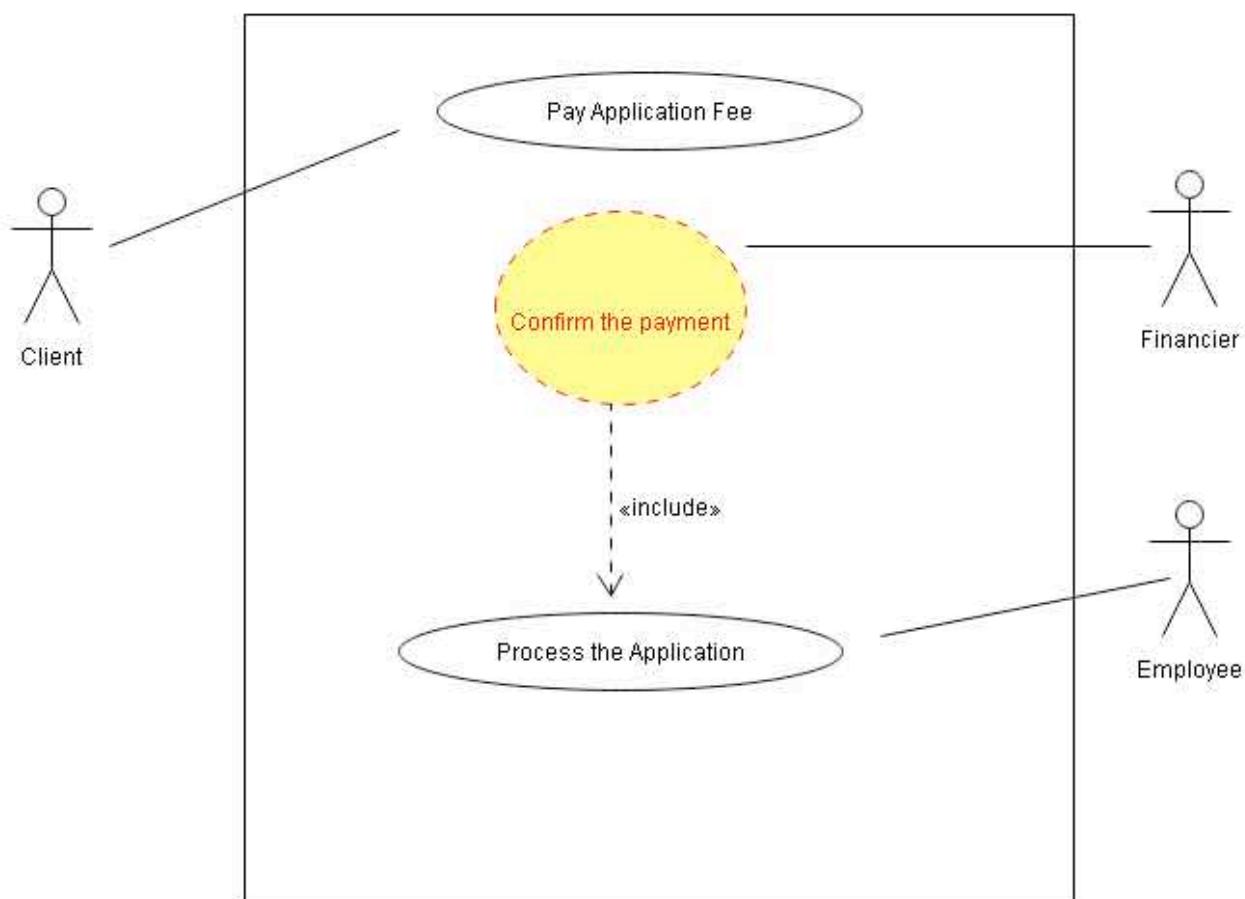
Use Case NO.	16
User Case Name	Client view
Overview	A client may want to check his information, his payment, his requested services.
Actor(s)	Client
Description	In case a Client wants to check his system (payment, services requested, personal information).
Pre-condition	Client should be logged in to check his System.
Alternative	Client should log in on his account.
Post condition	Now the Client can have a clearer idea on his account

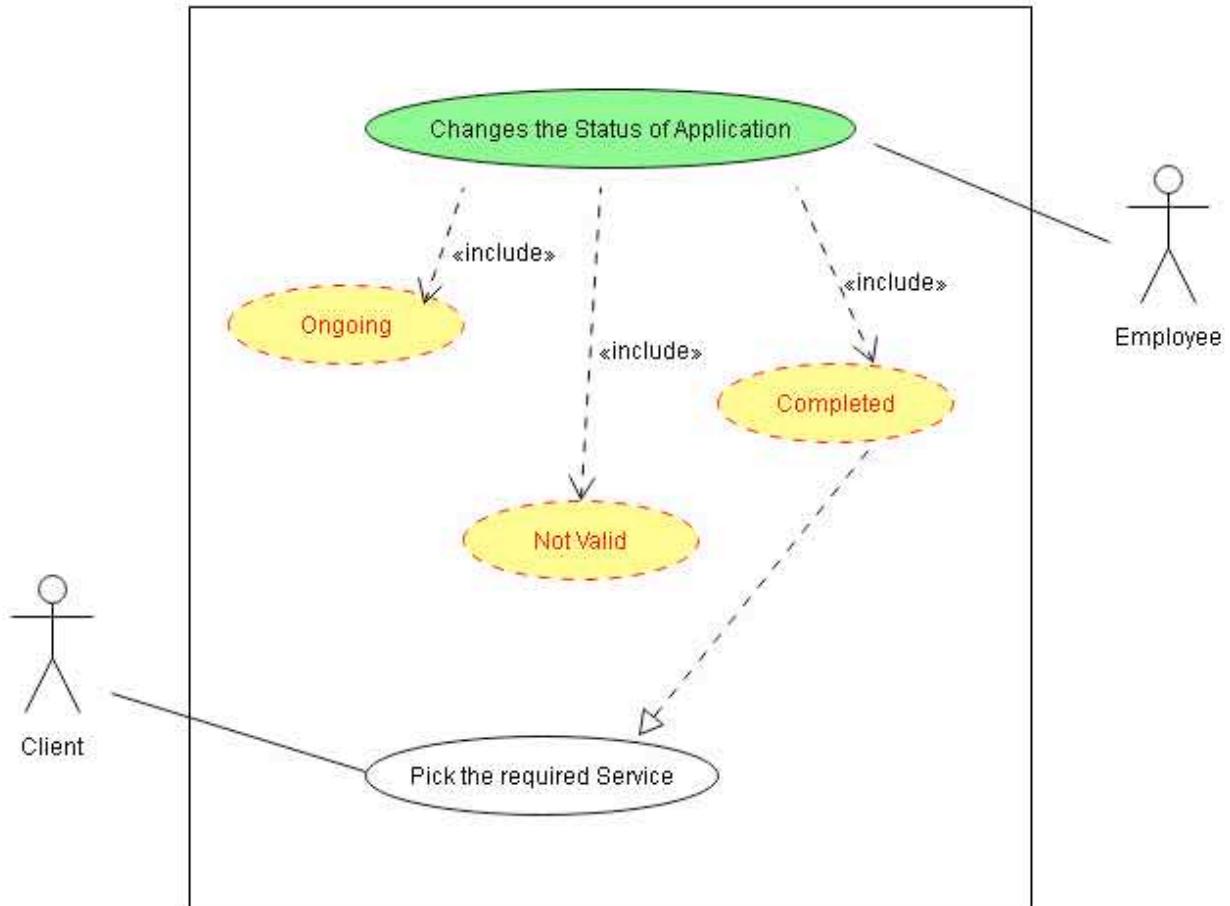
Use Case NO.	17
User Case Name	Client Submit Question/Complain
Overview	A client will be provided with an area where he/she can make question and provide complains.
Actor(s)	Client
Description	In case a client has questions/complains he will write in detail and will send through a send button to the staff.
Pre-condition	In Order to make a question/complain the Client should be logged in.
Alternative	Can write on the email.
Post condition	The client's question/complain is successfully sent to the staff which will take in consideration clients question/compliance and will provide him/her with an answer.

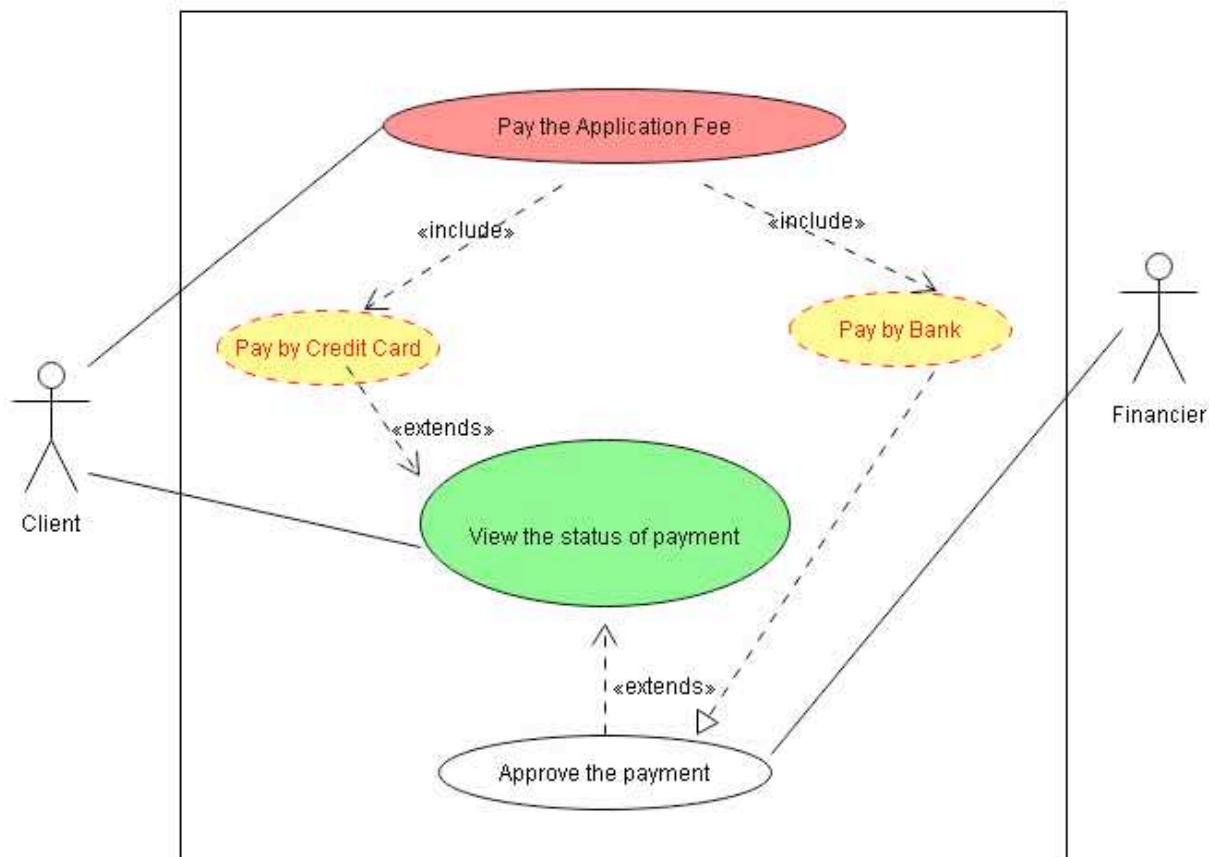
#### **4.3 User Scenarios**

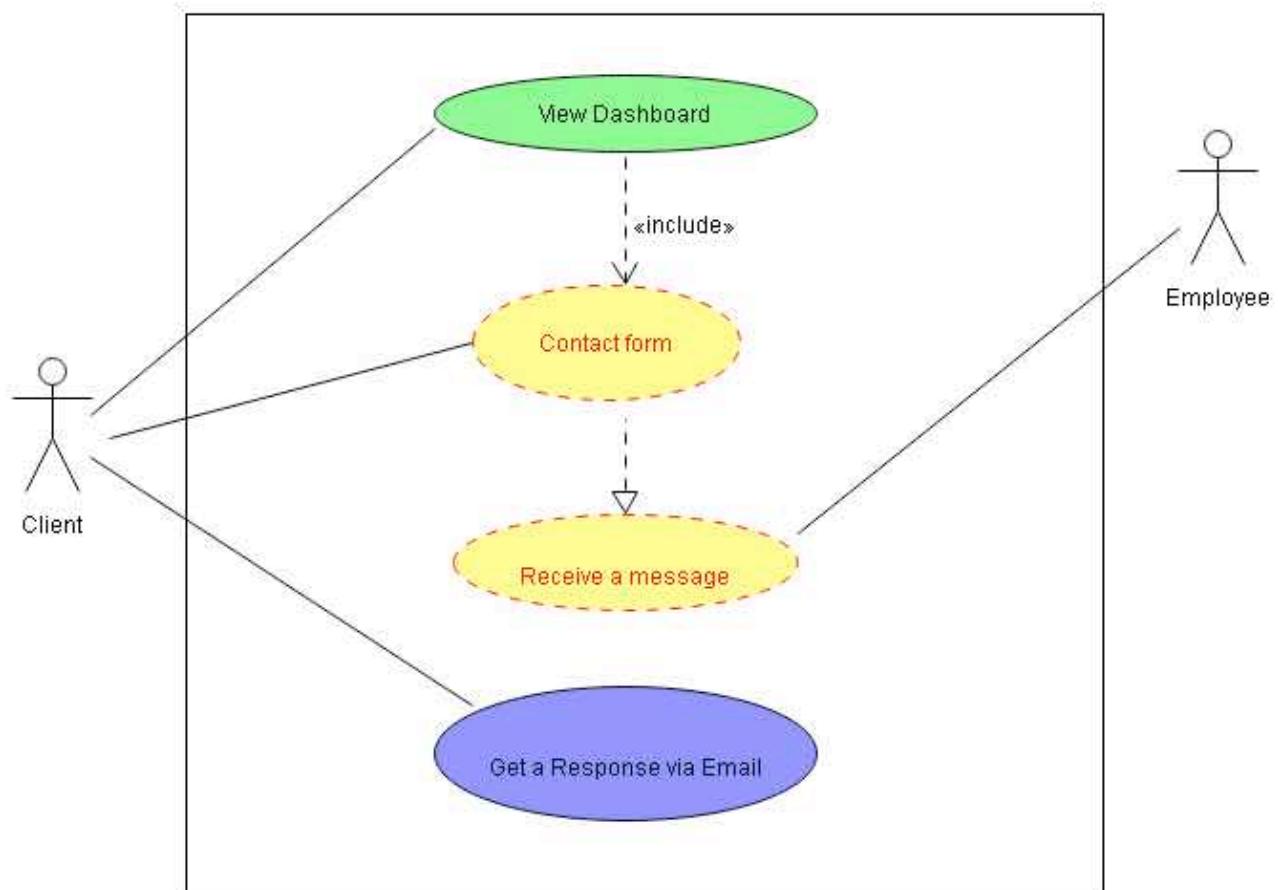




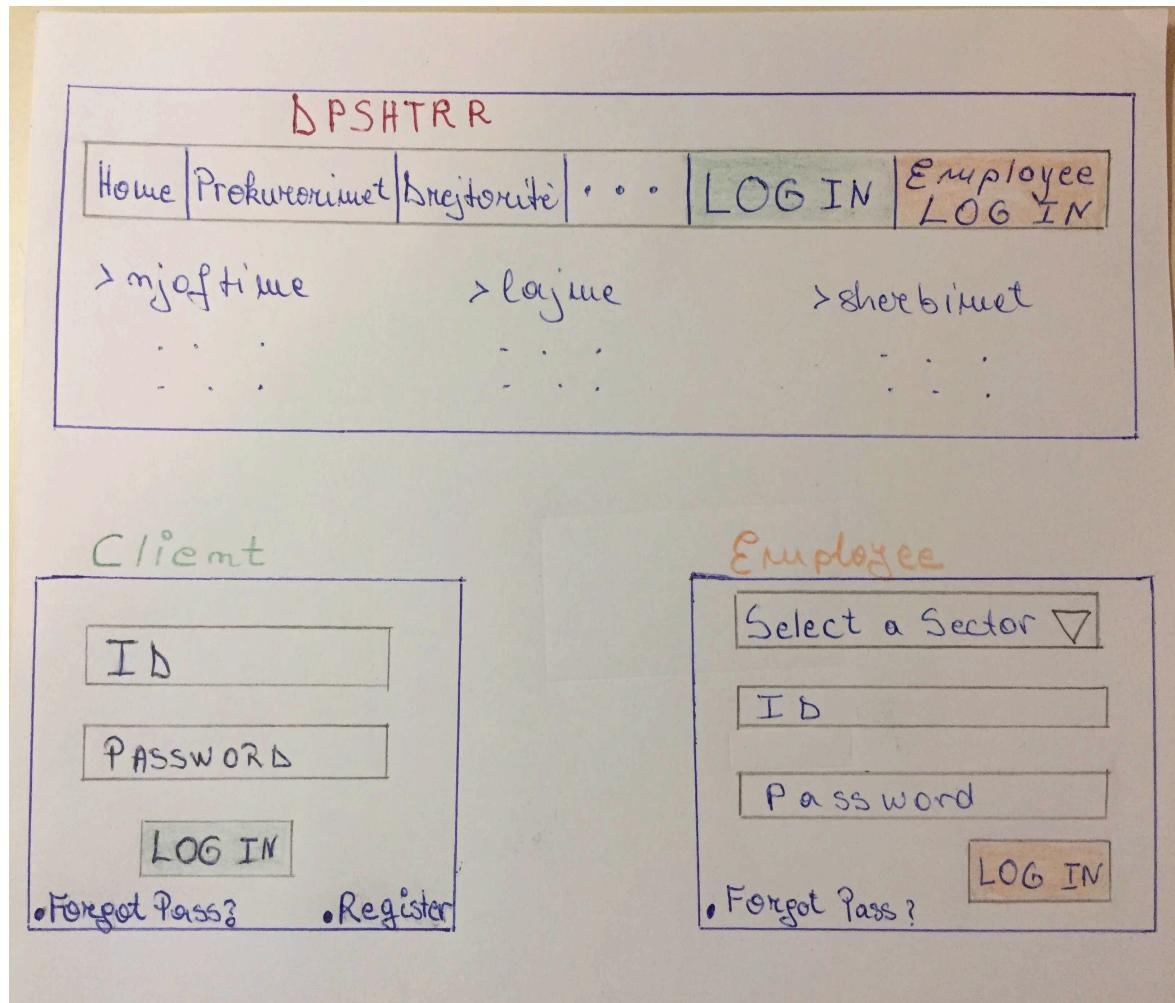






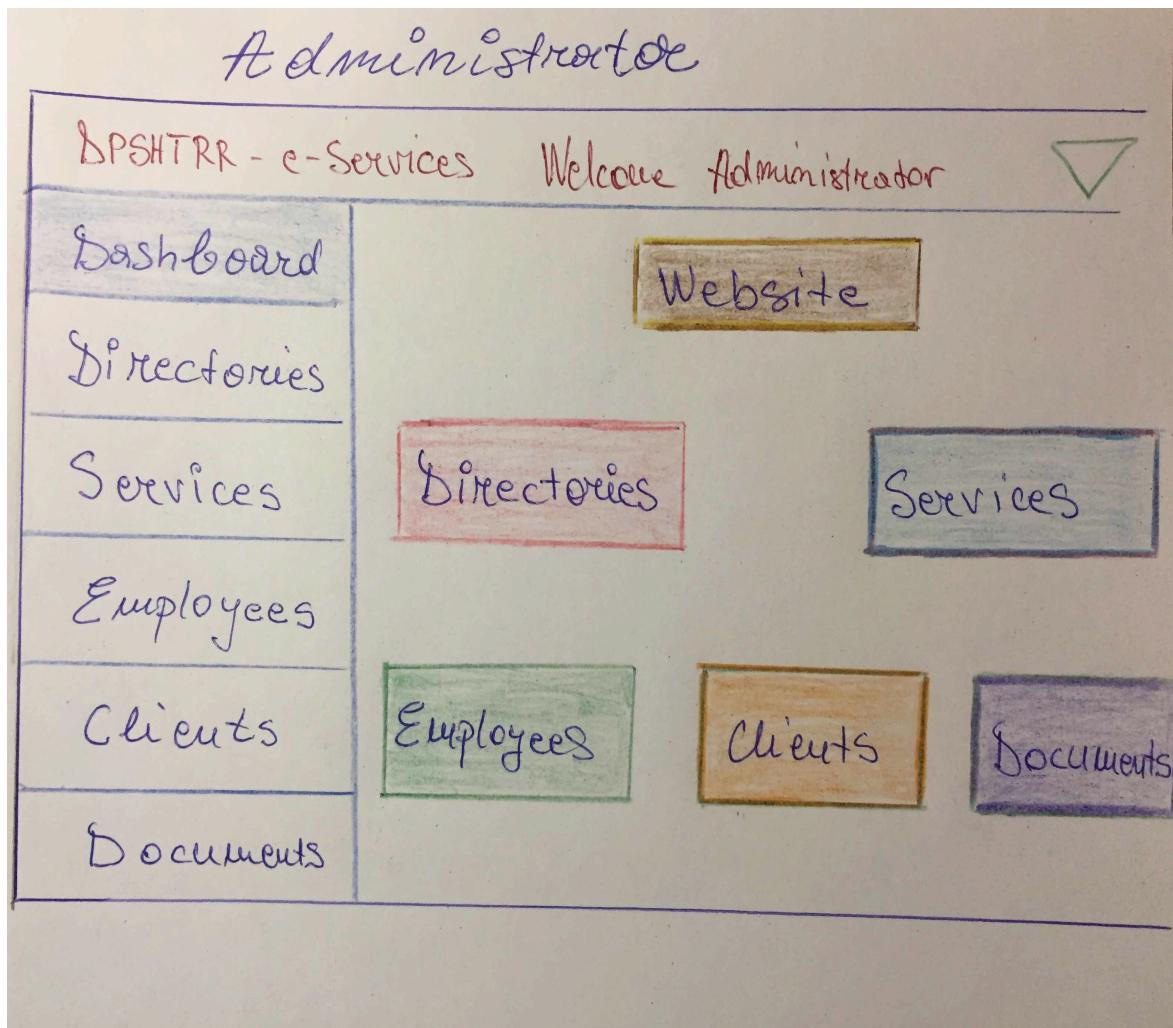


## Appendix D. Sketches



Sign up

First name	Last name
Personal Number	Gender
Birthplace	Birthdate
Street & House No.	
Email	Phone No.
Password	Register



Admin - Employees

Welcome Admin						
	ID	Name	Surname	Phone Nr.	Email	Sector
Employees						
		Add Employee				

Admin : Add Employee

Name :

Surname :

Birthplace :  Birthdate :

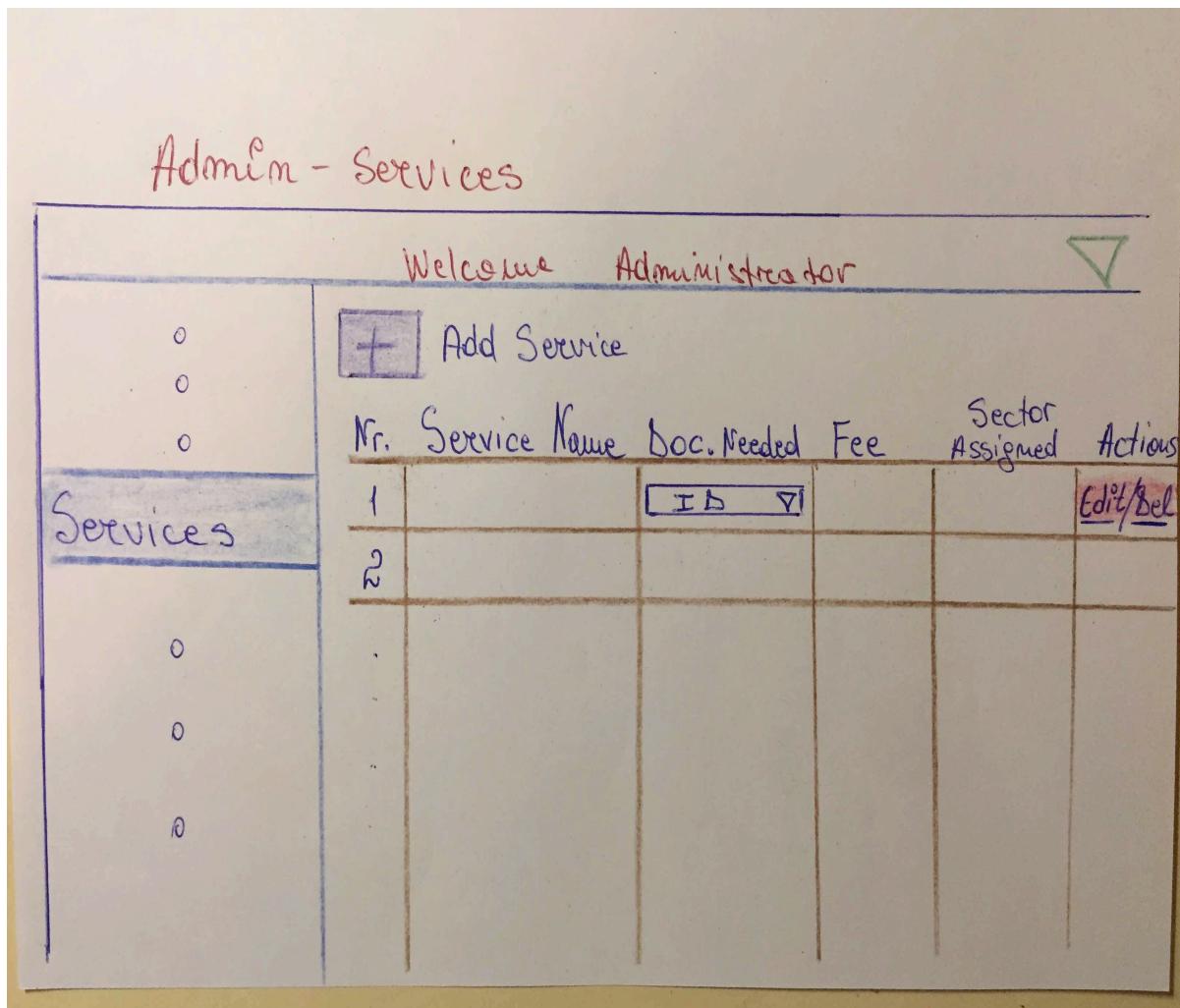
Phone Nr. :  Email :

Gender :

Personal Nr. :

Password :

Sector :  ▾



Admin : Add Service

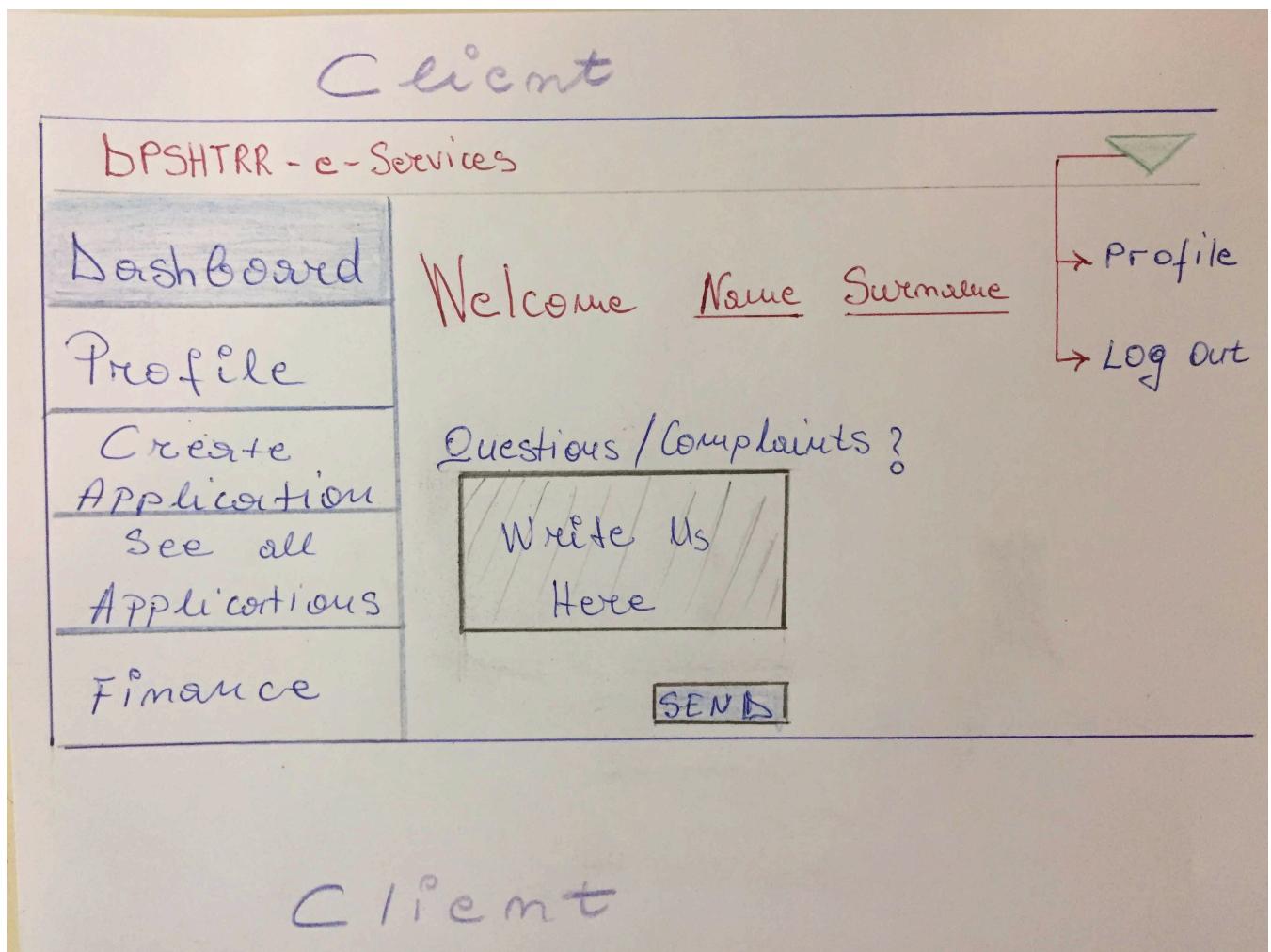
Service Name :

Documents needed :    
 ID  
  
...

Fee :

Sector assigned :    
Sector Name 1  
-----  
-----

Add Service



Client

DPSHTRR - e-Services

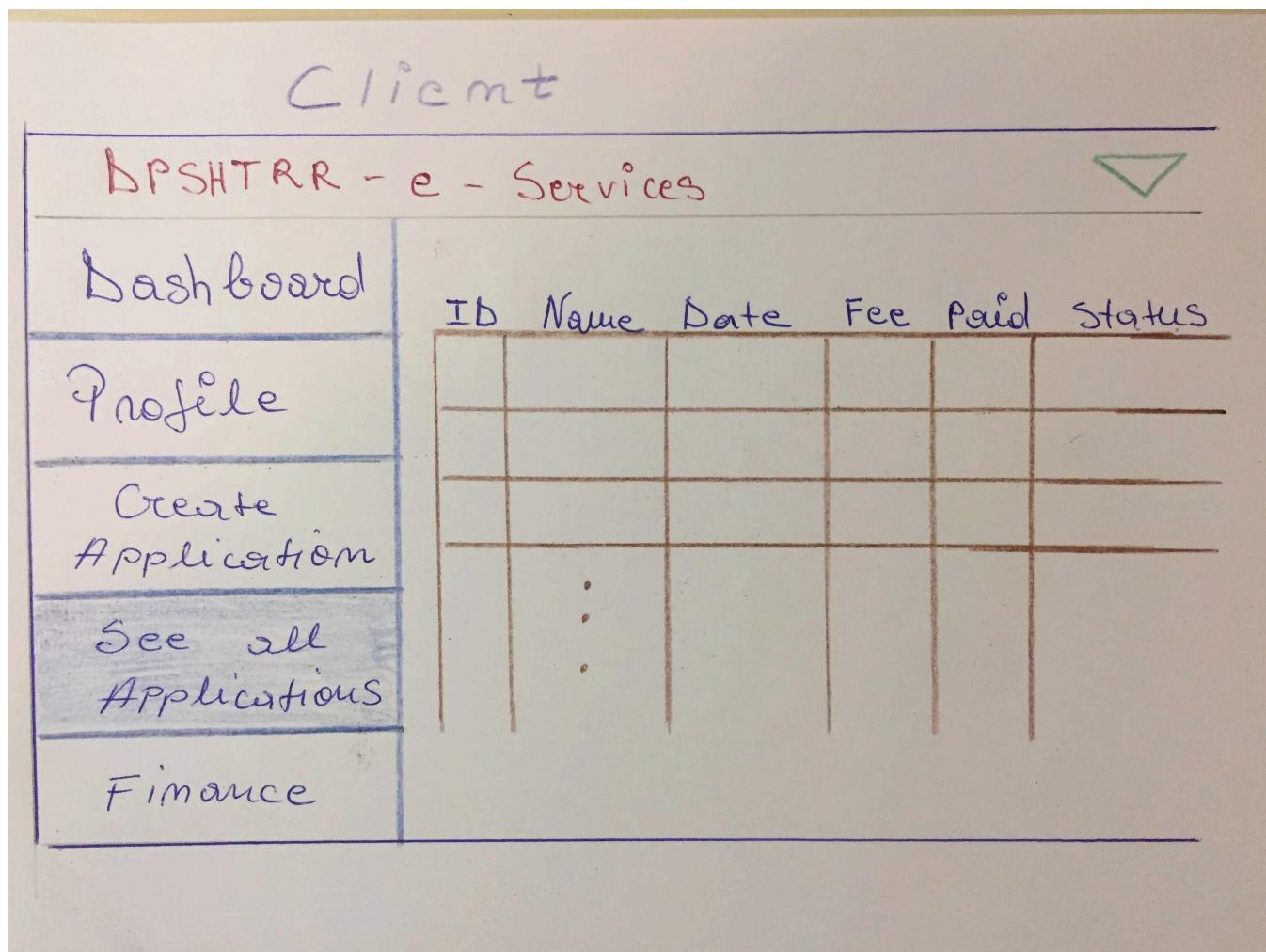
▽

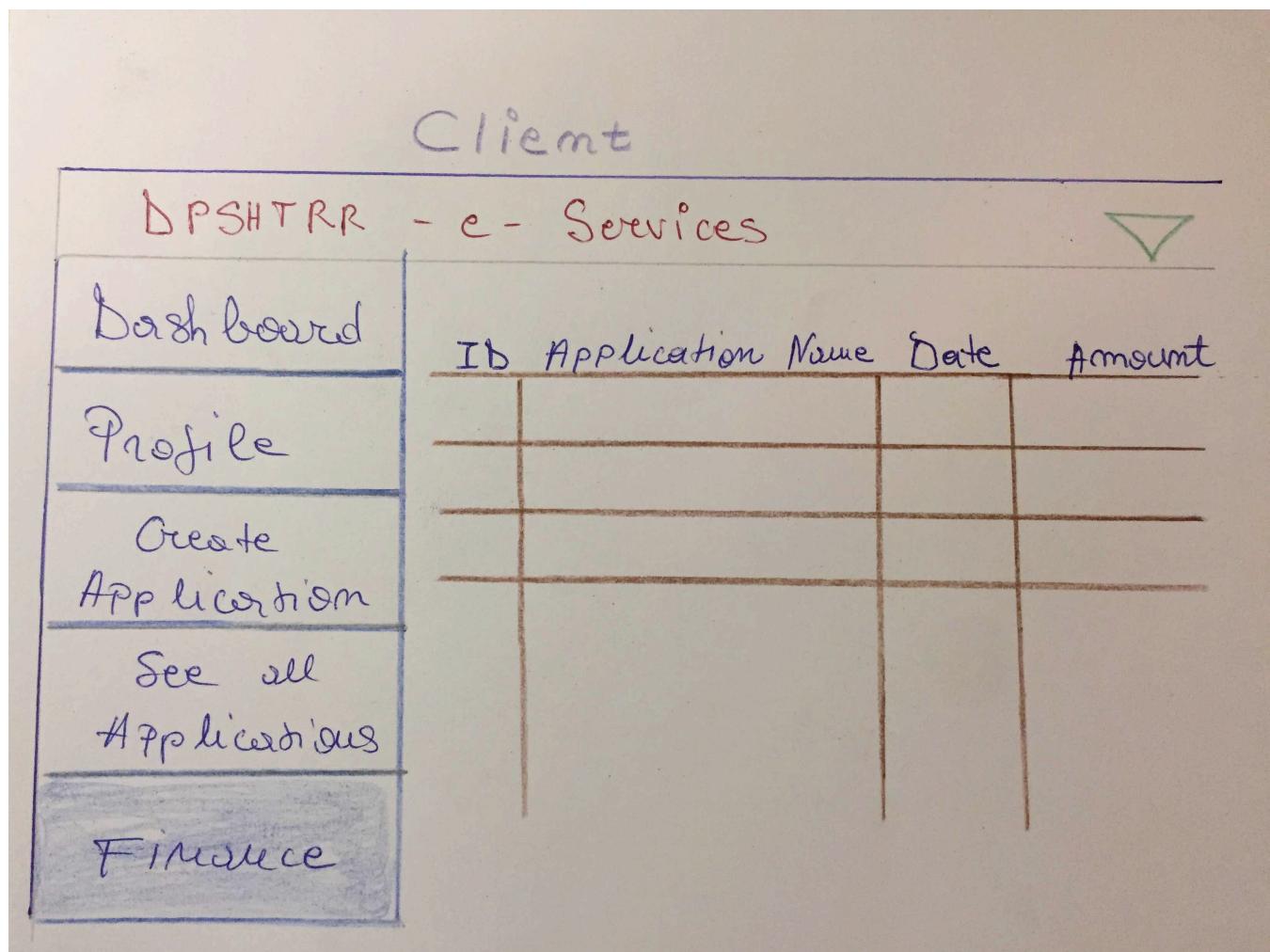
Dashboard	First Name	Last Name
Profile	Personal No.	Gender
Create Application	Birthplace	Birth date
See all Applications	Email	Phone No.
Finance	Street and House No.	Save
	Password	

Client

DPSHTRR - e-Services

Dashboard	<input type="button" value="Lista e Shërbimeve"/>	<input type="button" value="Zgjidh"/>
Profile	<u>Shërbimi X , fee y</u>	
Create Application	Doc. 1	<input type="button" value="Upload"/> X
See all Applications	Doc. 2	<input type="button" value="Upload"/> ✓
Finance	<input type="button" value="SUBMIT"/>	





# Employee

## DPSHTRR - e - Services



All Applications

Pending Applications

Finished Applications

Profile

ID	Applicant Name	Applicant Surname	Service Requested	Status
1037	Olimbia	Ziriaapi	Registration	Pending

## View an Application (Employee)

Application No: 1037

Applicant Name: Olimbi

Applicant Surname: Dirjagii

Applicant Birthdate: 23.06.1997

Applicant Birthplace: \_\_\_\_\_

→ ID : Id.pdf Download / Print

→ License : license.pdf Download / Print

⋮

Status:

Not checked	✓
Ongoing	
Completed	
Not Valid	

Change Status

