



# SOFTWARE REQUIREMENT SPECIFICATION (SRS)

HOME SERVICE SYSTEM

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**DOCUMENT APPROVAL**

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## 1. INTRODUCTION

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### 1.1 PURPOSE

Facilitating access to a diverse range of home services by providing fast and appropriate services to the consumer's needs.

### 1.2 SYSTEM IDENTIFICATION

ID - Identification

API - Application programming interface

Info - Information

JPEG - Joint Photographic Experts Group

MB - Megabyte

PDF - Portable Document Format

PNG - Portable Network Graphics

RFP - Request For Proposal

UC - Use Case

### 1.3 SYSTEM OVERVIEW

The "Home Services" system, herein referred to as "The System," will offer the most demanding home services within a single application in a few clicks. This system will provide an escape from life's stresses and concerns by connecting directly customers with the best services and best prices from providers pros in your area supported . The goal is to redefine your living experience by leveraging the power of technology to manage all aspects of life.

## 1.4 REFERENCES

Document ID	Document Title	Date	Source
02112214	Request for Proposal Document	2 November 2022	Jana Aldubai
10112204	Interview Transcripts	10 November 2022	Sana Shama
12122203	Scope Document	12 December 2022	Abeer Osman

## 1.5 DOCUMENT OVERVIEW

The purpose of this document is to collect, analyze, and give a clear picture of the Home Services System by documenting the needs of stakeholders through product characteristics and the detailed requirements of the system.

This document is divided into four main sections. The first section of this document provides an overview in terms of purpose, system identification, system overview, references, and an overview of the SRS. The second section discusses various aspects of the system, such as system interfaces, product functions, user characteristics, project constraints, and assumptions and dependencies. The third section highlights the specific requirements of the project through discussions of the software product features and the external interface requirements in more detail for user, hardware, and software interfaces and provides requirement traceability. Section 4 is for acronyms and abbreviations.

## 2. PRODUCT DESCRIPTION

### 2.1 Product Perspective

This system is not a self-contained system. It depends on other external components such as Google Gmail, Google Maps, and payment systems. When a user signs up in this system and enters the Gmail account, it communicates with Google Gmail to check whether the Gmail account is correct or not. Also, whenever there is a service that needs to be delivered, a map will show up the driver to the customer. This map is accessed by Google Maps. Finally, the last step before gaining any service is paying for it. This can not be done without the assistance of payment systems such as Apple pay. The system should communicate with these payment systems to ensure that the process of paying ends up successfully and in a secure manner. Figure 2.1.1 shows the context diagram for the system Home Service System.

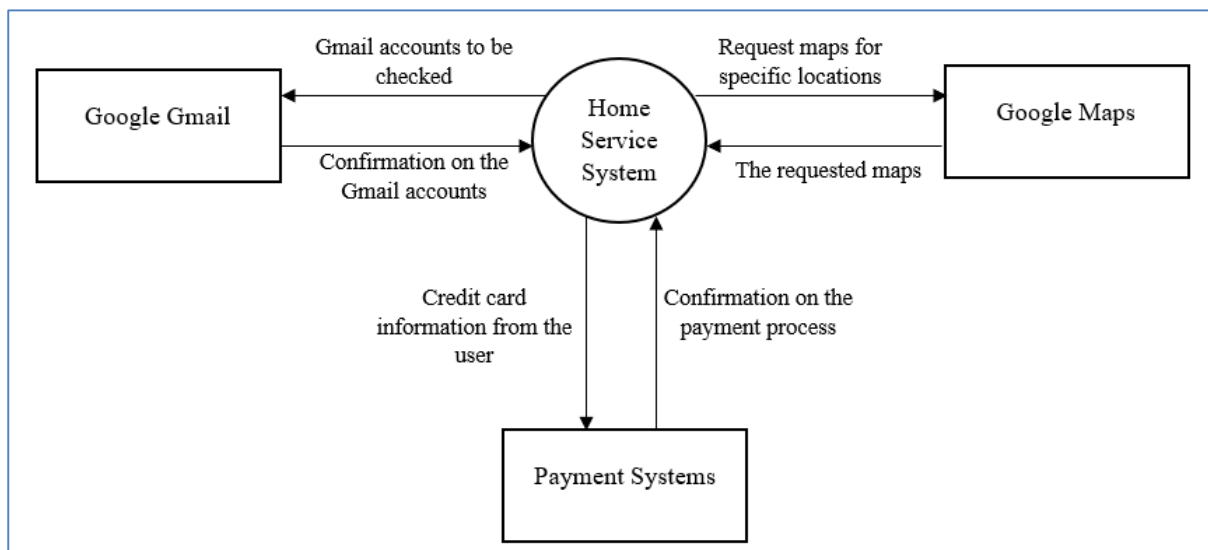


Figure 2.1.1 Context Diagram

## 2.2 System Interfaces

As mentioned before, the system has three system interfaces with other external systems. The first interface is Google Gmail which involves the requirement of signing up to the system. To sign up, the user will enter all the needed information, one of them is the Gmail account. Then the system will send Gmail account to Google Gmail and wait for confirmation on which is a correct account or not. The second interface is Google Maps which involves the requirement of ordering any type of services. The system will show the customer the live location of the driver to keep track of him. In order for this to happen, the system will request maps for specific locations to Google Maps and wait for their maps. The third interface is the payment system which involves the requirement of paying for a service. The user will enter the credit card information and the system will send them to the payment system. The system will wait for the confirmation of the payment process.

## 2.3 Product Functions

The system has 4 main functions. The first main function is delivering homemade food for those who are not able to make their food themselves such as people who live alone. The second main function is to provide babysitting services for those who need someone to take care of their children temporarily such as parents. The third main function is offering tutors for those who need tutorials in different courses taught in schools or universities such as students. The fourth main function is to provide painting services for those who don't have time to search for good painters such as parents. Figure 2.3.1 shows a use case diagram for the main 4 functions.

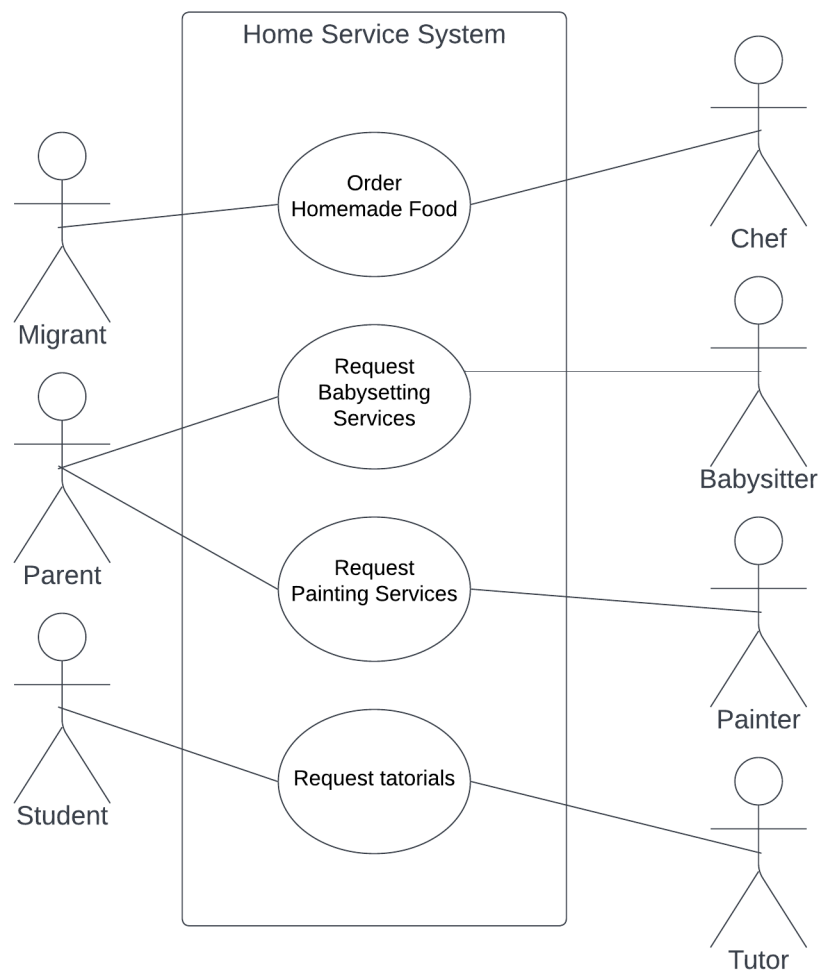


Figure 2.3.1 use case diagram

## 2.4 User Characteristics

Role	Educational Level	Experience	Technical Expertise
<b>Chef</b>	Diploma	Culinary field.	Medium
<b>Babysitter</b>	High School	Community service.	High
<b>Tutor</b>	Bachelor's Degree	Community service.	High
<b>Painter</b>	Less Than High School	Art field	Medium
<b>Migrant</b>	Bachelor's Degree	Education field.	High
<b>Parents</b>	Bachelor's Degree	Psychotherapy field	Medium



## 2.5 Constraints

One of the challenges and limits that the system may face and lead to a delay in its development process is the regulatory policies. For example, getting a license from the commercial ministry may take some time, since the system consists of several different jobs, and obtaining licenses to start the project may take some time and thus delay the system development process.

And another thing, when our system is linked to another system, some obstacles and challenges may occur, including the other application being a closed source and there being no codes and diagrams available for this application, and this may cause a delay in the development process.

## 2.6 Assumptions and Dependencies

We assumed that the devices on which the system will be loaded contain a scanner reader tool, if it does not, we should change the requirements accordingly.

### 3. SPECIFIC REQUIREMENTS

#### 3.1 Software Product Features

##### 3.1.1 Use Case

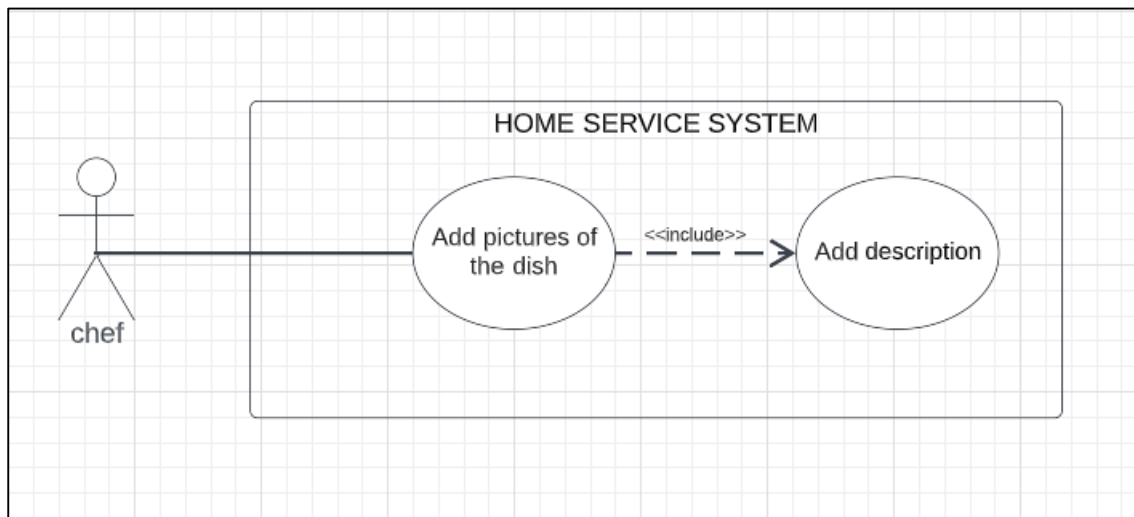


Figure 3.1 Use Case Diagram( FR.1.1.1)

<b>Use Case ID</b>	ADD_PIC_2.1
<b>Name</b>	Add pictures of the dish
<b>Actor</b>	Chef
<b>Brief Description</b>	This use case allows the chef to add pictures of his / her dishes and a description of those dishes
<b>Related use case</b>	Add description
<b>Pre-condition</b>	The chef must have a valid account The chef must be connected to the internet
<b>Basic Flow</b>	1- chef logged in to the system 2- chef add a picture of the dish 3- the system saves the picture to the database

	<ul style="list-style-type: none"> <li>4- the chef requests to add a description</li> <li>5- the system displays a blank description</li> <li>6- the chef adds a description and clicks save</li> <li>7- the system saves the description</li> <li>8- The system displays the picture and its description to the consumers</li> </ul>
<b>Alternative Flow</b>	In step 7 in the basic flow, the system did not save the description . The system informs the chef that the description cannot be saved.
<b>Exception Flow</b>	No exception Flow
<b>Failure</b>	The chef has a poor internet
<b>Failure condition</b>	The action is not valid
<b>Postcondition</b>	The chef has successfully completed her/ his action of adding
<b>Constraints</b>	The system shall be able to operate in various views (Mobile view, PC view)
<b>Activity diagram</b>	Refer Appendix Sequence Diagram

Table 3.1 Use Case (FR 1.1.1)

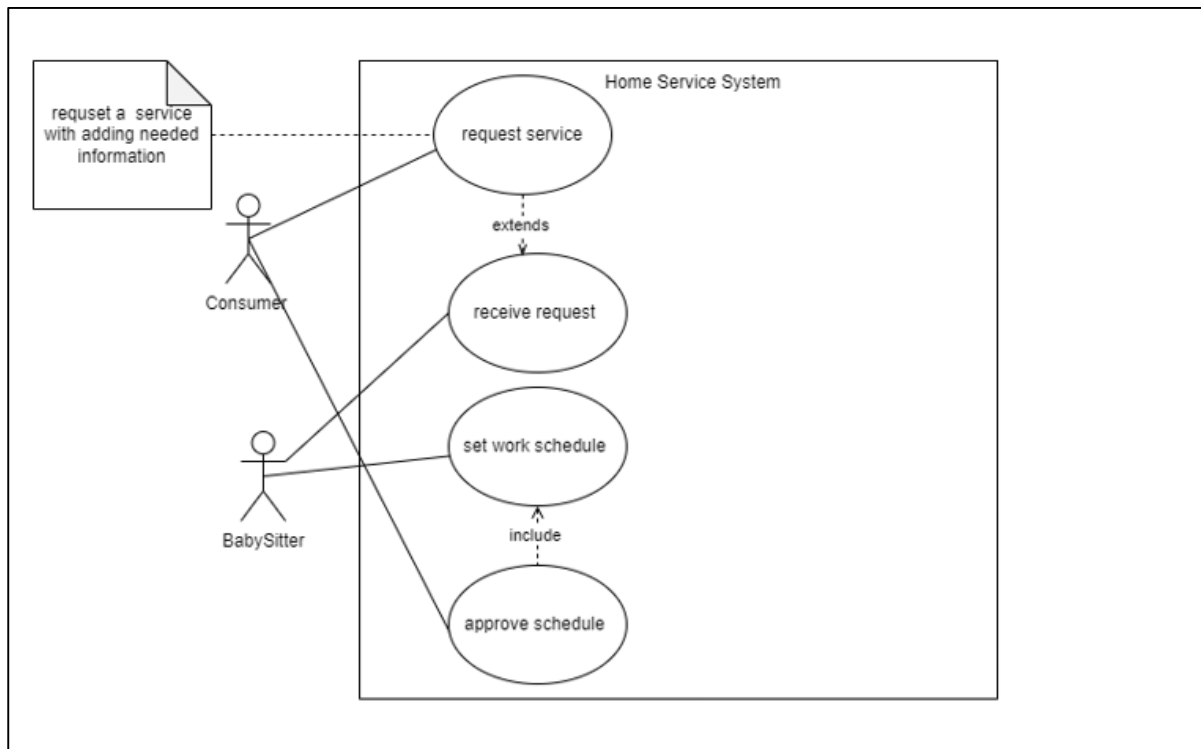


Figure 3.2 Use Case Diagram( FR.1.2.1)

<b>Use Case ID</b>	STSCH4528
<b>Name</b>	Set Work Schedule
<b>Actor</b>	Babysitter
<b>Brief Description</b>	The use case included by the use case “approve schedule”
<b>Pre-Conditions</b>	<ol style="list-style-type: none"> <li>1. The consumer requests a babysitter service.</li> <li>2. The babysitter receives the request</li> </ol>
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. The consumer requests a service</li> <li>2. The consumer selects the babysitting service</li> <li>3. The consumer selects the provider</li> <li>4. The babysitter accepts the request</li> <li>5. The babysitter can negotiate with the consumer in chat, to know the details <b>A-1</b></li> <li>6. The babysitter set a schedule of her/his hours of operation and care plan (in request process) and send it to the consumer</li> <li>7. The consumer approves the schedule <b>A-2</b></li> </ol>

<b>Alternative Flow</b>	<p><b>A-1</b> the consumer and the babysitter do not want to negotiate by chat, so the system sends to the consumer the default work schedule of the babysitter</p> <p><b>A-2</b> if the consumer does not approve the schedule the process back to basic flow <b>5</b> or abort(cancel) and searches for another babysitter offer</p>
<b>Exception Flow</b>	No Exception flow is applicable
<b>Post-Conditions</b>	<ol style="list-style-type: none"> <li>1. The copy of the work schedule sent to consumers' emails</li> <li>2. The payment process shall start</li> </ol>
<b>Constraints</b>	The system shall display on a map the nearest service provider needed by the customer 10 km or less (when searching for a provider)
<b>Failure</b>	The work schedule cannot be shared between the consumer and babysitter or the schedule cannot be settled by the babysitter
<b>Failure conditions</b>	The work schedule is no longer available due to a network failure or due to a system being crashed

Table 3.2 Use Case (FR.1.2.1)

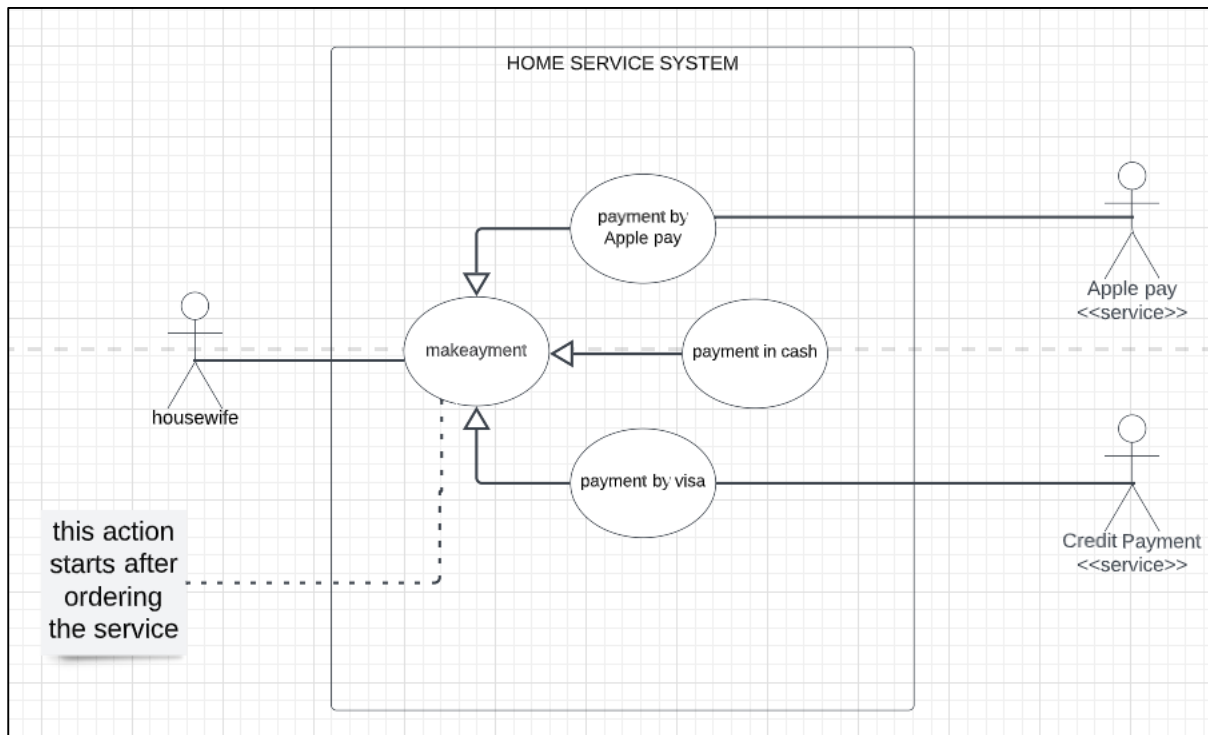


Figure 3.3 Use Case Diagram( FR.1.4.2)

<b>Use Case ID</b>	MAKE_PAY_1.1
<b>Name</b>	Make Payment
<b>Actor</b>	Housewife
<b>Brief Description</b>	This use case allows the housewife to complete her payment after ordering the service
<b>Related use case</b>	1- pay by Apple pay 2- pay in cash 3- pay by visa
<b>Pre-condition</b>	1- The housewife must have a valid account 2- The housewife has to have a valid card 3- The housewife must be connected to the internet
<b>Basic Flow</b>	1- Housewife logged in to the system 2- Housewife request Payment

	<p>3- The system sends a msg to the housewife to select the way of payment (pay by Apple pay, pay in cash, and pay by visa)</p> <p>4- the housewife chooses to pay in cash</p> <p>5- the system sends a notification to the providers (cash on delivery)</p>
<b>Alternative Flow No.1</b>	<p>In step 4 in the basic flow, the housewife did not choose to pay in cash</p> <p>4- the housewife chooses to pay by Apple pay</p> <p>5-the system validates the payment from the Apple pay service</p> <p>6-the Apple pay service verifies the payment</p> <p>7-the Apple pay service returns a successful payment msg to the system</p> <p>8-the system returns msg (payment is done successfully) to the housewife</p> <p>9- the system notifies the provider</p>
<b>Alternative Flow No.2</b>	<p>In step 4 in the basic flow, the housewife did not choose to pay in cash or pay by Apple pay</p> <p>4- the housewife chooses to pay by visa</p> <p>5-the system validates the payment from the Credit Payment service</p> <p>6-the Credit Payment service verifies the payment</p> <p>7-the Credit Payment service returns a successful payment msg to the system</p>

	<p>8-the system returns msg (payment is done successfully) to the housewife</p> <p>9- the system notifies the provider ordering</p>
<b>Exception Flow</b>	The system crashed down
<b>Failure</b>	The housewife has an invalid or expired card
<b>Failure condition</b>	<p>The payment is not valid</p> <p>The card is not valid</p>
<b>Post-condition</b>	The housewife has successfully completed her payment
<b>Constraints</b>	The system shall be able to operate in various views (Mobile view, PC view)
<b>Rules</b>	The housewife must only select one way of payment
<b>Activity Diagram</b>	Refer to Appendix Sequence Diagram

Table 3.3 Use Case (FR 1.4.2)

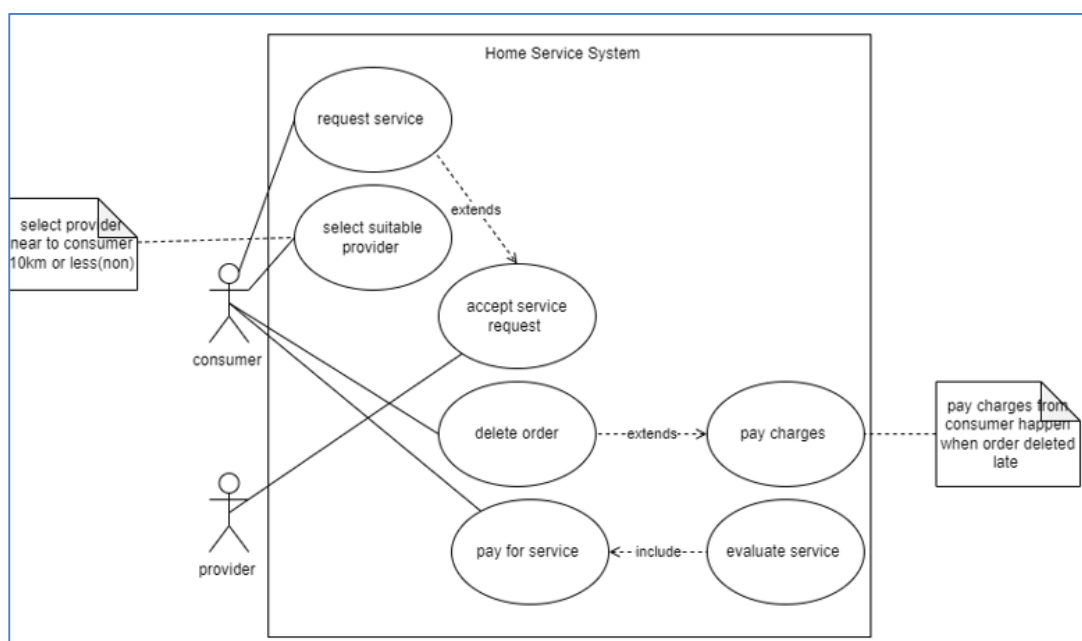




Figure 3.4 Use Case Diagram (FR 1.4.3)

<b>Use Case ID</b>	EVAL4528
<b>Name</b>	Evaluate Service
<b>Actor</b>	Consumer
<b>Brief Description</b>	The use case includes the use case “pay for service”
<b>Pre-Conditions</b>	The consumer paid for the service.
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. The consumer requests a service</li> <li>2. The consumer selects the provider</li> <li>3. The provider accepts the request</li> <li>4. The service is done (No cancellation happens from the consumer) <b>E-1</b></li> <li>5. The consumer pays for the service after the payment method selected</li> <li>6. The consumer receives the E-receipt</li> <li>7. an evaluation form appears to be filled after the payment the process has been completed to reflect on provider rank (points) <b>A-1</b></li> </ol>
<b>Alternative Flow</b>	<b>A-1</b> the consumer wants to pay only and does not want to fill the evaluation form .other calculation happens to add points for the provider and the evaluation process abort
<b>Exception Flow</b>	<b>E-1</b> the consumer cancels the request the evaluation appears after paying the charges for the cancellation to evaluate the application not(service-provider)
<b>Post-Conditions</b>	<ol style="list-style-type: none"> <li>1. The copy of the evaluation response sent to consumers’ emails</li> <li>2. The rank (points) of the provider updated</li> </ol>
<b>Constraints</b>	The system shall display on a map the nearest service provider needed by the customer 10 km or less
<b>Failure</b>	The evaluation form cannot be displayed

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<b>Failure conditions</b>	The evaluation form is no longer available due to a network failure or due to a system being crashed
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Table 3.4 Use Case (FR 1.4.3)

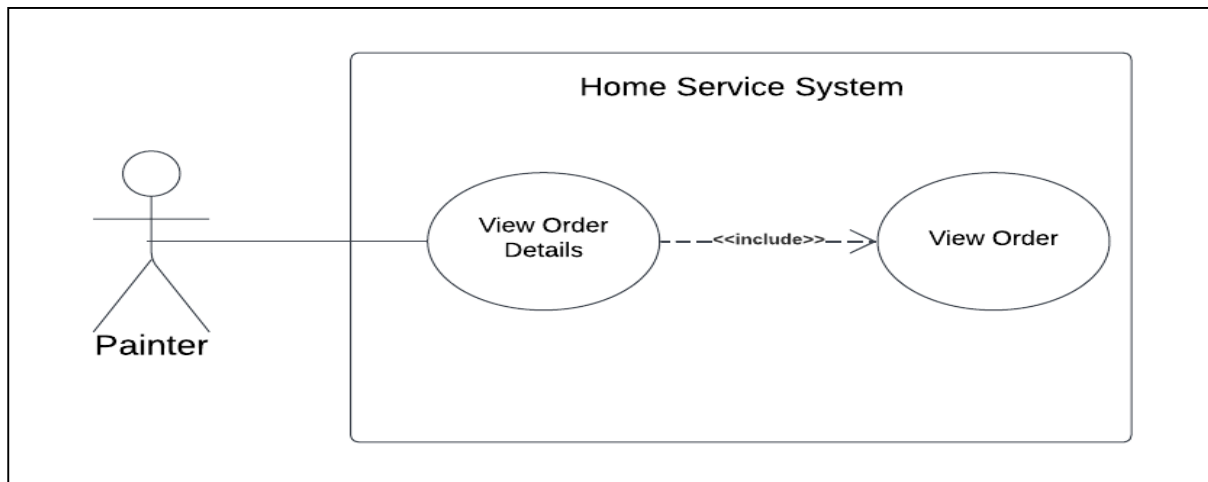


Figure 3.5 Use Case Diagram (FR 1.4.1)

<b>Use Case ID</b>	US - 6
<b>Brief Description</b>	A painter can see number of orders with its details that has been created by the customers.
<b>Actor</b>	Painter
<b>Related use case</b>	View Order
<b>Pre-Conditions</b>	1. The painter must be logged on to the system successfully.
<b>Basic Flow</b>	1. The system will display customer's orders. 2. The painter can view the order with corresponding information regarding it.
<b>Alternative Flow</b>	-
<b>Exception Flow</b>	1.1 The customer doesn't create any order 1.1.1 The system displays message "There is no orders yet"
<b>Post-Conditions</b>	All orders and their details must be presented to the painter.
<b>Constraints</b>	The system shall be able to handle 2000 painter at the same time.
<b>Rules</b>	Before start execute this use case, create order should be execute it first
<b>Activity Diagram</b>	-

Table 3.6 Use Case (FR 1.4.1)

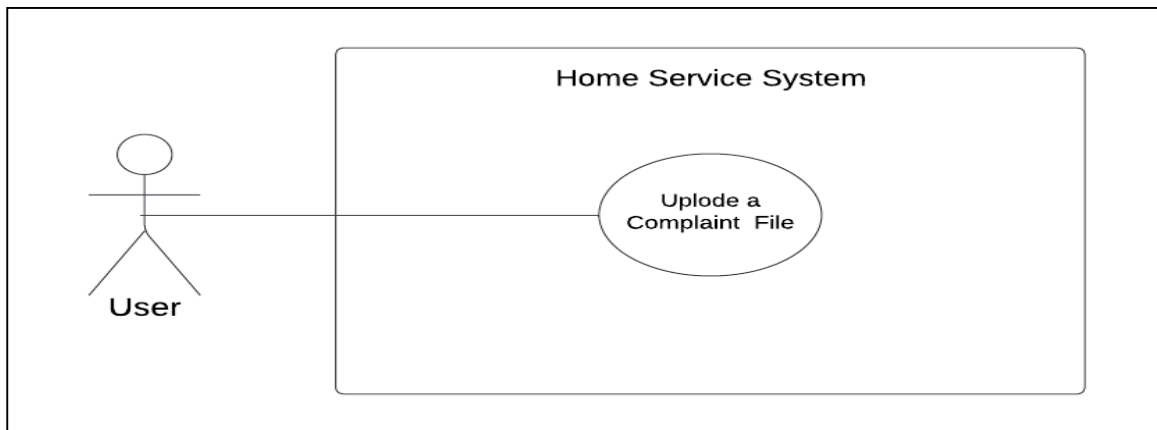


Figure 3.7 Use Case Diagram (FR 1.6.1)

<b>Use Case ID</b>	US - 12
<b>Brief Description</b>	The user will be able to file his/her complaint through system by uploading PDF/Word file which contains her/his compliments.
<b>Actor</b>	User
<b>Pre-Conditions</b>	The user must be logged on to the system successfully.
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. The user selects a file on the Local File List.</li> <li>2. The user clicks “Upload” button.</li> <li>3. The system prompts the user the successful message.</li> </ol>
<b>Alternative Flow (1)</b>	Pause Upload Process:
	This activity will only happen when the system is uploading files: <ol style="list-style-type: none"> <li>1. The User clicks “Pause” button.</li> <li>2. The function of this button turns to be “Resume Transfer”.</li> <li>3. The system pauses the uploading process.</li> </ol>
<b>Alternative Flow (2)</b>	Resume Upload Process:
	This activity will only happen when the uploading is paused: <ol style="list-style-type: none"> <li>1. The User clicks “Resume” button.</li> <li>2. The function of this button turns to be “Pause”.</li> <li>3. The system resumes the uploading process.</li> </ol>
<b>Alternative Flow</b>	Stop Upload Process:

(3)	<p>This activity will only happen when system is uploading files, or the uploading is paused:</p> <ol style="list-style-type: none"> <li>1. The User clicks “Stop” button.</li> <li>2. The system stops the uploading process.</li> <li>3. The file on transfer will be saved on the system though it has not been fully uploaded</li> <li>4. The function of this button is then disabled (for there is no uploading process currently).</li> </ol>
<b>Exception Flow</b>	<p>2.1 The user uploads file with incorrect extension.</p> <p>2.1.1 The system display failure message</p>
<b>Post-Conditions</b>	The system should notify the user that the file uploaded process was successful.
<b>Rules</b>	-
<b>Constraints</b>	The uploaded file must be in PDF/ Word extension.
<b>Activity Diagram</b>	-

Table 3.7 Use Case (FR 1.6.1)

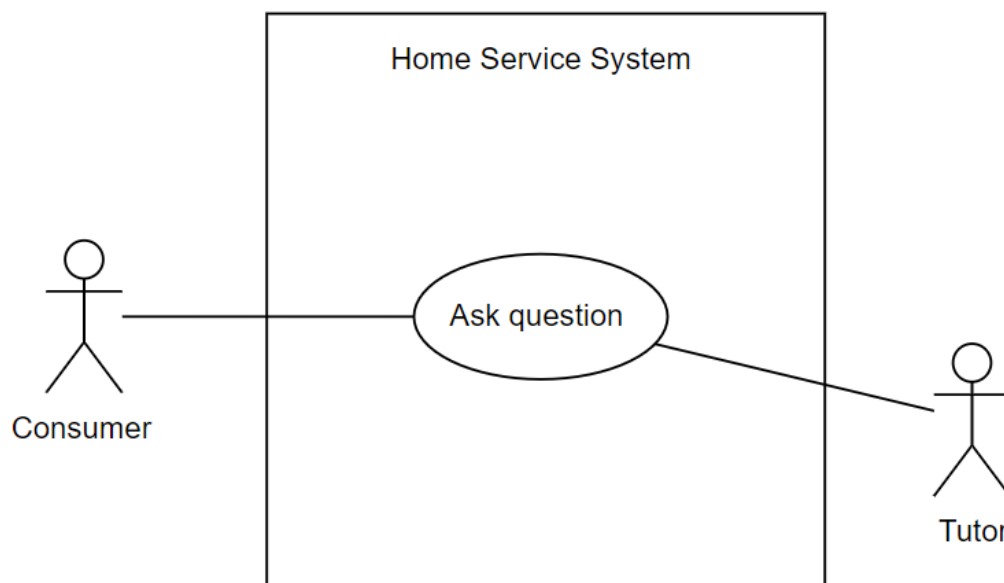


Figure 3.8 Use Case Diagram (FR 1.3.2)

<b>Use Case ID</b>	US-5
<b>Brief Description</b>	This use case provides a chat box between the consumer and tutor through which the consumer can send his or her messages.
<b>Actor</b>	Consumer and Tutor
<b>Pre-Conditions</b>	<ol style="list-style-type: none"> <li>1. The consumer/ tutor must be logged on to the system successfully.</li> <li>2. The consumer has already been assigned to a tutor.</li> <li>3. The tutor has already been assigned to consumers.</li> </ol>
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. The consumer/ tutor writes her or his question.</li> <li>2. The system sends the message.</li> <li>3. The use case ends.</li> </ol>
<b>Alternative Flow</b>	There is no alternative flow to do this task.
<b>Exception Flow</b>	<ol style="list-style-type: none"> <li>2.1 The system cannot send the message. <ol style="list-style-type: none"> <li>2.1.1 Continue with 3.</li> </ol> </li> </ol>
<b>Post-Conditions</b>	The system provides the updated transcribe for chat box.
<b>Rules</b>	-
<b>Constraints</b>	<ol style="list-style-type: none"> <li>1. The tutor and the consumer should have an internet connection.</li> <li>2. The task should be easy to complete after 2 hours of training with an error rate of no greater than 0.5%.</li> <li>3. The text on chat box must be recognized by the scanner reader tool.</li> </ol>
<b>Activity Diagram</b>	This use case does not have an activity diagram.

Table 3.8 Use Case (FR 1.3.2)

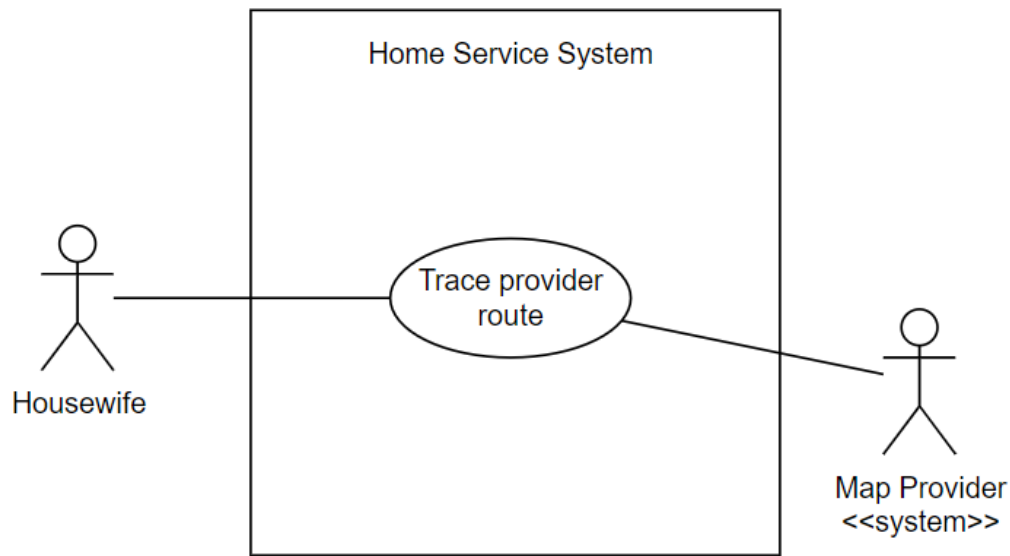


Figure 3.9 Use Case Diagram (FR 1.4.4)

<b>Use Case ID</b>	US-10
<b>Brief Description</b>	This use case provides a road map to the housewife to trace the provider's route.
<b>Actor</b>	Housewife
<b>Pre-Conditions</b>	1. The housewife must be logged on to the system successfully. 2. The housewife's order request was accepted by the provider.
<b>Basic Flow</b>	1. The housewife requests to trace the provider's route. 2. The system requests a road map from the map provider system. 3. The system provides a road map for the housewife. 4. The use case ends.
<b>Alternative Flow</b>	There is no alternative flow to do this task.

<b>Exception Flow</b>	2.1 The system cannot connect to the map provider system.  2.1.1 The system displays a message stating that the road map is not available.  2.1.2 Continue with 4.
<b>Post-Conditions</b>	The system provides the road map in responsive size.
<b>Rules</b>	-
<b>Constraints</b>	1. The housewife's device should have an internet connection.  2. The task should be easy to complete after 2 hours of training with an error rate of no greater than 0.5%.
<b>Activity Diagram</b>	This use case does not have an activity diagram.

Table 3.9 Use Case Diagram (FR 1.4.4)



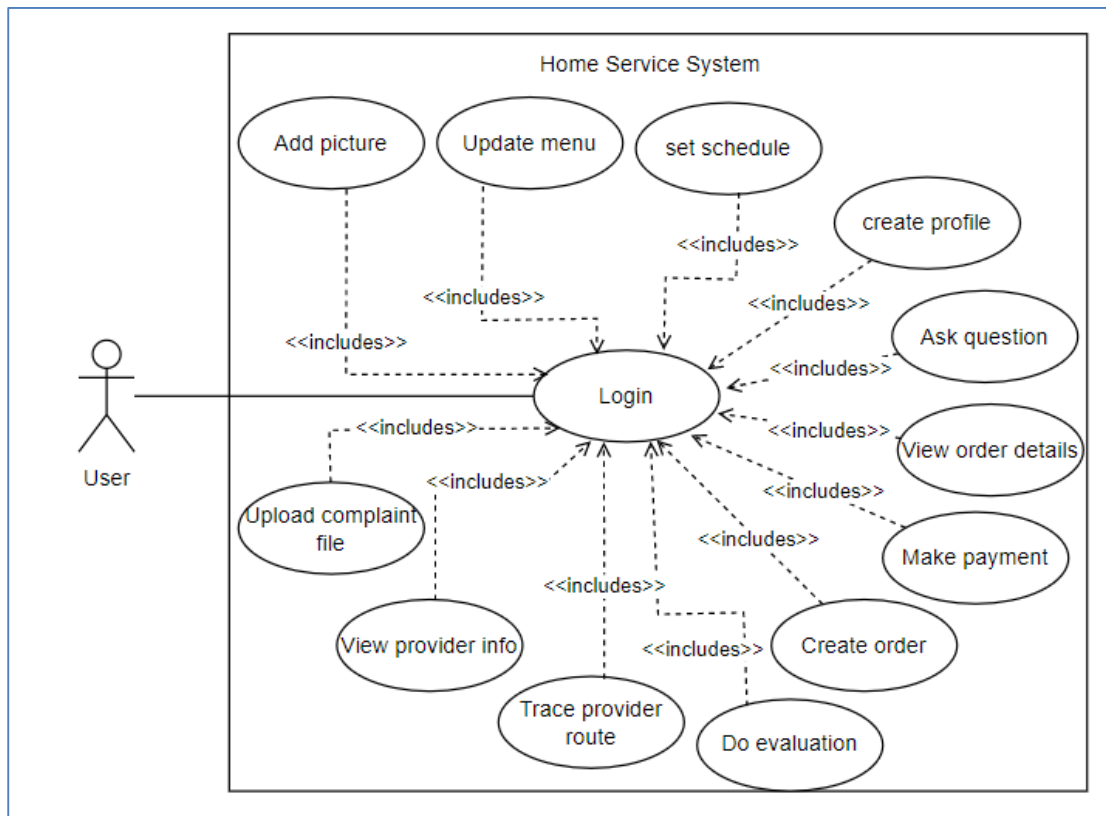


Figure 3.10 Use Case Diagram (NFR 1.6.7)

<b>Use Case ID</b>	US-13
<b>Brief Description</b>	This use case provides a security step by asking the user to enter the username and password.
<b>Actor</b>	User
<b>Pre-Conditions</b>	1.The user must have account in the system.
<b>Basic Flow</b>	1. The user enter her/his username. 2. The user enter her/his password. 3. The system validates the username and password. 4. The system allow the user to enter to her/his account. 5. The use case ends.

<b>Alternative Flow#1</b>	<p>1.1 The user forgets her/his username.</p> <p>1.1.1 The user reset her/ his username.</p> <p>1.1.2 Continue with 1</p>
<b>Alternative Flow#2</b>	<p>2.1 The user forgets her/his password.</p> <p>2.1.1 The user reset her/ his password.</p> <p>2.1.2 Continue with 1</p>
<b>Alternative Flow#3</b>	<p>3.1 The username and password incorrect.</p> <p>3.1.1 The system displays a message stating that the username or password incorrect.</p> <p>3.1.2 Continue with 1</p>
<b>Exception Flow</b>	3.1 The system cannot connect with database to validate the username and password.
<b>Post-Conditions</b>	The system login the user to her/his account.
<b>Rules</b>	-
<b>Constraints</b>	<p>1. The is task should be easy to complete after 2 hours of training with an error rate of no greater than 0.5%.</p> <p>2. The text on login page must be recognized by the scanner reader tool.</p>
<b>Activity Diagram</b>	This use case does not have an activity diagram.

Table 3.10 Use Case Diagram (FR 1.6.7)

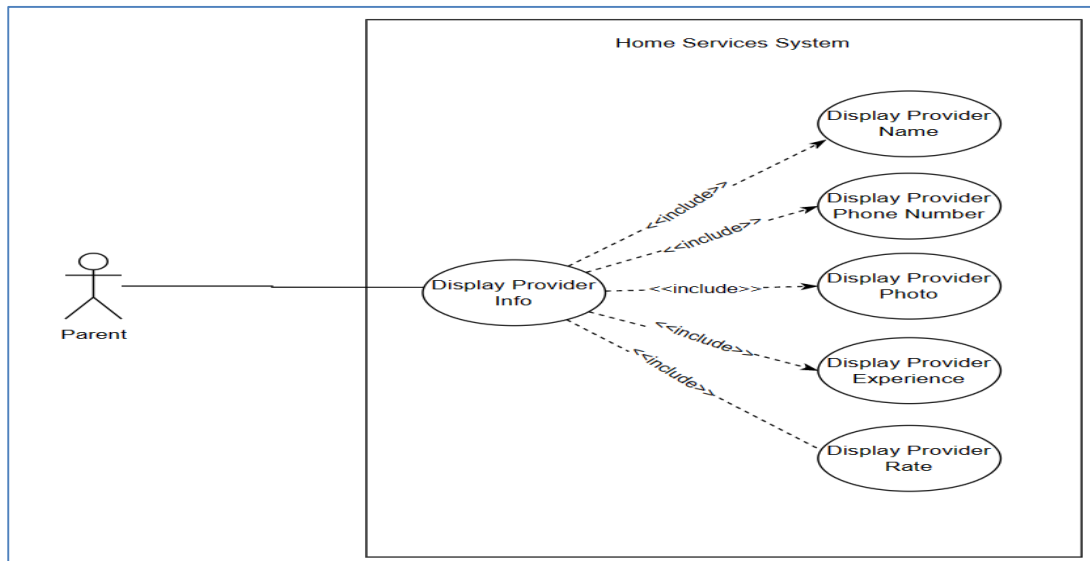


Figure 3.11 Use Case Diagram (FR 1.4.5)

<b>Use Case ID</b>	UC-11
<b>Brief Description</b>	The parent selects a provider that wants to see his or her info. The system then displays the provider info (Name, Phone Number, Photo, Experience, Rate).
<b>Actor</b>	Parent.
<b>Pre-Conditions</b>	The parent must be logged on to the system successfully.
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. Parent selects the provider that wants to see his/ her info.</li> <li>2. The system displays the provider's name.</li> <li>3. The system displays the provider's phone number.</li> <li>4. The system displays the provider's photo.</li> <li>5. The system displays the provider's experience.</li> <li>6. The system displays the provider's rate.</li> <li>7. The system displays all the previous results of a parent's selected provider.</li> <li>8. The use case ends.</li> </ol>

Alternative Flow	<p>2.1. The system can't display the provider's name.</p> <p>2.1.1 The system informs the parent that the provider's name cannot be fetched.</p> <p>2.1.2 Continue with 3.</p> <p>3.1. The system can't display the provider's phone number.</p> <p>3.1.1 The system informs the parent that the provider's phone number cannot be fetched.</p> <p>3.1.2 Continue with 4.</p> <p>4.1. The system can't display the provider's photo.</p> <p>4.1.1 The system informs the parent that the provider's photo cannot be fetched.</p> <p>4.1.2 Continue with 5.</p> <p>5.1 The system can't display the provider's experience.</p> <p>5.1.1 The system informs the parent that the provider's experience cannot be fetched.</p> <p>5.1.2 Continue with 6.</p> <p>6.1 The system can't display the provider's rate.</p> <p>6.1.1 The system informs the parent that the provider's rate cannot be fetched.</p> <p>6.1.2 Continue with 7.</p>
Exception Flow	The system is no longer available due to a network failure.
Post-Conditions	The provider info that parent wants will be displayed.
Rules	There is no rule for this use case.
Constraints	The system shall be able to transact this use case in less than 10 seconds.
Activity Diagram	This use case doesn't have an activity diagram.

Figure 3.11 Use Case Diagram (FR 1.4.5)

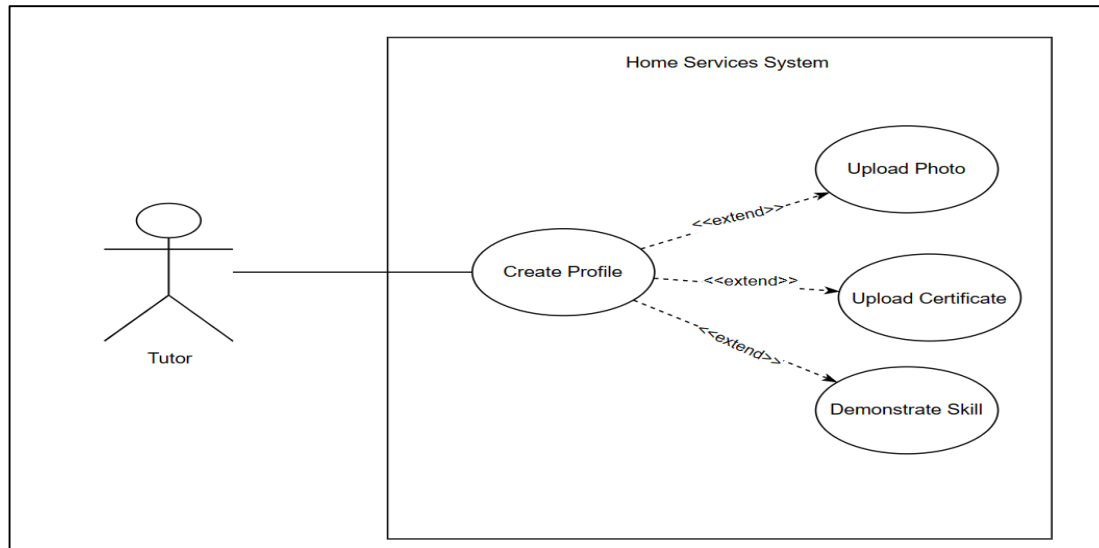


Figure 3.12 Use Case Diagram (FR 1.3.1)

<b>Use Case ID</b>	UC-4
<b>Brief Description</b>	The tutor can add photos, certificates, and skills to his/her profile. The system then creates the user profile.
<b>Actor</b>	Tutor.
<b>Pre-Conditions</b>	The tutor must be logged on to the system successfully.
<b>Basic Flow</b>	<ol style="list-style-type: none"> <li>1. The tutor uploads photos to see his/ her profile.</li> <li>2. The tutor uploads certificates to see his/ her profile.</li> <li>3. The tutor demonstrates skills to his/her profile.</li> <li>4. The system displays all the previous results of tutor's profile inputs.</li> <li>5. The use case ends.</li> </ol>
<b>Alternative Flow</b>	<ol style="list-style-type: none"> <li>1.1. The system can't process the uploaded photo.                             <ol style="list-style-type: none"> <li>1.1.1 The system informs the tutor that the uploaded photo cannot be processed.</li> </ol> </li> </ol>

	<p>1.1.2 Continue with 2.</p> <p>2.1. The system can't process the uploaded file.</p> <p>2.1.1 The system informs the tutor that the uploaded file cannot be processed.</p> <p>2.1.2 Continue with 3.</p>
<b>Exception Flow</b>	The system is no longer available due to a network failure.
<b>Post-Conditions</b>	The tutor's profile will be displayed.
<b>Rules</b>	<p>1. The uploaded photos must be 2MB of type (.PNG or .JPEG).</p> <p>2. The uploaded files must be 2MB of type (.PDF).</p>
<b>Constraints</b>	The system shall be able to execute this use case in less than 10 seconds.
<b>Activity Diagram</b>	This use case doesn't have an activity diagram.

Table 3.12 Use Case Diagram (FR 1.3.1)

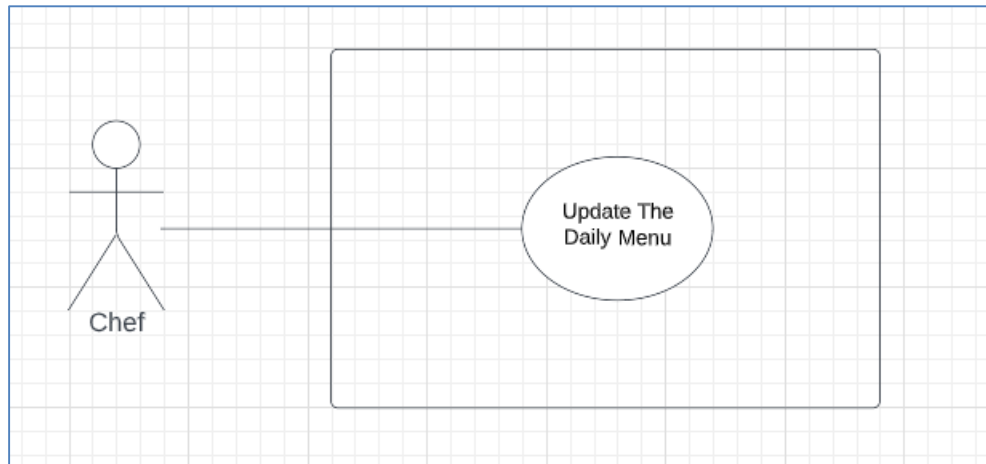


Figure 3.13 Use Case Diagram (FR 1.1.2)

<b>Use Case ID</b>	UTDM4258
<b>Use Case Name</b>	Update The Daily Menu
<b>Brief Description</b>	This use case enables the chefs to update their menu of food that will be prepared for the consumers every day so
<b>Actor</b>	Chef
<b>Pre-Conditions</b>	The chef should log in to the system successfully before updating the menu.
<b>Basic Flow</b>	<ol style="list-style-type: none"><li>1- The chef logs in to the system.</li><li>2- The chef views the current menu.</li><li>3- The chef requests for updating the menu.</li><li>4- The system checks the role of the user.</li><li>5- The system checks that the menu belongs to the chef.</li><li>6- The system accepts the chef's request.</li><li>7- The system displays the new menu after the update.</li></ol>

<b>Alternative Flow</b>	Not exist
<b>Exception Flow</b>	<p>4- The user is not a chef.</p> <p>4.1- The system displays the message “You are not a chef”.</p> <p>5- The menu does not belong to the chef.</p> <p>5.1- the system displays the message “You do not have access to update the menu”.</p>
<b>Post-Conditions</b>	The system should display the new menu after the update.
<b>Rules</b>	Only chefs have the ability to update the menu.
<b>Constraints</b>	Every chef can only update his/her own menu.
<b>Activity Diagram</b>	Refer Appendix A-2 :User story

Table 3.13 Use Case Diagram (FR 1.1.2)

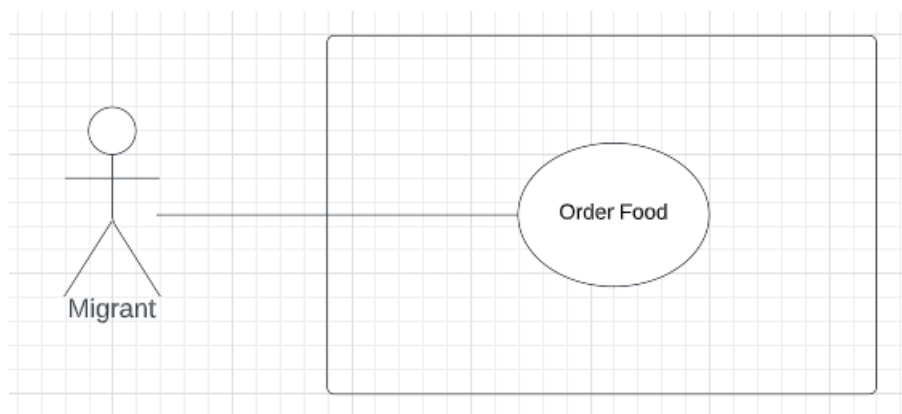


Figure 3.14 Use Case Diagram (FR 1.5.1)



<b>Use Case ID</b>	OF4258
<b>Use Case Name</b>	Order food
<b>Brief Description</b>	This use case enables the migrants to order homemade food from one's chef menu
<b>Actor</b>	Migrant
<b>Pre-Conditions</b>	The migrant should log in to the system successfully before ordering food.
<b>Basic Flow</b>	1- The migrant logs in to the system. 2- The migrant views all chefs' menus. 3- The migrant chooses dishes from one chef's menu. 4- The migrant fills in a form with all the needed information regarding the food. 5- The migrant sends the form to the chef. 6- The chef sends back a confirmation.
<b>Alternative Flow</b>	6- The chef does not accept the migrant order. 7- Steps from 2 to 6 will be repeated.
<b>Exception Flow</b>	5- The form was not sent successfully. 5.1- The system should display an error message. 6- The confirmation was not sent successfully. 6.1- The system should display an error message.
<b>Post-Conditions</b>	The system should display the confirmation from the chef to the migrant.
<b>Rules</b>	Not exist
<b>Constraints</b>	The migrant can view only the chef's menu without viewing the chef's personal information. The chef can only view the migrant needed information not all the personal information.
<b>Activity Diagram</b>	Refer Appendix A-2 :User story

Table 3.14 Use Case Diagram (FR 1.5.1)

## 3.2 External Interface Requirements

### 3.2.1 User Interfaces

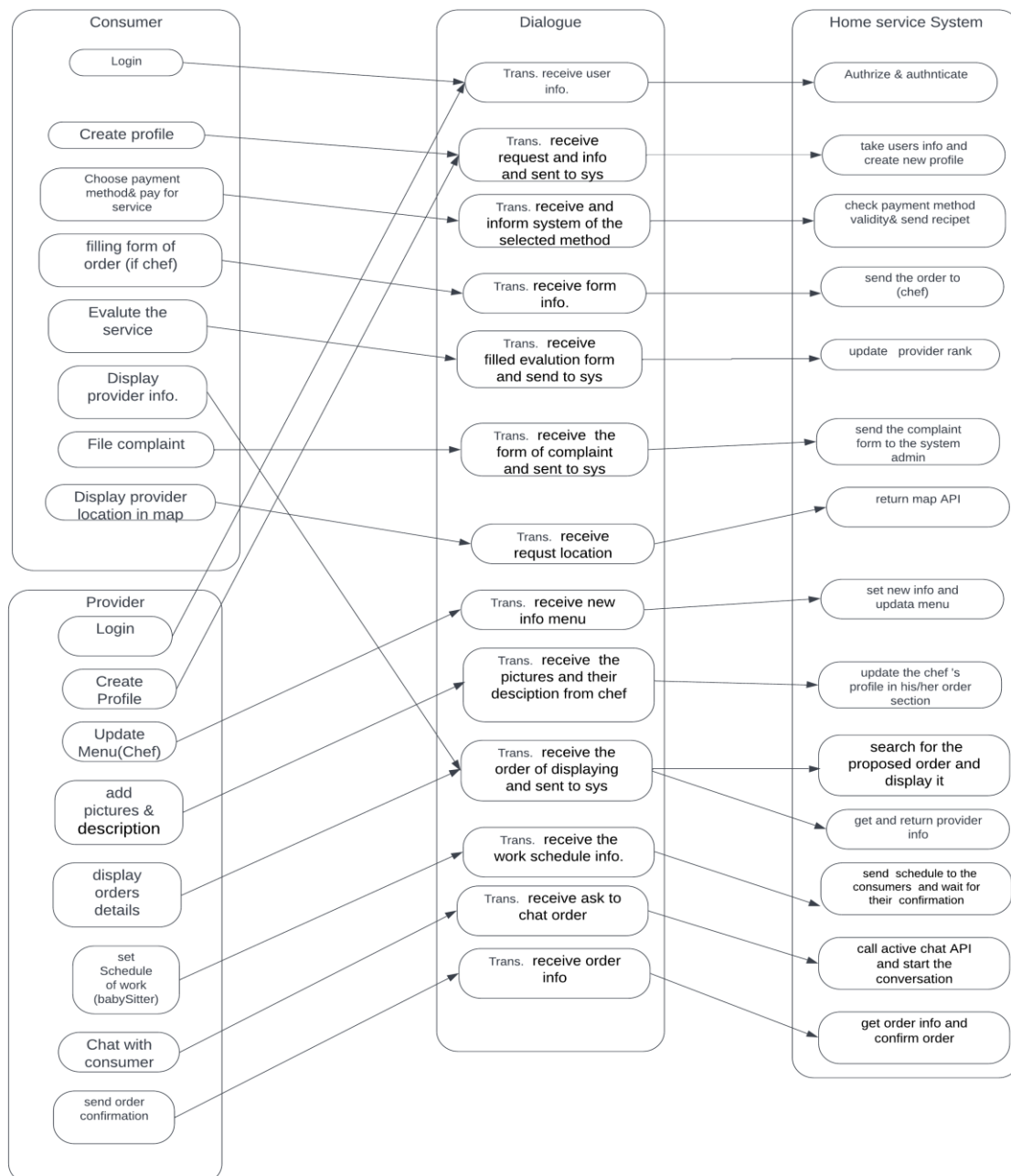


Figure 3.3 Dialogue Diagram

User Interface Name or Number	Description	User Interface Layout
<b>Login interface</b>	User shall key-in their user ID and password	Refer Appendix B, Figure B.1
<b>Map interface</b>	The system shall request the map from (Map API service) and display the map for the user	Refer Appendix B, Figure B.2
<b>User providers profile interface</b>	The user shall enter their info, then the system will create a new profile according to that info	Refer Appendix B, Figure B.3
<b>Order interfaces</b>	<ol style="list-style-type: none"><li>1. the system shall display a list of services categories</li><li>2. the system displays a list of providers info. of selected service, after displaying the map interface</li><li>3. The system shall display the order details (price, provider, type of service, location)</li></ol>	Refer Appendix B, Figure B.4

<b>Chat interface</b>	The user shall enter long text or send picture with different format	Refer Appendix B, Figure B.5
<b>Payment interfaces</b>	1-The user shall select his/her payment method (Cash, apple pay, credit card)  2-The user shall enter Card info, and password to confirm the card and to be added to the DB  3-Or to pay using apple pay (user choose a card)	Refer Appendix B, Figure B.6

Table 3.3 User Interfaces Description

### 3.2.2 Hardware Interface

*Not Applicable.*

### 3.2.3 Software Interface

- The software is developed for android, iOS, windows 7, windows 8, windows 10, etc.
- The connections of our software with other systems:  
The system uses live chat and map APIs
- The software can receive a picture of format PNG & JPEG

### 3.3 Requirements Traceability

ID	Requirement	Type	Stakeholder Source
			U- User Ce- Chef, B- Babysitter, T- tutor, Painter, M- Migrant, P - parent
1.1.1	The chef shall be able to add pictures of each dish that he/she provides and its description.	FR	Ce
1.1.2	The chef shall be able to update the daily menu.	FR	Ce
1.2.1	The babysitter shall be able to set a schedule with the consumer of her/his hours of operation and care plan	FR	B
1.3.1	The tutor shall be able to create his/her own profile  That Includes skills ,certificates photos	FR	T
1.3.2	The tutor shall be able to chat with his/ her customer to ask him/her and answer his/her questions	FR	T

<b>1.4.1</b>	The painter shall be able to see the details of the consumer's order	FR	P
<b>1.4.2</b>	The housewife shall be able to pay in Apple Pay, Visa and cash.	FR	P
<b>1.5.1</b>	The migrant shall be able to order by filling in a form and then a confirmation will be sent from the chef	FR	M
<b>1.4.3</b>	The housefather shall be able to do an evaluation for the service received.	FR	P
<b>1.4.4</b>	The housewife shall be able to trace the provider's route	FR	P
<b>1.4.5</b>	Parent shall be able to display the provider info (Name, Phone Number, Photo, experience, his/her rate)	FR	P
<b>1.6.1</b>	The user shall be able to file a complaint	FR	U
<b>1.6.2</b>	The system shall respond quickly to any transaction in less than 10 seconds.	FR	U
<b>1.6.3</b>	The system should hide the consumer's personal	NFR	U

	information including gender and phone number. (Privacy)		
<b>1.6.4</b>	The system shall handle 2000 users at the same time	NFR	U
<b>1.6.5</b>	The system shall be able to operate in various views (Mobile view, PC view)	NFR	U
<b>1.6.6</b>	The system shall be available 24/7	NFR	U
<b>1.6.7</b>	The user shall login after matching his/her email address or username and password. (Security)	NFR	U
<b>1.6.8</b>	The system shall add charges on consumers for cancelling or last-minute changes cases.	NFR	U
<b>1.6.9</b>	The system shall be able to display providers that are near to the consumer in the range of 10 km or less(serviceability/usability).	NFR	U
<b>1.6.10</b>	The user shall be able to complete the main tasks after 2 hours of training with	NFR	U

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	an error rate of no greater than 0.5%.		
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#### 4. ACRONYMS AND ABBREVIATION

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**Sys:** System

**Info.:** Information

**Trans.:** Transaction

**PNG:** Portable Network Graphics

**JPEG:** Joint Photographic Experts Group

**DB:** database

**API:** application programming interface

**ID:** Identification

**PDF:** Portable Document Format

**RFP:** Request For Proposal

**UC:** Use Case

## **APPENDIX B**

### **User Interfaces**

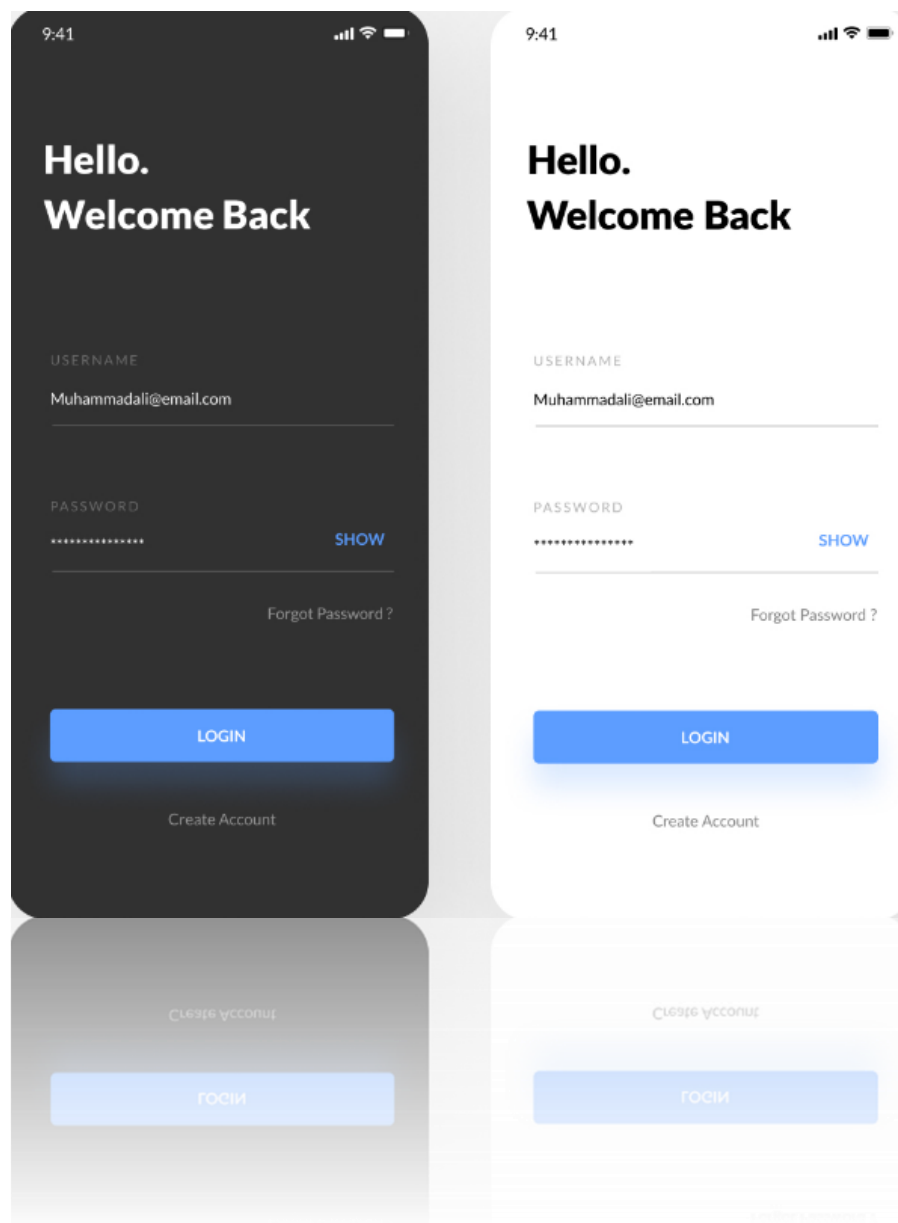


Figure B.1 login interface

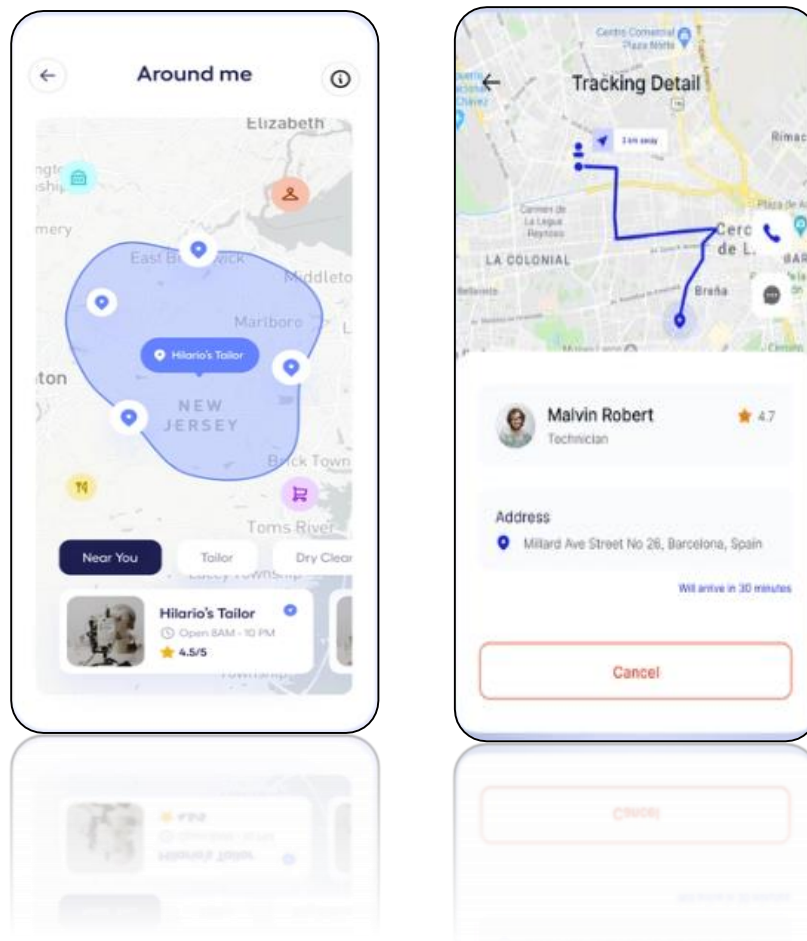


Figure B.2 map interface

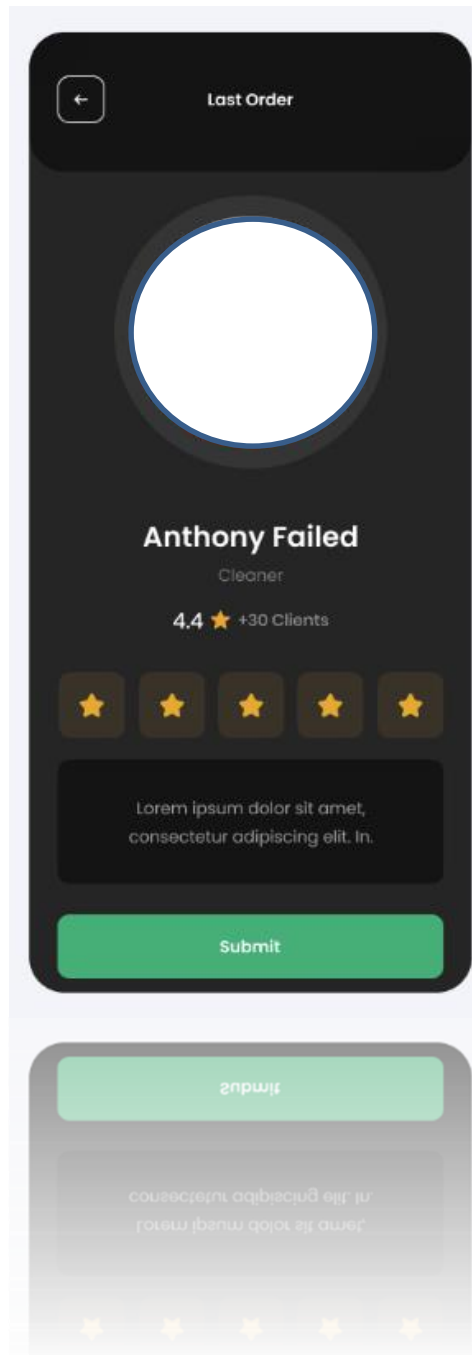


Figure B.3 User providers profile interface

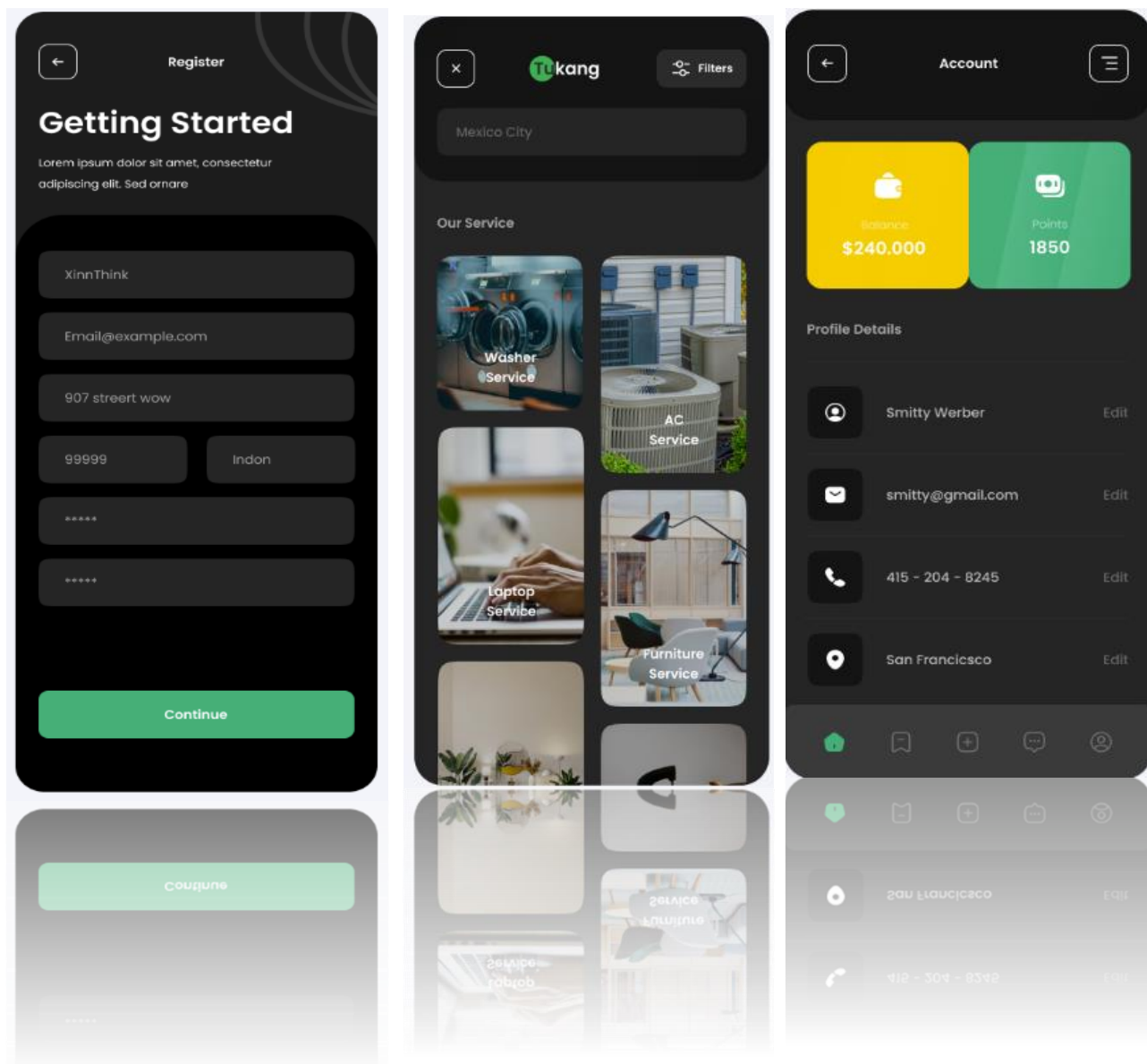


Figure B.4 order interface

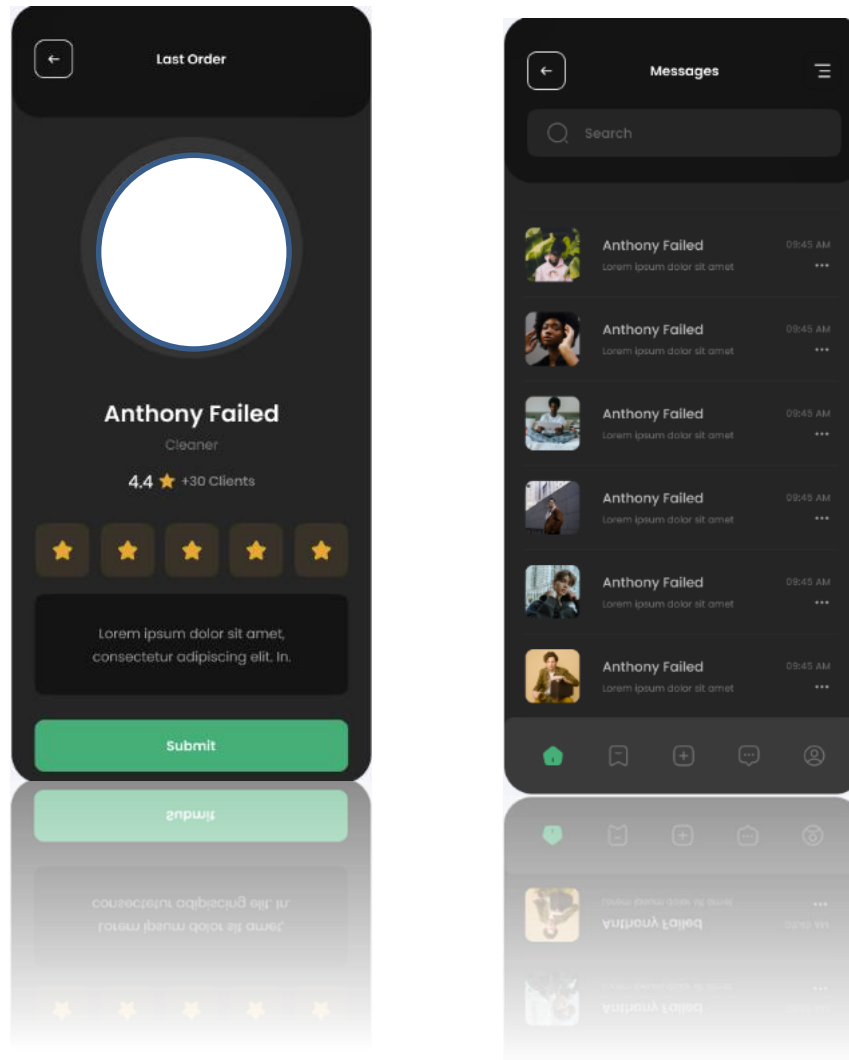


Figure B.5 chat interface

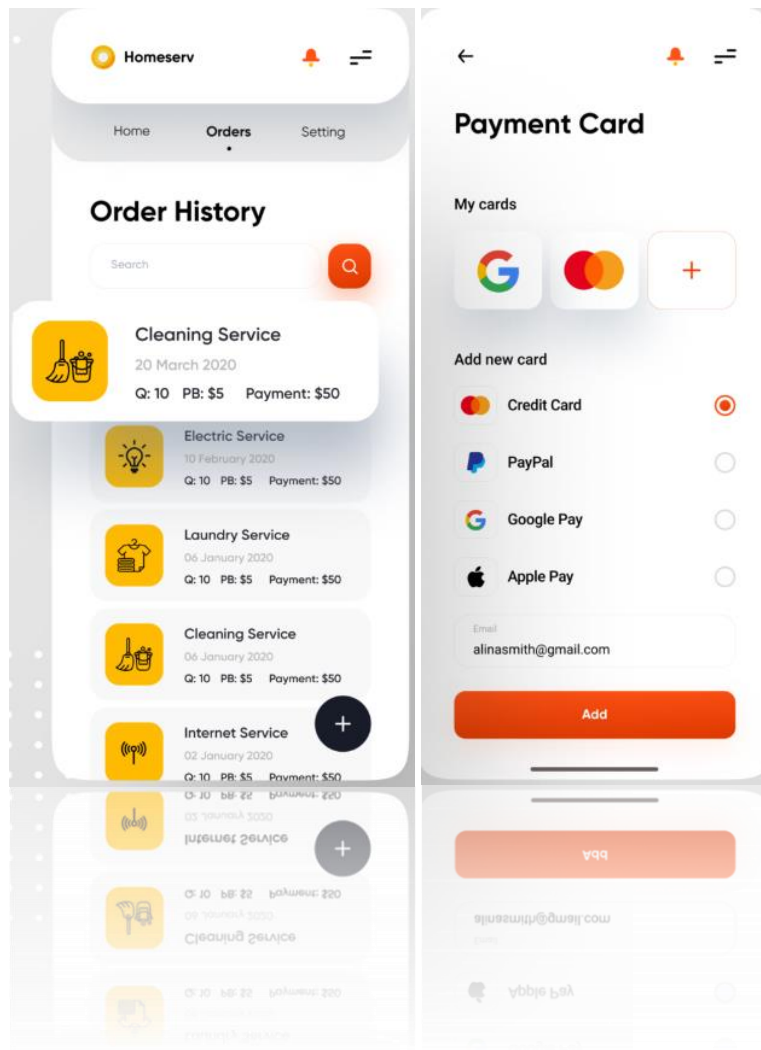
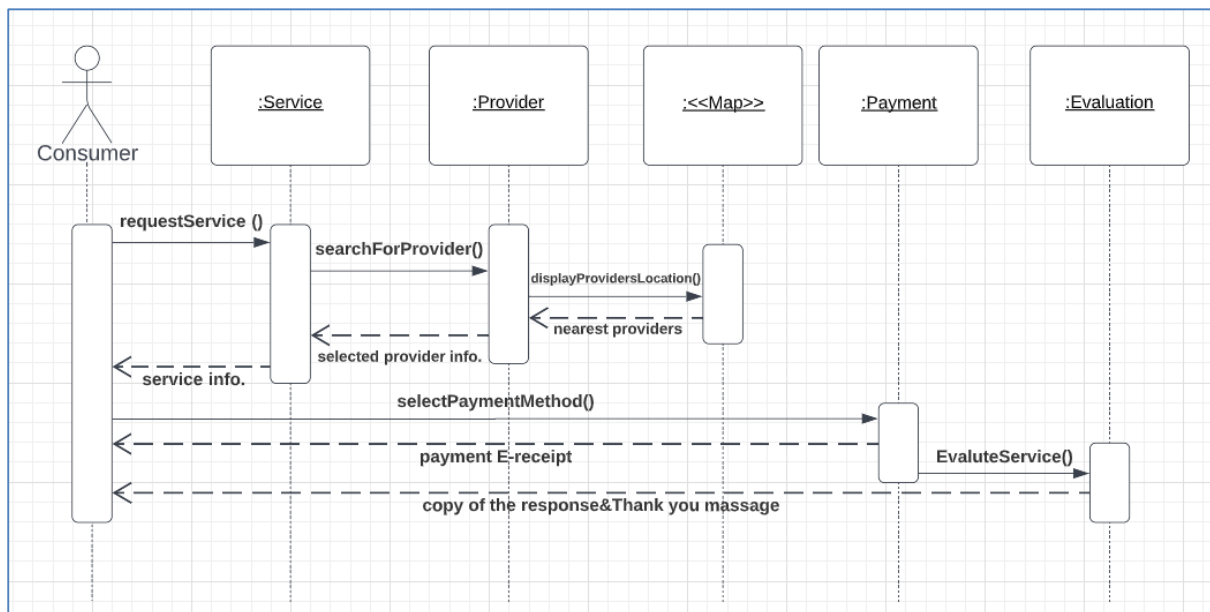


Figure B.6 payment interface



## **APPENDIX A**

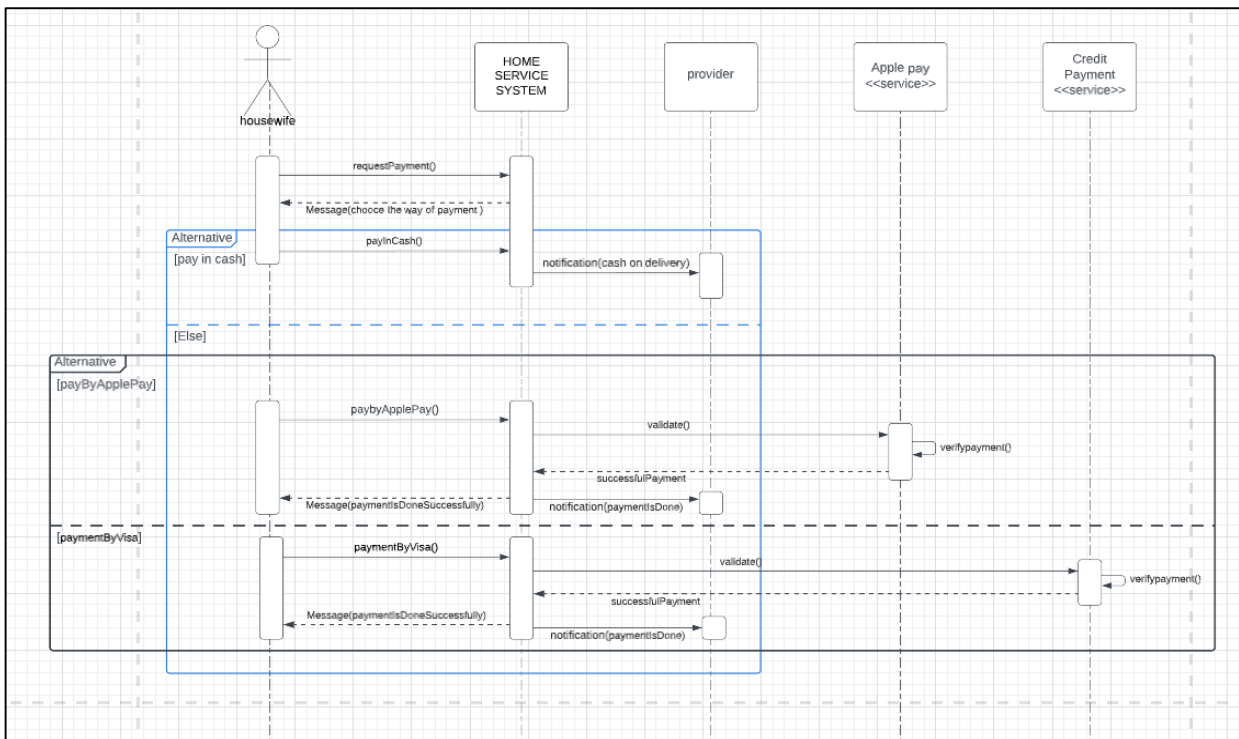
### **Sequence Diagram & User Stories**



A.1 Sequence Diagram (FR 1.4.3)

<i>Title: housefather do a service evaluation</i>		
<i>Acceptance</i> <i>Test:manEvaluat</i>	<i>Priority:3</i>	<i>Story Points(Estimation):1</i>
Description: when a customer receives the service and pays for it then finally he/she evaluates service received he/she evaluates the service provider which will affect the service provider rank (in his/her profile) accordingly and evaluates the service itself		

## A.3 User Story (FR 1.4.3)



## A.2 Sequence Diagram (FR 1.1.1)

<i>operate in various views Title: System</i>		
<i>Acceptance Test: sysOPrInVerVie</i>	<i>Priority: 1</i>	<i>Story Points: 2</i>
Description : when the user enters the system via their mobile or PC, the system should specify the user view and present the content of the system in a way that is suitable for that view		

## A.4 User Story (NFR 1.6.5)

<i>Title: system displays providers</i>		
<i>Acceptance Test:sysDisplyProv</i>	<i>Priority:1</i>	<i>Story Points(Estimation):3</i>
Description: When a consumer wants to order the system will display on a map the nearest service provider needed by the customer 10 km or less (serviceability/usability)		

## A.5 User Story (NFR 1.6.9)

<i>Title: system add charges to customer</i>		
<i>Acceptance Test:sysAdCharges</i>	<i>Priority:2</i>	<i>Story Points(Estimation):3</i>
Description: When a consumer cancels the order of service or changes the details of the service late(depend on the service and location of consumer ) ,the system will enforce the consumer to pay a charge to the provider, so the system will keep it in the application wallet as an amount of money that must be paid .		

## A.6 User Story (NFR 1.6.8)

<i>Title: babysitter set a schedule</i>		
<i>Acceptance Test:</i> <i>babysitSetSch</i>	<i>Priority:1</i>	<i>Story Points(Estimation):4</i>
Description : when a customer select baby sitting as a service needed the babysitter(provider of a service ) will set a schedule of his/her hours of operation and care plan after receiving the request from the customer(with provided details) ,then this schedule sent to customer and being approved by the customers		

## A.7 User Story (FR 1.2.1)

<i>Title: Chef updates the daily menu</i>		
<i>Acceptance Test:</i> <i>ChfUpDlyMenu</i>	<i>Priority:2</i>	<i>Story Points(Estimation):2</i>
Description : when the chef wants to update the daily menu, the system will check first whether he/she has the right to do so.		

## User Story A.8 (FR 1.1.2)

<i>Title: Migrant order food</i>		
<i>Acceptance Test:</i> <i>MgOrFood</i>	<i>Priority:1</i>	<i>Story Points(Estimation):3</i>
Description : when the migrant wants to order a homemade food, he/she will fill in a form containing the food's description and the migrant needed information, and wait for a confirmation from the chef.		

## User Story A.9 (FR 1.5.1)

<i>Title: System hides consumer's personal information</i>		
<i>Acceptance Test:</i> <i>SysHdPInfo</i>	<i>Priority:1</i>	<i>Story Points(Estimation):4</i>
Description : when a consumer signs up to the system, he/she will need to enter some personal information. This personal information should be hidden when requesting a service. Other users of the system can not view this personal information.		

User Story A.10 (NFR 1.6.3 )