# **CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY**

# COLLEGE OF ENGINEERING AND ARCHITECTURE

# **Software Requirements Specifications**

for

Health Teknoy

# Signature

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# **Change History**

Version	Date	Reason for Change
1.0	September 21, 2022	Drafting for SRS
1.1	September 23,2022	Revision on project specification
1.2	September 25, 2022	Functional requirements
1.3	September 27,2022	Revisions on UI

# Preface

This is the software requirements specifications (SRS) document for Healthteknoy. This document details the specifications of the intended development of easier, faster, and less hassle checking of item prices in the market and lessening the long queues. The intended audience of this SRS is the users, the application developers, and the project manager. Furthermore, foreknowledge of certain computer systems and other technologies is not needed in understanding the SRS

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## 1. Introduction

## 1.1. Purpose

Develop a mobile application that will generate QR code allowing users to make filling up of health declaration form more quick and easier. Users can input their data, generate a code, and can edit or update their data timely. The scanned code will then be directed to a database monitored by an admin. Moreover, it will aid admin to make the monitoring of statistics more convenient such as number of users who entered the campus, number of users that are currently symptomatic, number of users that are out of town, and more. Lastly, it makes the monitoring smooth as the information between students, and faculty and staff are already categorized in each group.

### 1.2. Scope

The application is accessible to everyone but solely used when entering CIT-U premises. The target users of this app are CIT-U students, faculty and staff. Users need a mobile device with internet connectivity to run and use the application. Once users have already inputted their data, they can quickly generate a code. On the other hand, admin is the only privileged to access the database using a desktop to conveniently monitor the statistics being covered by the application.

### 1.3. Definitions, Acronyms and Abbreviations

**Health Teknoy** - the name of the application to be developed. The primary goal of this app is to make filling out of health declaration form while entering CIT-U premises more quick and easy by generating a QR code. "Health" comes from the idea of this app being assimilated by health matters and "Teknoy" is from the name being called to those individuals integrated by CIT-U institution such as the students.

**QR Code -** "Quick Response" code is a type of 2D barcode that can provide easy and quick access to online information through a digital device. It also stored information in a square-shaped grid.

**Health Declaration Form** - a form that is required by the government in accordance to RA No. 11332 that must be provided with truthful information about one's possible exposure and health condition.

CIT-U - stands for Cebu Institute of Technology - University, an institution where this application be solely used.

**Users -** the operators of the software application to be developed. For this particular document, users are CIT-U students, faculty and staffs.

## 1.4. References

- A. Hayes. "Quick Response (QR) Code". Investopedia. https://www.investopedia.com [2021].
- T. Contributor, "QR code (quick response code)". TechTarget, https://www.techtarget.com [2022].
- "Covid-19 Declaration Form". https://www.denr.gov.ph.

#### 1.5. Overview

Health Teknoy is an application that will be in service to make filling out health declaration form much easier and quicker by generating a QR code. After the code is scanned, information will be directed to the database that is monitored by an admin. Moreover, users' data are being assured to be protected and safe. Lastly, this application includes the following functions: my calendar tab, my QR code, home, my account, and history which will be discussed elaborately in this document.

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# 2. Overall Description

### 2.1. Product perspective

The software would be created and implemented in an Android operating system environment because it is a mobile application. The intended audience for the application is largely students who are mobile users. Any phone with the latest version of the Android operating system can use the app.

### 2.2. Product functions

#### 1. QR Code Generator

 Creates Quick Response Code of the form that the user created from the health declaration form inside the app.

#### QR Scanner

 Scans the QR Code that is generated by the student. Once scanned, it will show the students' summary.

#### 2. Student Summary

Shows an overview of the students' details and whether the student is valid to go inside the campus or not. This function is dependent on the students' input of their details. If they don't have any symptoms that lead to coronavirus related diseases, then they are free to go inside the campus.

#### 3. Students Statistics

- It provides the statistics of students at the university. It shows the number of students who entered the campus, the number of students who are symptomatic, and the number of students who have traveled outside of Cebu for the last 2 weeks.

#### 4. Student History

It shows the history of a student's summary, the time and date when the student gets sick or when the student manages to enter the campus.

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#### 2.3. User characteristics

The expected users of this software are CIT students who care for themselves and other people. Users should know how to use mobile apps in general and what the app's main features are.

Users must fill out the health declaration form with the essential information. The user can generate the QR code they need to enter the campus once they have finished entering all the necessary details. They can generate the QR code anytime they need because their details are already saved. If they wish to edit their information, they are free to do so with the editing feature.

#### 2.4. Constraints

Internet connectivity is necessary to run the app. The generated QR code will expire after 1 day, so that the users will be reminded to check their form if they need to edit some data. The application will show an overview of the students' health status and whether they are valid to enter or not based on the health declaration form data they input once their QR code is scanned.

## 2.5. Assumptions and dependencies

The application is dependent on the user's data to generate a QR code. The integrity of the students is essential in order for the system to identify if the user is valid to go inside the school premises.

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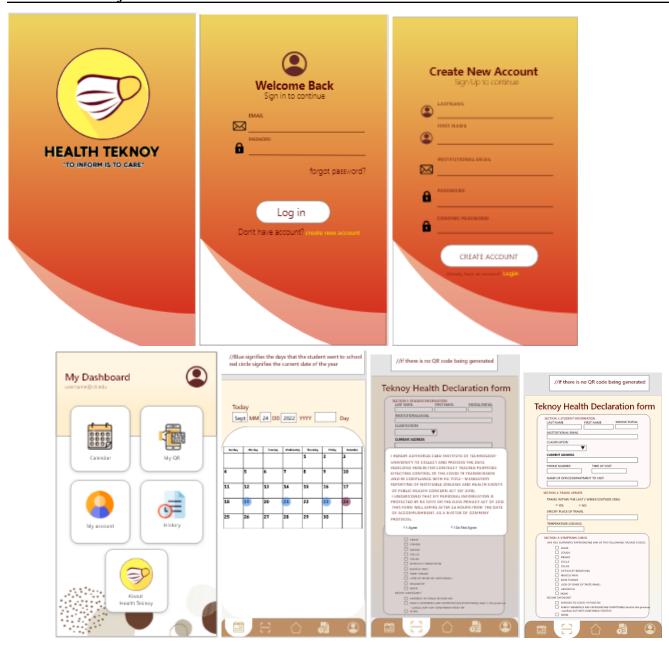
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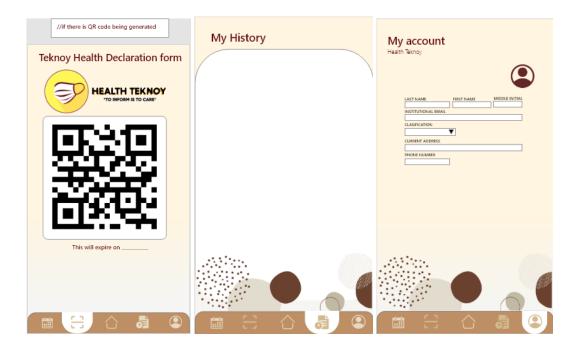
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# 3. Specific Requirements

## 3.1. External interface requirements

#### 3.1.1. User interfaces





#### 3.1.2. Hardware interfaces

An Android Operating System is required for the software to be installed and operated by the user.

### 3.1.3. Software interfaces

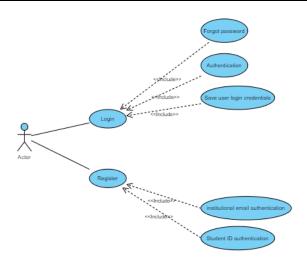
The application uses the Android Operating System Environment as the platform for development. The Integrated Development Environment (IDE) used is the Android Studio Chipmunk 2021 version, with the use of Java. Database is needed to store data of partnered store's product details.

#### 3.1.4. Communications interfaces

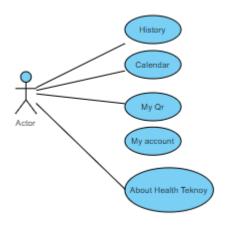
Communication is not required by the software.

## 3.2. Functional requirements

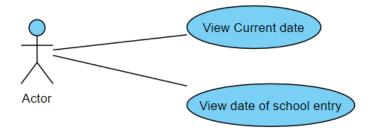
## 3.2.1. User Login Use Case



#### 3.2.2. Dashboard



## 3.2.3. My calendar



# 3.3. Performance Requirements

The application is required to run on android mobile devices. The system is expected to generate a QR code based on the information inputted by the user. The QR code is then scanned to be confirmed and data is

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added to the database. On the admin's side, a table would be seen where students' statistics can be accessed where each data can be sorted from their own categories like the number of students that entered the campus, number of symptomatic students, number of students that went outside of cebu, and more.

### 3.4. Design constraints

The software is limited only to mobile users with an android operating system.

## 3.5. Software system attributes

Availability - The software is available to anyone who has an android smartphone.

Efficiency - Functions of the application provides the basic necessities that targets the objectives of providing an easier way of a health declaration form..

Reliability - QR code can be used repeatedly within the 24 hour time period.

Maintainability - Software can evolve to meet user's needs.

Acceptability - Usage of the application does not limit to a single target audience.

# 3.6. Other requirements

# 4. Appendixes

# 5. Index