**Dental Clinic Services System**

Software Requirement Specification

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**Software Requirement Specification**

**Revision Table**

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# Chapter One: Introduction

## Introduction

### 1.1 Objectives

Dental clinic service system consists of a web application and mobile application, which support ios7. It offers most of the services needed by dental clinics into the web application and mobile application. This application supports patients, officers or dentists of a dental clinic. Furthermore, it allows visitors to use. This application will reduce officers’ work and save patients’ time also. Patient can find information about the dental clinic, personal information, and others from it. For visitors who want to get a dental treatment from the clinic, they can make an appointment with a dentist through the application and also the dentist can use it for checking patients’ schedule. When all these services are integrated into the system, it can provide much convenience to dental clinic users.

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 the project, the system’s functionalities, user characteristic, functional requirements, and non-functional requirements.

### 1.2 Project Scope

The objective of this software requirement specification is to specify requirements to establish the application that:

* Dental clinic services system is a web application for both computers and mobile devices.
* Dental clinic services system for mobile devices supports iOS.
* Dental clinic services system supports English language.
* Dental clinic services system provides for dental clinics’ patients, officers and dentists.
* Dental clinic services system provides the appointments of patients and dentists.
* Dental clinic services system provides user authentication for patients and dentists, which is maintained by dental clinic officers.

**1.3 User Classes and Characteristics**

The system divides users into 3 groups. Information and characteristics of each group are listed below.

* **Patient**

This group of per son who already register to the system at the dental clinic. They will get patientID and password from the clinic to use the services in website and mobile phone. Patient uses patientID to login. Patient is able to:

* + Patient can receive the pateintID and password from the dental clinic
  + Patient can login to the website and the mobile application
  + Patient can logout from the website and mobile application
  + Patient can view his/her appointment in the patient schedule
  + Patient can view all appointment in the dental clinic schedule
* **Officer**

This group of person who has the highest privilege in the system. So they gain the management function for maintaining the system. Officer is able to:

* + Officer can login to the website by using officerID and password
  + Officer can logout from the website
  + Officer can register for new patient and dentist
  + Officer can add appointment into the dental clinic schedule
  + Officer can edit appointment in the dental clinic schedule
  + Officer can delete appointment in the dental clinic schedule
* **Dentist**

This group of person who has the highest privilege in the system. So they gain the management function for maintaining the system. Dentist is able to:

* + Dentist can login to the website by using dentistID and password
  + Dentist can logout from the website
  + Dentist can view his/her appointment in the dentist schedule
  + Dentist can view all appointment in the dental clinic schedule

**1.4 Operation Environment**

Dental clinic services system provides web application and mobile application for iOS. All user must have the Internet connection. Mobile devices must supports iOS version 7.

**1.5 Acronyms and Definitions Acronyms**

DCSS =Dental clinic services system

PMP = Project Management Plan

* 1. SDD = Software Design Document
  2. SRS = Software Requirement Specification
  3. URS = User Requirement Specification
  4. SRS = Software Requirement Specification
  5. UC = Use Case
  6. AD = Activity Diagram

# Chapter Two: Overall Description

## Overall Description

### 2.1 Product Perspective

The Dental clinic services system is a mobile application base on iOS and web application. So this application helps patients save their time to contact with the dental clinic by providing features such as make an appointment, view upcoming appointment, and cost estimation. Help dentist to following up their patient, view and their appointment schedule. Also reduce works of officer by providing features such as use QR code to identify patient at the clinic, manage appointment for patient and dentist. This application is grouping most of dental clinics' services into one application.

### Product Features

The dental clinic services system offers six features. Each of features will create a step by step suit by priority. The following list is a description of each part in more detail.

### 2.3 Design and Implementation Constraints

List of project constraints:

* The application works on only iOS version7.
* The application requires the Internet connection.
* The application is available for the users who are already registered to the system and also who are not.

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# Chapter Three: User Requirement

## 3. User requirement

### 3.1 Dental clinic services system URS

**Schedule management**

URS-01: User can view his/her appointment schedule in mobile application

URS-02: User can view his/her appointment schedule in website

URS-03: User can view all appointment in the dental clinic appointment schedule

URS-04: User can view the dentist appointment in website

URS-05: User can view the patient 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

### 3.2 Dental clinic services system SRS

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

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

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

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

SRS-10: System shall delete appointment from appointment table in database

SRS-11: System shall open google calendar page to save the data to calendar

SRS-12: System shall provide the login interface for patient in mobile application

SRS-13: System shall validate by match patientID and password with the data in patient table in the database

SRS-14: System shall validate by match userID and password with the data in clinic users’ table in the database

SRS-15: System shall show error message “Wrong username or password”

SRS-16: System shall save session after user login

SRS-17: System shall provide the login interface for patient in website

SRS-18: System shall provide the login interface for officer in website

SRS-19: System shall provide the login interface for dentist in website

SRS-20: System shall provide logout button for logout

SRS-21: System shall destroy session after user logout

SRS-22: System shall provide interface for create a new account for patient

SRS-23: System shall add new patient to patients’ table in the database

SRS-24: System shall query data from patients’ table in the database

SRS-25: System shall delete patient from patients’ table in database

SRS-26: System shall provide interface for create a new account for dentist

SRS-27: System shall add new dentist to clinic users’ table in the database

SRS-28: System shall add new dentist to dentists’ table in the database

SRS-29: System shall query data from dentists’ table in the database

SRS-30: System shall delete patient from dentists’ table in database

SRS-31: System shall provide interface for show list of patient

SRS-32: System shall provide interface for show list of patient

# 

# Chapter Four: System Features

## 4. System Features

### 4.1 User requirement specification with system requirement specification

**URS-01: User can view his/her appointment schedule in mobile application**

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

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

**URS-02: User can view his/her appointment schedule in website**

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

**URS-03: User can view all appointment in the dental clinic appointment schedule**

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

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

**URS-04: User can view the dentist appointment in website**

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

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

**URS-05: User can view the patient appointment in website**

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

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

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

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

SRS-08: System shall add new appointment to appointment table in the database

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

**URS-07: User can edit the appointment**

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

SRS-08: System shall add new appointment to appointment table in the database

**URS-08: User can delete the appointment**

SRS-10: System shall delete appointment from appointment table in database

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

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

SRS-11: System shall open google calendar page to save the data to calendar

**URS-10: User can login to the mobile application**

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

SRS-12: System shall provide the login interface for patient in mobile application

SRS-13: System shall validate by match patientID and password with the data in patient table in the database

SRS-14: System shall validate by match userID and password with the data in clinic users’ table in the database

SRS-15: System shall show error message “Wrong username or password”

SRS-16: System shall save session after user login

**URS-11: User can login to the website**

SRS-13: System shall validate by match patientID and password with the data in patient table in the database

SRS-14: System shall validate by match userID and password with the data in clinic users’ table in the database

SRS-15: System shall show error message “Wrong username or password”

SRS-16: System shall save session after user login

SRS-17: System shall provide the login interface for patient in website

SRS-18: System shall provide the login interface for officer in website

SRS-19: System shall provide the login interface for dentist in website

**URS-12: User can logout from the mobile application**

SRS-20: System shall provide logout button for logout

SRS-21: System shall destroy session after user logout

**URS-13: User can logout from the website**

SRS-20: System shall provide logout button for logout

SRS-21: System shall destroy session after user logout

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

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

SRS-22: System shall provide interface for create a new account for patient

SRS-23: System shall add new patient to patients’ table in the database

**URS-15: User can edit patients’ information**

SRS-23: System shall add new patient to patients’ table in the database

SRS-24: System shall query data from patients’ table in the database

**URS-16: User can delete patients’ account**

SRS-25: System shall delete patient from patients’ table in database

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

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

SRS-26: System shall provide interface for create a new account for dentist

SRS-27: System shall add new dentist to clinic users’ table in the database

**URS-18: User can edit dentists’ information**

SRS-28: System shall add new dentist to dentists’ table in the database

SRS-29: System shall query data from dentists’ table in the database

**URS-19: User can delete dentists’ account**

SRS-30: System shall delete patient from dentists’ table in database

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

SRS-24: System shall query data from patients’ table in the database

SRS-31: System shall provide interface for show list of patient

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

SRS-29: System shall query data from dentists’ table in the database

SRS-32: System shall provide interface for show list of patient

4.2 Use Case Diagram

**4.2.1 Dental clinic services system Use Case for Patient**

**Patient**

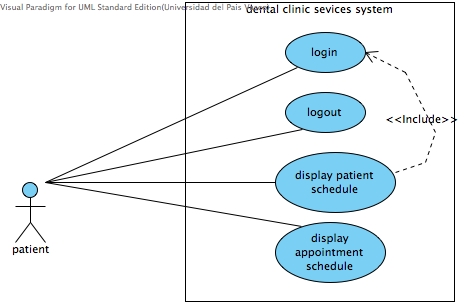


Figure 1: Dental clinic services system patient use case diagram

**4.2.2 Dental clinic services system Use Case for Officer**

**Officer**

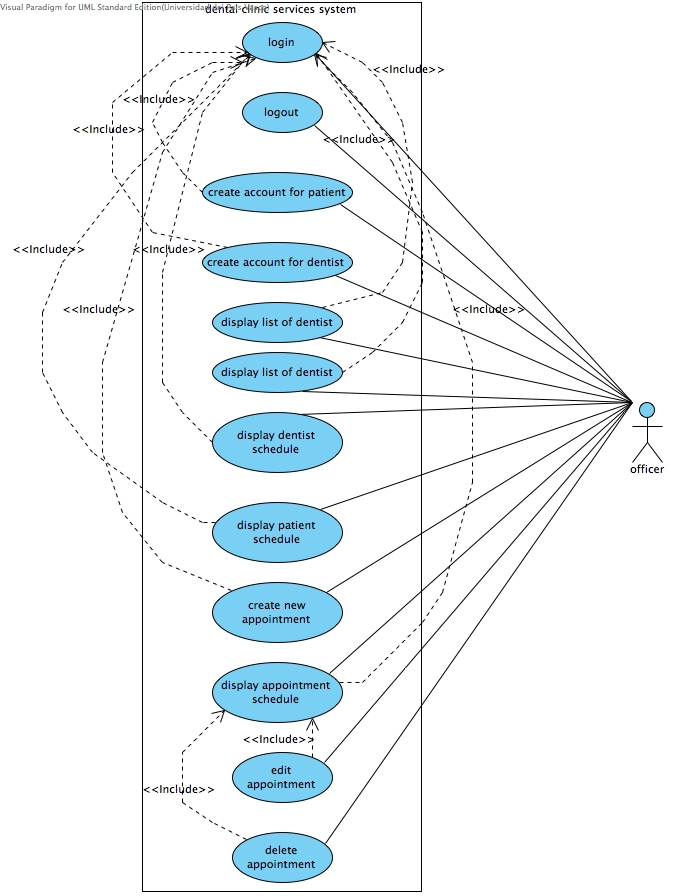


Figure 2: Dental clinic services system officer use case diagram

**4.2.3 Dental clinic services system Use Case for Dentist**

**Dentist**

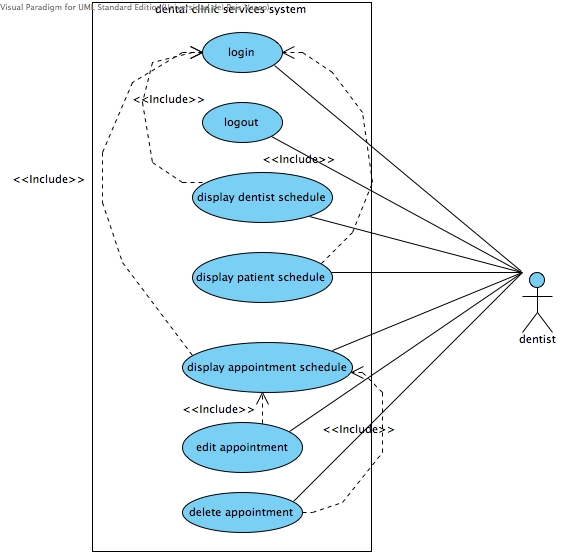
****

Figure 3: Dental clinic services system dentist use case diagram

### 4.3 Use case description

**4.3.1 Use case description for patient**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-01 | | |
| **Use Case Name:** | Login | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Patient,Officer,Dentist | | |
| **Description:** | User can login for identifying him/herself to website and mobile application. | | |
| **Trigger:** | User selects login menu to the dental clinic website or application. | | |
| **Preconditions:** | User enters to the dental clinic website or application. | | |
| **Postconditions:** | User can use the services that requires log in. | | |
| **Normal Flow:** | 1. User enters to website or application. 2. System shall provide the home page on website or application 3. User selects to login to the website or application 4. System shall provide login interface in mobile application 5. System shall provide login interface in website 6. User input ID(patientID for patient, dentistID for dentist, officerID for officer) and password. 7. System shall validate by match ID and password to the data in database 8. System shall show error message “Please input your id” 9. System shall show error message “Please input your password” 10. System shall show error message “Wrong username or password” 11. System shall save session after user login 12. User enter to home page | | |
| **Alternative Flows:** | 5a.User login to the website or application  1. User input ID/password  2. User select login  3. System shall validate by match ID and password with the database  4. System shall show error message “Wrong username or password”  4. Go back to basic flow 5 | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection user cannot login to the website or the application. System validation finds that the user record does not exist in the database. | | |
| **Includes:** | Steps 1-11 in the normal flow would be required for all types of request for login. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. User has to has his/her ID and password first. User id and password are provided by the dental clinics’ officer | | |
| **Notes and Issues:** | N/A | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-02 | | |
| **Use Case Name:** | Logout | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Patient,Officer,Dentist | | |
| **Description:** | User can logout from website and application | | |
| **Trigger:** | User selects logout button | | |
| **Preconditions:** | User is already logged into the website or application | | |
| **Postconditions:** | User enters the home page | | |
| **Normal Flow:** | 1. User selects logout from website or application 2. System shall destroy session after user logout 3. User enters to the home page | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection user cannot logout to the website or the application. | | |
| **Includes:** | Steps 1-4 in the normal flow would be required for all types of request for logout. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. User has to login into the website or application already. | | |
| **Notes and Issues:** | N/A | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-03 | | |
| **Use Case Name:** | Display patient schedule | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Kanokwan Maneerat |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Patient | | |
| **Description:** | Patient can view his/her own appointment in the patient schedule which provide in the website and mobile application | | |
| **Trigger:** | Patient selects dentist schedule | | |
| **Preconditions:** | Patient is already logged into the website or application by using patientID and password | | |
| **Postconditions:** | Patient enters to the patient schedule page | | |
| **Normal Flow:** | 1. Patient select dentist schedule from the home page 2. System shall provide the patient schedule interface that includes dentist appointment in website 3. System shall provide the patient schedule interface that includes dentist appointment in mobile application 4. System shall query data from appointment table in the database | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection user cannot login to the website or the application. The patient schedule will not show up. | | |
| **Includes:** | Steps 1-6 in the normal flow would be required for all types of display dentist schedule. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | Patient understands English language. Patient has to have his/her patient ID and password first. The dental clinics’ officer provides patient ID and password. | | |
| **Notes and Issues:** | N/A | | |

login

Home page

View Patient schedule

Login fail

Login success

Figure 4: Display patient schedule [AD-01]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-04 | | |
| **Use Case Name:** | Display dentist schedule | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Dentist | | |
| **Description:** | Dentist can view his/her own appointment in the dentist schedule which provide in the website | | |
| **Trigger:** | Dentist select dentist schedule | | |
| **Preconditions:** | Dentist has to login to the website by using dentistID and password | | |
| **Postconditions:** | Dentist enters to the dentist schedule page | | |
| **Normal Flow:** | 1. Dentist login to the website by using dentistID and password 2. System shall save session after user login 3. Dentist enter to the home page 4. Dentist select dentist schedule from the home page 5. System shall provide the dentist schedule interface that includes dentist appointment in website 6. System shall query data from appointment table in the database | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection user cannot login to the website or the application. The dentist schedule will not show up. | | |
| **Includes:** | Steps 1-6 in the normal flow would be required for all types of display dentist schedule. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | Dentist understands English language. Dentist has to have his/her dentist ID and password first. The dental clinics’ officer provides dentist ID and password. | | |
| **Notes and Issues:** | N/A | | |

login

Home page

View Dentist schedule

Login success

Login fail

Figure 5: Display dentist schedule [AD-02]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-05 | | |
| **Use Case Name:** | Display appointment schedule | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Patient,Officer,Dentist | | |
| **Description:** | User can view all appointment that include patient and dentist appointment in the dental clinic appointment schedule page | | |
| **Trigger:** | User select appointment schedule | | |
| **Preconditions:** | User enter to the website or application | | |
| **Postconditions:** | User enter to the home page | | |
| **Normal Flow:** | 1. User enter to the website or application 2. System shall provide the home page on website or application 3. User enter to the home page 4. User select appointment schedule 5. System shall provide the dental clinic appointment interface in website 6. System shall provide the dental clinic appointment interface in mobile application 7. System shall query data from appointment table in the database 8. User view all appointment in the dental clinic appointment schedule | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection user cannot view the appointment | | |
| **Includes:** | Steps 1-8 in the normal flow would be required for all types of display appointment. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Home page

Login fail

Login success

View dental clinic appointment schedule

Figure 6: Display dental clinic appointment schedule [AD-03]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-06 | | |
| **Use Case Name:** | Create account for patient | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Kanokwan Maneerat |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can create patients’ account to identify when his/her login to the website or application | | |
| **Trigger:** | Officer select create patients’ account | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to the patient list page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer select create patients’ account 6. System shall provide create account interface 7. Officer input patientID, password, firstname, lastname, age, gender, address, phone number, email address 8. System shall create account for patient to provide the patientID and patients’ password 9. System shall display error message if there is empty field 10. Officer select submit to save patients’ account to the database 11. System shall collect patients’ name, surname, address, telephone number, and email into the database 12. Officer enter to the patient list page 13. System shall display the list of all patients in the dental clinics’ patient page 14. System shall query the data from patient table in the database | | |
| **Alternative Flows:** | 7a. System shall display error message if there is empty field   1. Go back to step 7 | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to the website. | | |
| **Includes:** | Steps 1-14 in the normal flow would be required for all types of create patients’ account. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Login fail

Login success

Home page

Create account for patient

Input patient information

Form is invalid

Form is valid

Patient list page

Figure 7: Create patient account [AD-04]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-07 | | |
| **Use Case Name:** | Create account for dentist | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Kanokwan Maneerat |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can create dentists’ account to identify when his/her login to the website | | |
| **Trigger:** | Officer select create dentists’ account | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to the dentist list page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer select create patients’ account 6. System shall provide create account interface 7. Officer input dentistID, password, firstname, lastname, age, gender, address, phone number, email address 8. System shall create account for patient to provide the dentistID and dentists’ password 9. System shall display error message if there is empty field 10. Officer select submit to save dentists’ account to the database 11. System shall collect dentists’ name, surname, address, telephone number, and email into the database 12. Officer enter to the dentist list page 13. System shall display the list of all dentists in the dental clinics’ dentist page 14. System shall query the data from dentist table in the database | | |
| **Alternative Flows:** | 7a System shall display error message if there is empty field   1. Go back to step 7 | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to the website. | | |
| **Includes:** | Steps 1-14 in the normal flow would be required for all types of create dentists’ account. | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Login fail

Login success

Home page

Add new appointment

Input appointment date/time/patient ID/dentist ID

Form is invalid

Form is valid

Dental clinic appointment schedule page

Figure 7: Create dentist account [AD-05]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-08 | | |
| **Use Case Name:** | Display patient list | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can view all dental clinics’ patient in patient list page | | |
| **Trigger:** | Officer select patient list page | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to the patient list page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer select patient list page 6. System shall display the list of all patients in the dental clinics’ patient page 7. System shall query the data from patient table in the database 8. Officer view all patient | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to the website. If without login officer cannot select to view patient list | | |
| **Includes:** | Steps 1-8 in the normal flow would be required for all types of display patient list | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Home page

Select patient list page

Figure 8: Display patient list [AD-06]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-09 | | |
| **Use Case Name:** | Display dentist list | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can view all dental clinics’ dentist in dentist list page | | |
| **Trigger:** | Officer select dentist list page | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to the dentist list page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer select dentist list page 6. System shall display the list of all dentists in the dental clinics’ dentist page 7. System shall query the data from dentist table in the database 8. Officer view all dentists | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to the website. If without login officer cannot select to view dentist list | | |
| **Includes:** | Steps 1-8 in the normal flow would be required for all types of display dentist list | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

Select dentist list page

Home page

login

Figure 9: Display dentist list [AD-07]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-10 | | |
| **Use Case Name:** | Add new appointment | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can create new appointment for patient and dentist in to the dental clinic appointment | | |
| **Trigger:** | Officer select create new appointment | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to create new appointment page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer select add new appointment 6. System shall provide add new appointment interface 7. Officer input patient ID, dentist ID and select date and time for making an appointment 8. System shall show error message if there are empty field 9. System shall add new patient appointment in to the database 10. Officer can view the new appointment in the dental clinic appointment schedule 11. System shall provide dental clinics’ appointment schedule page | | |
| **Alternative Flows:** | 7a. Officer input patient ID, dentist ID and select date and time for making an appointment   1. Officer input patient ID, dentist ID and select date and time for making an appointment 2. System shall add new patient appointment in to the database 3. Officer can view the new appointment in the dental clinic appointment schedule 4. Officer shall provide dental clinics’ appointment schedule page 5. System shall display error message if the time that officer select has already booked “Please select date and time again”   6. Go back to step 7 | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to add new appointment. | | |
| **Includes:** | Steps 1-6 in the normal flow would be required for all types of add new appointment | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Home page

Login fail

Login success

Select add new appointment page

Select appointment date in the schedule

Select time and input patient id ,dentist id to add new appointment

Cancel

save data

Dental clinic appointment schedule

Figure 10: Add new appointment [AD-07]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-11 | | |
| **Use Case Name:** | Edit appointment | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can edit patient or dentist appointment in dental clinics’ appointment schedule | | |
| **Trigger:** | Officer select the appointment in the dental clinics’ appointment schedule | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to dental clinics appointment schedule page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer enter to the dental clinics’ appointment schedule page 6. System shall provide the dental clinic appointment interface in website 7. Officer select the appointment in the schedule 8. System shall query data from appointment table in the database 9. Officer edit the date, time, dentistID, or patientID and click edit for submit 10. System shall edit the appointment in the database 11. Officer enter to the dental clinic appointment page | | |
| **Alternative Flows:** | 7a. Officer edit the date, time, dentistID, or patientID and click edit for submit   1. Officer edit the date, time, dentistID, or patientID and click edit for submit 2. System shall display error message if the date or time that edited has already booked 3. Go back to step 7 | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to edit appointment. In the dental clinic appointment schedule should have an appointment first. | | |
| **Includes:** | Steps 1-11 in the normal flow would be required for all types of edit appointment | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

Edit data

Cancel

Dental clinic appointment schedule

Select date / time /patient id /dentist id for edit

Login success

Login fail

Select appointment date in the schedule

Select dental clinic appointment

Home page

login

Figure 11: Edit appointment [AD-08]

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case ID:** | UC-11 | | |
| **Use Case Name:** | Delete appointment | | |
| **Created By:** | Worapun Wongkium | **Last Updated By:** | Worapun Wongkium |
| **Date Created:** | 17/04/2014 | **Last Revision Date:** | 17/04/2014 |
| **Actors:** | Officer | | |
| **Description:** | Officer can delete patient or dentist appointment in dental clinic appointment schedule | | |
| **Trigger:** | Officer select the appointment in the dental clinic appointment schedule | | |
| **Preconditions:** | Officer login to the website | | |
| **Postconditions:** | Officer enter to dental clinic appointment schedule page | | |
| **Normal Flow:** | 1. Officer login to the website 2. System shall save session after user login 3. Officer enter to the home page 4. System provide the home page 5. Officer enter to the dental clinic appointment schedule page 6. System shall provide the dental clinic appointment interface in website 7. Officer select the appointment in the schedule 8. System shall query data from appointment table in the database 9. Officer select delete button 10. System shall delete the appointment in the database 11. Officer enter to the dental clinic appointment page | | |
| **Alternative Flows:** | N/A | | |
| **Exceptions:** | System initiated: System unavailable the information will not deliver. If there are no internet connection officer cannot login to delete appointment. In the dental clinic appointment schedule should have an appointment first. | | |
| **Includes:** | Steps 1-11 in the normal flow would be required for all types of delete appointment | | |
| **Frequency of Use:** | On demand | | |
| **Special Requirements:** | N/A | | |
| **Assumptions:** | User understands English language. | | |
| **Notes and Issues:** | N/A | | |

login

Delete data

Cancel

Dental clinic appointment schedule

Login success

Login fail

Select appointment date in the schedule

Select dental clinic appointment

Home page

Select delete appointment

Figure 11: Delete appointment [AD-09]