**Dental Clinic Services System**

Software Requirement Specification

By

**Kanokwan Maneerat 542115002**

**Worapun Wongkium 542115055**

Department of Software Engineering

College of Arts, Media, and Technology

Chiang Mai University

Project Adviser

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mrs. Yun Rim Park

**Project Management Plan**

**Revision Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Document Name** | **Detail** | **Status** | **Date** | **Viewable** | **Reviewer& Responsible** |
| Dental Clinic Services System-SRS-ver 0.1 | All chapters |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Table of Content**

**Type chapter title (level 1)1**

Type chapter title (level 2)2

Type chapter title (level 3)3

**Type chapter title (level 1)4**

Type chapter title (level 2)5

Type chapter title (level 3)6

# Chapter One: Introduction

## 1. Introduction

Dental clinic service system is created for reducing officers’ work and make convenient for the patient. This project will provide the dental clinic schedule for patients, officers and dentists all of them can manage their time by themselves, such as patient can reserve date/time to make an appointment date. In each of the user has limited usability for each user such as patient cannot change the dentists' appointment.

## 1.1 Purpose

This project management plan is a document for planning, scheduling, activities and evaluating overall of the project so the project for managing and avoid the risk that can occur in the project. The project will complete as successful as possible.

## 1.2 Scope

Dental clinic service system is mobile application and web application to develop for small dental clinic. This application helps to manage the patients’ appointment date and appointment remind. The reminder function is included in the mobile application. For the patient who does not use a smart phone the system will send a notification in sms. It can generate the patients’ ID in the QR code to identify patient do not to bring the appointment card to the dental clinic and send the QR code by using email, mobile application. The officer and dentist can create, change, and edit and delete the patients’ schedule. This application is proportion of works under ISO 29110

## 1.3 Acronyms

### 1.3.1 Acronyms

|  |  |
| --- | --- |
| **Acronyms** | **Stands for** |
| PM | Project Management |
| PMP | Project Management Plan |
| URS | User Requirement Specification |
| SRS | Software Requirement Specification |
| VSE | Very Small Entity |
| QR code | Quick Response Code |

### 1.3.2 Definition

Acceptance test Test activities for sample checks to verify a system (or product, solution) has the right quality for deployment or usage. Often acceptance test is done by customer [IEEE90]

Feature Transformation of input parameters to output parameters based on specified algorithm. It describes the functionality of the product. Used for requirements analysis, design, coding, testing or maintenance. [IEEE90]

IEEE Institute for electrical and electronic engineers. Biggest global interest group for engineers of different branches and computer scientist [IEEE90]

Plan A documented series of task requires meeting an objective, typically including the associated schedule, budget, resources, organizational, description and work breakdown structure [IEEE90]

Project Management The application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project [IEEE90]

Project Plan A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and the decision, to facilitate communication among stakeholders, and to document approved scope, scope, cost, and schedule baseline. [IEEE90]

Risk An uncertain event or condition that, if it occurs, has a positive or negative effect on a project’s objectives. It is a function of the probability of occurrence of a given threat’s occurrence. [IEEE90]

Risk Management The systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk. [IEEE90]

Traceability The ability to trace the history, application or location of an item or activities, by means of recorded identification. The establishment and maintenance of relationships between such items. Horizontal traceability describes the relationship between work products of the same type (e.g. customer requirement). Vertical traceability describes the relationship between work products which build upon each other or derived from each other (e.g. from customer requirements to qualification test cases). Bidirectional traceability allows to directly following relationships in both directions. [IEEE90]

Unit test A test of individual programs or modules in order to remove design or programming errors. [IEEE90]

Validation Confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use a fulfilled (“doing the right thing”).Part of quality control.

Verification Confirmation at the end of the process by examination and provision of objective evidence that specified requirements to the process have been fulfilled (“doing things right”). Part of quality control. [IEEE90]

QR code two-dimensional barcodes that can be read by many cell phones and smartphones. The codes, which are small squares with black and white patterns, appear in a variety of places, such as magazine and newspaper ads. A QR code is used to encode some sort of information, such as text or a URL.

## 1.4 Software Overview

Dental Clinic Services System is developing to reduce the work of officer and let dentist and patients get closer, this program focus to development on base of ISO 29110. Dental Clinic Services System is providing facilitate, speedy in the service to customer.

## 1.5 Overall Description

### 1.5.1 Product Perspective

Dental Clinic Services System is mobile application and web application which provide for patient, officer, and dentist. Patient can use both mobile application and web application to use the dental clinic services such as make an appointment, and consult with dentist. For officer and dentist they can use web application to manage the schedule and appointment. Reduce the work of officer by using QR code to identify the patient and for dentist can consult with their patient directly.

### 1.5.2 Product Function

The main function of Dental Clinic Services System:

* Make an appointment
* Appointment reminder
* Patient identification by using QR code
* Consulting between dentist and patient

### 1.5.3 Environment Condition

Dental clinic services System can let the patient get closer with the clinic by using the services of both application such as consulting, knowledge of dental treatment, and promotion. Reduce the work of officer by identify the patient using QR code and application can remind the patient about upcoming appointment.

### 1.5.4 User Characteristics

In Dental Clinic Services System focus on the small clinic, so this program will have about 2-3 dentists, and 1 officer.

* **Visitor:** The user who is interesting in dental treatment and dental clinic.
* **Patient:** The user who is already the patient of the clinic and already have an account which registered by the officer at the clinic.
* **Officer:** The user who is an admin, can register the account for new patient and dentist.
* **Dentist:** The only user that can answer the patients’ question

### 1.5.5 External Interface

The data of Dental Clinic Services System will store in the database which is in the server.

### 1.5.6 Constrains

* The program should support only in English version.
* The SMS have the limit to sending
* The program must follow ISO 29110