**Dental Clinic Services System**

Traceability Record

By

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Mrs. Yun Rim Park

**Test Plan**

**Revision Table**

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| **Document Name** | **Detail** | **Status** | **Date** | **Viewable** | **Reviewer& Responsible** |
| DCSS - Traceability Record  - ver 0.1 | Add all document | Draft | 07/02/2014 | Adviser | Kanokwan&Worapun |

**Table of Content**

**Chapter One: Introduction**

* 1. **Objectives**

Dental clinic service system is a web application and mobile application, which support ios7. This application is support English language for the person who is the patient, the officer or the dentist of the dental clinic furthermore it allow visitor can use. This application will reduce officers’ work and do not waste patients’ time so, patient can find anything about dental clinic information or personal information and others from it. For the visitor who want to has a dental treatment from the clinic he/she can make an appointment to the dentist through the application and also the dentist can use it for checking patients’ schedule. The Dental clinic services system is gathered most of the services in the clinic into the web application and mobile application. When the application is grouping all the services together it will be uncomplicated for dental clinic user.

This Software Requirement Specification has described in more detail of each requirement and each function that the system should have. The document includes the scope of project, product function, user characteristic, Functional Requirement, and Non-Functional Requirement.

**1.2 Purpose**

The purpose of the traceability record document is to show relation of the project. The traceability is linked between user requirements to system requirement specification, use case, activity diagram, sequence diagram and user interface design.

**1.3 Scope**

Dental clinic services system is a website and mobile application for dental clinic’s patient. This program can reduce clinic’s officer works and convenient for patient. The dental clinic provides patientID and password for clinic’s patient use for login into the application and website. In the website and application.

The test plan describes the units testing and to solve the defects in the system and describes the system testing activities for testing a completely integrated system to verify that it meets the user requirements.

**Chapter Two | Traceability Record Table**

**2.1 Bi-directional metrics System: Requirement Specifications and User Requirement Specification**

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| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 1 | SRS-01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | SRS-02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | SRS-03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | SRS-04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | SRS-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | SRS-06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | SRS-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | SRS-08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | SRS-09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | SRS-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | SRS-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 12 | SRS-12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | SRS-13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | SRS-14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | SRS-15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | SRS-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | SRS-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | SRS-18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | SRS-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | SRS-20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | SRS-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | SRS-22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | SRS-23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | SRS-24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 25 | SRS-25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | SRS-26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | SRS-27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | SRS-28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 | SRS-29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | SRS-30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | SRS-31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | SRS-32 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 33 | SRS-33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 | SRS-34 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 | SRS-35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | SRS-36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 37 | SRS-37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 38 | SRS-38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | SRS-39 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 | SRS-40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 41 | SRS-41 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | SRS-42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 43 | SRS-43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 | SRS-44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**2.2 Bi-directional metrics : Use Case and User Requirement Specification**

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| No. | Use Case | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 1 | UC-01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | UC-02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | UC-03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | UC-04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | UC-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | UC-06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | UC-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | UC-08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | UC-09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | UC-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | UC-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | UC-12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| No. | Use Case | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 13 | UC-13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | UC-14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | UC-15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | UC-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | UC-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | UC-18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | UC-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | UC-20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | UC-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**2.3 Bi-directional metrics: Class Diagram and User Requirement Specification**

**2.4 Bi-directional metrics: Activity Diagram and User Requirement Specification**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Activity Diagram | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 1 | AD-01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | AD-02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | AD-03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | AD-04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | AD-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | AD-06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | AD-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | AD-08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | AD-09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | AD-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | AD-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | AD-12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No. | Activity Diagram | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 13 | AD-13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | AD-14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | AD-15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | AD-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | AD-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**2.5 Bi-directional metrics: Sequence Diagram and User Requirement Specification**

**2.6 Bi-directional metrics: User Interface Design and User Requirement Specification**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | User Interface Design | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 1 | UI-01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | UI-02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | UI-03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | UI-04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | UI-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | UI-06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | UI-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | UI-08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | UI-09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | UI-10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | UI-11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | UI-12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No. | User Interface Design | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 13 | UI-13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | UI-14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | UI-15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | UI-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | UI-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | UI-18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | UI-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | UI-20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**2.7 Bi-directional metrics: System Test Case and User Requirement Specification**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | System Test Case | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 1 | STC-01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | STC-02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | STC 03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | STC -04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | STC -05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | STC -06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | STC -07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | STC -08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | STC -09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | STC -10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | STC 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | STC -12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 13 | STC -13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | STC -14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | STC -15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | STC -16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | STC -17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | STC-18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | STC-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | STC-20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | STC-21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | STC-22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | STC-23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | STC-24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | STC-25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No. | System requirement specification | URS-01 | URS-02 | URS-03 | URS-04 | URS-05 | URS-06 | URS-07 | URS-08 | URS-09 | URS-10 | URS-11 | URS-12 | URS-13 | URS-14 | URS-15 | URS-16 | URS-17 | URS-18 | URS-19 | URS-20 | URS-21 |
| 26 | STC-26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | STC-27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Chapter Three | Traceability record**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **URS** | **SRS** | **AD** | **UC** | **CD** | **SD** | **STC** | **UI** |
| URS-01 | SRS-01  SRS-02 | AD-01 | UC-05 |  |  | STC-06 | UI-19 |
| URS-02 | SRS-02  SRS-03 | AD-02 | UC-06 |  |  | STC-05 | UI-13 |
| URS-03 | SRS-02  SRS-04 | AD-03 | UC-07 |  |  | STC-27 | UI-03  UI-14 |
| URS-04 | SRS-02  SRS-05 | AD-04 | UC-08 |  |  | STC-04 | UI-20 |
| URS-05 | SRS-02  SRS-06 | AD-05 | UC-09 |  |  | STC-03  STC-20  STC-26 | UI-15 |
| URS-06 | SRS-07  SRS-08  SRS-09 | AD-14 | UC-18 |  |  | STC-19 | UI-05 |
| URS-07 | SRS-02  SRS-10 | AD-15 | UC-19 |  |  | STC-21 | UI-15 |
| URS-08 | SRS-11 | AD-16 | UC-20 |  |  | STC-22 | UI-15 |
| URS-09 | SRS-02  SRS-12 | AD-17 | UC-21 |  |  | STC-23 | UI-15 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **URS** | **SRS** | **AD** | **UC** | **CD** | **SD** | **STC** | **UI** |
| URS-10 | SRS-09  SRS-13  SRS-14  SRS-15  SRS-16  SRS-17  SRS-18  SRS-19 |  | UC-01 |  |  | STC-02 | UI-18 |
| URS-11 | SRS-14  SRS-15  SRS-16  SRS-20  SRS-21  SRS-22  SRS-23  SRS-24  SRS-25  SRS-26  SRS-27 |  | UC-02 |  |  | STC-01  STC-09  STC-24 | UI-02  UI-04 |
| URS-12 | SRS-28  SRS-29  SRS-30 |  | UC-03 |  |  | STC-08 |  |
| URS-13 | SRS-28  SRS-29  SRS-30 |  | UC-04 |  |  | STC-07  STC-10  STC-25 |  |
| **URS** | **SRS** | **AD** | **UC** | **CD** | **SD** | **STC** | **UI** |
| URS-14 | SRS-09  SRS-32  SRS-33 | AD-06 | UC-10 |  |  | STC-11 | UI-07 |
| URS-15 | SRS-35  SRS-36  SRS-37 | AD-07 | UC-11 |  |  | STC-15 | UI-08  UI-09 |
| URS-16 | SRS-37 | AD-08 | UC-12 |  |  | STC-16 | UI-09 |
| URS-17 | SRS-09  SRS-38  SRS-39 | AD-09 | UC-13 |  |  | STC-13 | UI-10 |
| URS-18 | SRS-40  SRS-41 | AD-10 | UC-14 |  |  | STC-17 | UI-11  UI-12 |
| URS-19 | SRS-42 | AD-11 | UC-15 |  |  | STC-18 | UI-12 |
| URS-20 | SRS-35  SRS-43 | AD-12 | UC-16 |  |  | STC-12 | UI-09 |
| URS-21 | SRS-41  SRS-44 | AD-13 | UC-17 |  |  | STC-14 | UI-12 |

**Chapter Four | Appendix**

**4.1 User Requirement Specification**

**Schedule management**

URS-01: User can view patients’ appointment in mobile application

URS-02: User can view patients’ appointment in website

URS-03: User can view the dentist appointment in website

URS-04: User can view all appointment in mobile application

URS-05: User can view all appointment in website

**Appointment management**

URS-06: User can add new appointment into the database

URS-07: User can edit the appointment

URS-08: User can delete the appointment

URS-09: User can save the appointment to google calendar

**User registration and authentication**

URS-10: User can login to the mobile application

URS-11: User can login to the website

URS-12: User can logout from the mobile application

URS-13: User can logout from the website

URS-14: User can create an account for new patient

URS-15: User can edit patients’ information

URS-16: User can delete patients’ account

URS-17: User can create an account for new dentist

URS-18: User can edit dentists’ information

URS-19: User can delete dentists’ account

URS-20: User can view all patients’ account as a list

USR-21: User can view all dentists’ account as a list

**4.2 Use Case**

UC-01: Login(in mobile application)

UC-02: Login(in website)

UC-03: Logout(in mobile application)

UC-04: Logout(in website)

UC-05: Display patients’ appointment(in mobile application)

UC-06: Display patients’ appointment(in website)

UC-07: Display dentists’ appointment(in website)

UC-08: Display appointment schedule(in mobile application)

UC-09: Display appointment schedule(in website)

UC-10: Create new account for patient

UC-11: Edit patients’ information

UC-12: Delete patients’ information

UC-13: Create new account for dentist

UC-14: Edit dentists’ information

UC-15: Delete dentist s’ account

UC-16: Display patients’ list

UC-17: Display dentists’ list

UC-18: Create new appointment

UC-19: Edit appointment

UC-20: Delete appointments’ account

UC-21: Save the appointment to google calendar

**4.3 System Requirement Specification**

SRS-01: System shall provide patients’ appointment schedule interface in mobile application

SRS-02: System shall query data from appointment table in database

SRS-03: System shall provide patients’ appointment schedule interface in website

SRS-04: System shall provide dentists’ appointment schedule interface in website

SRS-05: System shall provide all appointment schedule of dental clinic in mobile application

SRS-06: System shall provide all appointment schedule of dental clinic in website

SRS-07: System shall provide interface for make a new appointment

SRS-08: System shall add new appointment to appointment table in the database which contains patientID, dentistID, date, startTime, endTime, treatment, and description

SRS-09: System shall show error message “Please fill out this field” for any field that require to not empty

SRS-10: System shall update new appointments’ data to appointment table in the database

SRS-11: System shall delete appointment from appointment table in database

SRS-12: System shall open google calendar page to save the data to calendar

SRS-13: System shall provide the login interface for patient in mobile application

SRS-14: System shall validate by match patientID with the data in patient table in the database

SRS-15: System shall validate by match password with the data in patient table in the database

SRS-16: System shall validate by match userID with the data in clinic users’ table in the database

SRS-17: System shall show error message “Your login failed”

SRS-18: System shall save session after user login

SRS-19: System shall provide the main page interface for patient in mobile application

SRS-20: System shall show error message “Wrong username or password”

SRS-21: System shall save session after user login

SRS-22: System shall provide the login interface for patient in website

SRS-23: System shall provide the login interface for officer in website

SRS-24: System shall provide the login interface for dentist in website

SRS-25: System shall provide the index page for patient

SRS-26: System shall provide the index page for officer

SRS-27: System shall provide the index page for dentist

SRS-28: System shall provide logout button for logout

SRS-29: System shall destroy session after user logout

SRS-30: System shall provide main home page interface in mobile application

SRS-28: System shall provide logout button for logout

SRS-29: System shall destroy session after user logout

SRS-31: System shall provide main home page interface in website

SRS-32: System shall provide interface for create a new account for patient

SRS-33: System shall add new patient to patients’ table in the database which contains patientID, password, firstname, lastname, age, gender, address, phone number, and email address

SRS-34: System shall update new patients’ data to patients’ table in the database

SRS-35: System shall query data from patients’ table in the database

SRS-36: System shall provide interface for edit patients’ information

SRS-37: System shall delete patient from patients’ table in database

SRS-38: System shall provide interface for create a new account for dentist

SRS-39: System shall add new dentist to clinic users’ table in the database

SRS-40: System shall update new dentists’ data to dentists’ table in the database

SRS-41: System shall query data from dentists’ table in the database

SRS-42: System shall delete patient from dentists’ table in database

SRS-43: System shall provide interface for show list of patient

SRS-44: System shall provide interface for show list of patient

**4.4 Class Diagram**

**4.5 Activity Diagram**

AD-01: Display patients’ appointment in mobile application

AD-02: Display patients’ appointment in website

AD-03: Display dentists’ appointment in website

AD-04: Display appointment schedule(in mobile application)

AD-05: Display appointment schedule(in website)

AD-06: Create new account for patient

AD-07: Edit patients’ information

AD-08: Delete patients’ information

AD-09: Create new account for dentist

AD-10: Edit dentists’ information

AD-11: Delete dentists’ information

AD-12: Display patients’ list

AD-13: Display dentists’ list

AD-14: Create new appointment

AD-15: Edit appointment

AD-16: Delete appointments’ account

AD-17: Delete appointments’ account

**4.6 Sequence Diagram**

**4.7 User Interface Design**

UI-01: Shows the index page of website

UI-02: Shows the login page of the website.

UI-03: Shows the schedule of dental clinic from google calendar.

UI-04: Shows the officer index page after officer login. Officer can make appointment google calendar, view schedule, and manage account

UI-05: Add new appointment page for officer to add appointment to the database

UI-06: Shows page of google calendar to add the appointment to dental clinic calendar.

UI-07: Shows the patient registration page.

UI-08: Shows the edit patients’ details page.

UI-09: Shows all patient account as list.

UI-10: Shows the dentist registration page.

UI-11: Shows edit dentist information page.

UI-12: Shows all dentist account as a list

UI-13:Patient can view his/her appointment in website using patientID and password.

UI-14: Dentist can view his/her appointment in website using userID and password.

UI-15: Officer can view all appointment as a list and the appointment page has delete and edit function for edit/delete appointment account

UI-16: Mobile application index page[UI-16]

UI-17: Mobile application menu [UI-17

UI-18: Login page for patient [UI-18]

UI-19: Display patients’ appointment [UI-19]

UI-20: Dental clinic calendar [UI-20]

**4.8 System Test Case**

**Patient**

STC-01: Users can login into the websites

STC-02: Users can login into the mobile application

STC-03: Users can view appointment schedule in the website

STC-04: Users can view appointment schedule in mobile application

STC-05: Users can view his/her appointment schedule in the website

STC-06: Users can view his/her appointment schedule in the mobile application

STC-07: Users can logout from the website

STC-08: Users can logout from the mobile application

**Officer**

STC-09: Users can login into the websites

STC-10: Users can logout from website

STC-11: Users can create patient account

STC-12: Users can view patient list in the patients’ schedule

STC-13: Users can create dentist account

STC-14: Users can view dentist list in the dentists’ schedule

STC-15: Users can edit patient account

STC-16: Users can delete patients’ account

STC-17: Users can edit dentists’ information

STC-18: Users can delete dentists’ account

STC-19: Users can make an appointment

STC-20: Users can view appointment schedule in the website

STC-21: Users can edit an appointment

STC-22: Users can delete an appointment

STC-23: Users can save appointment into google calendar

**Dentist**

STC-24: Users login to the website

STC-25: Users logout from the website

STC-26: Users can view the appointment schedule

STC-27: Users can view his/her dentists’ appointment schedule