* 1. **Introduction**

The requirement analysis is a major process in software engineering which provides an appropriate mechanism to understand what user wants from the system, analyse the user needs, assess eligibility of the system for the user, and so on (Moertini, Suhok, Heriyanto, & Nugroho, 2014). It is very important to make requirement analysis in developing a mobile application because it will help us as the developer to analyse what user needs from the system and meet those requirements so that the application we develop will be work as expected.

This chapter will discuss about the requirements summary which requirement summary will the summarization of all the requirements that are reflect accurately the details of the system.

Beside, based on the system’s functions, requirements can be classified into functional and non-functional which in functional requirement, it will be specified all the prior function of the system and it describe what the system should do. The function of the system also will be explained with a use case diagram, high-level use case, and expanded use case to describe in more details of the system’s function.

In non-functional requirement, it is described how the system works, define the system properties or attributes and constraints from technical requirements to security requirements which it is very important while developing an application.

* 1. **Non – Functional Requirements** 
     1. **Technical Requirements**

To develop and operate the mobile application, there are more than two technical requirements that required to be fulfilled. The mobile application will be met with all requirements.

There are several technical requirements that need to be fulfilled as follows:

1. **Technical Requirements for The Application Developers**

In developing this mobile application, we decided to use IntelliJ IDEA as IDE. To operate IntelliJ IDEA properly, there are several requirements that need to be fulfilled.

* **Operating System (OS):**

IntelliJ IDEA can be installed in three Operating System such as Windows, Mac OS, and Linux. For Windows, it is required to use 32-bit or 64-bit and versions of Microsoft Windows of 10/8/7/Vista. For Mac OS, it is required to use Mac OS X 10.8.3 or higher versions and only 64-bit are supported to operate IntelliJ IDEA. However, for Linux it can be used in KDE, GNOME, or Unity desktop.

* **RAM:**

It is need 2 GB RAM minimum to operate IntelliJ IDEA and it recommended to use 4 GB RAM or higher to operate IntelliJ IDEA for better experience.

* **Screen Resolutions:**

The minimum screen resolution that is required to run the IntelliJ IDEA is 1024 x 768 pixels

* **Hard Drive Space:**

The IntelliJ IDEA required minimum 1.5 GB available for hard drive space in order to use the software properly. Also, it required at least 1 GB for caches.

* **Java Development:**

This software required the developer have a standalone JDK for Java development. However, The Java Runtime Environment (JRE) 1.8 is already bundled with IntelliJ IDEA distribution.

1. **Technical Requirements for The User**

To run and operate the mobile application, there are also some technical requirements for the user that need to be fulfilled. There are the technical requirements for the user as follows:

* **Operating System (OS):**

The user need 5.1 Lollipop or higher versions of Android to run and operate this application on their smartphone.

* **RAM:**

The minimum RAM of the smartphone that are required for the user to run and operate this application is 1 GB of RAM.

* **Screen Resolution:**

The minimum screen size of the smartphone for the user to operate or run this application is 5 inch and minimum resolution is 1080 x 1920 pixels. For the aspect ratio is 16:9 will be supported by this application.

* + 1. **Usability Requirements**

It is very important to have a great experience of usability for a mobile application to fulfil the user’s desire and make the user feel satisfied so the user can operate the application properly and easily. The user interface is one of the aspects that is exist and it give big impact for usability of an application. To meet and fulfil the usability requirements, we decided to to design our application’s user interface with Google’s Material Design.

The user interface design of this mobile application will be designed in simple way and attractive so the application can be understood by the user and the user can operate the application easily. For the icon, menu, image, and text that are exists in the application will be placed symmetrical in order to make the design looks presentable and well organized by the users.

A minimalist but attractive will be appeared so the user interface will look great and eyes catching. We also use a combination of pink, white, and grey for the colour of the user interface. Flat scheme of colour will be used because flat colour does not too flashy.

* + 1. **Reliability Requirements**

The other requirements for a mobile application is reliability. The application must be reliable so the user can operate and use the application comfortably. To fulfil the requirements, the application must be accessible 24 hours and it be accessed everywhere so the user can access the application anytime they want.

All data in this application will be stored in database so to run this application, the user needs an internet connection to retrieve all data that are stored in the database. However, if the user has good internet connection but the application is not responding, the system will notify the user.

* + 1. **Security Requirements**

The other important aspect for the mobile application is it security to make user feel safe in order of using the application, because of those reason, access to the system is limited. The user must have an account first, if they want to contact or make appointment with the MUA or beauty salon so the user must register or sign up if they do not have an account or login if they already have an account.

Only admin can access the function that can modify the system such as update lists of MUA or beauty salon, update beauty related news, update features in an application, and others.

All communication between client and server will be secured and protected, also all data that are stored in the database will be encrypted to prevent unwanted things such as unauthorized access.

# REFERENCE

Moertini, V. S., Suhok, Heriyanto, S., & Nugroho, C. D. (2014). REQUIREMENT ANALYSIS METHOD OF ECOMMERCE WEBSITES DEVELOPMENT FOR SMALLMEDIUM ENTERPRISES, CASE STUDY: INDONESIA. *International Journal of Software Engineering & Applications (IJSEA)* *, 5* (2), 12 - 13.