المملكة العربية السعودية وزارة التعليم العالي جامعة الإمام محمد بن سعود الإسلامية كلية علوم الحاسب والمعلومات	 First term 1441/2020	KINGDOM OF SAUDI ARABIA Ministry of Higher Education Al-Imam Mohammad University College of Computer & Information Sciences

Software Engineering (CS- 310)

BSCS- Section: 171

Project-Phase No: 2

Appointments System

Design Document

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1. Abstract

The AS project is about an Appointments system which organize booking appointments for the customer from many different facilities.

The AS spilt into two parts; the first part is a control panel java-based program which is connected to the main database server. The second part is a phone app for the user which is connected to the database server as well. The system provides to the user the ability to reach many different facilities and book appointments without direct contact which secures and save a lot of time to the user, and it secures the personal information and data of the user which brings tons of reliabilities.

The AS allows the user to register in the system using the phone App to browse for appointments within different facilities within different sections, the user can book appointments and select exactly the time and date which the user want, also the user can cancel, and change appointments time or date, also the user can change the account personal information and the login info and can customize the profile, the facility will register in the system using the java-based program, which allows the facility to write a description to present itself, Also the facility can add, edit, and remove sections and can also add and remove and edit appointments and adjust the dates and time on them and monitor the user appointments and the user communications info, the user must use an IOS or Android operating system to run the phone App also it needs to be up-to-date, the user register info will be only by phone number and a password, also the user information and credentials will safe and secured, the facility user needs a compatible computer to run the AS system program, the computer operating system needs to be either Windows OS or Mac OS and they need to be up-to-date so the program can work perfectly, the facility user needs to have a secured computer which is clear with viruses and bugs to maintain the proper security to the facility information and the customer information.

2. Introduction

This section will be an introduction to the Design document, first the purpose of this Software Design Document is to provide a description of the design of a system fully enough to allow for software development to proceed with an understanding of what is to be built and how it is expected to build, second the owners of many different facilities face a lot of problems with appointments scheduling, also the majority of our community had these problems as well, as a result of these problems Appointments system (AS) solved most of them by allowing the user to book appointments online and the facilities to schedule it.

The design document overview will be the following: the first section will be an abstract and revised version of the SRS document and the system, the second section will give an introduction about this design document, the third section will be about the design of this project which will include diagrams and charts, the fourth section will be about the user interface design and how

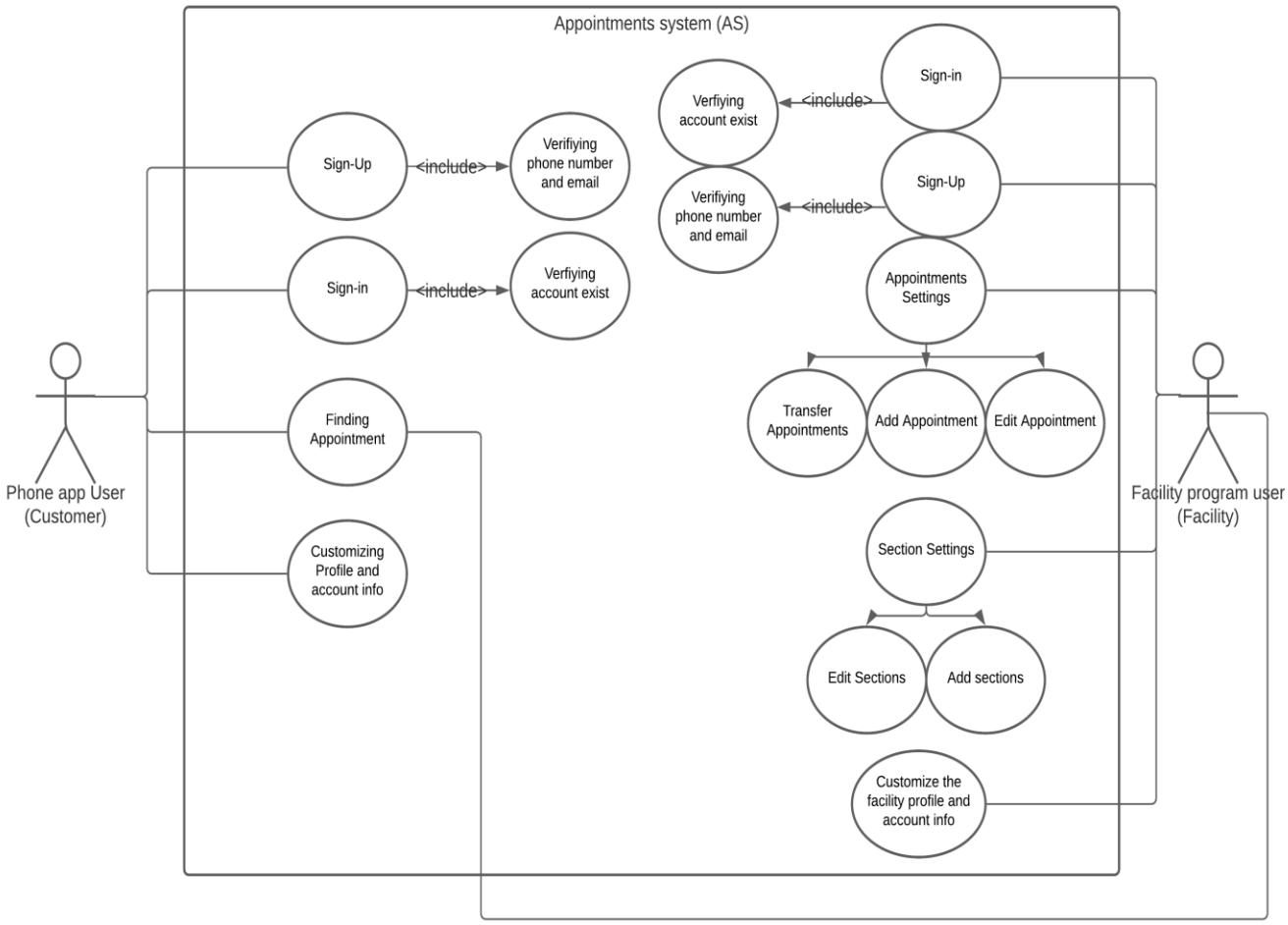
the system will look, the fifth section will be a table about the team contribution, and the last section will give a conclusion of this document.

3. Design

This section will be about the design of the system which will include diagrams and charts.

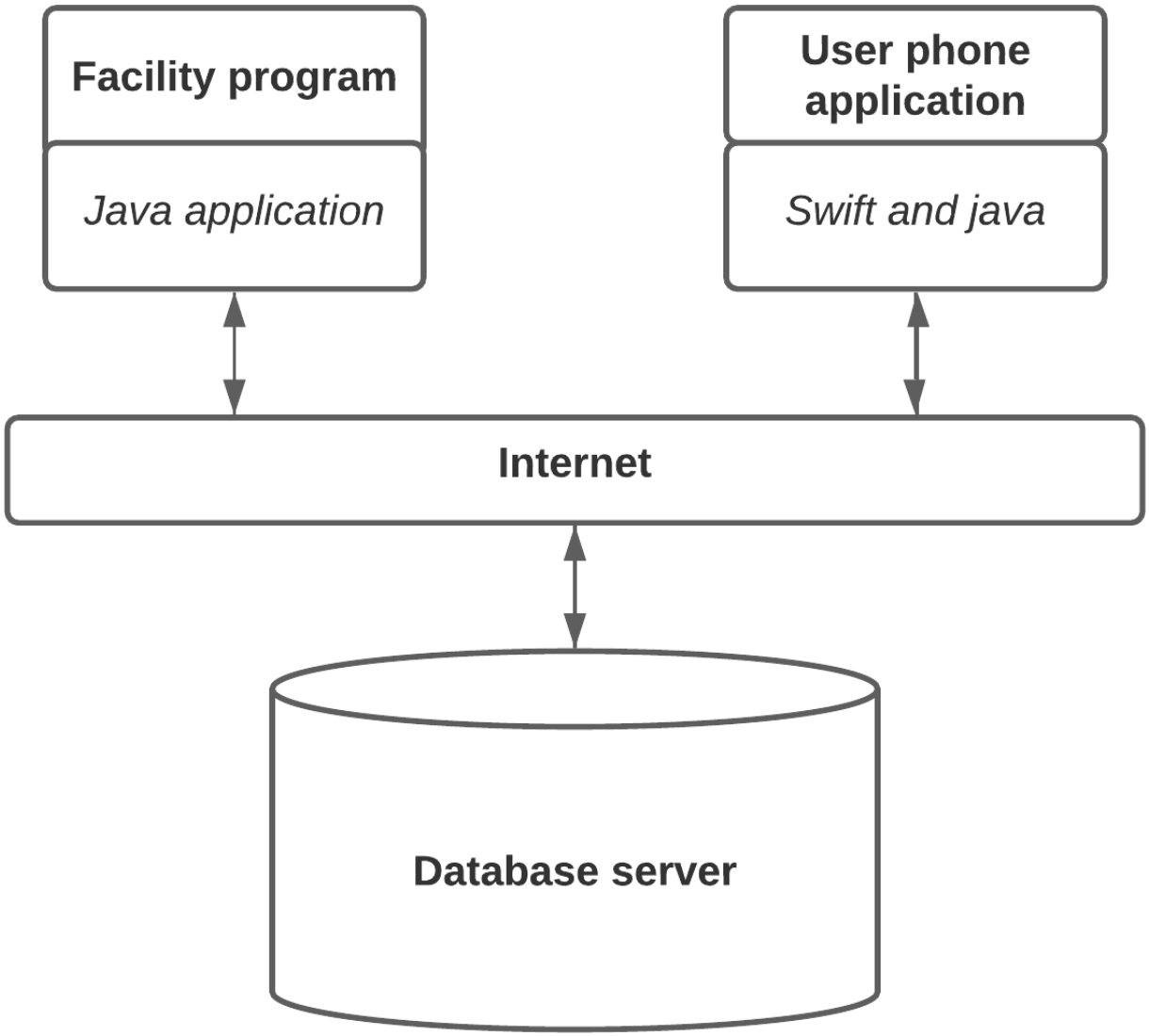
3.1 Use cases diagram

The purpose of this use case diagram is to demonstrate the different ways that a user might interact with a system. Create a professional diagram for nearly any use case.



3.2 Architectural Pattern

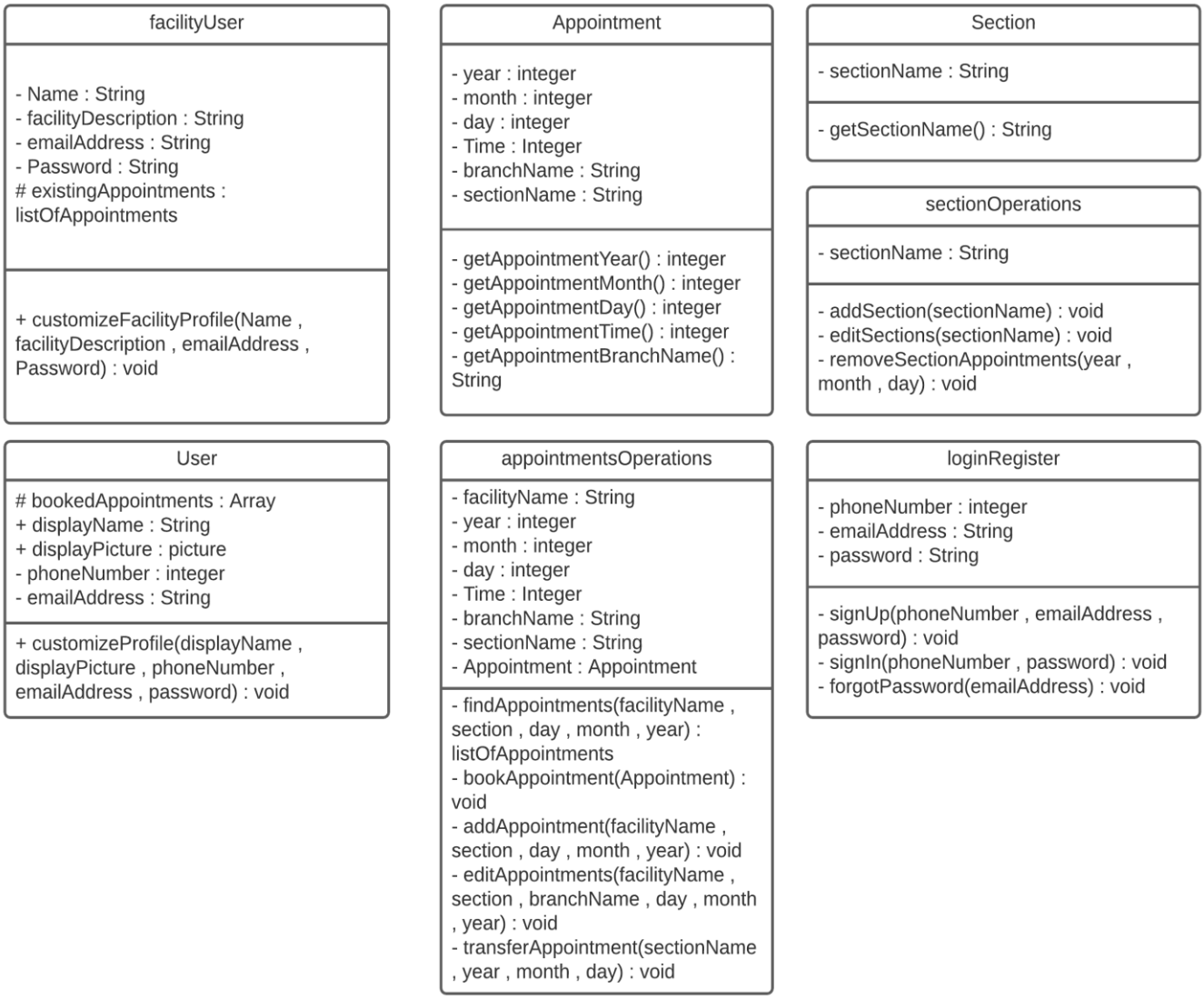
The architectural pattern that will be used is Client-server pattern because the functionality of the system is divided into services and the services will be delivered from a server.



This Client-server pattern diagram is divided into two components, the first one is the clients which in this case are the facility program and the user phone application, the second component is the data base server which provide the services to the clients through the internet.

3.3 Class Diagram

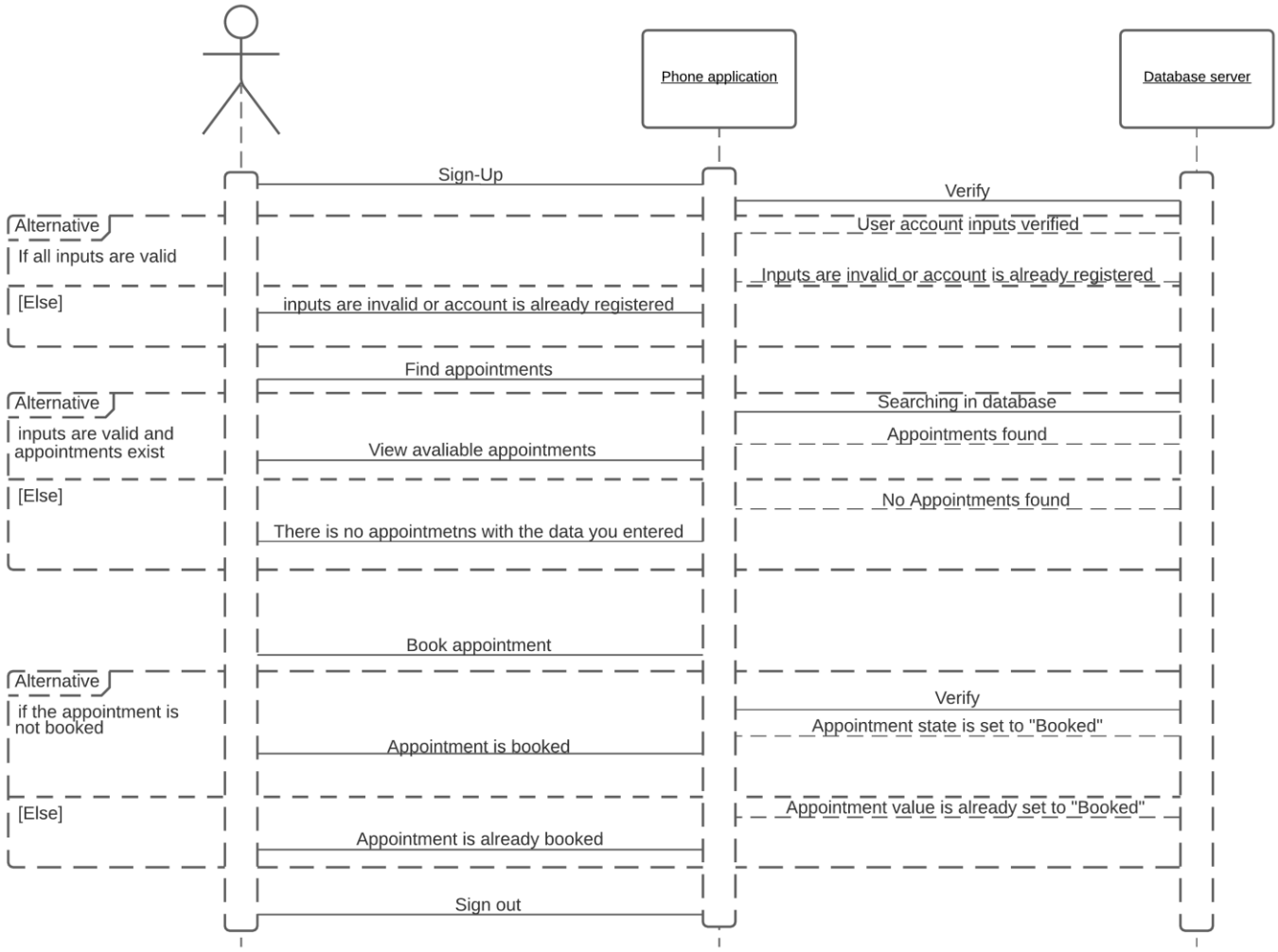
This class diagram will describe the structure of the system by showing the system's classes and their attributes, operations (or methods), and the relationships among objects.



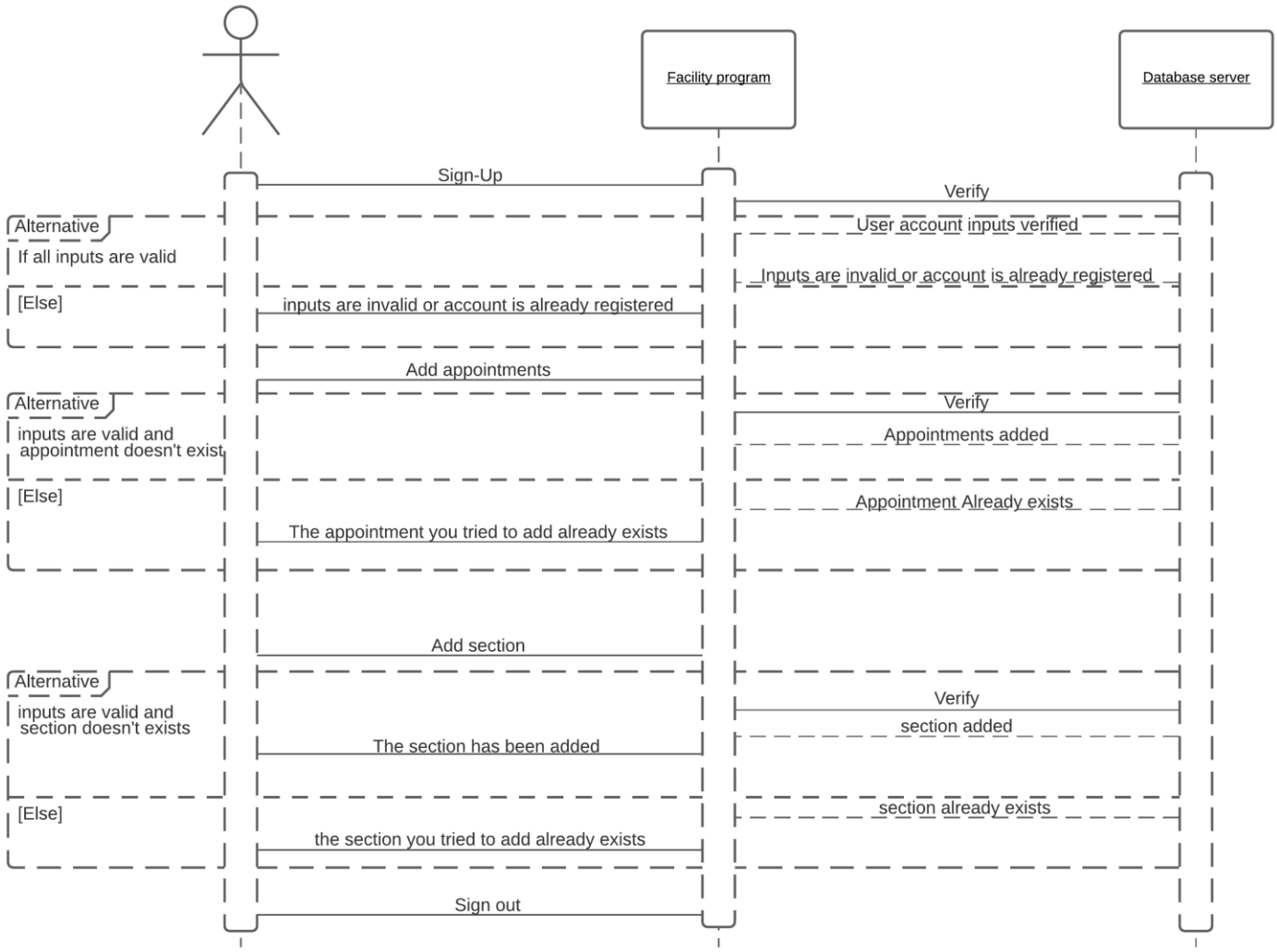
3.4 Sequence Diagrams

these two sequence diagrams will simply depict interaction between objects in a sequential order for example the order in which these interactions take place.

The first diagram will be about the phone application user.



The Second one will be about the facility program.



4. User interface Design.

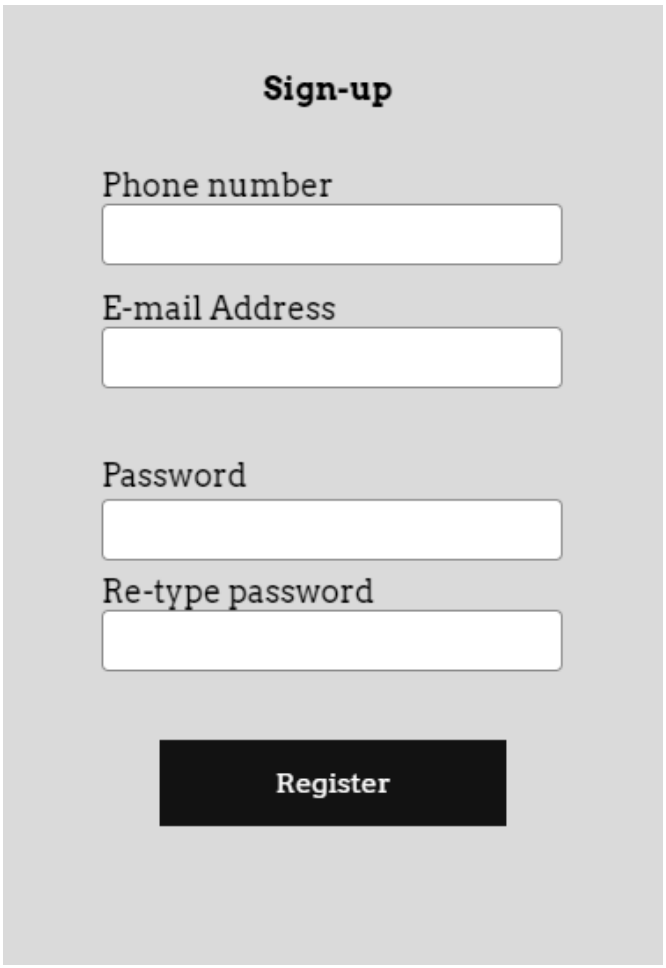
The User Interface (UI) Design focuses on anticipating what users might need to do and ensuring that the interface has elements that are easy to access, understand, and use to facilitate those actions. UI brings together concepts from interaction design, visual design, and information architecture.

4.1 Customer Phone Application.

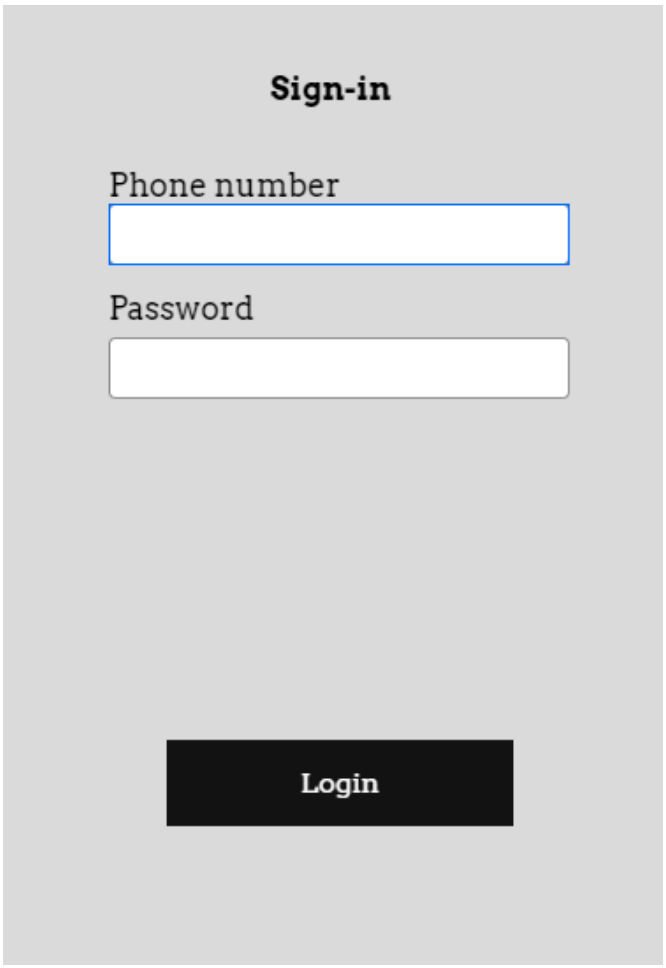
First the Customer phone application interface,

this is the first page that will appear after running the app.

Then the Sign-up page.



The Sign-in page.



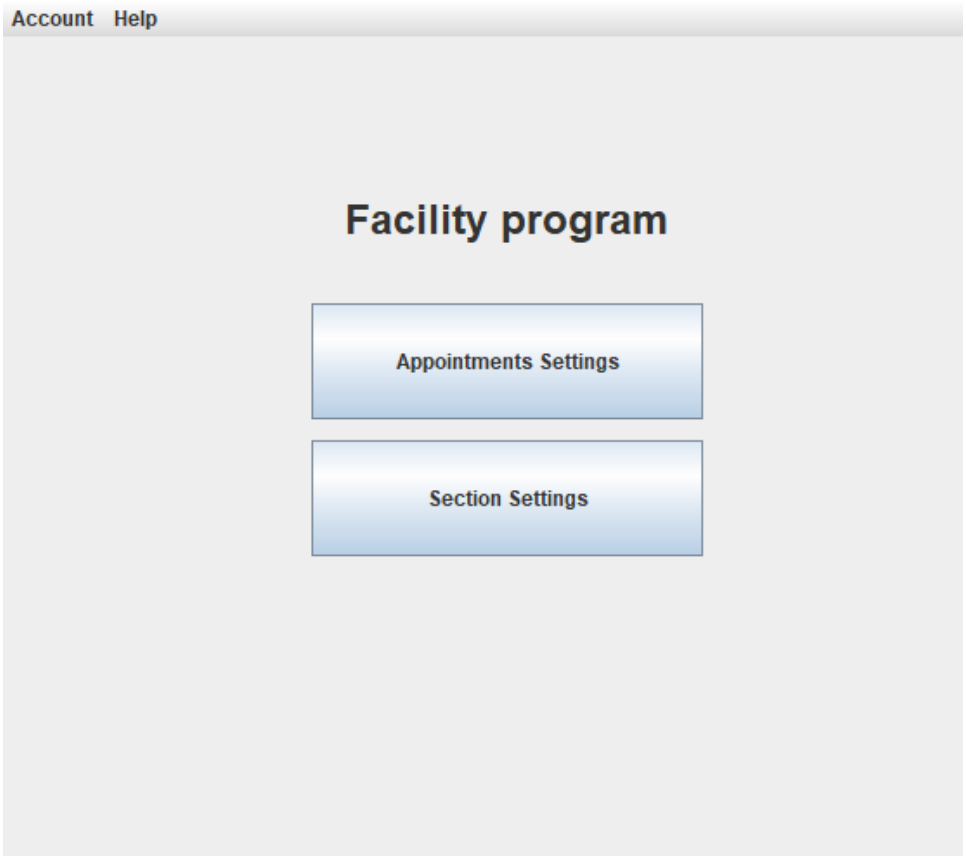
The main page where appointments get searched.

4.2 Facility Program.

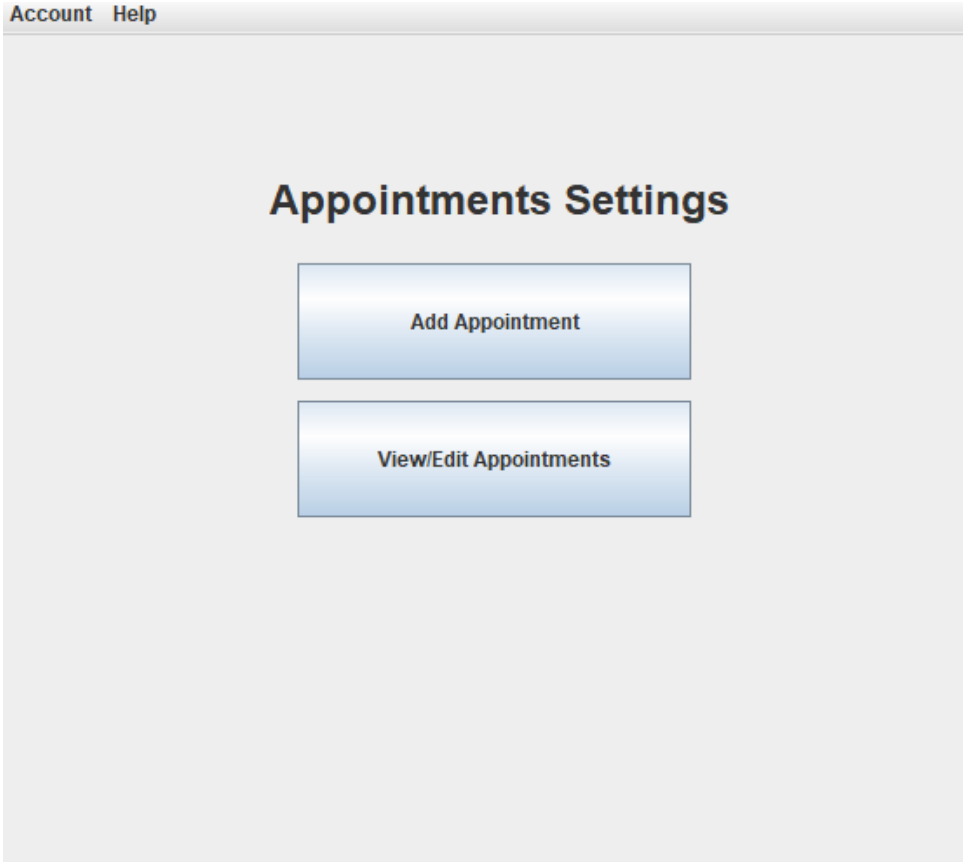
Second the facility program interface.

The facility program has the same Sign-Up/in pages as the customer phone application.

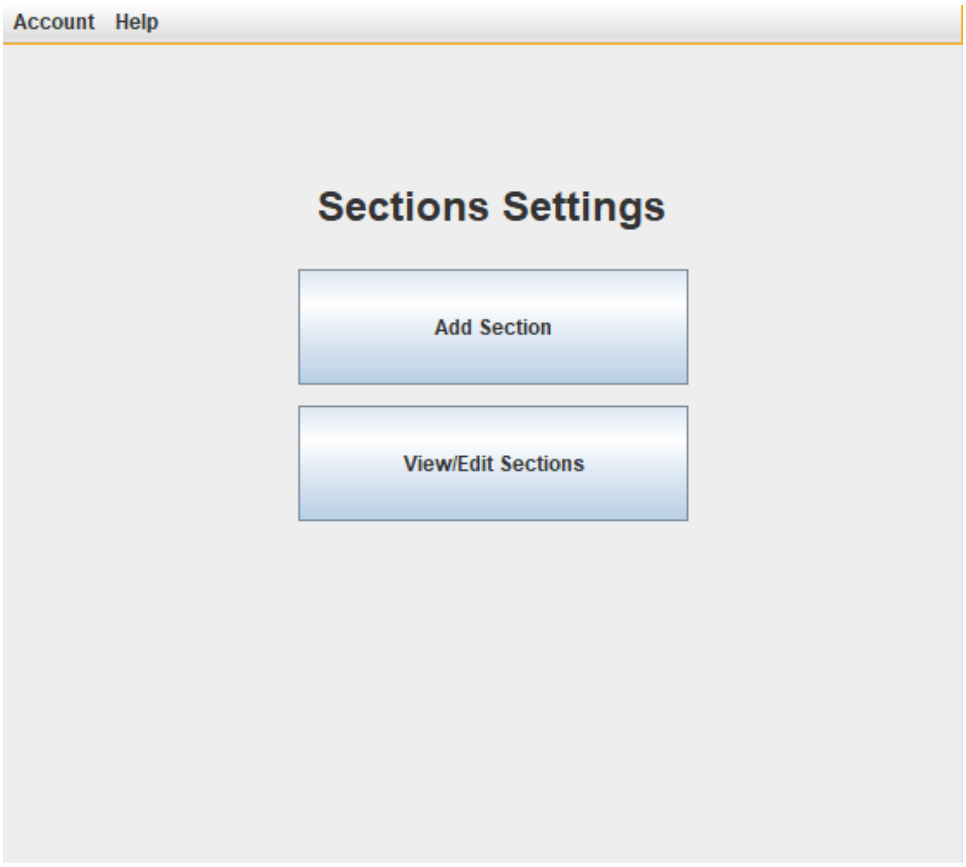
Here is the main page of the facility program.



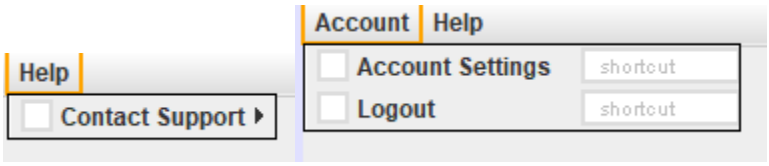
Here is the page where the facility user can add or edit appointments.



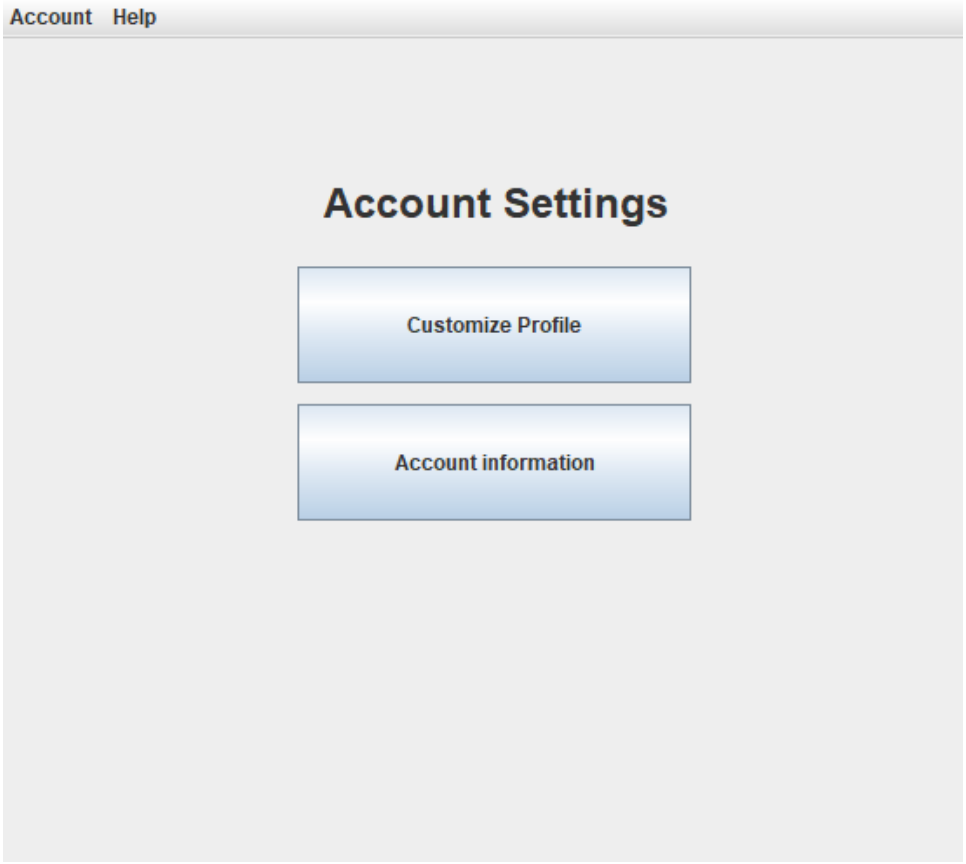
And this is the page where the facility user can add or edit sections.



Here is the menu bar on top of the pages.



This is the page where the users can manage thier account settings.



5. Contributions

Member	***Roles/Activities***
Saleh	*Writing, researching, evaluating, brainstorming, UI Design, Diagram Design*
Rayan	*Researching, evaluating, brainstorming, UI Design, Diagram Design*
Fahad	*Researching, evaluating, brainstorming, Diagram Design*
Abdulelah	*Researching, evaluating, brainstorming, Diagram Design*
Riyadh	*Researching, evaluating, brainstorming, Diagram Design*

6. Conclusion

In the end of this Design document we covered most of the design concepts, this document provided an abstract revised version of the software requirements specification and a complete introduction that explained the purpose and scope of this system, also this document provided a design section that has the use cases diagram, architectural pattern, class diagram and a sequence diagram of this system, then it provided a designed user interfaces for the system, and the contributions of each developer, at this point we can say that we wrote and designed a complete Design Document.