## **4.1. Chapter Overview**

According to this chapter it will introduce about the stakeholders, model requirement, functional and non-functional requirement, and analysis of requirement. Until the end of the chapter, legal, social, and ethical issues related to implementation are discussed.

### **4.2.2. Stakeholder Description**

The stakeholders eventually use their role in different way in different perspective. Stakeholders and their own viewpoint are:

* End users: Non-technical end users such as healthcare professionals, health care managers Patients and citizens; Including health professionals, managers and policy makers and physicians Sensors Researchers concerned with public health.
* And the other parties who are concerned about commercial exploitation of the system are Service providers They want it to maintain effective communication with their end users and running time environment to explore potential integrations.
* Researchers are mainly concerned with those who have a good development environment and knowledge community of developers and access to resources for software and algorithm implementation

However, it does provide good division roles and services that build system architecture by having stakeholders. After identifying the relevant stakeholders, we had to look for and understand their Expectations, that is, the system that gives them the desired benefits, defines the focus quality measurements to meet their expectations.

# 4.5. Models

## **4.5.1. Use case Diagram**



Figure 19:Use Case Diagram

*Figure SEQ Figure \\* ARABIC 2: Use case Diagram*

## **4.5.2. Use case Diagram description**

Table 10:Use Case Diagram

|  |  |
| --- | --- |
| **Use Case Name:** | User Login |
| **Description:** | This use case describes the registration process. Patient needs to login in with their patient details to use the system. |
| **Actor:** | Patient |
| **Precondition:** | All patients should register to the application |
| **Scenarios** | 1. The patient inputs mail /phone number 2. The patient enters the password |
| Main flow | 1. User inputs email. 2. User inputs password. |
| Alternative flow | 1. Email does not match. 2. Password does not match. |
| **Post Conditions:** | View the home screen of the application |

|  |  |
| --- | --- |
| **Use Case Name:** | Checks account details |
| **Description:** | This use case describes whenever when the user wants to check in to their own details the allocation allows |
| **Actor:** | Patient |
| **Precondition:** | All patients should register to the application |
| **Scenarios** | 1. The patient inputs mail /phone number 2. The patient enters the password |
| Alternative flow | None |
| **Post Conditions:** | View the applicates detail |

|  |  |
| --- | --- |
| **Use Case Name:** | Checks Diabetes Level |
| **Description:** | This use case describes the action of predicting results according to the given user inputs |
| **Actor:** | Patient |
| **Precondition:** | The patients should log in to the application |
| **Scenarios** | 1. The patient enters all the details what the application wants to prediction |
| Alternative flow | None |
| **Post Conditions:** | After the execution the use case will expire |

## **Domain Model**

Diagram

Description automatically generated

Figure 20:Domain Mode