

ABSTRACT

Some people face problems in reaching those who provide them with some simple services, such as a simple design some video, and if they are not available in the designated places in their city, or they need it as soon as possible and it will be delayed, and this requires us a lot of time and effort in research . The main objective of our project is to design an application called **SerTec** which will be designed to serve the residents of Al Majmaah area in the Kingdom of Saudi Arabia, and they can only request access to public services. There are two types of users in the application, the first type is used to provide a service and the second type is who will need the service request it can be provided in the application being designed.

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1.1 Introduction

The app is like an advertisement board for services there are two types of users in the application.

The first type is used to provide services the second type user need the service one of the most important goals of the program is that it be a secondary source of income for individuals who have these services, information or even skills to help other with amount of money based on his effort to provide the service.

Despite the technical growth in which we live, sometimes we need simple services such as repairing a simple malfunction in one of the home device, but we see that it takes a lot of time and effort from us. Having an app like this will save us a lot of time and effort.

The application will be specific to the Majmaah area only. The following are some of tag services that can be included in the application being developed

Health - important pharmacies and information about them, their features and location.

Education - private tutors, important courses and certificates, important libraries, their features and location.

Design - design of photos and Video, websites, decoration.etc.

Beauty - " Women's beauty salon " Features, working hours, locations.

Some of the features related to the different services could be as follows

With the possibility of adding the map if some services need to be located in the specified place. The addition of the payment feature that the user prefers, online or in cash.

The application will be programmed using the Swift programming language. We expect an application that provides basic services to everyone who often needs them in a professional manner. It is compatible with the technological growth in which we live.

1.2 Project background

Nowadays , technology has become very important and effective it provided many services as well as will giving the possibility to anyone to get benefit from these service when we start search about an idea on the internet we see a lot of idea then we ask some people around us what is missing from the current application ? after that we noticed that there is no application in our society that provide general services and that services often simple but take a lot of time and effort also need to complete in specific time. So our application will help user to get the service they want from service holders . This applications will work in Majmmah area only . Name of application is SerTec the idea of name is to do normal or general service by using benefit of technology. Application allow user to add what specific service they need , and second user can see the service and they reply if they can do service, Then discuss between user want the service and second user that will do the service for him about the details . We will use Artificial Intelligence System that calculate feedback about service and give rating depend on feedback who will get 5 will classified to be an expert and get higher advantage and 4 know as excellent the other 3 know as very good and from 2 -1 know as beginner.

Application will give service related to

Health - important pharmacies and information about them, their features and location.

Education - private tutors, important courses and certificates, important libraries, their features and location.

Design- design of photos and Video, websites, decorationetc.

Beauty- " Women's beauty salon " Features, working hours, locations.

1.3 Motivation for the project

We believe that the community around us is facing some difficulties in searching and accessing the services it needs, and this project aims to create an intermediary application to serve the residents of the area used to search for the services they need in the same area through technology, and we have many reasons that motivate us to create an application "SerTec " .

There is a great tendency for people to use applications and software to search for services to meet their needs, so we created the application to make it easier for them to reach customers and for customers to reach them. Making it easier for people to complete their work and know the services provided without the burden of moving and shortening the trouble of searching and effort, as this can be achieved through the Internet. A way to present your information to all customers, communicate with you and know you, arrange your schedule throughout the day, and do things on time. It has provided the opportunity for many individuals to work in the field that is important to them.

1.4 Problem statement

Even with great technology evaluation that we live in today sometime people need specific and simple services and can not find it or maybe find after a lot of time and effort like if there a program for example national day people in companies , schools , even hospital most of them need group of designers photo or videos , to get there own Professional design so our application will help user to get the service early general services have increased in Saudi Arabia. However, most people with the necessary skills are out of reach; those offering the services need to understand where these jobs are and who is providing them. Therefore addressing this problem will be a great benefit . Thus, this project aims to develop mobile applications that connect vendors with customers within these general services jobs. The research will identify the most significant factors to incorporate in the application to improve advertisement services, increasing awareness our project is application to help people who need service in education , health , design , beauty.

1.5 Scope

The project will support the residents of the city of Al-Majmaah in the Kingdom of Saudi Arabia. People need many services, sometimes they are not available or they may be at an inappropriate time for the customer or take a long waiting time because he does not know where they are located or when, and this is a waste of time and great effort that can solve all these problems Easily using technology to create a mobile application that serves the requirements of the residents of the region, and the application will save time and effort and make life easier.

Users will know about the services offered and also users can share their knowledge with other users. The application will cover and detail the services for users with health, education, beauty and design. It targets all groups and ages. It is available for IOS devices, payment methods preferred by the user, and enables to know the information of the user and the customer when needed to communicate with each other.

1.6 project baseline requirements

- Hardware
 - MAC OS Laptop
 - smartphone
- Software
 - Xcode (Programming platform)
- Programming Language
 - Swift
- Database
 - Firebase
- Stakeholder
 - people who need service in
 - A. Health
 - B. Education
 - C. Design
 - D. Beauty

1.7 Methodology

The methodology and project requirement and how the project will be accomplished and complete the development process. There are various methods for software development that can be utilized in creating a research project. However, based on the requirement of our project, we employ the waterfall methodology to develop the software. It is considered the most traditional software development method but also effective because of its linear nature. This nature makes it easier for team members to understand and manage the project. In addition, waterfall methods are used for projects that have clearly defined objectives and stable requirements. The main objective of these projects is to create an application that will connect vendors and customers within the Majmaah community; therefore, we need to determine the project requirement which will benefit members from using waterfall methods.

The waterfall method is based on a linear model and works in sequential phases, including requirement definition, design, implementation, verification, and maintenance. These sequential phases focus on completing distinct goals of the project; this implies that everyone must be fully completed before moving to another phase.

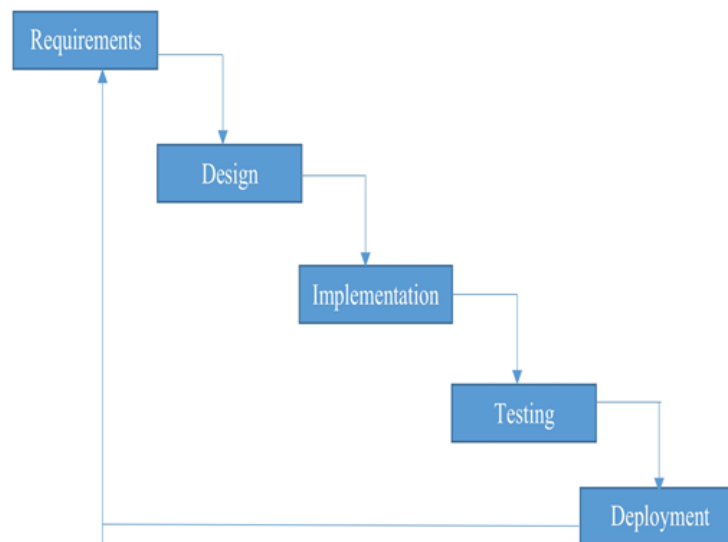


figure 1waterfall model

1.8 Functional and nonfunctional requirement

Before the application is released to the general public various tests will be conducted to ensure the application meets all the requirements. For instance, functionality tests, compatibility tests, unit tests, and user acceptance tests. The functionality test will be conducted for functional and non-functional tests. Functional tests include *Registration, login, and users' content* as the front-end requirements and user registration, among other features in the back-end. The non-functional requirement will include security of the software, non-repudiation where the user cannot deny having made a digital signature. Other non-functional requirements include data retention, general performance, and system availability compatibility tests will be performed on different devices and web-based functionalities to understand how the application works on these devices. The unit test will be carried to test the efficiency of the code written. Finally, the user acceptance test is very crucial as it will be used to understand how users are satisfied with the application and whether it will meet its intended purpose.

1.9 Expected outcomes

Facilitate the access of services to people and save time and effort.
Helping the individual through financial return when performing tasks.
know how to communicate with the service provider.
The user's knowledge of all the services provided and that are commensurate with his situation.
Accessibility throughout the day, allowing the user to know the service in a timely manner.
Informing the residents of the area of the services provided, and informing the residents of the area of the latest developments.
Provide an application that acts as a medium between users through which a lot of work gets done.
The user can follow up with more than one person.

1.10 Work plan

Work Description	Description	Duration	Assign to
Initial Evaluation	Background	2 Day	Reema
Initial Evaluation	Motivation	2 Day	Aziza
Initial Evaluation	Problem Statement	2 Day	Reema
Initial Evaluation	Scope	2 Day	Aziza
Initial Evaluation	project baseline requirements	2 Day	Reema
Initial Evaluation	Expected outcome	1 Day	Aziza
Midterm Evaluation	Analysis of related work Detailed Project requirement	3 Day	Reema ,Aziza
Midterm Evaluation	Identification of alternative solution	1 Day 2 Day	Reema Aziza
Midterm Evaluation	Discussion of tools and techniques used during project proposal	2 Day	Reema
Final Evaluation	Description of tools and techniques to use during project implementation	3 Day	Reema & Aziza

Table 1work

1.11 Work breakdown structure

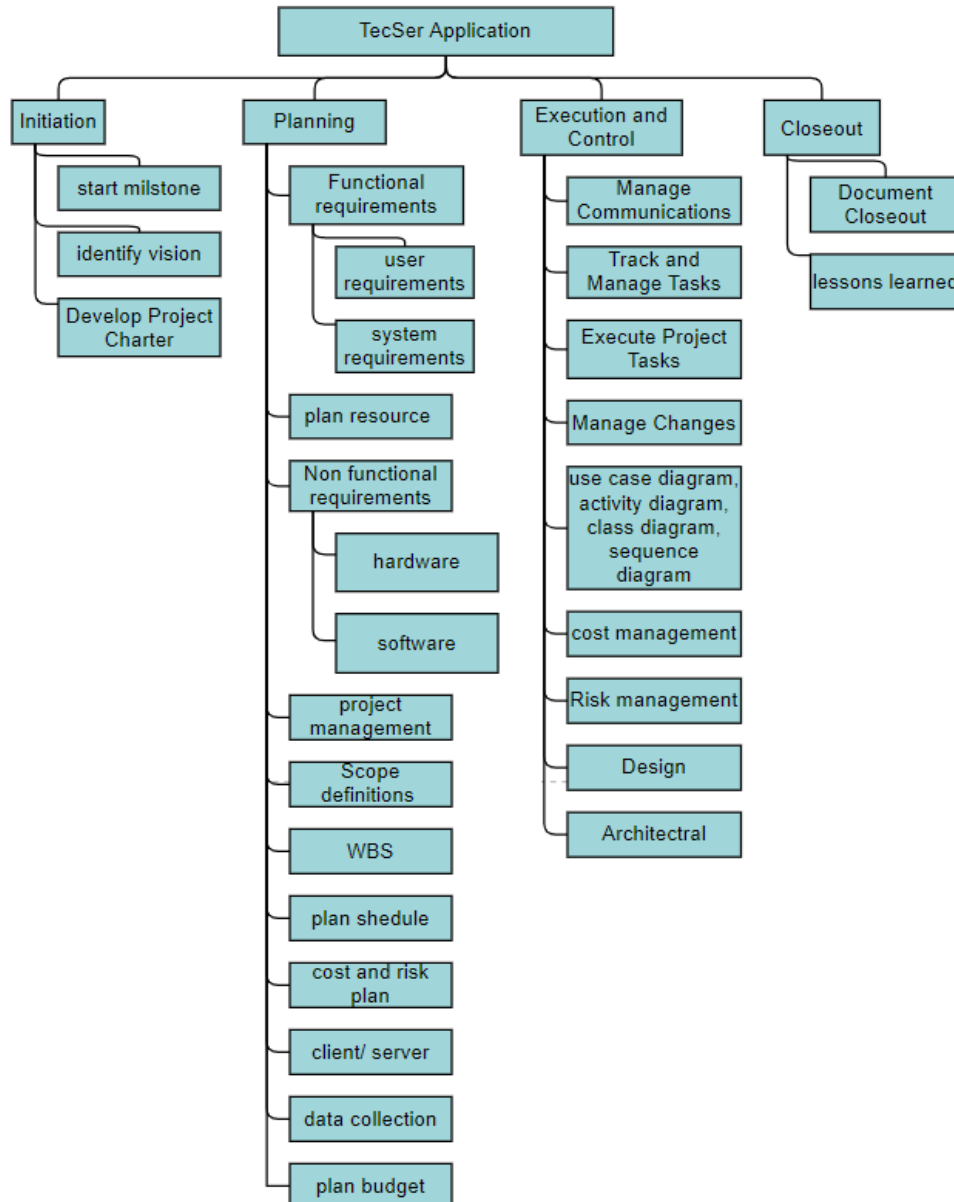




figure 2WBS

2.1 Analysis of related work

There are some applications and websites that related to the our application.

Application	Description	similarity	Differentiate
	The cody applications is means of connecting a business that provides products or services with its customers.	There are offers for the company's products and services, also can comment on the products and evaluate them. And serves the residents of Majmaah.	It serves organizations, not individuals. Also each subscriber in the application provides a special code in it .
	Noon Academy educational application for students will be able to attend live classes and ask the teacher any questions from all over the world.	Communicate with teacher at any convenient time and answer questions through the application.	It for students and teachers all over the world . It offers training courses that you can enroll in and obtain an accredited certificate approved by the Ministry of Education.



	<p>Saidaliaty Application</p> <p>An application that provides the service of purchasing online pharmacies With the provision of delivery service, ordering and receiving service from the pharmacy, in addition to the service of speaking directly with the pharmacist through the application</p>	<p>Providing pharmacy services in addition to adding location to websites</p> <p>Provide online payment service</p>	<p>It provides a one services in pharmacy</p> <p>For more quality services, the focus was on providing services in the Majmaah area only in our project</p>
	<p>Nana Application</p> <p>Provides purchase and delivery service from supermarkets, pharmacies, and others</p>	<p>Provides pharmacy services and maps in addition provide of also it source for income individuals</p> <p>More than one way to pay</p> <p>Including online payment service</p>	<p>Provide specific service which is delivery for customer</p> <p>Serving large area or city in Saudi Arabia</p>

Table 2Analysis of related work

2.2 Feasibility study

A feasibility study of the project will be done by considering the literature reviews and any existing systems or software within the Majmaah community regarding connecting vendors and customers in general work services. The study will be analyzed to perform and evaluate the impending solution of the proposed systems.

2.3 Limit of the applications

It does not serve individuals in general, it is intended for commercial establishments.

Certificated of training courses obtained by referring to the Ministry of Education , thy cannot obtain them through the application.

Most of the service applications are specialized in a specific service.

Service applications often focus on the service itself, not focuses on the skills.

Our application is (SerTec)

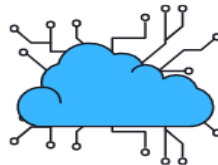


figure 3 SerTec

SerTec is Application program implemented by swift language the purpose of the application is to provide services in scope including education , pharmacy , beauty salons and design. Most of the service applications are specialized in a specific service. But our application it serve 4 fields most people need it. Also, service applications often focus on the service itself, but SerTec application that focuses on the skills and creativity of individuals in providing the service.

SerTec service

- It is provides the maps if they needed.
- It is provides to write a comment and share your experiments and evaluation the service.
- Provides communication with the customer and the service provider.
- You can view all that is available at any convenient time.

We will use Artificial Intelligence System that calculate feedback about service and give rating depend on feedback who will get 5 will classified to be an expert and get higher advantage and 4 know as excellent the other 3 know as very good and from 2 -1 know as beginner .

2.4 Identification of alternative solution

Obtain certified certificates through the application.

The application serves individuals in beauty , design, education, as well as commercial establishments such as pharmacies.

Will focuses on the skills and creativity of individuals in providing the service.

1. To assess the current technology methods used in connecting vendors and customers in general services.
2. To develop a mobile application for connecting vendors and customers within Majmaah.
3. To enable Majmaah residents to find job opportunities using the mobile service application.
4. To enable people in Majmaah to find customers for their various products and services.

We will use Artificial Intelligence System that calculate feedback about service and give rating depend on feedback who will get 5 will classified to be an expert and get higher advantage and 4 know as excellent the other 3 know as very good and from 2 -1 know as beginner .

2.5 Detailed Project Requirements

The stakeholders in SerTec Project

Teachers

upload course for student

Students

Can ask expert teacher to understand courses

User who need service in

Design

Pharmacy

Beauty salons

3.1 Discussion of tools and techniques used during project proposal

We select application on IOS system because is simple and most widely use system in Saudi Arabia . Application will help users to increases their scientific skills also it provide income for individuals it available all age . To take advantage of application services user must register then data will stor in application . User able to rate service which provider .They can also shear their experience of the service .

3.2 Appropriate analysis

One of the most important features of this system is the high level of security; Where the smart device can be protected in the event of its loss, or theft, through the use of a special application of the company, which is called the I cloud application, a feature that allows the user to erase information, photos and data, in addition to enabling the user to know the location of the device in case of loss, in addition to providing Protection of information and data privacy, the protection in the phone is very large, it is possible to make a fingerprint, as well as a passcode and photograph the face, all of these methods of security to unlock the phone. The IOS system provides important advantages in terms of continuous updates, which are updates that are classified as security updates, and these updates are constantly released to all users, It is also available a set of updates related to making some fixes or addressing problems facing users or perhaps to close and fix one of the vulnerabilities that appeared in the operating system. The iOS system is keen to provide high-quality applications only on its App Store, by setting strong conditions and instructions for all application developers in order to provide a distinctive use experience without fake services or poor and bad applications that have no value. The phone space is large and enough to download many applications It supports Arabic, English and some other languages. IOS system is very popular in all countries of the world. And Applications play a major role in organizing people's lives, as they make the process of completing duties and daily life easier and easier, through the many applications available in mobile phone stores, which can be downloaded effortlessly, as these various applications give many services that have become necessary The applications have greatly contributed to saving time and daily effort, especially for those business owners. It enables them to access the information they want to obtain easily and easily, and at all times, and its use in business management has had a major role in the speed of work completion. Applications help the user to schedule his appointments, so that the person becomes more productive. Access to education without being restricted to a specific place and time.

3.3 Description of tools and techniques to use during project implementation

Swift is a powerful and intuitive programming language for iOS, iPadOS, macOS, tvOS, and watchOS. Writing Swift code is interactive and Swift includes modern features for developers . Swift code is safe by design, yet also produces software that runs lightning-fast.

Firestore

Google Firestore is a Google-backed application development software that enables developers to develop iOS, Android and Web apps. Firestore provides tools for tracking analytics, reporting and fixing app crashes, creating marketing and product experiment. Allow app which need authentication database , file storage , analytic.

Xcode

Xcode is the development environment for Apple operating systems such as OS X, iOS, WatchOS and tvOS.

The integrated development environment (IDE) contains a suite of software development tools, supporting source code for programming languages such as C, C++, Objective-C, Objective-C++, Java, AppleScript, Python, Ruby, ResEdit (Rez), and Swift.

App developers can build and edit applications and work with them from their initial idea to ultimately releasing it to the App Store.

4.Design

4.1 System use-cases

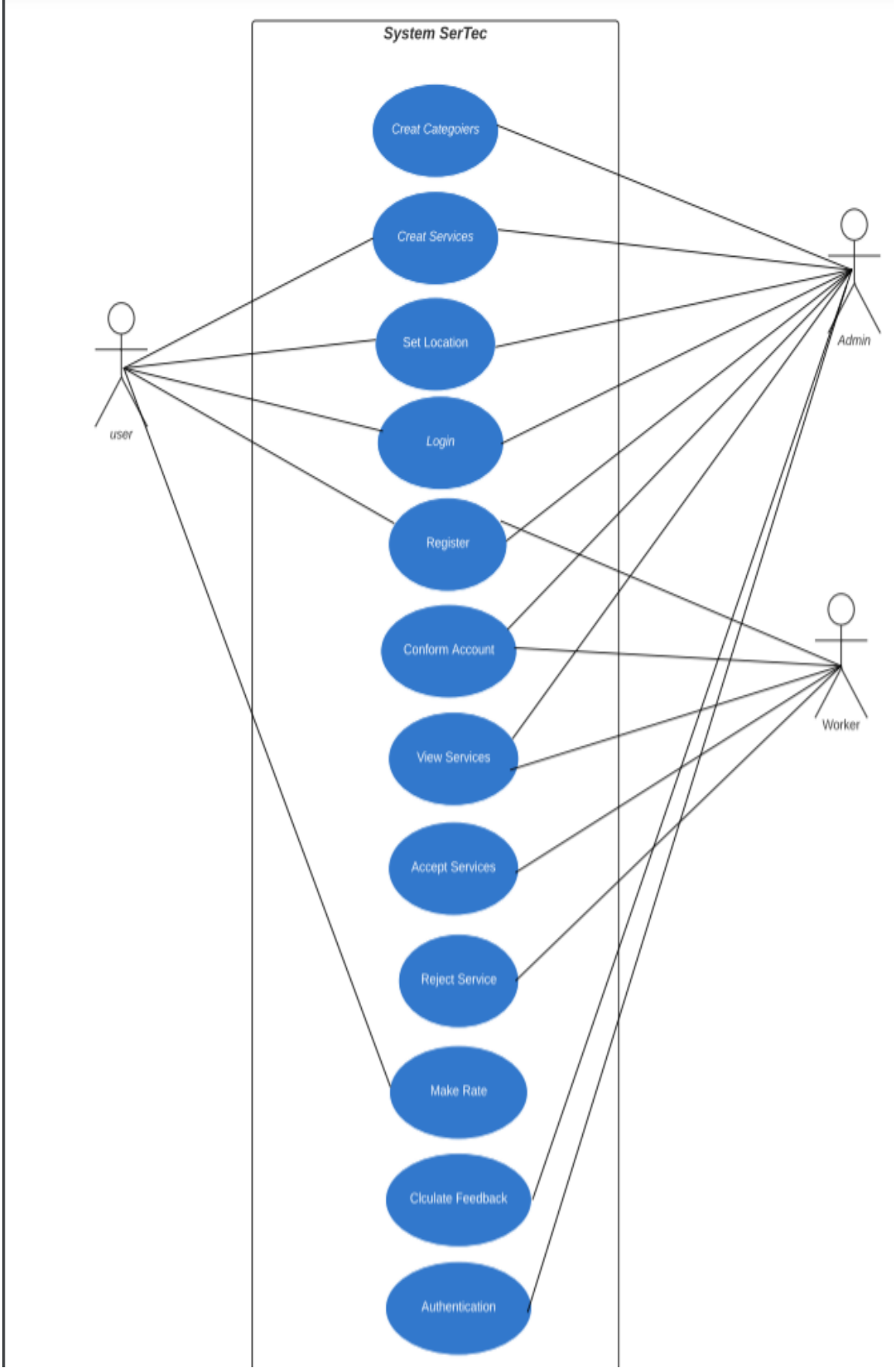


figure 4 System use cases

4.2 Class diagrams

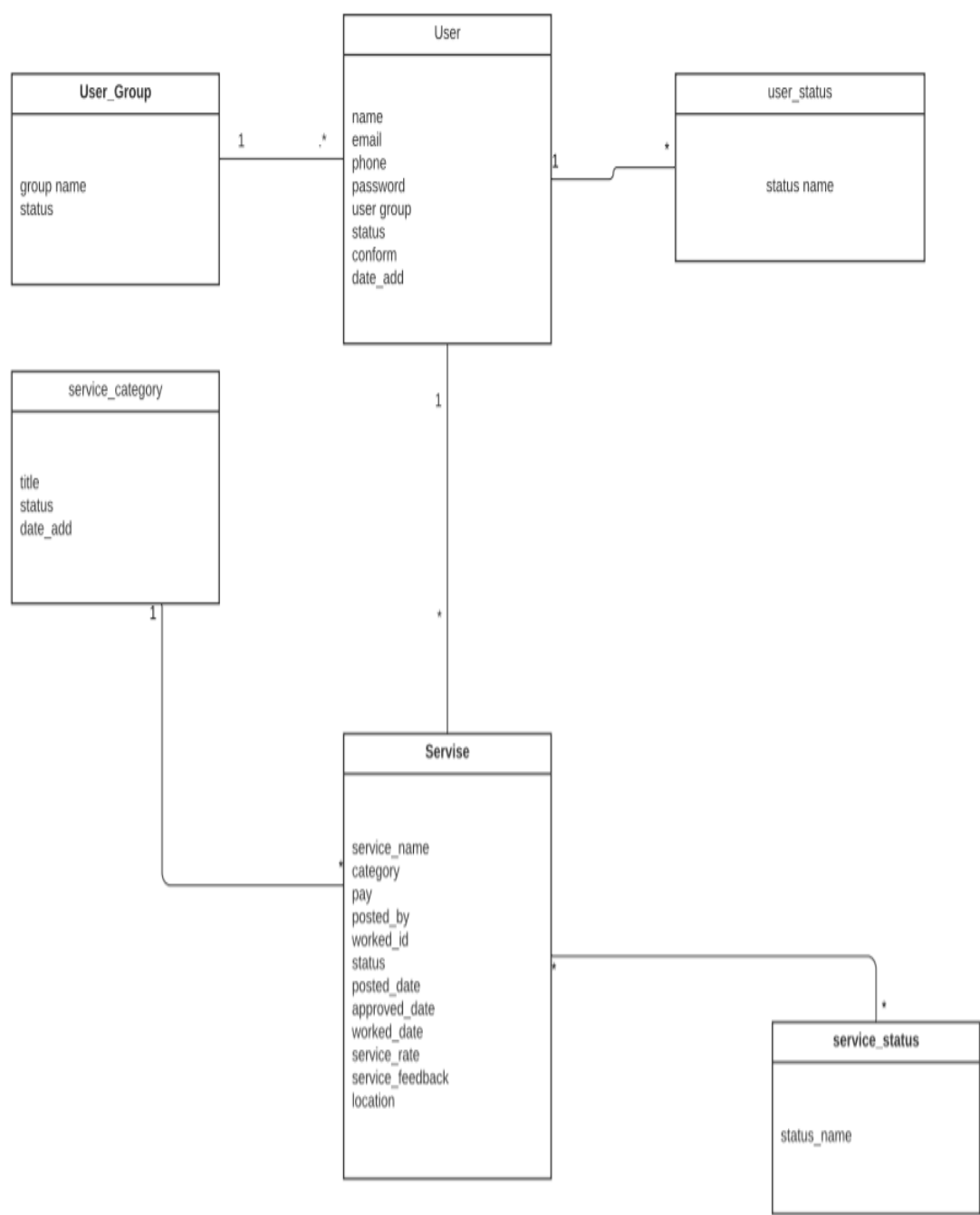


figure 5 Class diagrams

4.3 Activity diagram

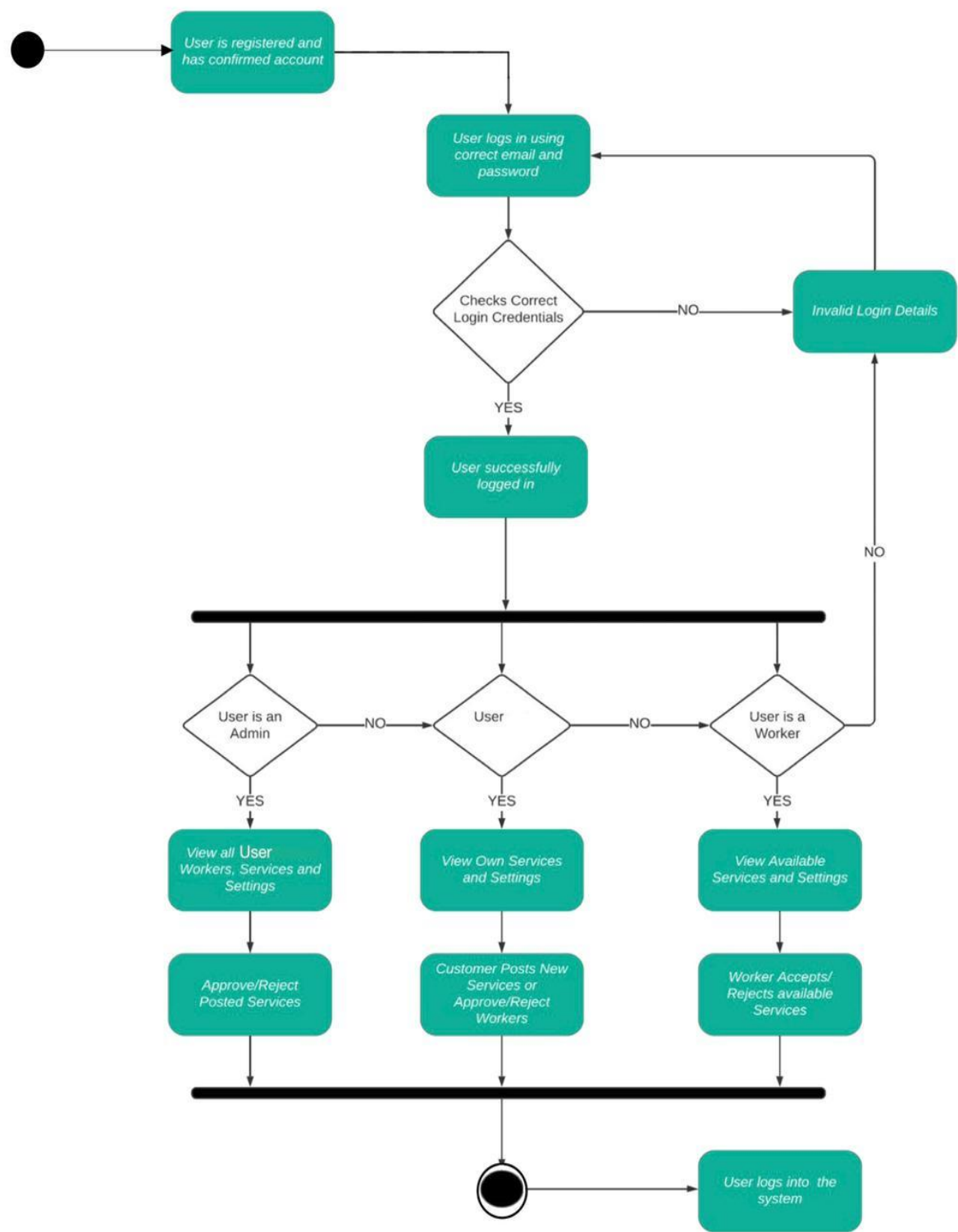


figure 6 Activity diagram

4.4 Sequence diagrams

Service registration of worker

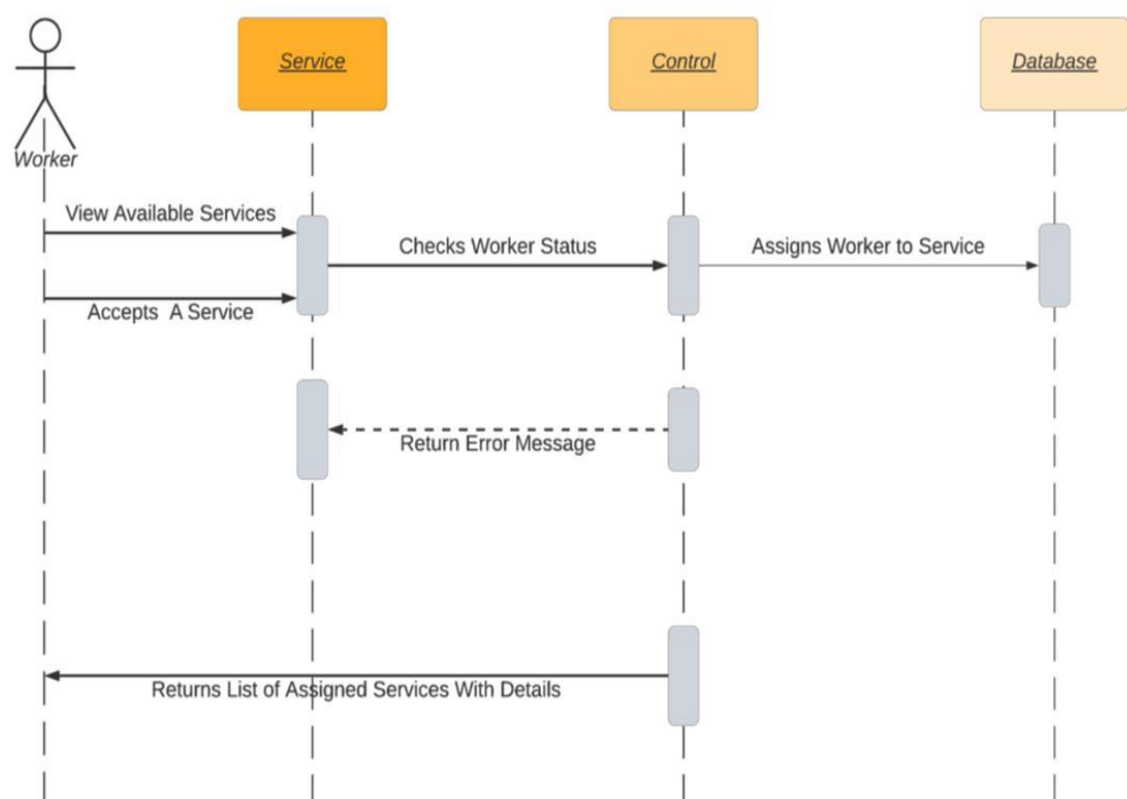


figure 7 Service registration of worker

Registration Of User

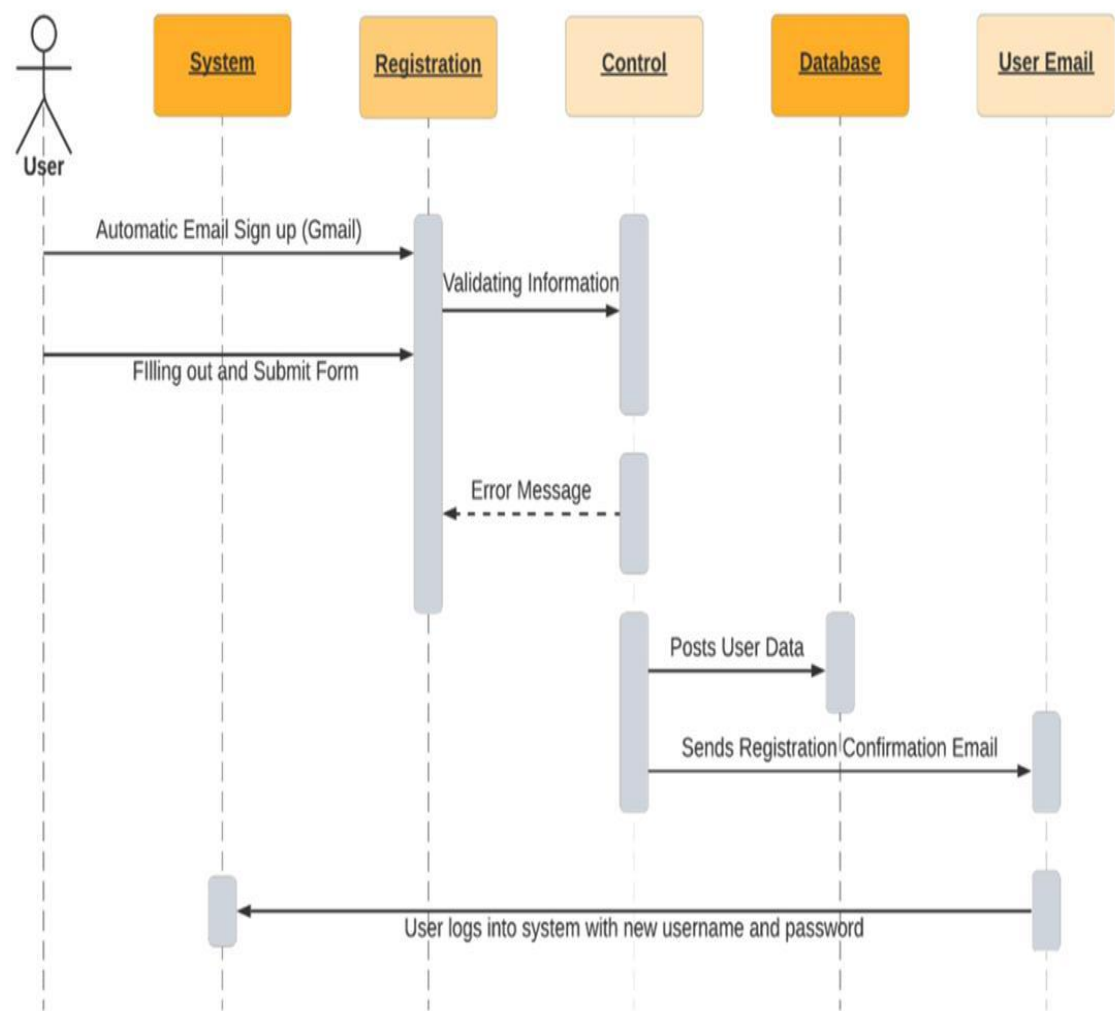


figure 8 Registration Of User

Service Display to Customer

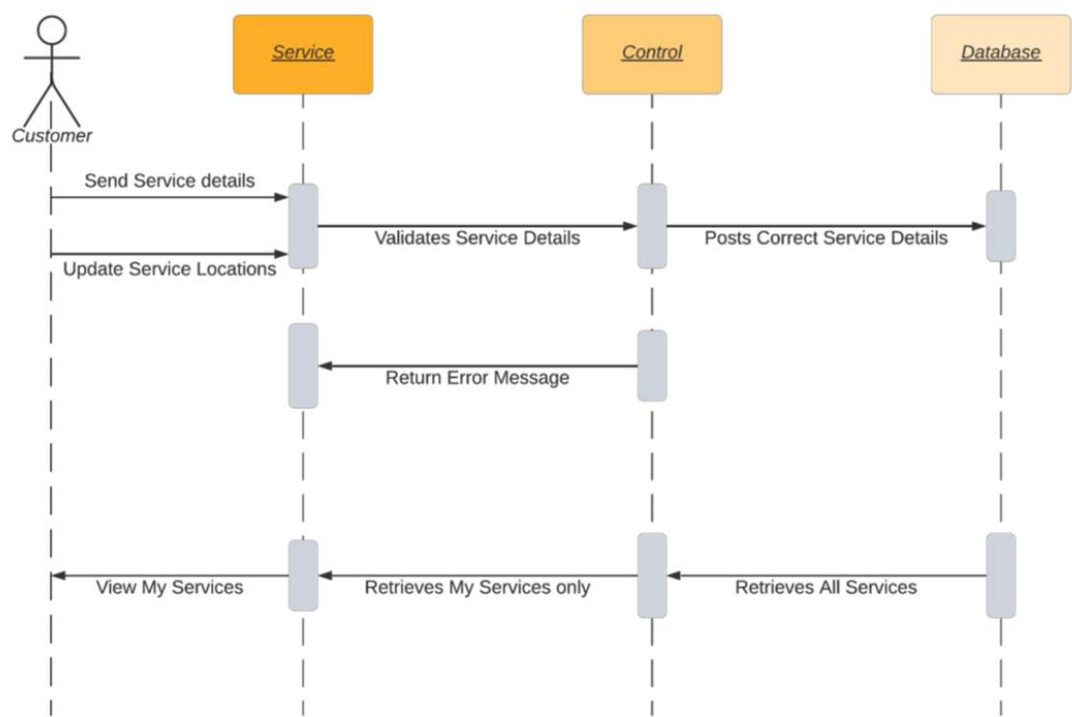


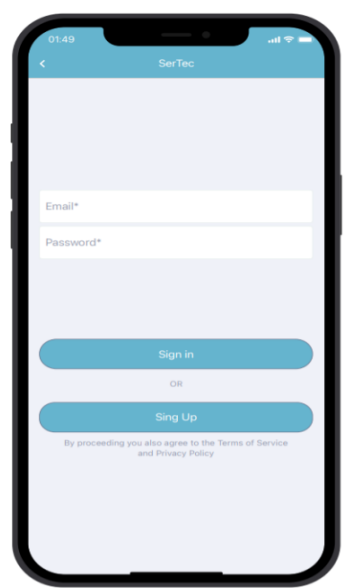
figure 9 Service Display to Customer

5. User interface design



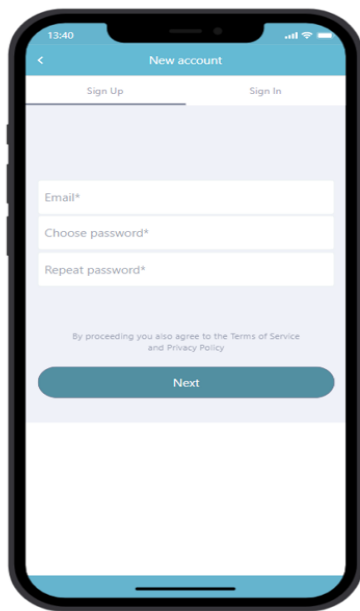
This is the first page in the application that bears the name and logo of the application.

figure 10 Welcome to SerTec



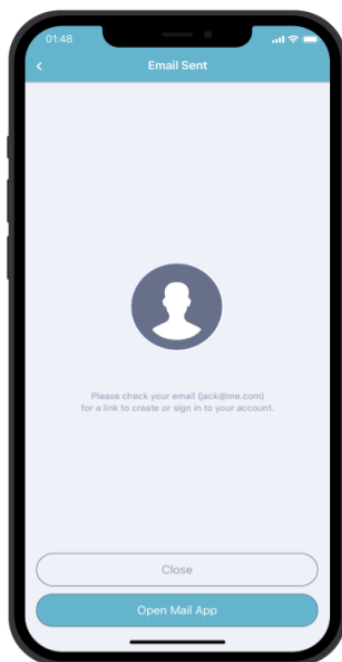
This page is the login information of the user . they can log in with the email and password then click on Sign in, and if they are not logged in before, they clicks on Sign up.

figure 11 Sign in



If this is the first time the user downloads the application, they create a new account by entering the email, password and confirming it, then clicking **Next**.

figure 12 Sign up



After that, the application will **send a message** via e-mail to verify.

figure 13 Email sent

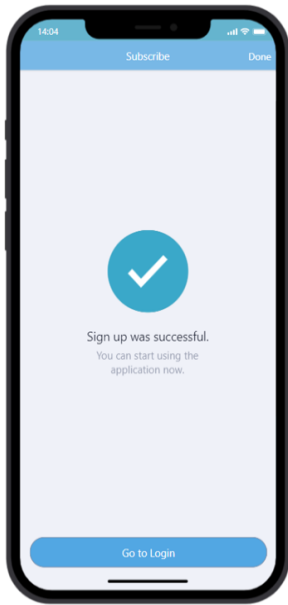


figure 14 Subscribe

After verification, the application will confirm the **subscription**.

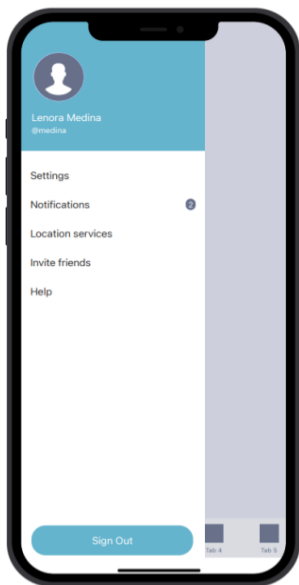


figure 15 Profile page

This is the **profile page** of the application user, where they data appears , and they can use the application with ease.

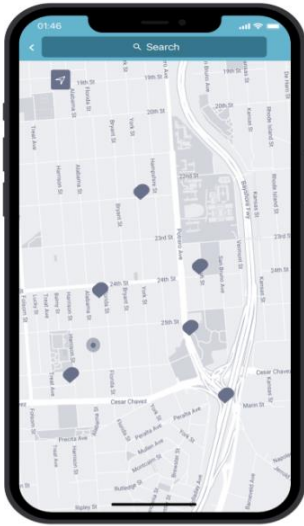


figure 16 Location

All users of the application can specify the **location** to facilitate the provision of services to them and as soon as possible.

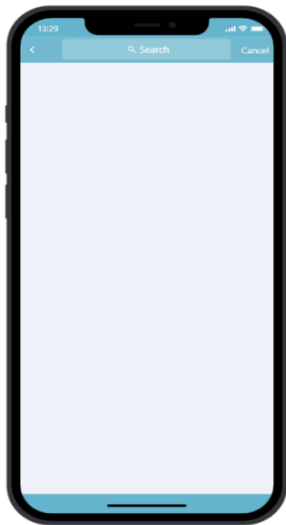


figure 17 Search

Through this page, the user can **search** for what they wants and check whether this service is present in the application or not.

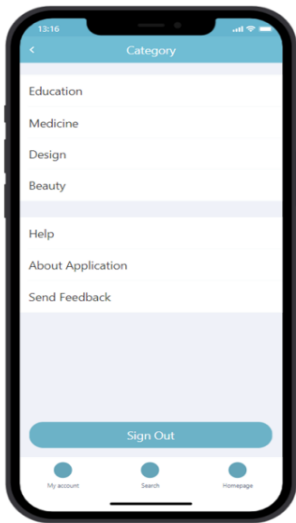


figure 18 Category

Through this page, the user can find out about the **category** provided in the application , or help , about application, send feedback, or exit.

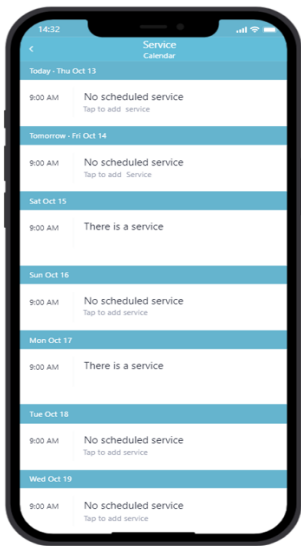


figure 19 Calendar

From the **calendar** page, users of the application can schedule services to know when they can do services , and also the user can choose the appropriate booking time.

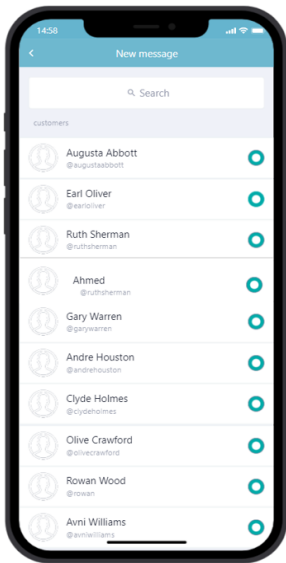


figure 20 New message

Through this page, users of the application can see **new messages**.



figure 21 Conversation

Also, users of the application can **communicate** between the customer and the service provider to obtain the service and agree between them.

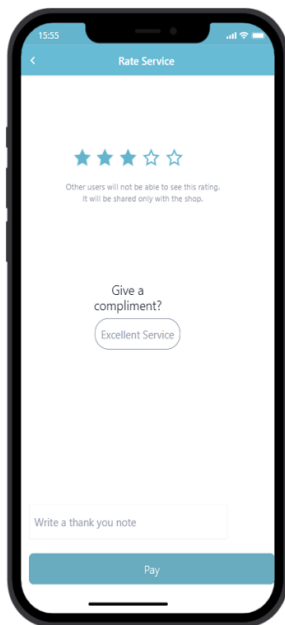


figure 22 Rate

The customer can **evaluate** the user by providing the service, if the service provider gets a 4, he is an expert, if a 3 is average, if a 1 is a beginner, this makes it easier for other customers to know whether the service provider is good or not, then click on **Pay**.

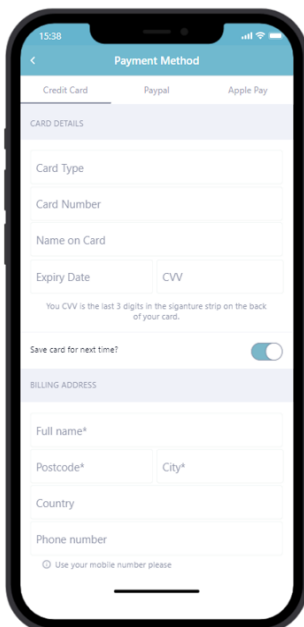


figure 23 Payment method

Through this page, the customer can choose the **payment method** if it is a card and enter all they data.

6. Conclusion

At the end of our project, we present an application for the mobile phone "SerTec" that serves the residents of the Majmaah area, and the main objective of the application is to solve the problems of some people in reaching those who provide them with some services if the service is not present in the designated places in their city or they need it as soon as possible. It will be postponed or for several other reasons. In it, we talked about the objectives, reasons, methodology, project requirements, expected results and similar applications, and what distinguishes our application. We also discussed the tools and techniques used and the programming language for application. User interface design system architectural design was presented. This helped define and explain the details of the work for our application, and we learned a lot while doing these tasks, in fact, we are very excited and hope that this idea will achieve greater success and achieve the desired result, and we are happy to start the implementation work of the application in the next semester.

Appendix C: KEY TERMS

Key	Definition
R	Responsible for completing the work
A	Accountable for ensuring task completion
C	Consulted before any decisions are made.
I	Informed of when an action/decision has been made

Table 3Appendix c

Appendix D: SUMMARY OF SPENDING

Project Title : SerTec Name of application is SerTec the idea of name is to do normal or general service by using benefit of technology

Project Start Date: 22/9/2021
Project Finish Date: 7/12/2021

Project Description : The project involves the development of app is like an advertisement board for services there are two types of users in the application.

The first type is used to provide services the second type user need the service one of the most important goals of the program is that it be a secondary source of income for individuals who have these services, information or even skills to help other with amount of money based on his effort to provide the service.

Despite the technical growth in which we live, sometimes we need simple services such as repairing a simple malfunction in one of the home device, but we see that it takes a lot of time and effort from us. Having an app like this will save us a lot of time and effort.

We will use Artificial Intelligence System that calculate feedback about service and give rating depend on feedback who will get 5 will classified to be an expert and get higher advantage and 4 know as excellent the other 3 know as very good and from 2 -1 know as beginner

The application will be specific to the Majmaah area only. The following are some of tag services that can be included in the application being developed:

Health - important pharmacies and information about them, their features and location

Education - private tutors, important courses and certificates, important libraries, their features and location

Design - design of photos and Video, websites, decoration.etc

Beauty - " Women's beauty salon " Features, working hours, locations

Some of the features related to the different services could be as follows:

With the possibility of adding the map if some services need to be located in the specified place. The addition of the payment feature that the user prefers, online or in cash.

The application will be programmed using the Swift programming language. We expect an application that provides basic services to everyone who often needs them in a professional manner. It is compatible with the technological growth in which we live.

Budget information: the total Cost is 19,526 SR

Project manager: Remma Alhussainan

Team members: Aziza Alharbi

Project objectives:

Obtain certified certificates through the application.

The application serves individuals in beauty , design, education, as well as commercial establishments such as pharmacies.

Will focuses on the skills and creativity of individuals in providing the service.

1. To assess the current technology methods used in connecting vendors and customers in general services.
2. To develop a mobile application for connecting vendors and customers within Majmaah.
3. To enable Majmaah residents to find job opportunities using the mobile service application.
4. To enable people in Majmaah to find customers for their various products and services.

Main project success criteria:

- completed on time.
- completed within the budget.
- team member work disruptions will be minimal
- Achieve rollout of software to all users
- The application must meet all written specifications.

Approach:

- ● Use team members for planning, analysis, implementation, and installation.
- ● Select hardware and software resources necessary for the development of the

Project manager: **Remma Alhussainan**

Signature:

Team member: **Aziza Alharbi**

Signature:

Appendix B
< SerTec>

Project Requirement Specification Version No < 1 > Date

1. EXECUTIVE SUMMARY

1.1 Project Overview

Nowadays , technology has become very important and effective it provided many services as well as will giving the possibility to anyone to get benefit from these service when we start search about an idea on the internet we see a lot of idea then we ask some people around us what is missing from the current application ? after that we noticed that there is no application in our society that provide general services and that services often simple but take a lot of time and effort also need to complete in specific time.

So our application will help user to get the service they want from service holders. This applications will work in Majmmah area only .

Name of application is SerTec the idea of name is to do normal or general service by using benefit of technology

Application allow user to add what specific service they need , and second user can see the service and they reply if they can do service, Then discuss between user want the service and second user that will do the service for him about the details .

Application will give service related to

Health - important pharmacies and information about them, their features and location.

Education - private tutors, important courses and certificates, important libraries, their features and location.

Design- design of photos and video, websites, decorationetc.

Beauty- " Women's beauty salon " Features, working hours, locations.

1.2 Motivation for the project

We believe that the community around us is facing some difficulties in searching and accessing the services it needs, and this project aims to create an intermediary application to serve the residents of the area used to search for the services they need in the same area through technology, and we have many reasons that motivate us to create an application "SerTec " .

There is a great tendency for people to use applications and software to search for services to meet their needs, so we created the application to make it easier for them to reach customers and for customers to reach them. Making it easier for people to complete their work and know the services provided without the burden of moving and shortening the trouble of searching and effort, as this can be achieved through the Internet. A way to present your information to all customers, communicate with you and know you, arrange your schedule throughout the day, and do things on time. It has provided the opportunity for many individuals to work in the field that is important to them.

2. PRODUCT/SERVICE DESCRIPTION

2.1 Product Context

We select application on IOS system because is simple and most widely use system in Saudi Arabia. Application will help users to increases their scientific skills also it provide income for individuals it available all age .

To take advantage of application services user must register then data will stor in application . user able to rate service which provider .They can also shear their experience of the service .

2.2 User Characteristics

User Characteristic	Description
Role	The users of the application are divided into Two part : one who provide service , second who need service
Age	Should be 16+.
Gender	Both males and females.
Education level	The users of the application are expected to be able to read and write.
Computer skill	The users of this application are expected to have the minimum knowledge and skills needed to use Application
Interest	the users of the application are expected to have interest in application.
Administration	the admin should have high level IT skills to manage the system and all user accounts and issues in a professional manner.

Table 4User characteristic

2.3 Assumptions

We assume that our application will realize the desired tasks when it releases live, as follows:

- The application will exist and be used in the internet.
- The application will be used by any user, and will be targeted for personal help for both males and females.
- The application will be simple enough to use.
- The application will increase the income of highly skilled people
- The application will make services more convenient for the community.
- The application will keep up with requirements of the developing kind society.

2.4 Constraints

- The application would work only on mobile and smart device.
- The application would have connectivity to the internet

2.5 Dependencies

The application depends on Firebase database

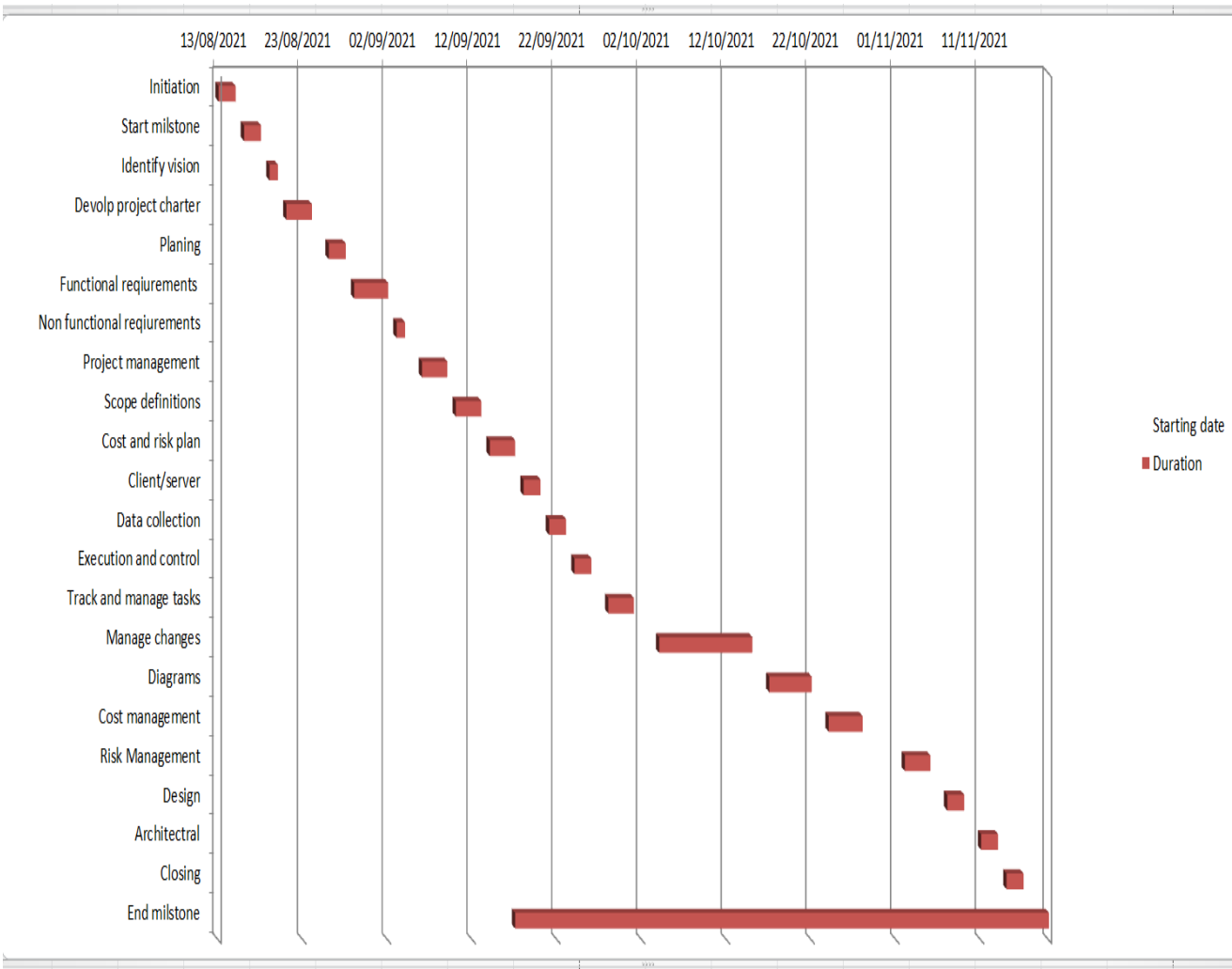


figure 24 Gantt chart

3. Requirements

3.1 Functional Requirements

3.1.1Functional user requirements

Register requirements

ID/Number	Requirement Text
1	The user should be able to register in the application.

Table 5Functional user requirements

Login requirements

ID/Number	Requirement Text
1	The user should be able to log into the application

Table 6 functional user requirements

Logout requirements

ID/Number	Requirement Text
1	The user should be able to log out the application.

Table 7 functional User requirements

Content Requirements

ID/Number	Requirement Text
1	The user should be able to request the service.
2	The user should be able to leave a feedback about quality of service .
3	The user should be able to select type categories.
4	The other type of user should be able to provide service
5	The user should be able select way to pay service
6	The user should be able to add the location.

Table 8 functional user Requirements

Register requirements

ID/Number	Requirement Text
1	The system should be able to allow user to create account.

Table 9 functional system requirements

Login requirements

ID/Number	Requirement Text
1	The system should be able to allow user to log in.

Table 10 Functional system requirements

Logout requirements

ID/Number	Requirement Text
1	The system should be able to allow user to log out.

Table 11 functional System requirements

content requirements

ID/Number	Requirement Text
1	The system should be able to display the categories of the application.
2	The system should be able to enable user select what service he or she want
3	The system should be able to enable user to leave a feedback about service
4	The other type of user should be able to provide service
5	The user should be able select way to pay service
6	The user should be able to add the location.

Table 12 functional system Requirements

3.2 Usability

- The system should be user easy and not difficult to use.
- The system interface should be clear and simple to understand and work with.

3.3 Performance

3.3.1 Capacity

- Initially, the expected range of system users will be between 50-1500.
- Initially, t the application will cover are majmaah area
- The capacity of storage should be big enough to handle the data.

3.3.2Availability

- The system should be available 24/7.
- The system admin team should be available to respond to the user concerns.

3.3.3 Latency

- The response time of the system should be fast enough.
- The loading of the page should not take much time.
- The processing time of the system should be fast enough.

3.4 Non-functional requirements

3.4.1 Hardware requirements

- Laptop: Laptop Macbook pro , iphone , ipad
- Internet service.
- Smartphone.

3.3.2 Software Requirements:

- IOS Operating System
- Web browser: Google chrome, Internet explorer , Safari
- WBS Schedule Pro.
- SWIFT Programing Language

3.5 Manageability/Maintainability

3.5.1 Monitoring

Monitoring, recording, and observing all actions is critical, and we will implement monitoring from the outset. Monitoring will help us preserve and not waste resources. The project manager will monitor everything and record notes that are recorded based on the problems and issues faced by the project or the team members of the project. The team members are also required to inform the project manager if they observe anything that is not in its proper position.

Regular monitoring will allow the project manager to recognize the problems that may occur or that have already occurred to be observed, detected, solved and maintained early. This will ensure that the project is going well and is not impeded by any problems. The project manager will observe the actual outputs and measure the efforts of the project team, and compare them to the expected outputs and efforts and record the results. If there is any error or if someone makes any mistake, it will be recorded and resolved to ensure that the work plan proceeds.

3.5.2 Maintenance

Maintenance is needed for correction and required changes as the application continues to grow, and enhancement is very important in order to improve the project so that the project will continue to expand, succeed, and achieve its future objectives. Therefore, the application will need to be updated and will need some changes necessary to satisfy the users requests over time. In this project, corrective maintenance is required to fix the problems and errors that have been observed while monitoring. Perfective maintenance is also needed to meet the users' requests. Preventive maintenance is necessary to achieve the quality attributes that the project seeks to reach. And lastly, adaptive maintenance is required to achieve the developers will correct errors, defects, and responses to the changes if necessary.

3.5.3 Operations

Operations that are required by the user may include the following:

- User registration/user login in the application.
- User registration in the application by email, password, full name and mobile number.
- User can move between different sections in the application.
- User search for help is by either location or by the category wise.
- User logout is in the application.

4. System Interface / Integration

4.1 Network and Hardware Interfaces

The application will require an internet connection to operate. The following requirements are needed to operate the application:

- Database: to store the users' information. (Firebase)

4.2 Security

4.2.1 Protection

- The system should be developed in MACBOOK PR
- The system should keep the user personal information encrypted .
- The system should be protected against attacks and threats by continually checking the system vulnerabilities.

4.2.2 Authorization and Authentication

The user will be able to access the system only by the authenticated email address and password to avoid unauthorized access. The system should check the All user information before giving approval to guarantee the integrity of the service provider.

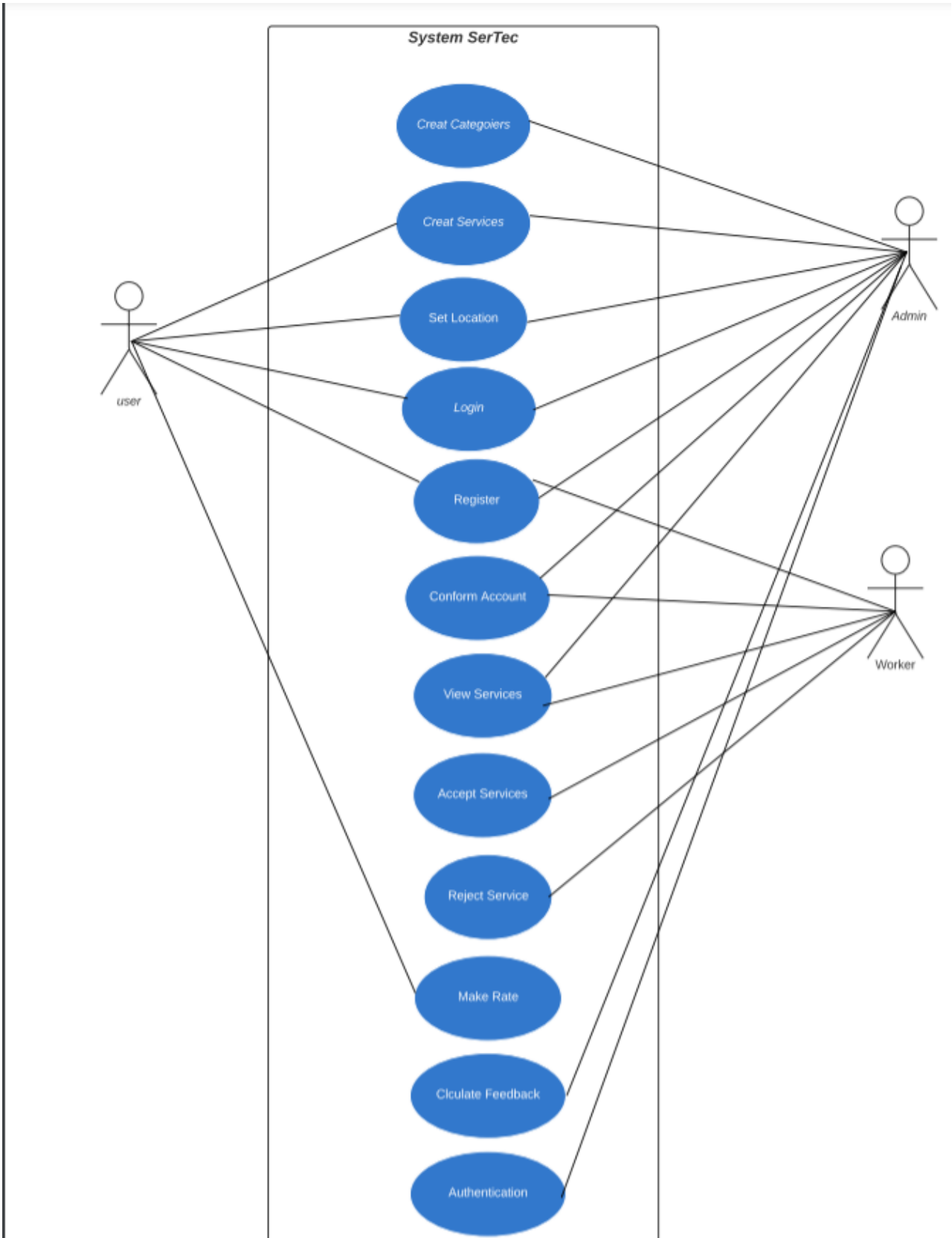
All user don't have the authorization to modify or update their information manually, they must contact us for any changes.

4.3 Data Management

This entails a process that includes a set of required data needed by the project to be verified and processed. It is stored in a database, which is protected and accessible to meet ongoing information or data of user's needs.

5. USER SCENARIOS/USE CASES

5.1 System use-cases



6. Requirements confirmation/Stakeholders Sign-Off

- Project Supervisor:
Confirmation and approval of the project requirements.
- Project Leader:
Have the team's signature and email.
- Project Team:
Send the business requirements via email

APPENDIX

Appendix A. Definitions, Acronyms, and Abbreviations

Terms	Definition
User	Anyone can use mobile phone
Application	A software program that runs on IOS system
Platform	The basic hardware computer and software operating system
KSA	Majmaah Area

Table 13 Appendix A

Appendix C. Requirements Traceability Matrix

Num	Requirement	Description	Base Functional
1	Registration	Functional	X
2	Login.	Functional	X
3	Logout.	Functional	X
4	Rate services	Functional	
5	Feedback	Functional	
6	Create categories	Functional	
7	Create Service	Functional	X
8	Set Location	Functional	
9	Accept / Reject service	Functional	
10	Usability	Non Functional	
11	Performance	Non Functional	
12	Capacity	Non Functional	
13	Availability	Non Functional	
14	Latency	Non Functional	

Table 14Appendix C

Appendix C
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