



**DrAssist**

**Project documentation submitted to the  
Faculty of the School of Computing and Information Technology of  
Asia Pacific College**

**In partial fulfillment of the requirements for the subject  
Applied Projects 2 of CSPROJ**

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# **Vision and Scope Document**

**For**

# **DRASSIST**

**Version 4.0 approved**

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**August 25, 2017**



## Revision History

| Name   | Date            | Reason For Changes                                 | Version |
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| Maria Kristina Punla   | August 25, 2017 | Updated Objectives                                 | 4       |

## **Executive Summary**

DrAssist has been created and developed by a group of BSIT Students in Asia Pacific College under CSPROJ2 Class SY: 2017-2018 Term 1 for Happy Clinique Dental and Derma services only. Happy Clinique caters to both dental, dermatology and other diagnostic services. The clinic current appointment and booking process is walk-in and phone call. The clinic currently uses paper for maintaining records of their clients.

To be at par with competitors, Happy Clinique needs to adapt to current trends in technology by providing a website that will showcase their services and interact with customers.

The team decided to create and develop an online booking system for Happy Clinique's dental and derma patients only. Aside from the online booking system the team will also create a system that will contain the dental and derma patients' and payment record.

Patients will now have a website to visit to book or make appointment with the clinic for their dental or dermatology services. Employees of the clinic will now have a user-friendly system to assist their patients with booking, assist doctors with their appointments, manage dental and derma patients record online and manage dental and derma patients' payment record online.

## Statement of the Problem

Happy Clinique has been with the business for quite a while and by par still practices the traditional way of accepting appointment. They accept clients or patients through walk-ins, giving their patients the feeling of uncertainty if they will be able to get the service in an acceptable reasonable wait time or will they wait for a long time or will they be asked to come back.

Nowadays that people are always on the go, long waits is a big NO for customers. Long wait time is a major cause of patients' dissatisfaction. Although the clinic does have an old website, it is outdated and static. It does contain old information about the clinic but basically that its. Nothing to provide to their patrons any ease of convenience to avail of their service. A technological innovation is needed by the clinic in order to improve their day to day task that will equally improve their quality service.

Several issues occur when patients' walk-ins to the clinic for appointment or service. According to our observation and interviews done with the clinic staff. They could not avoid patients' dissatisfaction in a day. Patients who had taken their days off to go to the clinic for a dental or derma service does not guarantee that they will be accommodated on their time of arrival in the clinic. It still depends on how many patients have been scheduled on that day and depends on the number of walk-ins ahead of that patient.

On the clinic's side, they do not have a real data at hand on how many patients are book for the day resulting to over acceptance of appointments or bookings. 8 On the patient's side they will not know if they will be able to avail a service on that day. It is like trying your luck.

Patient might be accommodated after hours of waiting or worse they will be scheduled on a different day. Patient's record is all filed up in one big cabinet. It is the old traditional index card recording system. It does takes time for employee to locate one patient record, affecting employees' productivity.

The problem with no online system for recording their revenue is quite minimal but will result to a very big change and importance once transitioned to an online database system. With the old process of recording their revenue takes time, resulting to a decrease in employees' productivity.

## **Project Context**

This project will be used by Happy Clinique for their online booking limited to dental and dermatology service only.

## **Purpose and Description**

The team aims to provide Happy Clinique an efficient online booking system. The project also aims to create a system that will transition their patient (dental and derma patients only) and payment record to an online database.

## **Objectives**

### *General Objectives*

The project DrAssist aims to develop a website for Happy Clinique. Booking function, patient record and payment recording is available to dental and derma services only.

### *Specific Objectives*

- To create a website for Happy Clinique featuring their service.
- To add an online booking system to their current process of walk in and call limited to dental and derma services only.
- To transition 40% to 30% of their patient record from paper to paperless limited to their dental and derma patients only in the first quarter of implementing the system.
- To create a payment record system specifically for their dental and derma patients only.

## **Business Requirements**

### **Background**

This paper will site the creation of DrAssist. Base on the research and observation of the project team. The clinic still practice the walk-in and phone call appointment method. Their patient record is still the traditional index cards filed in big bulky cabinets. The clinic payment record method is the paper copy of the payment receipts of patients.

The proposed system will resolve problems of Happy Clinique and will let them achieve their goal of providing a quality care of service to their patients.

There are many reasons or factors that affects patient satisfaction and one of it is, "wait time." Based on study, "After 20 minutes of waiting, patients think their time is being wasted." (Preece, D.).

The aggregate of time patients devoted in waiting, in an office or clinic may appear to be a small aspect when it comes to patient satisfaction. But it can have a big effect. A recent Software Advice survey found a staggering 97% of patients were frustrated by wait times (Lafolla, T. (2017). Infographic: How to reduce wait times).

“Patient satisfaction is considered as an important indicator of quality care provided in emergency departments” (Yarnold PR, Michelson EA, Thompson DA, Adams SL (1998) Predicting patient satisfaction: a study of two emergency departments. J Behav Med 21: 545-563).

To be at par with competitors, Happy Clinique needs to adapt to current trends in technology. They are on social media right now and they do have an outdated static website. Happy Clinique needs to revamp their outdated site to provide an efficient system for their staff to use and for their prospective clients or patients to visit so it would increase their client demographics.

With the online booking system feature of the website we are expecting a significant change with their patients’ appointment that will totally minimize patients wait time. That will increase patients’ satisfaction.

Aside from the online booking system, the project team have added a feature in the system that will records patient information. The team realizes the importance of a database management system.

Per Scott Knickelbine, having your information in a database, instead of paper or in spreadsheets, not only saves you time and preserves vital information, it allows you to see patterns in operations that are visible in no other way.

The system-generated reports will assist business owner to project their revenue and make plans for a foreseeable growth. In addition, the proposed system will have a feature of recording payment received. In relation to keeping their patients record online. Recording payments received will help them track their revenue.

## **Business Opportunity**

An online booking system for the clinic is efficient, accurate and effective for both parties because it will save them time, money and effort. Patients do not need to wait in line for a dental or derma service. With a confirmed appointment, they can manage. No more missed appointments or over acceptance of patients.

The internet is a proven avenue for improving a business in all other aspects like marketing.

The team believes that by converting the traditional method of booking and patient’s record to online will provide more revenue to the owner and quality service to the patients.

## **Business Objectives and Success Criteria**

Major goal of the project is to add another method of accepting appointment.

## **Customer or Market Needs**

- Online booking system.
- User friendly system.
- 24/7 availability of the website.

## **Business Risks**

- Poor customer service
- Competitive risk
- Low revenue risk
- Customer relationship risk
- Bad reputation risk

## **Vision of the Solution**

Happy Clinique has opened under new management last December 12, 2016 and have acquired many patients throughout time. The proposed system will provide a faster and easy way of booking an appointment to get a dental or derma service.

## **Vision Statement**

This projects' vision is to provide our patient's dental and derma needs with the highest level of care by providing them quality service and valuing their time. We aim to adapt and grow to the new technologies that will grow in our society.

## **Major Features**

### **User Login**

The website will have a login and sign up features for the patient's side, dentist/doctors side and the admin side. Patients are required to sign up to book, so that the Clinique will be able to get important details.

### **Calendar**

The website will have a calendar to show which day and time is open for reservation.

### **Design**

The design of the system will be similar to the old site of Happy Clinique but will be more interactive.

## Assumptions and Dependencies

The website will be available on desktops and laptops and it will be mobile responsive. It will be hosted initially on a trial DNS service. Server can initially run on the clinic's existing desktop but the team will be assisting the client in case of a future migration to upgrade platform.

## Scope and Limitations

### Scope of Initial Releases

Happy Clinique will have a website that will contain their products and services and will give their patients an option to book appointment online. The major feature of the site is the online booking system specifically for their dental and derma patients. Dental and derma patients can now book online, anytime and anywhere they want.

The website will require patients to sign up for them to book an appointment which will register patients contact information to the system.

The project team will also create a system that will allow them to record patient contact information and patient's payment record.

### Limitations and Exclusions

The project range will have focused on the booking/appointment features of the clinic website and will be limited to transitioning their manual records of patient to online records.

- The DrAssist website will only be web-based.
- No mobile app but will be mobile responsive.
- The DrAssist will service the Happy Clinique only.
- The DrAssist will only be available for dental and derma appointments.

## Stakeholder Profiles

| Stakeholder             | Major Value       | Attitudes  | Major Interests                                   | Constraints      |
|-------------------------|-------------------|--|---|------------------|
| Leticia Aspiras (Owner) | Increased revenue | Sees the system as avenue to 35% increase of revenue and patients. | Increase in revenue and increase in new patients. | Budget and Time. |

|              |   |   |  |                                 |
|--------------|---|---|--|---------------------------------|
| Doctors      | Efficient and accurate appointments with patients | Expects an organized scheduling of patients | Efficient scheduling of patients.              | Adaptability to the new system  |
| Receptionist | Quick access to patient's scheduled appointment   | Flexibility in adapting to the new system.  | Ability to cope up with the new online system. | Adaptability to the new system. |

### Project Priorities

| Dimension | Driver<br>(state objective)  | Constraint<br>(state limits) | Degree of Freedom<br>(state allowable range)                                       |
|-----------|--|------------------------------|--|
| Schedule  | Release 1.0 to be available at the mid of the course                         | Time Constraint              | 90% -100% of the main functions and features must be done.                         |
| Features  | All approved features shall be implemented.                                  | Budget and Time.             | 70-80% of high priority features must be included in release 1.0                   |
| Quality   | Provides a user friendly booking/appointment website for Happy Clinique.     | Errors in the system.        | 90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 1.1  |
| Staff     | The team is determined to and goal oriented to complete the project on time. | Time and schedule conflict.  | 85% -100 % of the time committed for the project should be achieve for release 1.0 |



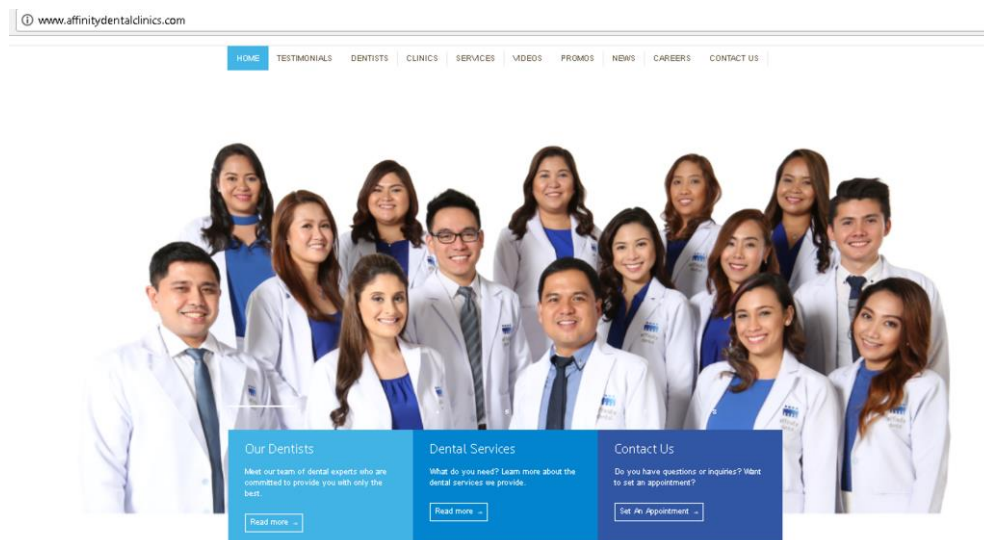
|      |  |                |  |
|------|--|----------------|--|
| Cost | The overall expense should not exceed the allotted budget for creating the system. | Maximum Budget | Exceeding the budget of 10 to 15% is still acceptable. |
|------|--|----------------|--|

## Operating Environment

The new and improved Happy Clinique website will be replacing their manual booking/appointment system. The system will be created via Laravel Framework. The user of the systems will be the receptionists, the dentists and the patients who manages their appointment for dental service. System will provide a 'no service interruptions' or continuous access to the system. The system will have a username and password feature for security reasons on both the clinic side and patients.

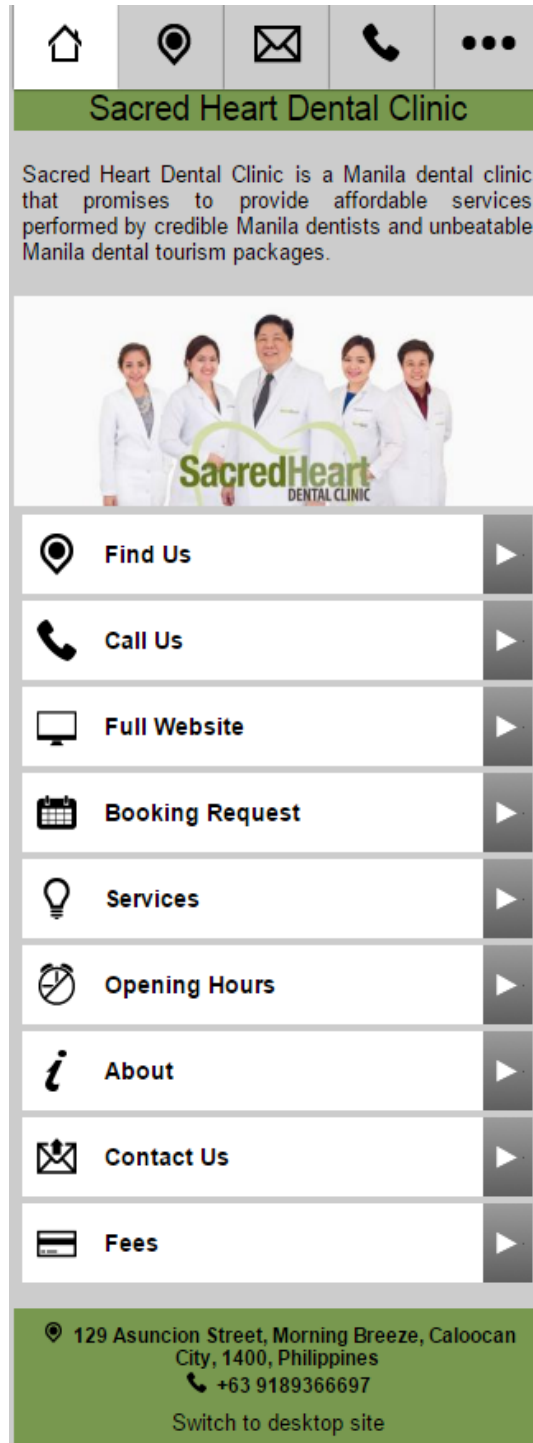
## Review of Related Works

- A. Affinity Clinic (<http://www.affinitydentalclinics.com/home/about-affinity-dental/>)  
Affinity Dental is committed to operate the best chain of dental clinics that delivers the highest quality dental care at the most affordable cost.



B. Sacred Heart Dental Clinic (<http://filipinodontist.com/>)

Sacred Heart Dental Clinic is one of the best Manila dental clinic that specializes in dental tourism.



## Technical Background

"Laravel is a web application framework with expressive, elegant syntax. We believe development must be an enjoyable, creative experience to be truly fulfilling. Laravel attempts to take the pain out of development by easing common tasks used in the majority of web projects, such as authentication, routing, sessions, and caching.

Laravel aims to make the development process a pleasing one for the developer without sacrificing application functionality.

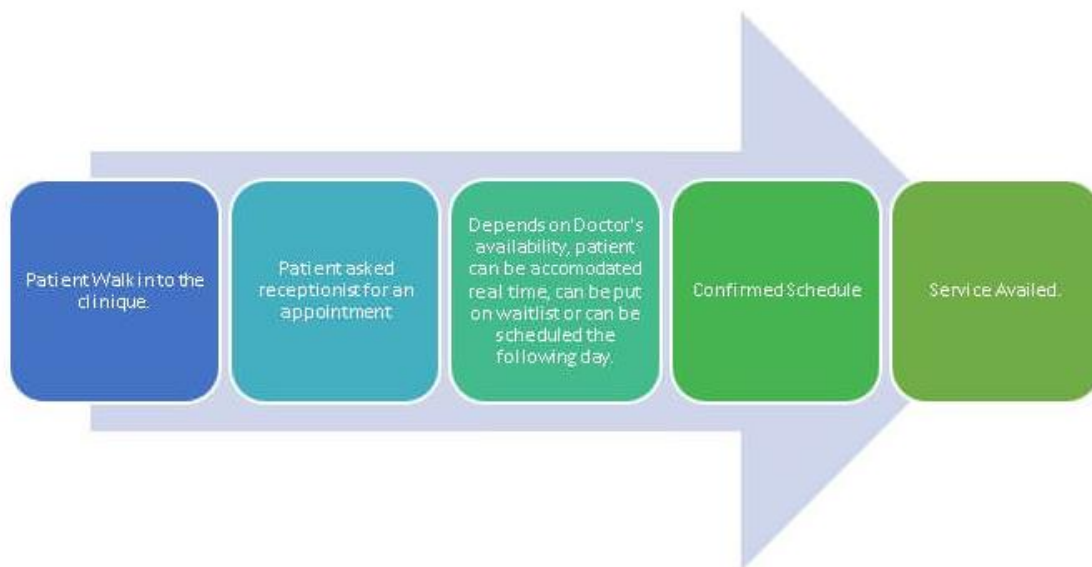
Laravel is accessible, yet powerful, providing powerful tools needed for large, robust applications. A superb inversion of control container, expressive migration system, and tightly integrated unit testing support give you the tools you need to build any application with which you are tasked." (<https://laravel.com/docs/4.2/introduction>)

## Methodology, Results and Discussion

### Requirements Analysis

Happy Clinique has been with the business with quite a while but has been under new management since December 12, 2016, and they have been acquiring new patients as well as introducing new services such as dermatology services. They need a website that will be used by the clinic and their clients for reservations. The management of Happy Clinique would also like to completely transition their patients' record online. The team also decided to add a payment feature in the website that will records patients' payment for recording purposes.

Below is a diagram of the Clinic's current process.



## Requirement Documentation

- Patient must sign up to have an account.
- Only patients with account can request for an appointment.
- Doctors and Reception Admin can manage appointment schedule of patient.
- Therapist can only view patients appointment schedule
- Doctors can manage patients' record.
- Reception Admin to manage payments
- Reception Admin to manage Doctors Schedule.

## Gap Analysis

| Current Process   | Future Process  | Action/Proposal  |
|---|---|--|
| Patients walk in or call the clinic for reservation.                                      | Patient will have an additional method of booking, limited to dental and derma patients   | Create a website that will have an online booking function for dental and derma service.                 |
| Patient is uncertain if they will walk in for an appointment if they can be accommodated. | Patient will get a confirmation email if they will book online.   | Add a feature in the website that sends an email confirmation to patients about their appointment.       |
| Doctors extend hours of work to service all who walked in for the day.                    | The system will display how many patients are book for the day giving the Doctors and admins to better manage the scheduled patients. | Add a feature in the website that will show the Doctors available schedule and patients booking history. |
| Patient records are all in papers   | Patient records will transition to an online database system  | Create an online patient record system   |
| Payment records are all in a traditional paper receipts                                   | Payment record will transition to an online database system   | Create an online payment record system   |

## Design of Software, Systems, Product, and/or Processes

System is developed with Laravel framework. For each table in the database are generated with create, read, update, and delete feature depending on the needs of the system. To accomplish the main function of the prototype, the model, view and controller of the framework are revised including the database model.

## **Development and Testing**

The team uses agile methodology. Business needs to cope up with the fast paced business environment. Using Agile will allow the team to do changes and iterations to the system to improve it.

## **Description of Prototype**

The DrAssist is an online booking system that is web based. It will be mobile responsive in order for users to have ease of access when using a mobile phone when accessing the website. The front end contains the Welcome page. On the upper right of the page, it will include login button and the register or sign up button. At the lower left hand side will consist of the “Book” button which will let the users request for an appointment.

The backend differs from the front end where admins of the website have more permission than the regular users. The backend will consists of the Doctors schedule that can be updated or modified. It will also provide the Doctors and the reception admin to accept or reject a requested appointment. Furthermore this will holds the payment page where the reception admin records the patients’ payment.

## **Implementation Plan (Infrastructure/Deployment)**

Once the system deploys to the clinic, it will be then administered by the clinic staff, providing admin access to Doctors and Reception admin but still differs on permission depending on their role. Patients can access the website but permission is restricted. While Admins would have the capability to manage appointments, patient record and schedules.

## **Conclusions and Recommendation**

Throughout the course of our project, we came up with three general conclusions:

- There is a potential growth in business if you will take it online.
- There will always be limitations when creating the project like time constraint and cost.
- Overall teamwork plays a big role in completing the project.

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# Statement of Work

For

# DRASSIST

**Version 1.0 approved**

**Prepared by:**  
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**Asia Pacific College**

**June 14, 2017**

## **Introduction/Background**

Happy Clinique has recently approved the DrAssist in support of its strategic plan to enhance marketing and customer service. To provide more timely feedback to improved customer interaction, the DrAssist will focus on building a content rich website which provides a simplified and more user-friendly approach for existing and potential customers. It is imperative that Happy Clinique utilizes its web site as a platform for communicating new services, recent news, and other health information. Happy Clinique also realizes the importance of working with customers to develop tailored consulting solutions which the new web site will allow the ability to do. In order to accomplish this, Happy Clinique seeks to outsource the design, testing, implementation, and training for the new website. Happy Clinique anticipates that its new website will move the company forward in its multi-tiered approach to winning new clients and capturing additional market share.

## **Scope of Work**

The scope of work for the DrAssist includes all planning, execution, implementation, and training for a new public-facing internet site for Happy Clinique. The selected project developers will be responsible for the design of the new website based on feedback to be provided by Happy Clinique. Each stage of the project will require approval from Happy Clinique management before moving on to the next stage. The selected project developers must ensure it has adequate resources for designing, building, testing, and implementing the new web site and is staffed for the training of Happy Clinique personnel as well. Specific deliverables and milestones will be listed in the Work Requirements and Schedules and Milestones sections of this SOW.

## **Period of Performance**

The period of performance for the DrAssist is less than 2 months (54 days) beginning on 7 June 2017 through 1 August 2017. All work must be scheduled to be completed within this timeframe. Any modifications or extensions will be requested through Happy Clinique and CSPROJ2 professor for review and discussion.

## **Place of Performance**

The project developers for the DrAssist will perform a majority of the work at its own facility. The developers will be required to meet at Asia Pacific College facility once per week (every Saturday at 11:30 A.M) for a weekly status meeting with the project adviser. Additionally, all project gate reviews will be held at Asia Pacific College facility and attended by the developers. Once the project reaches the training phase, all training will be conducted at Happy Clinique's facility.

## Work Requirements

As part of the DrAssist the developers will be responsible for performing tasks throughout various stages of this project. The following is a list of these tasks which will result in the successful completion of this project:

### Kickoff:

- Project developers will create and present detailed project plan including schedule, Work breakdown structure, testing plan, implementation plan, training plan, and transition plan
- Project developers will present project plan to Happy Clinique for review and approval

### Design Phase:

- Work with Happy Clinique to gather requirements and establish metrics
- Create site design based on collected requirements
- Develop site design proposal for Happy Clinique review and approval
- Present written status at weekly meeting

### Build Phase:

- Project developers will complete all coding for approved site design
- Project developers will include all content provided by Happy Clinique on redesigned web site
- Project developers will resolve any coding and site issues identified in testing
- Project developers will compile a testing report to present to Happy Clinique for review/approval
- Present written status at weekly meeting

### Implementation Phase:

- Project developers will implement the newly redesigned web site on Happy Clinique servers
- Present written status at weekly meeting

### Training Phase:

- Project developers will provide training in accordance with approved training plan provided in the kickoff
- Present written status at weekly meeting



#### Project Handoff/Closure:

- Project developers will provide Happy Clinique with all documentation in accordance with the approved project plan
- Project developers will present project closure report to Happy Clinique for review and approval
- Project developers will complete the project requirements checklist showing that all project tasks have been completed
- Present written status at weekly meeting

### Schedule/Milestones

The below list consists of the initial milestones identified for the DrAssist:

|                                     |                 |
|-------------------------------------|-----------------|
| RFP/SOW Release                     | June 21, 2017   |
| Project developers Selection Review | June 7-13, 2017 |
| Project developers Selection        | June 14, 2017   |
| Period of Performance Begins        | June 23, 2017   |
| Website Design Review               | June 29, 2017   |
| Website Implementation Review       | July 27, 2017   |
| Implementation Complete             | August 1, 2017  |
| Project Completion Review           | August 2, 2017  |
| Project Closure/Archives Complete   | August 23, 2017 |

### Acceptance Criteria

For the DrAssist the acceptance of all deliverables will reside with Happy Clinique's owner. The owner will maintain a small team of three advisors in order to ensure the completeness of each stage of the project and that the scope of work has been met. Once a project phase is completed and the project developers provides their report/presentation for review and approval, the owner either sign off on the approval for the next phase to begin, or reply to the developers, in writing, advising what tasks must still be accomplished.

Once all project tasks have been completed, the project will enter the handoff/closure stage. During this stage of the project, the developers will provide their project closure report and project task checklist to Happy Clinique's owner. The acceptance of this documentation by Happy Clinique's owner will acknowledge acceptance of all project deliverables and that the project developers have met all assigned tasks.

Any discrepancies involving completion of project tasks or disagreement between Happy Clinique and the chosen project developers will be referred to both organizations' contracting offices for review and discussion.

### **Other Requirements**

All DrAssist project team members will submit security forms to Happy Clinique for clearance and access badges to the facility. All programmers and quality control team members will be granted access to Happy Clinique servers and all necessary IT functions. They will also be given temporary Happy Clinique accounts which are to be used only for work pertaining to the DrAssist. Upon completion of the project these accounts will be closed.

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# **Software Requirements Specification**

**For**

# **DRASSIST**

**Version 3.0 approved**

**Prepared by:**

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**Chloe Tañada**

**Reimarie Princess Quirante**

**Asia Pacific College**

**June 14, 2017**

## Revision History

| Name                 | Date            | Reason for Changes | Version |
|----------------------|-----------------|--------------------|---------|
| Chloe Tañada         | July 11, 2017   | First Draft        | 1       |
| Chloe Tañada         | July 15, 2017   | Second Draft       | 2       |
| Maria Kristina Punla | August 25, 2017 | Third Draft        | 3       |

## Introduction

### Purpose

The purpose of Software Requirements Specification (SRS) is to provide a detailed explanation about the technical prerequisite of DrAssist. The requirements specified are implemented by the developers before the end of term. After the implementation, this will give the assigned administrator in Happy Clinique a documented guideline of the technical requirements and objectives of the system.

### Document Conventions

This document was created in Microsoft Office 2016, with font sizes (12 – content, 14 – headings) and a standard font (Calibri). Typographical conventions are:

| Typeface or Symbol | Meaning  | Example   |
|--------------------|--|---|
| <b>AaBbCc123</b>   | Bold font style was used on highlighted topics.          | <ul style="list-style-type: none"><li>▪ <b>1.3 Purpose</b></li><li>▪ <b>1.4 Product Functions</b></li></ul> |
| <i>AaBbCc123</i>   | Italicized fonts were used to emphasize a specific word. | Major functions the product must perform:   |

### Intended Audience and Reading Suggestions

- Developers – The developers are those who manage the entire system. This document is used by developers as a guideline to create the functionalities required for the completion of the project.

- Technical Writers – The technical writers are the people assigned to prepare the user manuals and other requisite documents of the project.
- Testers/Users – The testers/user can examine and estimate the performance outcome of the system DrAssist and to be able to check the technical necessities whether the requirements had been accurately implemented.

For the full content of Project Product Scope

Please see Vision and Scope document.

## **Overall Description**

### **Product Perspective**

DrAssist is a new production for Happy Clinique. It is a replacement for the organization's traditional method in accumulating loads of patient records. For the organization to become flexible in their services and can cope up with the fast pacing technology world, the team developed a system (DrAssist) that can benefit both the customers and the company itself.

### **Product Functions**

Major functions the product must perform:

- Online booking system
- Online base patient information record for their dental and derma patients.
- Online base payment record system.

Major functions the user must perform:

- Management
- Book appointment
- Cancel appointment
- View appointment history

## User Classes and Characteristics

There are four types of users of DrAssist:

| User          | Activities   |
|---------------|--|
| Administrator | <ul style="list-style-type: none"><li>▪ Manage doctor's schedule</li><li>▪ Manage payments</li><li>▪ Manage appointment schedule</li><li>▪ Re-schedule appointment</li></ul> |
| Doctor        | <ul style="list-style-type: none"><li>▪ View appointment schedule</li><li>▪ Manage appointment schedule</li><li>▪ Manage patient record</li></ul>                            |
| Therapist     | <ul style="list-style-type: none"><li>▪ View patient's appointment schedule</li></ul>  |
| Patient       | <ul style="list-style-type: none"><li>▪ Create an account</li><li>▪ Book an appointment</li><li>▪ Cancel appointment</li><li>▪ View appointment history</li></ul>            |

## Operating Environment

- Digital Ocean Cloud (cloud-based)
- CentOS 7 (server-based)
- Windows 8 (minimum of 32-bit RAM)

## Design and Implementation Constraints

- DrAssist design must meet the standards given by the client.
- DrAssist must perform validation check in user's input.
- The system uses phpmyadmin MySQL for the database.
- The system uses Laravel as the framework.
- PHP, CSS, HTML and JavaScript are being combined in creating the system interfaces.

## Assumptions and Dependencies

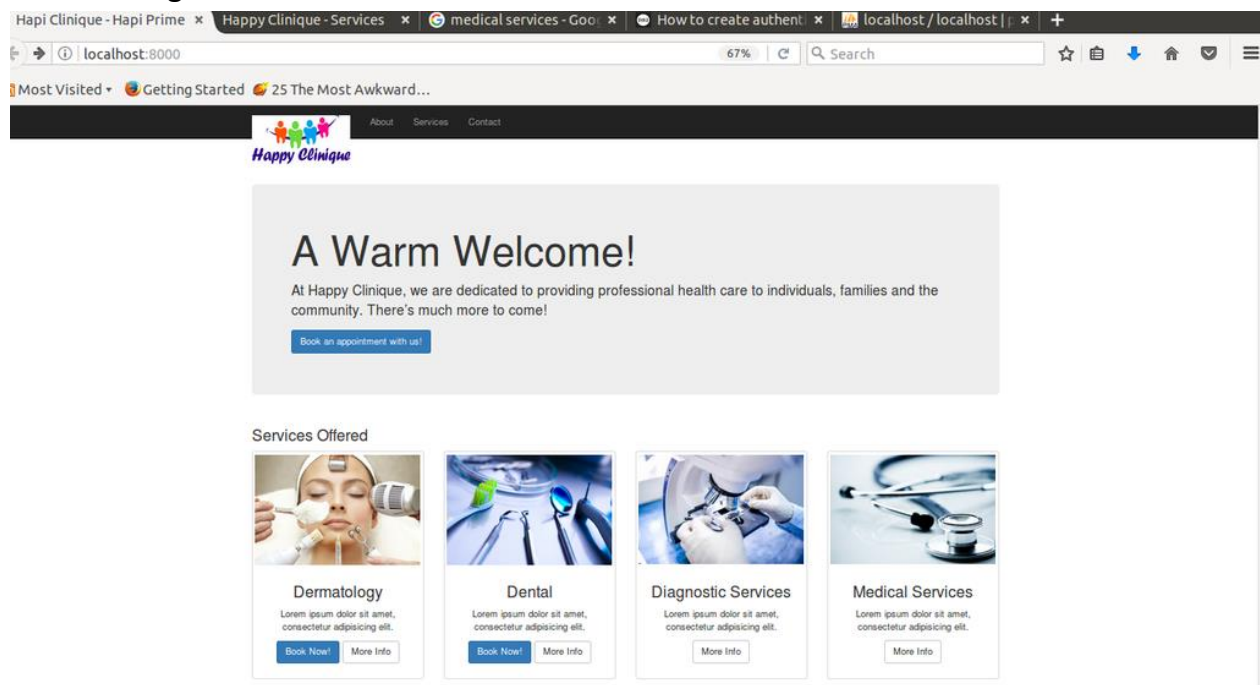
The website will be accessible on desktops and laptops and it will be mobile responsive. It will be hosted initially on a trial DNS service. Server can initially run on the clinic's existing desktop but the team will be assisting the client in case of a future migration to upgrade platform.

## External Interface Requirements

## User Interfaces

Screenshots of the system's user interface.

### Welcome Page





## Welcome to Happy Clinique!

### Appointments

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Saepe rem nisi accusamus error velit animi non ipsa placeat. Recusandae, suscipit, soluta quibusdam accusamus a veniam quaerat eveniet eligendi dolor consectetur.

[More Info](#)

### History

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[More Info](#)

### Survey

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[More Info](#)

Copyright © Happy Clinique 2017

## Register Page



# Happy

We are dedic  
individuals, fa  
more to come

[Book No](#)

### Register

[Register Now](#)


### Services Offered




localhost:8080/Booking\_Management\_System/#



## Login Page

[About](#) [Contact](#)

[Register](#) [Log In](#)



### Happy Clinique

We are dedicated to providing professional health care to individuals, families and the community. There's much more to come!

[Book Now!](#)

#### Log In





Username

Password


☐ Remember Me [Log In](#)

[Forgot Password?](#)

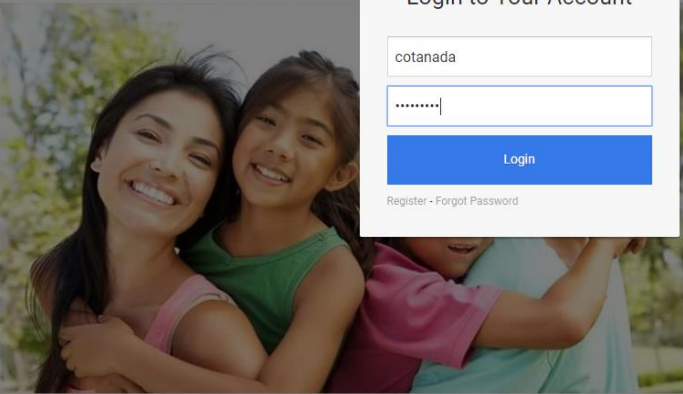
#### Services Offered



phpoll.com/login

[About](#) [Contact](#)

[Register](#) [Log In](#)



### Happy Clinique

We are dedicated to providing professional health care to individuals, families and the community. There's much more to come!





[Book Now!](#)

#### Login to Your Account


[Login](#)


[Register](#) - [Forgot Password](#)

#### Services Offered



## Book now page


[Home](#) [Services](#) [Contact](#) [Logout](#)



### Dermatology

Lorem ipsum dolor sit amet, consectetur adipiscing elit.


[Book Now!](#) [More Info](#)



### Dental

Lorem ipsum dolor sit amet, consectetur adipiscing elit.


[Book Now!](#) [More Info](#)



### Diagnostic Services

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

[More Info](#)



### Medical Services

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

[More Info](#)

Copyright © Happy Clinique 2017

localhost:8080/Booking\_Management\_System/services.html

[Home](#) [Services](#) [Contact](#) [Logout](#)

## Book an Appointment

Preferred Date

[Make an appointment](#)

## Why Appointment with Us

### 24/7 Hours Available

Integer nec nisi sed mi hendrerit mattis. Vestibulum mi nunc, ultricies quis vehicula et, iaculis in magnestibulum.

### Experienced Staff Available

Aliquam sit amet mi eu libero fermentum bibendum pulvinar a turpis. Vestibulum quis feugiat risus.

### Easy To Use

Praesent eu sollicitudin nunc. Cras malesuada vel nisi consequat pretium. Integer auctor elementum nulla suscipit in.

## Hardware Interfaces

- Processor: 2.4 GHZ processor speed
- Memory: 1GB RAM (2 GB recommended)
- Screen resolution: 800 x 600 colors or above

## Software Interfaces

- Windows, Linux, iOS and Android operating system environment
- The user interface and other parts of DrAssist system were created using Laravel advanced framework, including HTML, CSS, PHP 5.4, Bootstrap.
- Browsers like Google Chrome, Microsoft Edge, Firefox, etc. is used for the viewing of the system.
- MySQL and PHP My Admin for the database.

## Communications Interfaces

The patient will interact with the system through a web browser and can be accessible to the patient's computer and network; while from the admin side the system can be accessed using intranet. Any browser may use the system, from Google Chrome, Microsoft Edge and Firefox.

## System Features

### User Registration

A user is required to have an account to be able to manage the reservation online.

### Description/Priority (User)

Users can create an account by completing the online registration and it is a high priority.

### Access, View, and Manage

Users can access, view and manage the necessary requirements accessible based on its user privilege (Receptionist, Doctor, Therapist, or Patient) upon logging in.

|         | Stimulus  | Response  |
|---------|---|---|
| Patient | A patient creates an account by completing the registration form. | The system will verify if the required information is valid i.e. username, password, email address and contact number. The system will store the information in |

|                    |  |   |
|--------------------|--|---|
|                    |  | the database and redirect the user to the login page.   |
| Admin/Receptionist | The admin manages patient appointments / doctor schedule upon logging in.              | The system will display all pending reservation or doctor schedule.   |
|                    | The admin approves/cancel the reservation in the calendar and/or edit doctor schedule. | The system updates the information in the calendar. If the reservation is cancelled upon reason, the admin will select other available slot for reservation for the patient.  |
| Doctor             | Doctor views request appointments.   | The system will display the calendar.   |
|                    | Doctor either accept or cancel the appointment.  | If the selected date is cancelled, the system will notify the following users (Receptionist and Patient) and proceed to the reservation page to allow the user to file another reservation or not. If the date selected is accepted, the system will save the appointment schedule. |
| Patient            | Patient views available schedule.  | The system will display the calendar.   |
|                    | Patient booked and send the requested appointment.                                     | Receptionist/Doctor will be notified.   |

|           |   |  |
|-----------|---|--|
|           |   |  |
|           | Receptionist/Doctor will accept, cancel or edit the schedule. | The patient will be notified.  |
| Therapist | Therapist views scheduled appointments.                       | The system will display the appointments.                                    |
|           | Therapist confirms.   | Therapist will assist on the procedure of the service chosen by the patient. |

### Functional Requirements

- **REQ-1:** The admin/doctor/patient/therapist should have an account
- **REQ-2:** The admin/doctor/patient/therapist should be connected to the internet

### Other Nonfunctional Requirements

### Performance Requirements

- The responsiveness of the system depends on the speed of its internet connection of the user.
- The system should provide real-time information about the doctor's available schedule.
- Pending approval should be managed by the admin in order in which the reservation was received.

### Safety Requirements

A patient can access certain features based on its user privilege. The system will secure all outlets of transaction that includes any confidential patient records. The system will automatically log out users after a certain period of inactivity.

## Security Requirements

The system must maintain separate levels of security for users and the system administrator as well as for doctors and therapists. All users are required to have an account to be able to access DrAssist website. Users can access certain functionalities depending on their role.

## Software Quality Attributes

### Security

- DrAssist will support different privileges for users such as patient, receptionist, doctor and therapist. The user upon logged in with the given role should only be allowed to access functionalities based on its privilege.
- In HTTPS, it enables web application to securely access confidential information like patient records.
- The patient's personal information is protected.

### Reliability

- DrAssist service descriptions and doctor description are clear and understandable.

### Scalability

- DrAssist must be scalable to many users for all the patients to have better user experience.

### Availability

- DrAssist is available 24/7

## Business Rules

- Each patient can select one or more service/s. Each service can be provided to one or more patient.
- Each patient can request for one or more appointment. Each appointment can be associated with one patient only.
- Each patient can make one or many payment. Each payment is associated to one patient.
- Each patient has one or more patient record. Each patient record is associated to one patient.
- Each patient record can consist of dental or derma record. Each dental or derma record is associated to one patient record.
- Each employee can provide one or more service/s. Each service is provided by one or more employee.

- An employee can be a doctor, reception admin or therapists.
- A doctor can be a dentist or dermatologists.
- Each reception admin manages patients' schedule.

## Appendix A: Glossary

- GHz - means 1 billion cycles per second and when it talks about 2.4 GHz processor, it is usually mean that this is the maximum frequency of the clock to each core.
- RAM - Random Access Memory is the memory or information storage in a computer that is used to store running programs and data for the programs.
- HTTPS - Hypertext Transport Protocol Secure. HTTPS is the same thing as HTTP, but uses a secure socket layer (SSL) for security purposes.
- DrAssist – System name/Project name.
- Happy Clinique – Name of the company.
- Laravel – web application framework with expressive, elegant syntax.

## Appendix B: Analysis Models

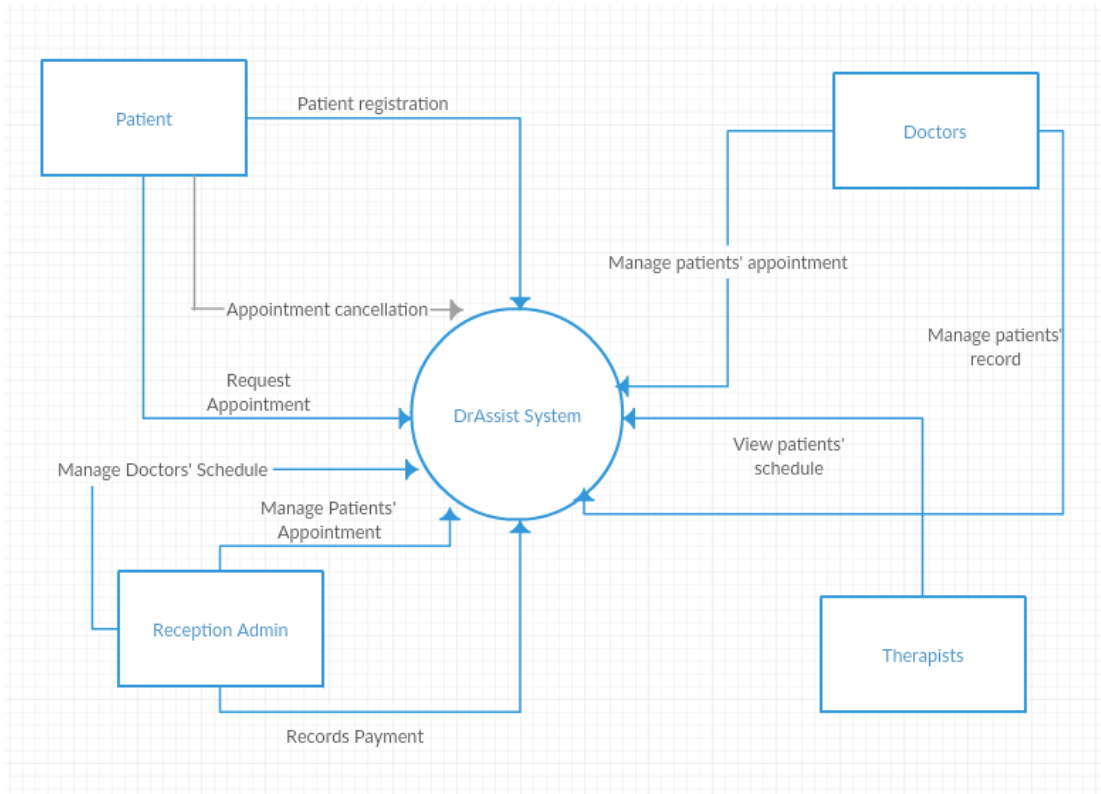


Figure 1: Context Flow Diagram

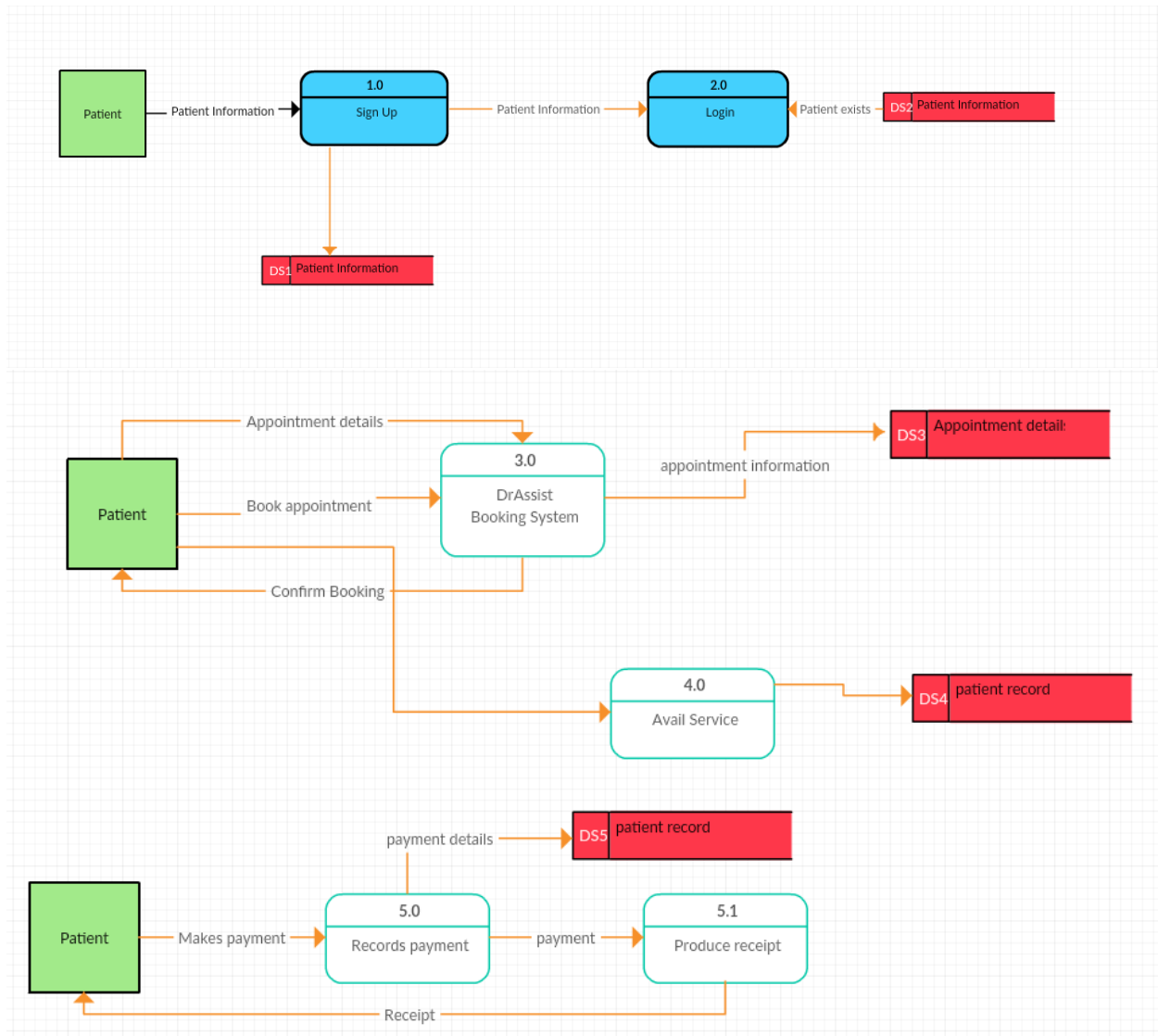


Figure 2. Data Flow Diagram





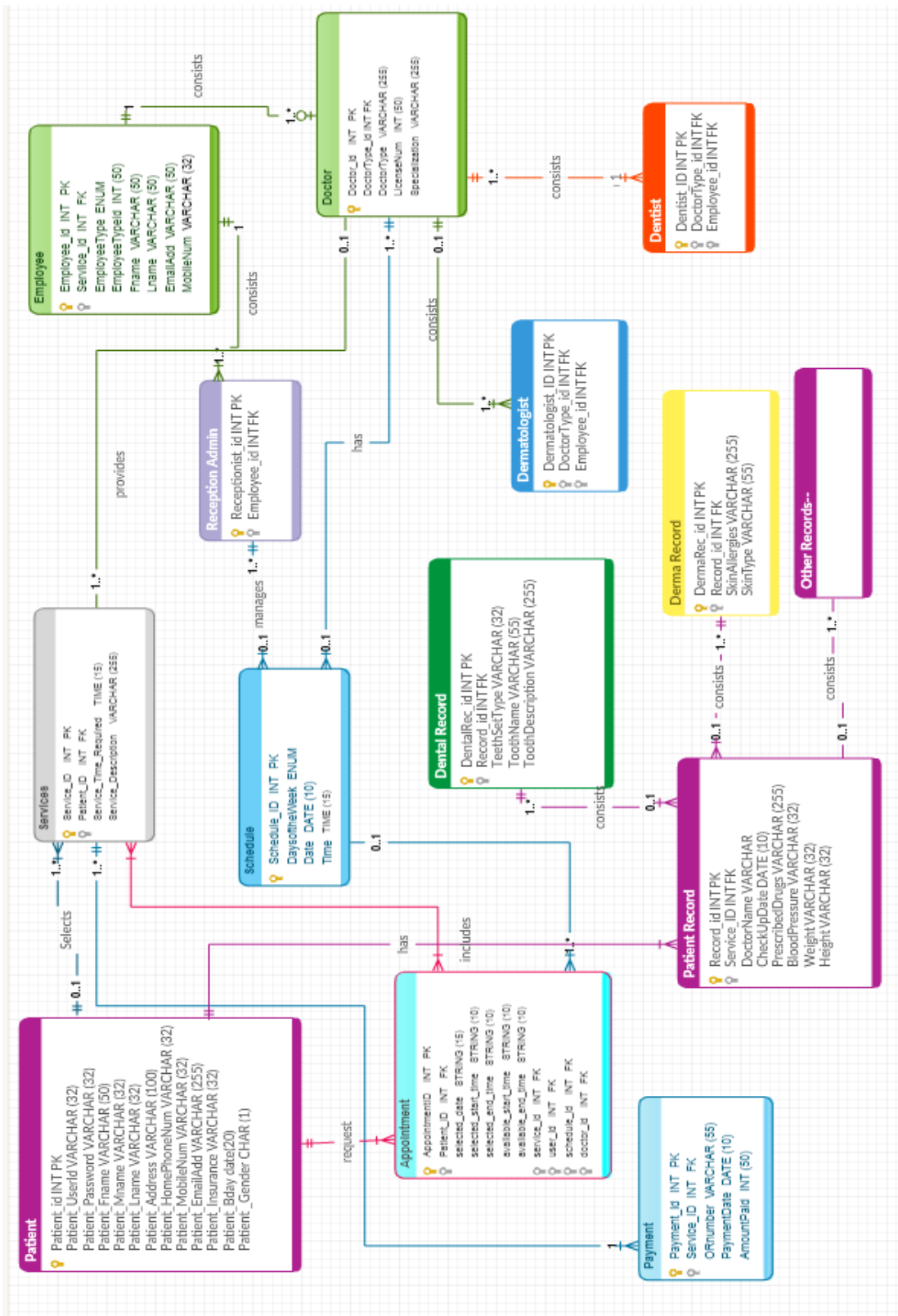


Figure 4. Entity Relationship Diagram (ERD)

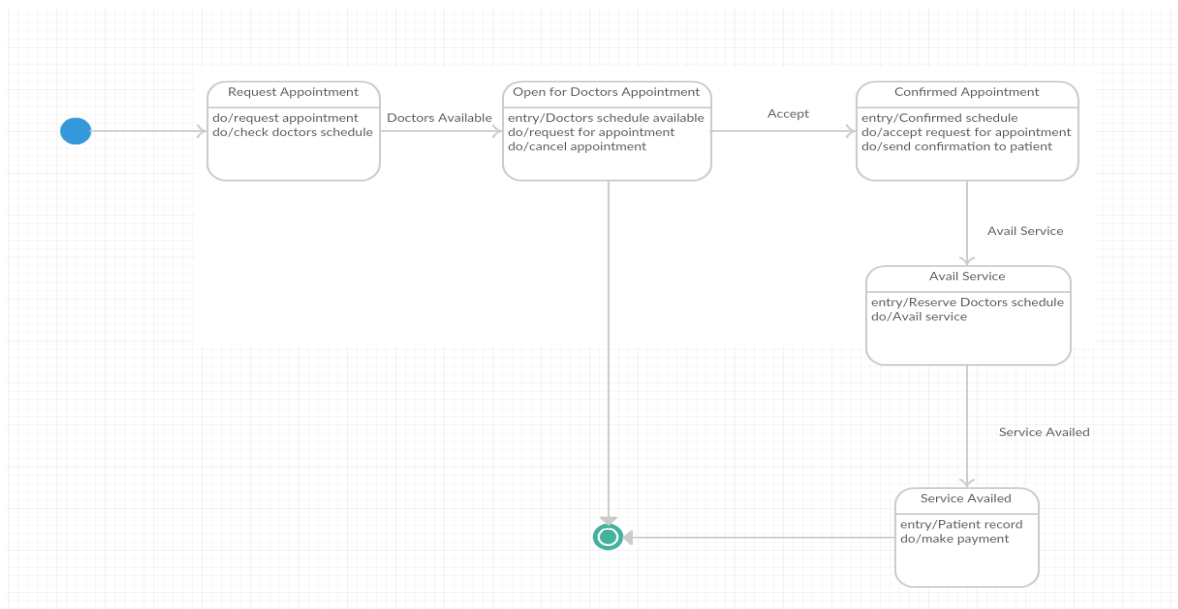


Figure 5. State Transition Diagram

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# Quality Plan

For

# DRASSIST

**Version 1.0 approved**

**Prepared by:**  
**Maria Kristina Punla**  
**Chloe Tañada**  
**Reimarie Princess Quirante**

**Asia Pacific College**

**June 14, 2017**

## Introduction

This document, together with other referenced documents, defines the responsibilities and procedures to be adopted to ensure that the data and information produced as part of Project 001 are reliable, fit for purpose and consistent with documented objectives and deliverables. It summarizes the system of internal management that governs the decisions and instructions concerning project quality assurance.

## Project Contractual Information

|                             |   |
|-----------------------------|---|
| Project:                    | Booking Online System and Patients Record System  |
| Project Number:             | 001   |
| Programme Co-ordinator:     | Leticia Aspiras<br>Nancy Calimag  |
| Principal Investigators(s): | Coney Dela Pena<br>Richelle Ravago<br>Welthea Ea<br>Marjorie Celis<br>Lala Marquezo<br>Mary Jane Santos<br>Charizza Jinayon |

## Scope of Work and Quality Objectives

### Scope of work:

#### The scope of DrAssist

- Patient can view the website
- Patient can request appointment online.
- Patient can cancel appointment.
- Admins can manage patient appointments.
- Admin can manage Doctors Schedule.
- Admin can manage patients' record.
- Admin can manage payment.

DrAssist will focus on the dental and derma services of Happy Clinique. The project team will also create a patient record system for the Clinique.

### Quality Objectives:

- To provide Happy Clinique a website with an online booking function.
- For Happy Clinique to have a better monitoring of their accepted appointments.
- Provide patients a quick and easy way of requesting for an appointment.
- To completely transitions patients records from paper to paperless.
- To add a feature in the website to record patient's payment.

## QA Requirement

| QA Requirement   |  |      |
|------------------|--|------|
| Factor           | Description  | Rank |
|                  |  |      |
| Accessibility    | Admins will be given different permissions. The Admins (Doctors and Reception Admin) can manage patients appointment. While patients would only have permission to manage their own appointment. |      |
| Correctness      | The correctness of the system will be determined if the patient was able to submit an appointment request online .   |      |
| Efficiency       | The system aims to increase patients and increase productivity of employees.   |      |
| Expandability    | Adding functionality to the system will always be taken into consideration. The system uses Laravel framework which do have a lot of resource or open source.                                    |      |
| Integrity        | Doctors are the only one who can make changes on patients record in regards to updating their medical records. Admins like Reception Admin will have access to managing patients appointment.    |      |
| Interoperability | The system will engage with different mailing platform. The system will be sending confirmation emails to the patients regarding their registration to the site and appointment request.         |      |
| Maintainability  | Happy Clinique will be up and running as long as the business is ongoing.  |      |
| Portability      | The system will be soon have a mobile app.   |      |
| Presentability   | The design of the website is minimalistic. It will contain information about the clinique. It will also show clinique's services offered and the availability of the Doctors.                    |      |
| Reliability      | The system will can accept bookings as long as the server is running.  |      |
| Reusability      | Login and Booking modules can be used in other applications.   |      |
| Usability        | The system will be design in a friendly user manner.   |      |

## Project Organization

Project Manager(s): Reimarie Princess Quirante

Task Manager(s): Maria Kristina Punla

Quality Assurance: Chloe Tanada

User Community: Lala Marquezo

Mary Jane Santos

Charizza Jinayon

Technical Reviews: Leticia Aspiras

Nancy Calimag

## Project Duration and Scheduling

Start Date:

June 7, 2017

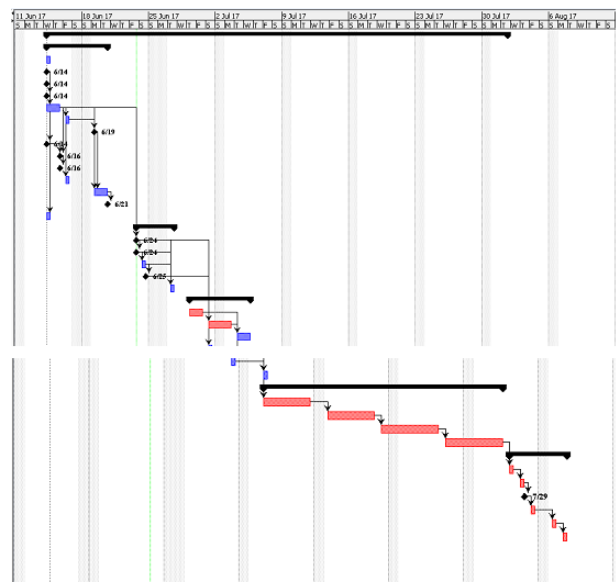
Completion Date:

August 23, 2017

Scheduling of Activities:

Gantt Chart:

|    |  | Name   | Duration                      | Start           | Finish      | Predecessors |
|----|--|--|-------------------------------|-----------------|-------------|--------------|
| 1  |  | Work Breakdown Schedule                              | 40 days 7 h 14 m 17 s 0:00 AM | 6/1/17 5:00 PM  |             |              |
| 2  |  | Planning   | 3 days 7 h 14 m 17 s 0:00 AM  | 6/2/17 5:00 PM  |             |              |
| 3  |  | Initial meeting                                      | 1 day 6/1/17 8:00 AM          | 6/1/17 8:00 AM  |             |              |
| 4  |  | Create Project Team                                  | 0 days 6/1/17 8:00 AM         | 6/1/17 8:00 AM  |             |              |
| 5  |  | Transition on what project system to develop         | 0 days 6/1/17 8:00 AM         | 6/1/17 8:00 AM  |             |              |
| 6  |  | Finalize which project to propose                    | 0 days 6/1/17 8:00 AM         | 6/1/17 8:00 AM  | 5           |              |
| 7  |  | Create a project plan                                | 2 days 6/1/17 8:00 AM         | 6/1/17 5:00 PM  | 5           |              |
| 8  |  | Create a proposal document                           | 1 day 6/1/17 8:00 AM          | 6/1/17 5:00 PM  | 7           |              |
| 9  |  | Submit Proposal Document                             | 0 days 6/1/17 8:00 AM         | 6/1/17 5:00 AM  | 8           |              |
| 10 |  | Delegation of Tasks/roles                            | 0 days 6/1/17 8:00 AM         | 6/1/17 8:00 AM  | 8           |              |
| 11 |  | Seek for an adviser                                  | 0 days 6/1/17 5:00 PM         | 6/1/17 5:00 PM  | 10,7        |              |
| 12 |  | Schedule appointments for adviser consultation       | 0 days 6/1/17 5:00 PM         | 6/1/17 5:00 PM  | 11          |              |
| 13 |  | Set goals and objectives                             | 1 day 6/1/17 8:00 AM          | 6/1/17 5:00 PM  | 7           |              |
| 14 |  | Create Vision and Scope of the Project               | 2 days 6/1/17 8:00 AM         | 6/2/17 5:00 PM  | 7,9         |              |
| 15 |  | Perform a phase review                               | 0 days 6/2/17 5:00 PM         | 6/2/17 5:00 PM  | 14          |              |
| 16 |  | Create a Communications Plan                         | 1 day 6/1/17 8:00 AM          | 6/1/17 5:00 PM  | 8           |              |
| 17 |  | Analysis   | 2 days 6/2/17 5:00 PM         | 6/2/17 5:00 PM  |             |              |
| 18 |  | Identify the end user requirements                   | 0 days 6/2/17 5:00 PM         | 6/2/17 5:00 PM  | 7           |              |
| 19 |  | Perform a gap analysis                               | 0 days 6/2/17 5:00 PM         | 6/2/17 5:00 PM  | 18          |              |
| 20 |  | Identify quality requirements                        | 1 day 6/2/17 8:00 AM          | 6/2/17 5:00 PM  | 19          |              |
| 21 |  | Conduct requirements analysis                        | 0 days 6/2/17 5:00 PM         | 6/2/17 5:00 PM  | 20          |              |
| 22 |  | Create Process Model                                 | 1 day 6/2/17 8:00 AM          | 6/2/17 5:00 PM  | 18,19,20,21 |              |
| 23 |  | Design   | 9 days 6/2/17 8:00 AM         | 7/9/17 5:00 PM  |             |              |
| 24 |  | Create Architecture document of the project          | 2 days 6/2/17 8:00 AM         | 6/2/17 5:00 PM  |             |              |
| 25 |  | Create Implementation Plan                           | 2 days 7/1/17 8:00 AM         | 7/1/17 5:00 PM  | 24          |              |
| 26 |  | Create Test Plan                                     | 2 days 7/1/17 8:00 AM         | 7/1/17 5:00 PM  | 25          |              |
| 27 |  | Define the general features of the system            | 1 day 7/1/17 8:00 AM          | 7/1/17 5:00 PM  | 18,21,24    |              |
| 28 |  | Create a Contingency/Disaster Recovery Plan          | 1 day 7/1/17 8:00 AM          | 7/1/17 5:00 PM  | 24,25       |              |
| 29 |  | Development  | 20 days 7/4/17 8:00 AM        | 7/28/17 5:00 PM |             |              |
| 30 |  | Developing the solution components                   | 5 days 7/1/17 8:00 AM         | 7/1/17 5:00 PM  | 24,25,27    |              |
| 31 |  | Developing the testing tools and tests               | 5 days 7/1/17 8:00 AM         | 7/1/17 5:00 PM  | 30          |              |
| 32 |  | Develop specific standards and methods of the system | 5 days 7/1/17 8:00 AM         | 7/2/17 5:00 PM  | 31          |              |
| 33 |  | Develop tools, actions and responsibility            | 5 days 7/2/17 8:00 AM         | 7/2/17 5:00 PM  | 32          |              |
| 34 |  | Testing  | 5 days 7/2/17 8:00 AM         | 8/1/17 5:00 PM  |             |              |
| 35 |  | Implementation of User Acceptance Test               | 1 day 7/2/17 8:00 AM          | 7/2/17 5:00 PM  | 33          |              |
| 36 |  | Identify test procedure creation                     | 1 day 7/2/17 8:00 AM          | 7/2/17 5:00 PM  | 35          |              |
| 37 |  | Document results of test                             | 0 days 7/2/17 8:00 PM         | 7/2/17 5:00 PM  | 36          |              |
| 38 |  | Test Procedure Definition                            | 1 day 7/2/17 8:00 AM          | 7/2/17 5:00 PM  | 37          |              |
| 39 |  | Create Test Problem results                          | 1 day 7/2/17 8:00 AM          | 7/2/17 5:00 PM  | 38          |              |
| 40 |  | Create Readiness                                     | 1 day 8/1/17 8:00 AM          | 8/1/17 5:00 PM  | 39          |              |





## Activity list

| Activity # | Activity Name             | Activity Name<br>Description          | # of Days | Start Date | Dependency         | Milestone                        |
|------------|---------------------------|---------------------------------------|-----------|------------|--------------------|----------------------------------|
| 1          | Planning                  | Planning on<br>Project<br>Development | 1         | 06/07/17   |                    | Final decision of<br>the project |
| 2          | Analysis                  | Project<br>Requirements<br>Analysis   | 1         | 06/07/17   | SS                 | Final analysis                   |
| 2.1        | Analysis<br>Documentation | WBS/ Gantt<br>Chart/ Activity<br>List | 1         | 6/21/17    | 1FS + 5 day<br>lag |                                  |
| 2.2        | Analysis                  | Project<br>Documents                  | 13        | 06/14/17   | 5 day lag          | Final documents                  |
| 3          | Design                    | System<br>Architecture                | 5         | 06/14/17   | FS                 | Detailed design                  |
| 4          | Development               | System<br>Development                 | 20        | 06/14/17   | lag                | Software code                    |
| 4.1        | GUI                       | Develop GUI                           | 10        | 06/14/17   | 5 day lag          |                                  |
| 4.2        | Code                      | Code<br>subroutine                    | 20        | 06/14/17   | lag                | Prototype                        |
| 4.3        | Functions                 | System<br>Functions<br>Development    | 25        |            | 5 day lag          | Final working<br>prototype       |
| 5          | Online                    | Wiki                                  | 2         | 06/14/17   | 3 day lag          | Final Online                     |

|     |                     |                   |   |          |           |                        |
|-----|---------------------|-------------------|---|----------|-----------|------------------------|
|     | requirements        |                   |   |          |           | Documents              |
| 5.1 | Online requirements | Microsoft Planner | 2 | 06/14/17 | 3 day lag | Final Online Documents |
| 5.2 | Online requirements | GitHub            | 0 | 06/14/17 | 1 day lag | Final Online Documents |

**Legend:**

- FS = The specific task must finish prior to starting the identified task
- SS = Two identified tasks start at the same time, but are not linked to finish at the same time.
- FF = Two identified tasks finish at the same time, but are not linked to start at the same time.
- Blank = Task has no dependency
- Lag = Additional days can be added for reserve to ensure project stays on schedule.

## **Deliverables**

Deliverables specified for the project include:

- (i) Quality Plan
- (ii) Project Progress Report
- (iii) Project Vision and Scope
- (iv) Software Requirements Documentation
- (v) Project Statement at Work
- (vi) Change Management Plan
- (vii) Risk Management Plan

All project deliverables (the Quality Plan itself, interim reports, progress reports, final reports, publications, maps, data, etc.) should be listed here (and numbered appropriately).

## **Review of Quality Plan**

The quality plan will be reviewed every week and will be updated as needed.

## **Document and Record Control**

Project documents, records and data will be controlled and stored in GitHub ([www.GitHub.com](http://www.GitHub.com)), Planner and Projects Wiki ([www.projects2.apc.edu.ph/wiki](http://www.projects2.apc.edu.ph/wiki)). All completed documents relating to the project will be book bound at the end of this course. A compact disc will contain a soft copy of all the documentation.

The Quality Plan, Change Management Plan, Vision and Scope Document, Software Requirement Specification, Statement of Work will be issued to all members of the project team.

## **Project Progress Reports will be issued to the following:**

Prof. Manual Sebastian Sanchez

Prof. Jacob Catayoc

## **Documented Procedures**

All documentation created for this project is recorded in GitHub ([www.github.com](http://www.github.com)), Planner (Onenote.com), Trello ([www.trello.com](http://www.trello.com)) and Projects Wiki ([www.projects2.apc.edu.ph/wiki](http://www.projects2.apc.edu.ph/wiki)). All data gathered for this project came from internet and from interviews and survey made with the client. Other documentations are also from our project advisers, project consultant and class adviser. All pertinent documentation are reviewed every week by the professors.

---

# Change Management Plan

For

# DRASSIST

Version 1.0 approved

Prepared by:  
Maria Kristina Punla  
Chloe Tañada  
Reimarie Princess Quirante

Asia Pacific College

July 11, 2017

## **Change Management Plan**

### **Introduction**

Change Management Plan is created for DrAssist System in order to define activities and roles to manage and control change during the execution and control stage of the project. The client should comply with the change management plan for all requests and changes in the system.

### **Change Management Approach**

The Change Management approach for DrAssist System will make sure that plan or proposed changes are clear, studied, documented and approved to avoid problems with the implementation. The strategy is to make sure that only approved changes will be implemented.

The Change Management approach consists of three areas:

- Changes should be within scope and valuable to the project
- Implementation of the approved change must be well defined.
- Be able to implement the change.

The purpose of Change Management process is to make sure that this approach is charted for all changes. Through this methodology, the developers will avoid unplanned and unnecessary change from occurring.

### **Definitions of Change**

There are several types of changes that can be requested and considered for the project. Depending on the size and type of the proposed changes, changes the project documentation, and these changes are then included into the project plan and ensured that all the project stakeholders are aware and notified.

### **Types of changes includes:**

Scheduling Changes:

Change that will affect the approved project schedule.

### Budget Changes:

Practically for each situation, change implies more prominent cost. It is uncommon to have change lessen cost. Change management includes sponsors of the project - those paying for it - comprehend the effect of changes on the financial plan. Where changes can be controlled, for example, budget impacts, are part of the change analysis and may result in a decision to forego or defer the changes. The project team, led by the project manager, should also be prepared to brainstorm on ways to hold to the budget despite the impact of changes.

### Scope Changes:

Changes which are necessary and impact the projects scope which may be the result of unforeseen requirements which were not initially planned for. These changes may also impact budget and schedule. These changes may require revision to WBS, project scope statement, and other project documentation as necessary.

The project manager must ensure that any approved changes are communicated to the project stakeholders. Additionally, as changes are approved, the project manager must ensure that the changes are captured in the project documentation where necessary. These document updates must then be communicated to the project team and stakeholders as well.

## Change Control Board

A Change Control Board (CCB) or Software Change Control Board (SCCB) is a team that makes decisions regarding whether proposed changes to a software project is to be executed. The change control board is composed of project stakeholders.

Table below consist the list of the CCB members for the Project:

| Name                       | Position            | CCB Role   |
|----------------------------|---------------------|------------|
| Leticia Aspiras            | Project Sponsor     | CCB Chair  |
| Reimarie Princess Quirante | Project Manager     | CCB Member |
| Maria Kristina Punla       | Project Team Member | CCB Member |
| Chloe Tanada               | Project Team Member | CCB Member |

Once the Project Team sends change requests to the Project Manager, the project manager will document the requests in the change log and the CCB will conduct a meeting to do a run of reviews and discussions on all the change requests. In order for change to be instigated, all members of the CCB should decide whether they approved the request or not. Any further data

and explanation regarding the change requests can be discussed in the meeting. Changes that are deemed critical should be given an importance to review the change.

## **Roles and Responsibilities**

Roles and responsibilities for all change management.

### *Project Sponsor:*

Role:

Overall accountability of the project.

Responsibilities:

- Ensures that project is under control.
- Monitors progress of the project.
- Gives approval to all requested change
- Approve all changes to schedule baseline
- Manages the project team
- Approves project charter and documentation
- Ensures that approved changes are implemented properly
- Approves project deliverables

### *Project Manager:*

Role:

Overall responsibility for the analyzing, planning, design, implementation, monitoring and managing the completion of the project.

Responsibilities:

- designing and applying appropriate project management standards
- managing the production of the required deliverables
- planning and monitoring the project
- manage project risks
- monitoring overall progress of the project
- manage deliverables
- Form schedule on the changes
- Receives and documents change requests from project stakeholders
- Clarifies unclear change requests from the requestors
- Participate in Change Control Board.
- Documents all processes.

- Approves job orders and change orders

*Project Team/Stakeholders:*

Role:

To perform tasks that have been assigned to keep the project manager updated on all concerns.

Responsibilities:

- Contributes and participates to overall project objectives.
- Completing individual tasks and deliverables
- Providing expertise
- Working with users to establish and see business needs

## **Change Control Process**

The following are the process to be used when implementing changes.

1. Fill up change request form and submit.
2. Change Control Board (CCB) reviews submitted changes or execution of changes to the project.
3. Submitted change request will be scheduled for a Technical Approval. In order to review the request by suitable people to regulate the technical impact the change might do in the user environment.
4. Seek Technical Approval.
5. Implement Change.



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# **Risk Management Plan**

**For**

# **DRASSIST**

**Version 1.0 approved**

**Prepared by:  
Maria Kristina Punla  
Chloe Tañada  
Reimarie Princess Quirante**

**Asia Pacific College**

**August 14, 2017**

## Risk Management Plan

Project Title: DrAssist

Project Working Title: DrAssist

Proponent Secretary: \_\_\_\_\_

Proponent Agency: \_\_\_\_\_

Prepared by: Maria Kristina G. Punla

Date/Control Number: August 14, 2017

## Risk Management Strategy

The Risk Management Strategy is to classify and evaluate the effects of uncertainties on the DrAssist Program, so that action can be taken to minimize the consequences of any undesired incident that may threaten the success of the Program. The purpose of this plan is to create an outline of working practices, which will permit all risks linked with the DrAssist system to be identified, monitored and controlled during the lifecycle of the Program.

### 1. Risk Identification Process

Risk Identification Process will be conducted on the initial project risk assessment meeting. The project manager together with the project team will brainstorm on all possible risks.

### 2. Risk Assessment and Impact Assessment Criteria

| Risk                    |   |
|-------------------------|---|
| Risk Level 1 (Low)      | The risk will not affect the availability of the business.  |
| Risk Level 2 (Low)      | Similar to Level 1, but may cause minor disruption to services or site, but localized and agreed with all parties and can be performed in normal working hours. |
| Risk Level 3 (Medium)   | This risk will would normally be scheduled to take place outside of core business hours as it may impact normal business running.                               |
| Risk Level 4 (Med\High) | This risk will have minor impact to the business and needs careful planning.  |
| Risk Level 5 (High)     | This will have impact to the business and needs careful planning to ensure it completes successfully.   |

| Impact                  |   |
|-------------------------|---|
| 4. Minor/Localized      | Affects only a single system. Will not require extensive testing before completion. If the system fails it will not adversely affect our ability to carry out normal business operations.   |
| 3. Moderate/Limited     | Could potentially impact more than One local system, but due to nature/use of systems not business critical. Will not require moderate testing before completion. If the system fails it will not adversely affect our ability to carry out normal business operations. |
| 2. Significant/Large    | Typically affects more than one system. Could affect business operations. Will need downtime. The risk and impact need to be assessed and all affected parties consulted and agree to the action.   |
| 1. Extensive/Widespread | Will affect multiple systems and have business impact. Requires extensive planning, risk and impact analysis, consultation / agreement and discussion before being scheduled.   |

### 3. Risk Mitigation Options

The project manager has managed the project team in creating resolutions to each known risk. As more risks are found, the project team will develop avoidance and mitigation strategies. These risks will be documented to guarantee they are checked at the proper times and are replied to consequently.

The risks for this project will be managed and organized within the limitations of time, scope, and cost. All identified risks will be assessed. The project manager, together with the project team, will find the best way to resolve each risk to ensure compliance with these limitations.

### 4. Risk Plan Maintenance

The project manager together with the team will test, evaluate and update the risk management plan regularly. Risks can affect the business. A Regular review on the risk management plan is important for identifying new risks and monitoring the efficiency of the risk action plans.

## 5. Risk Management Responsibilities

| Individual               | Responsibility  |
|--------------------------|---|
| <b>Program Director</b>  | The program Director has overall responsibility for Risk Management on DrAssist.  |
|                          |   |
| <b>Assurance Manager</b> | The Assurance Manager coordinates all the Assurance functions on the DrAssist Program, which includes the Risk Management Process.  |
|                          |   |
| <b>Risk Manager</b>      | <p>The Risk Manager is responsible to the Assurance Manager and Program Director for the effective management of the Risk Management Process, which includes the following:</p> <ul style="list-style-type: none"> <li>➤ Facilitate the identification of all risks that may impact the success of the DrAssist Program.</li> <li>➤ Make certain that all risks identified are recorded into the DrAssist Risk Register.</li> <li>➤ Ensure that a Risk Owner is assigned to each risk.</li> <li>➤ Ensure that there is a control strategy for each risk, which is being implemented with clearly identified actions and resolutions.</li> <li>➤ Maintain the Risk Register and ensure that it is correct and up to date.</li> <li>➤ Organize and manage regular meetings of the Risk Management Committee.</li> </ul> |
|                          |   |
| <b>Risk Owner</b>        | The Risk Owner is responsible for confirming that risk control actions are implemented.   |
|                          | Assigns responsibility for the control actions and resolutions.   |
|                          | Reports completion of a risk action to the Risk Manager.  |
|                          | The Risk Owner can change the control actions as and when required in reply to changing conditions.   |

## Risk Analysis Summary

| Risk Number | Risk Name  | Probability of Occurrence | Impact level | Impact Description   |
|-------------|--|---------------------------|--------------|--|
| 1           | Executives fail to support project                       | 30%                       | 3            | The project team may lack the authority to achieve project objectives. In such cases, executive management support is fundamental to project success. When this doesn't materialize the project fails. |
| 2           | Executives become disengaged with project                | 30%                       | 3            | Executive management disregards project communications and meetings.   |
| 3           | Conflict between executive stakeholders disrupts project | 20%                       | 3            | Members of executive management are combative to the project or there is a disagreement over project issues at the executive level.  |
| 4           | Estimates are inaccurate                                 | 10%                       | 2            | Inaccurate estimates is a common project risk.   |
| 5           | Cost forecasts are inaccurate                            | 10%                       | 2            | Inaccurate cost estimates and forecasts.   |
| 6           | Change management overload                               | 20%                       | 3            | Change requests may be the source of stakeholder conflict.   |
| 7           | Stakeholder conflict over proposed changes               | 10%                       | 3            | Identify any lack of critical tools as a risk.   |
| 8           | Lack of a change management system                       | 5%                        | 3            | Identify any lack of critical tools as a risk.   |
| 9           | Lack of a change management process                      | 5%                        | 3            | Change management at the organizational or departmental level is critical to project success. Otherwise, the project   |

|    |  |     |   |  |
|----|--|-----|---|--|
|    |  |     |   | will have limited visibility into changes that impact the project.   |
| 10 | Lack of a change control board             | 5%  | 3 | When non-essential changes are prioritized impacting critical schedules.   |
| 11 | Change request conflicts with requirements | 5%  | 3 | Change requests that make no sense in the context of the requirements.   |
| 12 | Stakeholders become disengaged             | 10% | 2 | When stakeholders ignore project communications.   |
| 13 | Stakeholders have inaccurate expectations  | 20% | 3 | Stakeholders develop inaccurate expectations (believe that the project will achieve something not in the requirements, plan, etc.).  |
| 14 | Stakeholder turnover                       | 20% | 3 | Stakeholder turnover can lead to project disruptions.  |
| 15 | Stakeholders fail to support project       | 20% | 3 | When stakeholders have a negative attitude towards the project and wish to see it fail.  |
| 16 | Stakeholder conflict                       | 20% | 3 | Disagreement between stakeholders over project issues.   |
| 17 | Project team misunderstand requirements    | 30% | 3 | When requirements are misinterpreted by the project team a gap develops between expectations, requirements and work packages.  |
| 18 | Impacted individuals aren't kept informed  | 30% | 3 | A stakeholder is missing in your communication plan. Anyone who isn't informed but is impacted has an excellent reason to throw up project roadblocks. For example, if you |

|    |  |     |   |  |
|----|--|-----|---|--|
|    |  |     |   | build a system but fail to consult the operations group that will be responsible for support.  |
| 19 | Resource shortfalls                                      | 30% | 3 | Inability to secure sufficient resources for the project.  |
| 20 | Learning curves lead to delays and cost overrun          | 30% | 3 | When your project team need to acquire new skills for the project there's a risk that productivity will be low.                                    |
| 21 | Training isn't available                                 | 30% | 3 | Quality training for certain skills can be difficult to secure.  |
| 22 | Training is inadequate                                   | 30% | 3 | Training is often a poor substitute for professional experience. Projects shouldn't assume that resources will be fully productive in a new skill. |
| 23 | Resources are inexperienced                              | 20% | 3 | Resources who are just out of school or who are new to your industry or profession tend to make more mistakes and be less productive.              |
| 24 | Resource performance issues                              | 20% | 3 | Resources who perform below expectations.  |
| 25 | Team members with negative attitudes towards the project | 10% | 3 | Resources who are negative towards the project may actively or passively sabotage project efforts.   |
| 26 | Resource turnover  | 20% | 3 | Your team lacks motivation. This is a particularly common risk for long running projects.  |
| 27 | Design is infeasible                                     | 20% | 3 | The design isn't possible, is excessively costly or doesn't support the requirements.  |

|    |   |     |   |  |
|----|---|-----|---|--|
| 28 | Design lacks flexibility                                      | 20% | 3 | A poor design makes change requests difficult and costly.  |
| 29 | Design is not fit for purpose                                 | 20% | 3 | The design is low quality.   |
| 30 | Design fails peer review                                      | 20% | 3 | It's a good idea to have peers or architectural experts review your designs.                           |
| 31 | Information security incidents                                | 30% | 3 | The risk of a security incident during the project (e.g. information is leaked).                       |
| 32 | System outages  | 30% | 3 | Critical systems such as your test environments go down.   |
| 33 | Decision delays impact project                                | 20% | 3 | Establish guidelines for decision turnaround time. Identify the risk that guidelines will be exceeded. |
| 34 | Project team lack authority to complete work                  | 20% | 3 | If you lack specific authorities required to deliver the project list this as a risk.                  |
| 35 | Authority is unclear  | 20% | 3 | It's unclear who has the authority to accomplish a project objective.                                  |
| 36 | Delays to financial approvals impact the project              | 20% | 3 | The risk of delays to financial approvals and processes to release funds.                              |
| 37 | Delays to stakeholder approvals impact the project            | 20% | 3 | The risk that approval deadlines will be exceeded.   |
| 38 | A merger or acquisition disrupts the project                  | 20% | 3 | Mergers & acquisitions may represent significant organizational changes.                               |
| 39 | An organizational restructuring throws the project into chaos | 20% | 3 | If your project has a large footprint it may be extremely  |



|    |  |     |   |  |
|----|--|-----|---|--|
|    |  |     |   | sensitive to organizational changes.   |
| 40 | Users reject the prototype                           | 20% | 3 | One of the key methods of improving user acceptance is to get regular prototypes in front of users. There's always a risk that these prototypes will be rejected (require significant rework). |
| 41 | User interface doesn't allow users to complete tasks | 20% | 3 | The risk that the user interface doesn't allow users to complete end-to-end tasks.   |
| 42 | User interface is low quality                        | 20% | 3 | The user interface is buggy, slow or difficult to use.   |
| 43 | User interface isn't accessible                      | 20% | 3 | In many jurisdictions, user interfaces must be accessible  |
| 44 | Project reduces business productivity                | 20% | 3 | Users identify your product(s) as reducing their productivity.   |
| 45 | Users reject the product                             | 20% | 3 | The general risk that users will reject your product.  |

## Risk Response Summary

| Risk Priority | Risk Number | Risk Name  | Responsible Person | Mitigation Action(s)   |
|---------------|-------------|--|--------------------|--|
| 1             | 1           | Executives fail to support project                       | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 1             | 2           | Executives become disengaged with project                | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 2             | 3           | Conflict between executive stakeholders disrupts project | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 2             | 4           | Estimates are inaccurate                                 | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 2             | 5           | Cost forecasts are inaccurate                            | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 1             | 6           | Change management overload                               | Risk Manager       | A change management plan will be created.                                |
| 2             | 7           | Stakeholder conflict over proposed changes               | Risk Manager       | A regular chair meeting will be held during the duration of the project. |
| 2             | 8           | Lack of a change management system                       | Risk Manager       | A change management plan will be created.                                |

|   |    |  |              |  |
|---|----|--|--------------|--|
| 2 | 9  | Lack of a change management process        | Risk Manager | A change management plan will be created.                                |
| 2 | 10 | Lack of a change control board             | Risk Manager | A change management plan will be created.                                |
| 2 | 11 | Change request conflicts with requirements | Risk Manager | A change management plan will be created.                                |
| 1 | 12 | Stakeholders become disengaged             | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 1 | 13 | Stakeholders have inaccurate expectations  | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 1 | 14 | Stakeholder turnover                       | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 1 | 15 | Stakeholders fail to support project       | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 1 | 16 | Stakeholder conflict                       | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 3 | 17 | Project team misunderstand requirements    | Risk Manager | A regular chair meeting will be held during the duration of the project. |

|   |    |  |              |  |
|---|----|--|--------------|--|
| 2 | 18 | Impacted individuals aren't kept informed                | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 3 | 19 | Resource shortfalls                                      | Risk Manager | A forecast of resource needed will be done.                              |
| 3 | 20 | Learning curves lead to delays and cost overrun          | Risk Manager | A timeline will be created for learning.                                 |
| 3 | 21 | Training isn't available                                 | Risk Officer | A scheduled training will be done.                                       |
| 3 | 22 | Training is inadequate                                   | Risk Officer | A scheduled training will be done.                                       |
| 3 | 23 | Resources are inexperienced                              | Risk Officer | A scheduled training will be done.                                       |
| 3 | 24 | Resource performance issues                              | Risk Officer | An evaluation of the performance of resource will be conducted.          |
| 3 | 25 | Team members with negative attitudes towards the project | Risk Officer | An evaluation of the performance of resource will be conducted.          |
| 3 | 26 | Resource turnover  | Risk Manager | A scheduled training will be done.                                       |
| 4 | 27 | Design is infeasible                                     | Risk Officer | A regular chair meeting will be held during the duration of the project. |
| 4 | 28 | Design lacks flexibility                                 | Risk Officer | A regular chair meeting will be held during the duration of the project. |
| 4 | 29 | Design is not fit for purpose                            | Risk Officer | A regular chair meeting will be held                                     |

|   |    |  |              |   |
|---|----|--|--------------|---|
|   |    |  |              | during the duration of the project.   |
| 4 | 30 | Design fails peer review                           | Risk Officer | A regular chair meeting will be held during the duration of the project.      |
| 4 | 31 | Information security incidents                     | Risk Officer | The system will be design will all the security needed to protect the system. |
| 4 | 32 | System outages                                     | Risk Manager | A plan will be created to handle system outages                               |
| 3 | 33 | Decision delays impact project                     | Risk Manager | A regular chair meeting will be held during the duration of the project.      |
| 3 | 34 | Project team lack authority to complete work       | Risk Manager | A regular chair meeting will be held during the duration of the project.      |
| 3 | 35 | Authority is unclear                               | Risk Manager | A regular chair meeting will be held during the duration of the project.      |
| 2 | 36 | Delays to financial approvals impact the project   | Risk Manager | A regular chair meeting will be held during the duration of the project.      |
| 2 | 37 | Delays to stakeholder approvals impact the project | Risk Manager | A regular chair meeting will be held during the duration of the project.      |

|   |    |   |              |  |
|---|----|---|--------------|--|
| 2 | 38 | A merger or acquisition disrupts the project                  | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 2 | 39 | An organizational restructuring throws the project into chaos | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 2 | 40 | Users reject the prototype                                    | Risk Manager | A scheduled training will be done.                                       |
| 2 | 41 | User interface doesn't allow users to complete tasks          | Risk Manager | A scheduled training will be done.                                       |
| 2 | 42 | User interface is low quality                                 | Risk Manager | A scheduled training will be done.                                       |
| 2 | 43 | User interface isn't accessible                               | Risk Manager | A scheduled training will be done.                                       |
| 2 | 44 | Project reduces business productivity                         | Risk Manager | A regular chair meeting will be held during the duration of the project. |
| 2 | 45 | Users reject the product                                      | Risk Manager | A regular chair meeting will be held during the duration of the project. |

## Risk Mitigation Cost

| <i><b>Risk Number</b></i> | <i><b>Risk Name</b></i>                                  | <i><b>Internal Staff Labour</b></i> | <i><b>Services</b></i> | <i><b>Development Tools</b></i> | <i><b>Software</b></i> | <i><b>Hardware</b></i> | <i><b>Materials and Supplies</b></i> | <i><b>Facilities</b></i> | <i><b>Tele-communications</b></i> | <i><b>Training</b></i> | <i><b>Total Cost</b></i> |
|---------------------------|--|-------------------------------------|------------------------|---------------------------------|------------------------|------------------------|--------------------------------------|--------------------------|-----------------------------------|------------------------|--------------------------|
| 1                         | Executives fail to support project                       | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 2                         | Executives become disengaged with project                | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 3                         | Conflict between executive stakeholders disrupts project | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 4                         | Estimates are inaccurate                                 | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 5                         | Cost forecasts are inaccurate                            | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 6                         | Change management overload                               | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 7                         | Stakeholder conflict over proposed changes               | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 8                         | Lack of a change management system                       | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |
| 9                         | Lack of a change management process                      | 0                                   | 0                      | 0                               | 0                      | 0                      | 0                                    | 0                        | 0                                 | 0                      | 0                        |

|    |   |   |   |   |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Lack of a change control board                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | Change request conflicts with requirements      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | Stakeholders become disengaged                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | Stakeholders have inaccurate expectations       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | Stakeholder turnover                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | Stakeholders fail to support project            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | Stakeholder conflict                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | Project team misunderstand requirements         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | Impacted individuals aren't kept informed       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | Resource shortfalls                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | Learning curves lead to delays and cost overrun | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | Training isn't available                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 | Training is inadequate                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 | Resources are inexperienced                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



|    |  |   |   |   |   |   |   |   |   |   |   |
|----|--|---|---|---|---|---|---|---|---|---|---|
| 24 | Resource performance issues                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | Team members with negative attitudes towards the project | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | Resource turnover  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | Design is infeasible                                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 | Design lacks flexibility                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 | Design is not fit for purpose                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 | Design fails peer review                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31 | Information security incidents                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 32 | System outages   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 33 | Decision delays impact project                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34 | Project team lack authority to complete work             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 | Authority is unclear                                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | Delays to financial approvals impact the project         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | Delays to stakeholder approvals impact the project       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | A merger or acquisition disrupts the project             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

|    |   |   |   |   |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|---|---|---|---|
| 39 | An organizational restructuring throws the project into chaos | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | Users reject the prototype                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 41 | User interface doesn't allow users to complete tasks          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | User interface is low quality                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 | User interface isn't accessible                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | Project reduces business productivity                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45 | Users reject the product                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Risk Contingency Report

| <i><b>Risk Number</b></i> | <i><b>Risk Name</b></i>                                  | <i><b>Probability of Occurrence</b></i> | <i><b>Mitigation Cost</b></i> | <i><b>Planned Contingency Cost</b></i> |
|---------------------------|--|---|-------------------------------|--|
| 1                         | Executives fail to support project                       | 30%                                     | 0                             | 0                                      |
| 2                         | Executives become disengaged with project                | 30%                                     | 0                             | 0                                      |
| 3                         | Conflict between executive stakeholders disrupts project | 20%                                     | 0                             | 0                                      |
| 4                         | Estimates are inaccurate                                 | 10%                                     | 0                             | 0                                      |
| 5                         | Cost forecasts are inaccurate                            | 10%                                     | 0                             | 0                                      |
| 6                         | Change management overload                               | 20%                                     | 0                             | 0                                      |
| 7                         | Stakeholder conflict over proposed changes               | 10%                                     | 0                             | 0                                      |
| 8                         | Lack of a change management system                       | 5%                                      | 0                             | 0                                      |
| 9                         | Lack of a change management process                      | 5%                                      | 0                             | 0                                      |
| 10                        | Lack of a change control board                           | 5%                                      | 0                             | 0                                      |
| 11                        | Change request conflicts with requirements               | 5%                                      | 0                             | 0                                      |
| 12                        | Stakeholders become disengaged                           | 10%                                     | 0                             | 0                                      |
| 13                        | Stakeholders have inaccurate expectations                | 20%                                     | 0                             | 0                                      |
| 14                        | Stakeholder turnover                                     | 20%                                     | 0                             | 0                                      |
| 15                        | Stakeholders fail to support project                     | 20%                                     | 0                             | 0                                      |
| 16                        | Stakeholder conflict                                     | 20%                                     | 0                             | 0                                      |
| 17                        | Project team misunderstand requirements                  | 30%                                     | 0                             | 0                                      |
| 18                        | Impacted individuals aren't kept informed                | 30%                                     | 0                             | 0                                      |
| 19                        | Resource shortfalls                                      | 30%                                     | 0                             | 0                                      |

|    |   |     |   |   |
|----|---|-----|---|---|
| 20 | Learning curves lead to delays and cost overrun               | 30% | 0 | 0 |
| 21 | Training isn't available                                      | 30% | 0 | 0 |
| 22 | Training is inadequate  | 30% | 0 | 0 |
| 23 | Resources are inexperienced                                   | 20% | 0 | 0 |
| 24 | Resource performance issues                                   | 20% | 0 | 0 |
| 25 | Team members with negative attitudes towards the project      | 10% | 0 | 0 |
| 26 | Resource turnover   | 20% | 0 | 0 |
| 27 | Design is infeasible  | 20% | 0 | 0 |
| 28 | Design lacks flexibility                                      | 20% | 0 | 0 |
| 29 | Design is not fit for purpose                                 | 20% | 0 | 0 |
| 30 | Design fails peer review                                      | 20% | 0 | 0 |
| 31 | Information security incidents                                | 30% | 0 | 0 |
| 32 | System outages  | 30% | 0 | 0 |
| 33 | Decision delays impact project                                | 20% | 0 | 0 |
| 34 | Project team lack authority to complete work                  | 20% | 0 | 0 |
| 35 | Authority is unclear  | 20% | 0 | 0 |
| 36 | Delays to financial approvals impact the project              | 20% | 0 | 0 |
| 37 | Delays to stakeholder approvals impact the project            | 20% | 0 | 0 |
| 38 | A merger or acquisition disrupts the project                  | 20% | 0 | 0 |
| 39 | An organizational restructuring throws the project into chaos | 20% | 0 | 0 |
| 40 | Users reject the prototype                                    | 20% | 0 | 0 |
| 41 | User interface doesn't allow users to complete tasks          | 20% | 0 | 0 |
| 42 | User interface is low quality                                 | 20% | 0 | 0 |
| 43 | User interface isn't accessible                               | 20% | 0 | 0 |

|    |                                       |     |   |   |
|----|---------------------------------------|-----|---|---|
| 44 | Project reduces business productivity | 20% | 0 | 0 |
| 45 | Users reject the product              | 20% | 0 | 0 |

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# Diagrams and Tables

For

**DrAssist**

Version 1.0 approved

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Asia Pacific College

July 11, 2017

Figure 6: Work Breakdown Structure

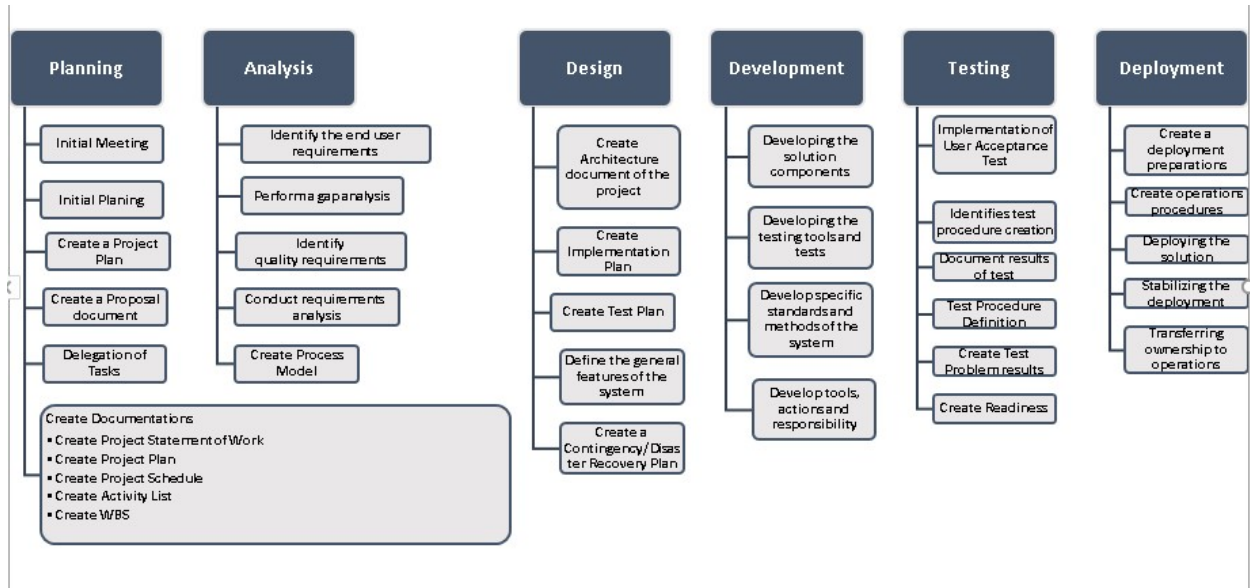


Figure 7: Functional Decomposition Diagram

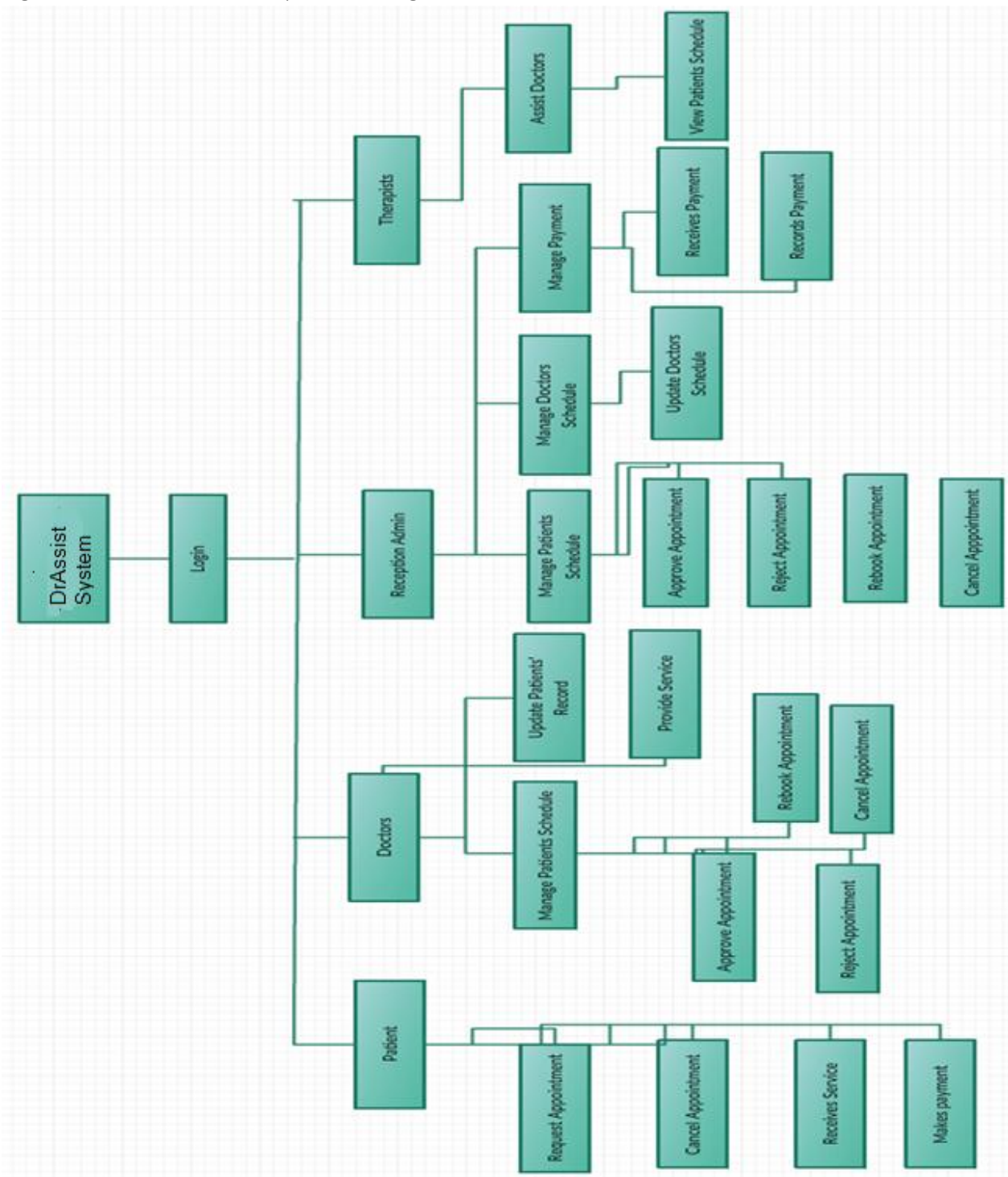




Figure 8: Use Case Diagram

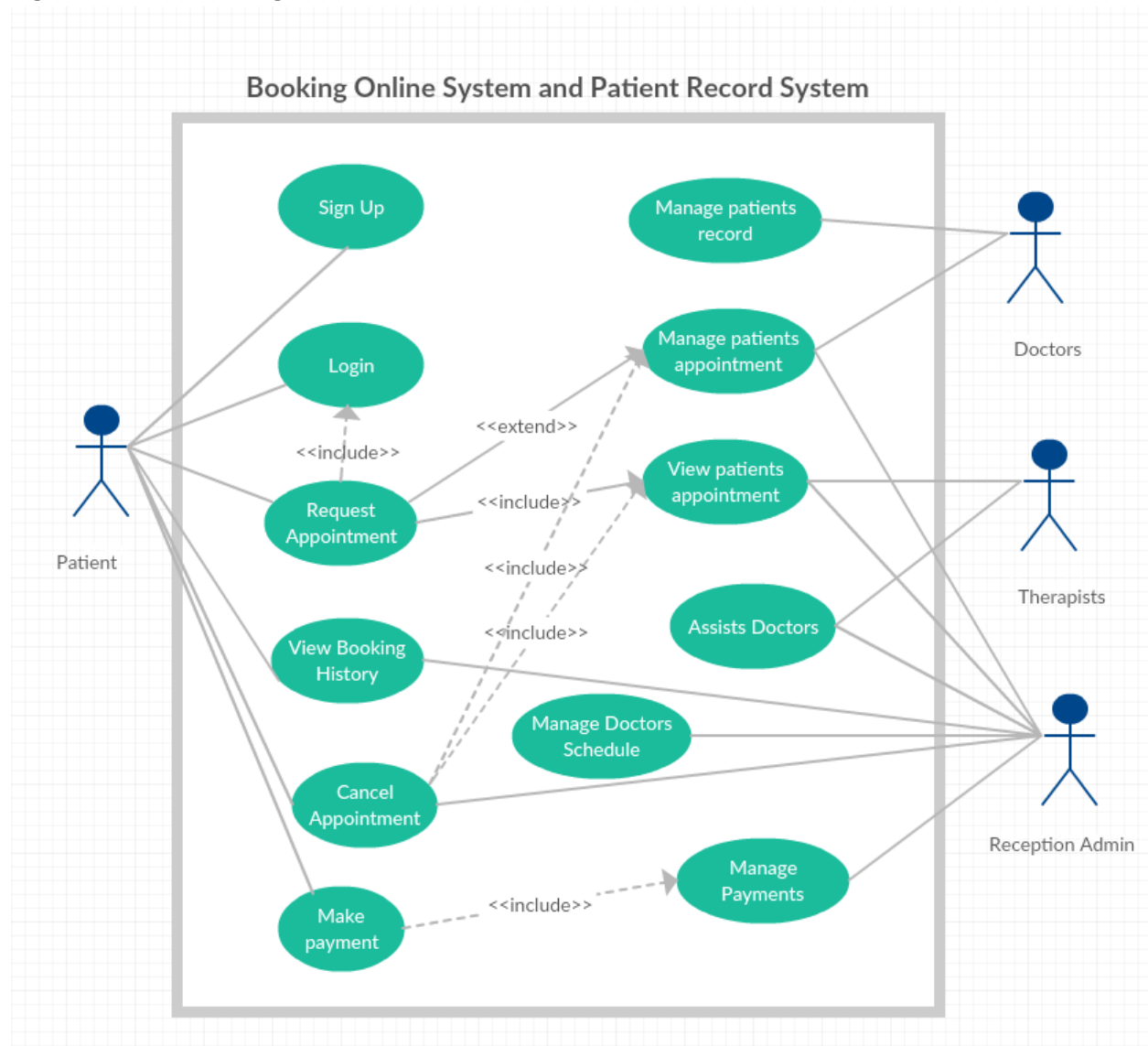


Figure 9: Package Diagram

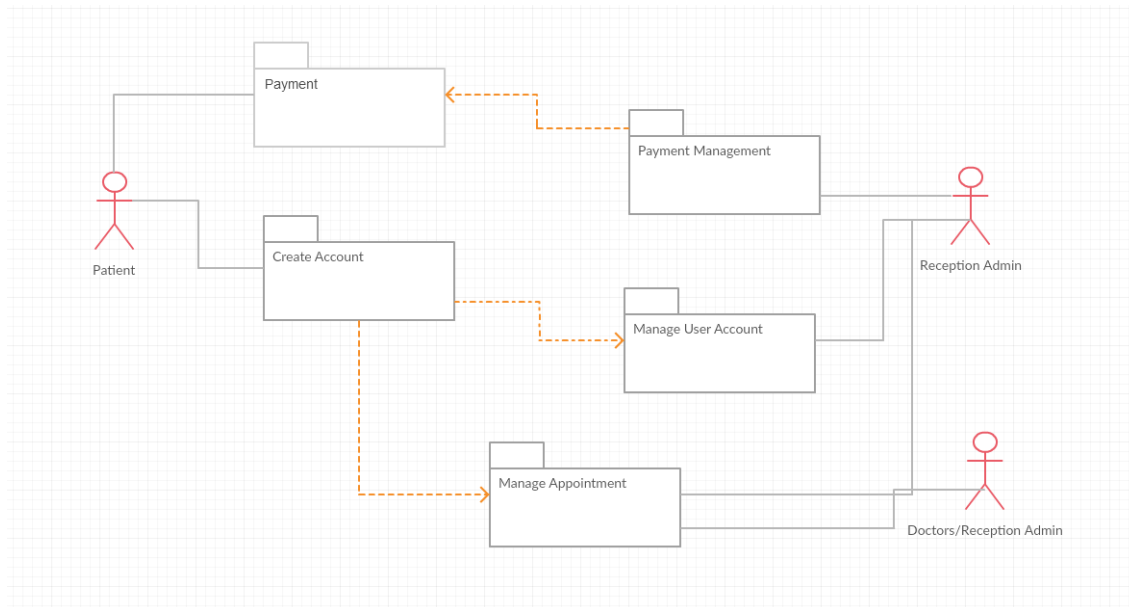
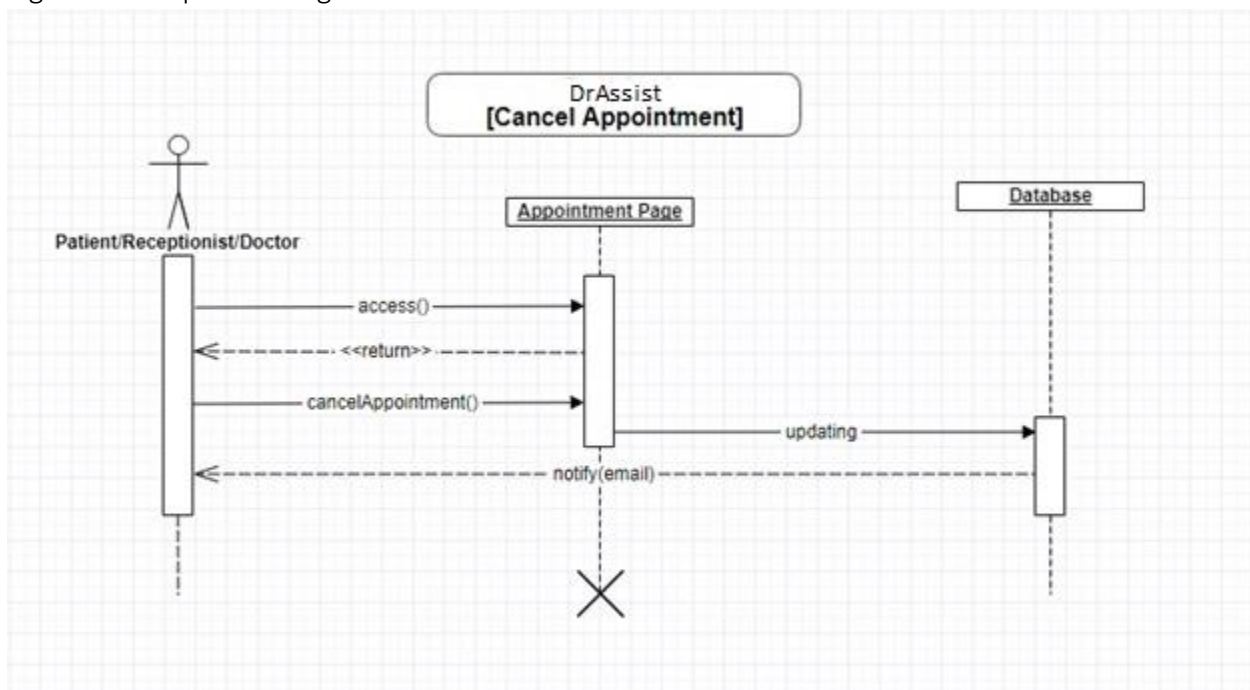
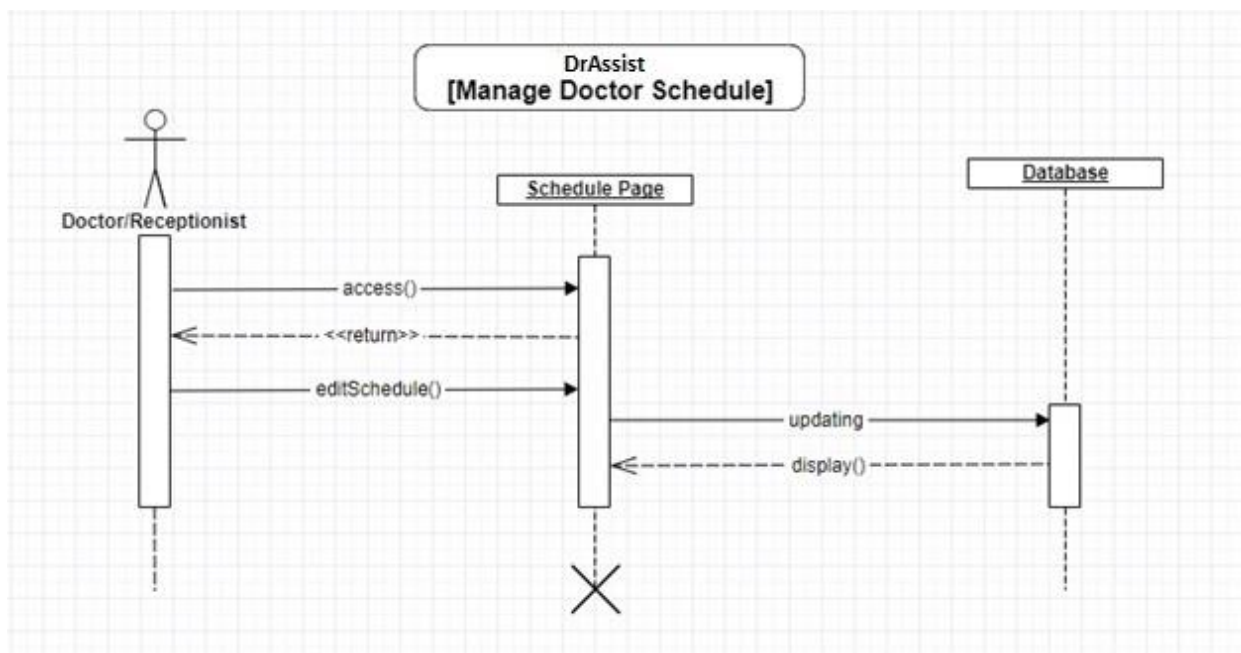
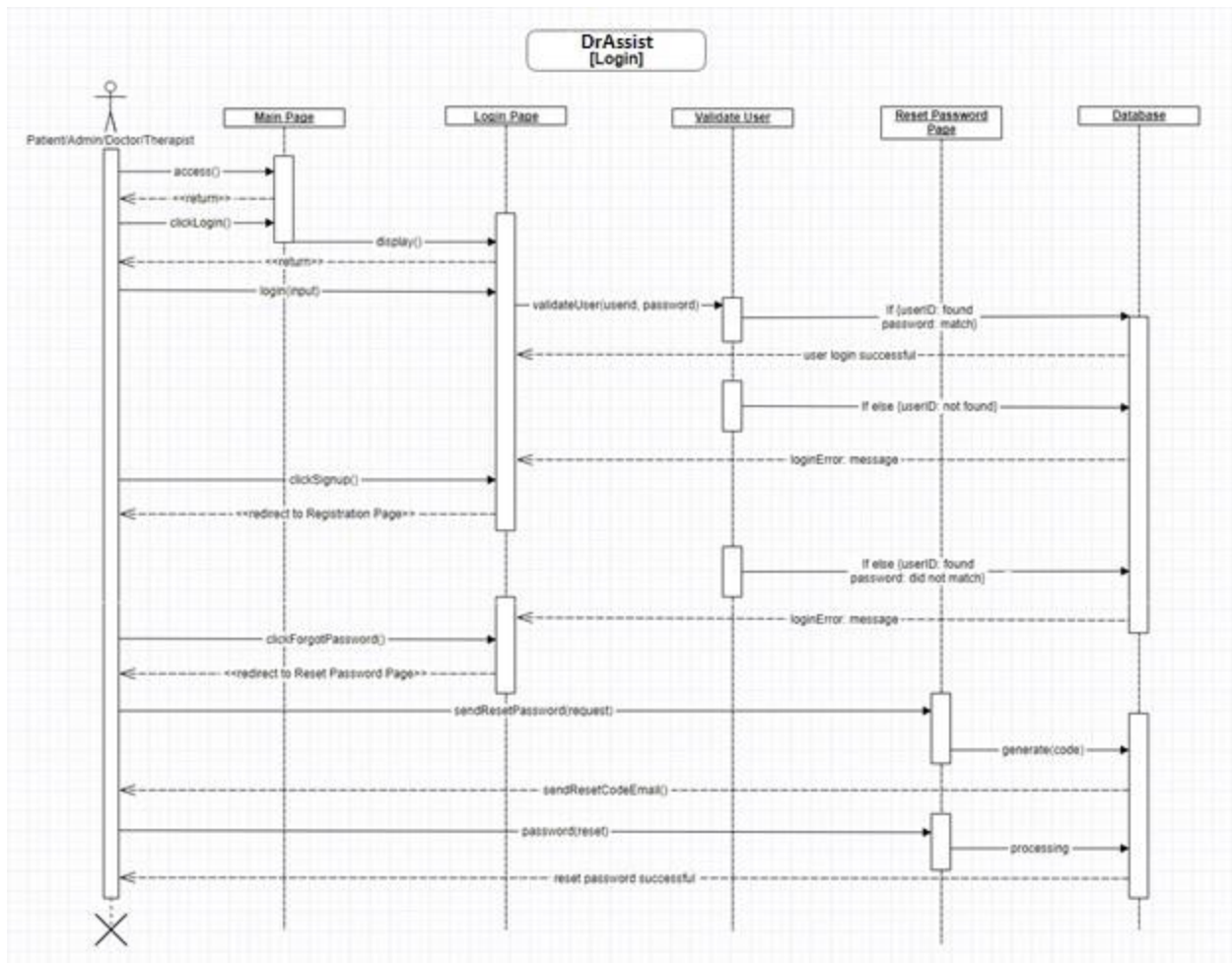
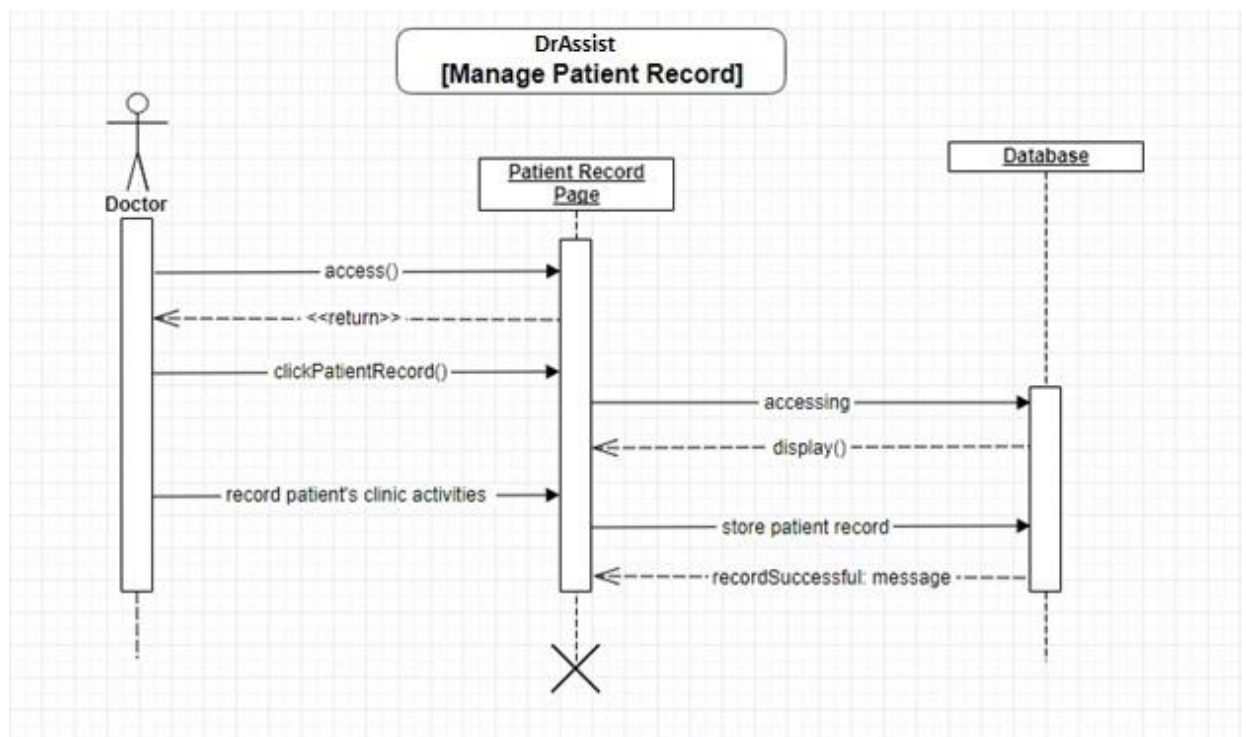
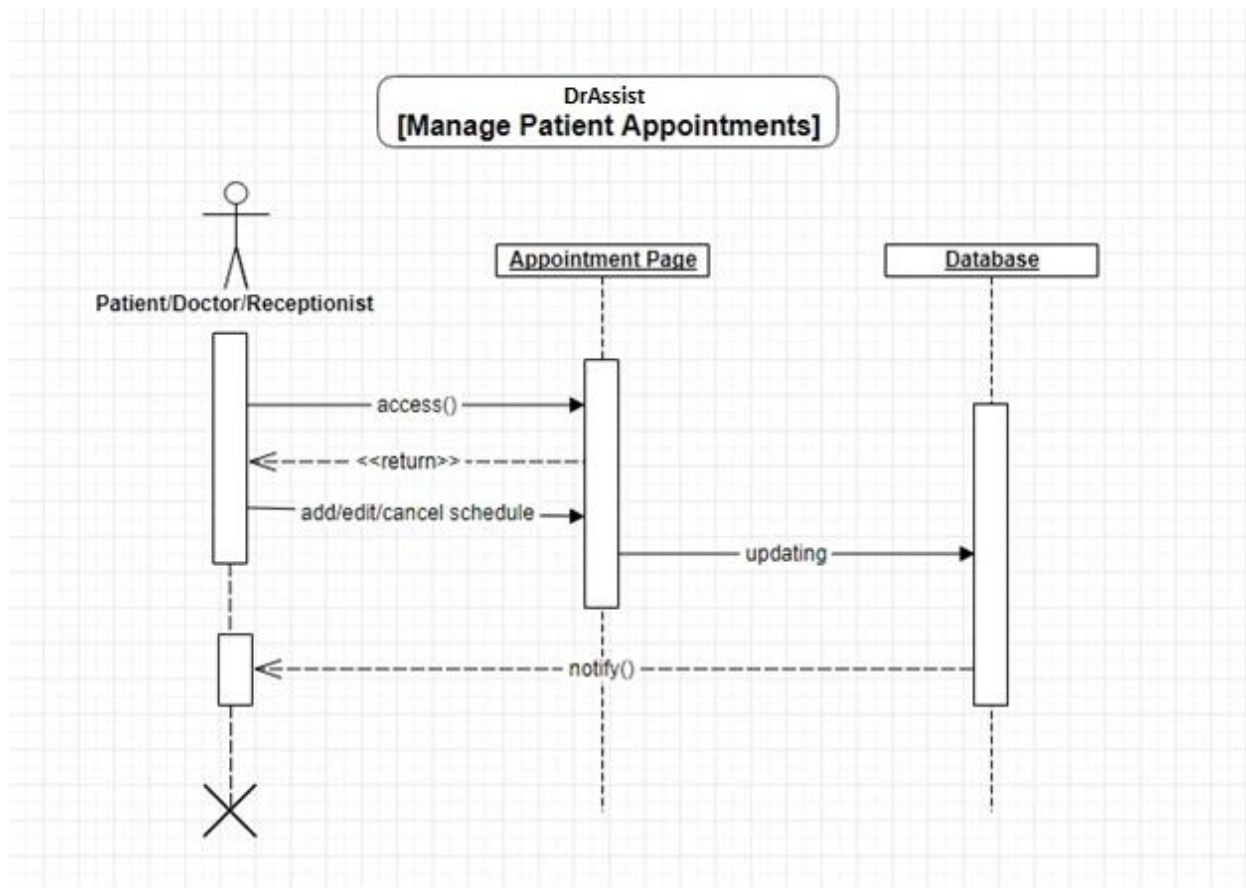
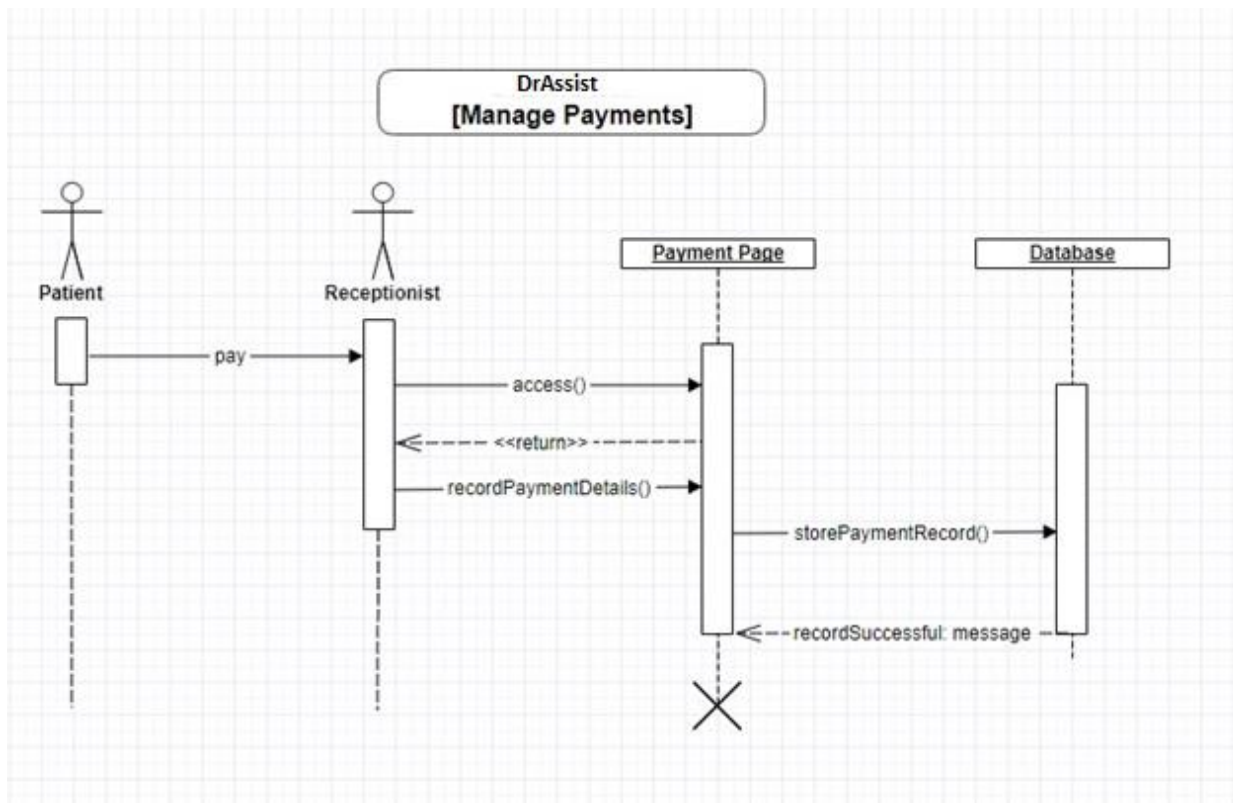


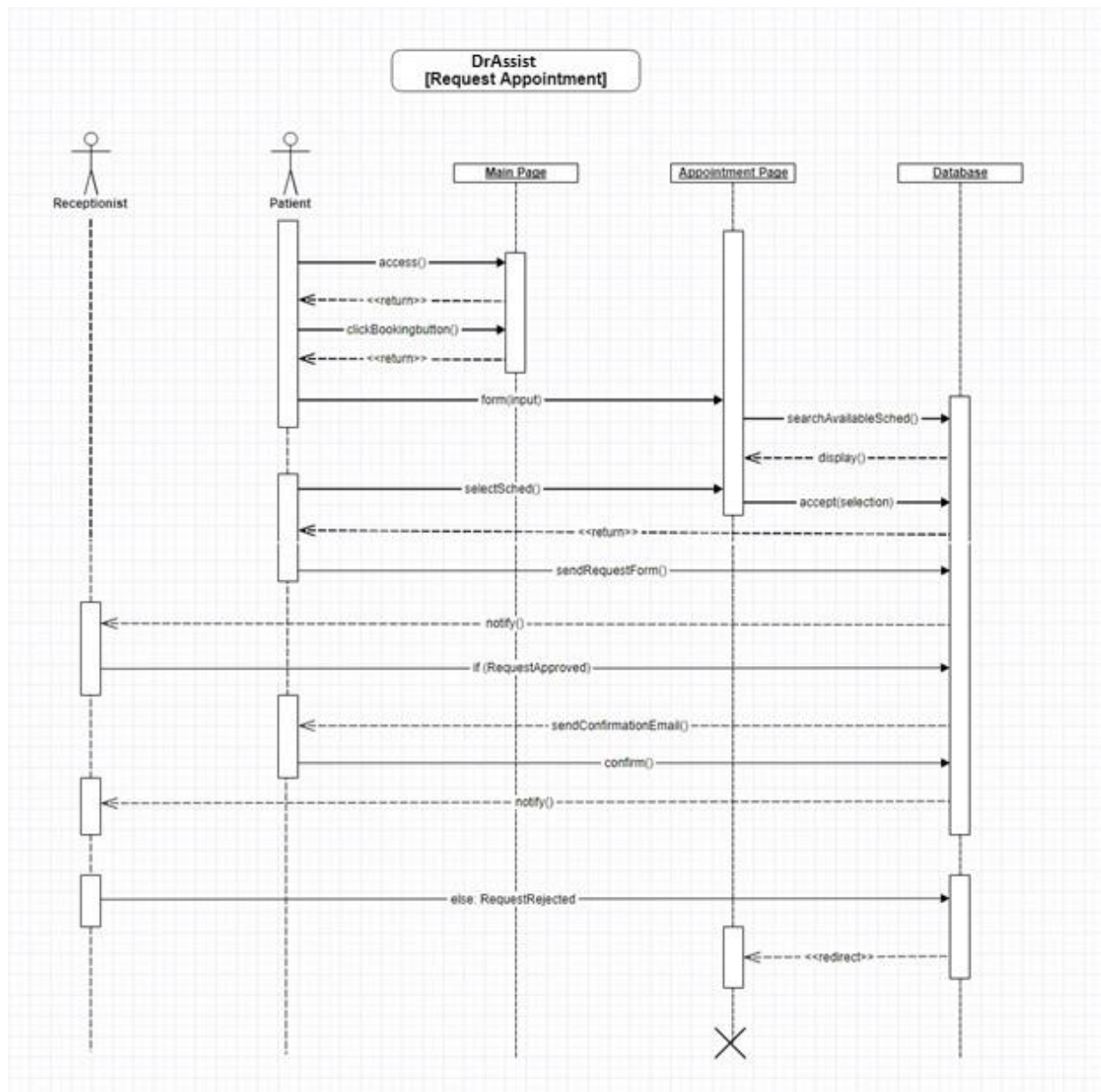
Figure 10: Sequence Diagram



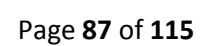












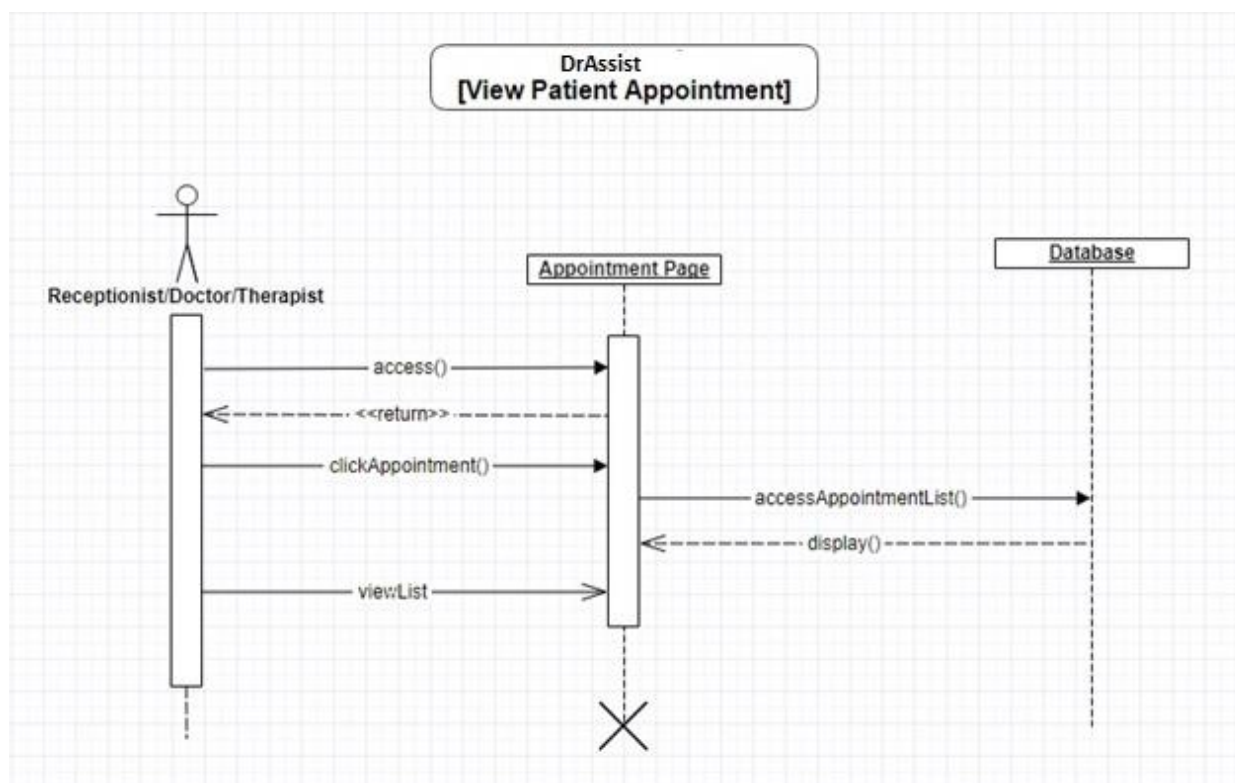
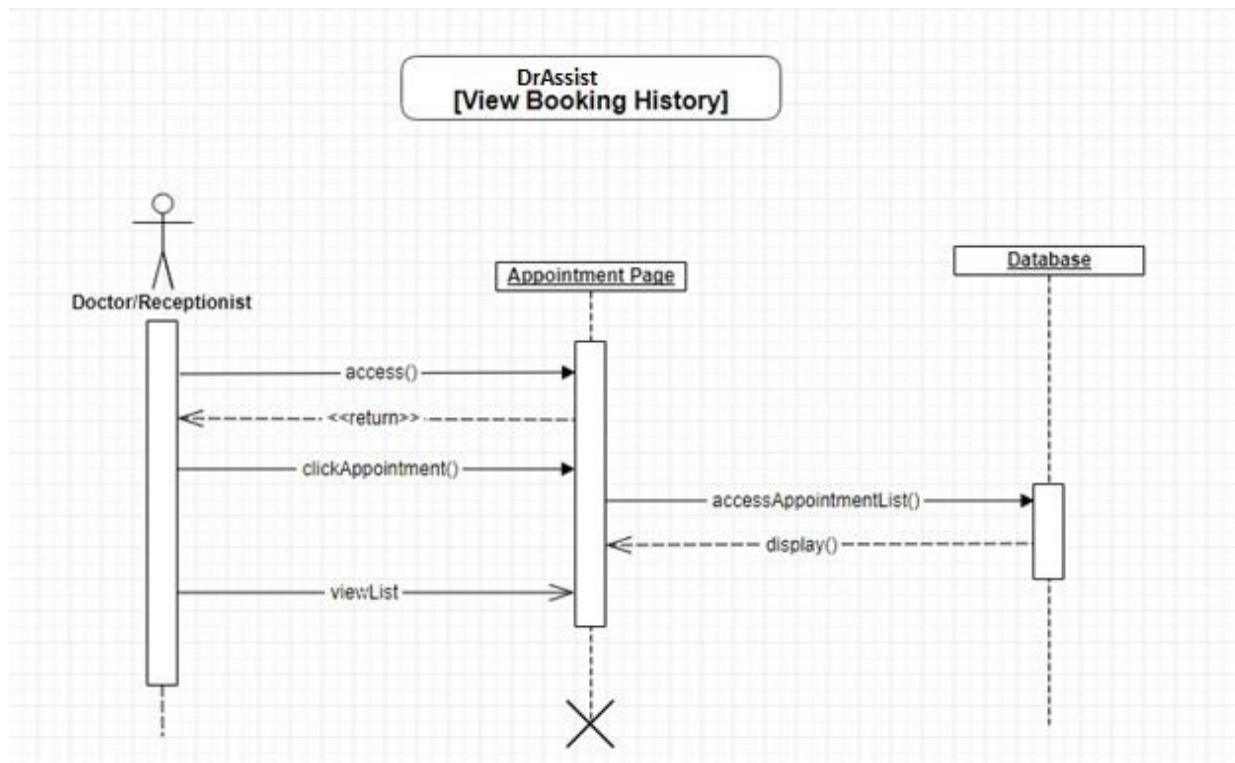
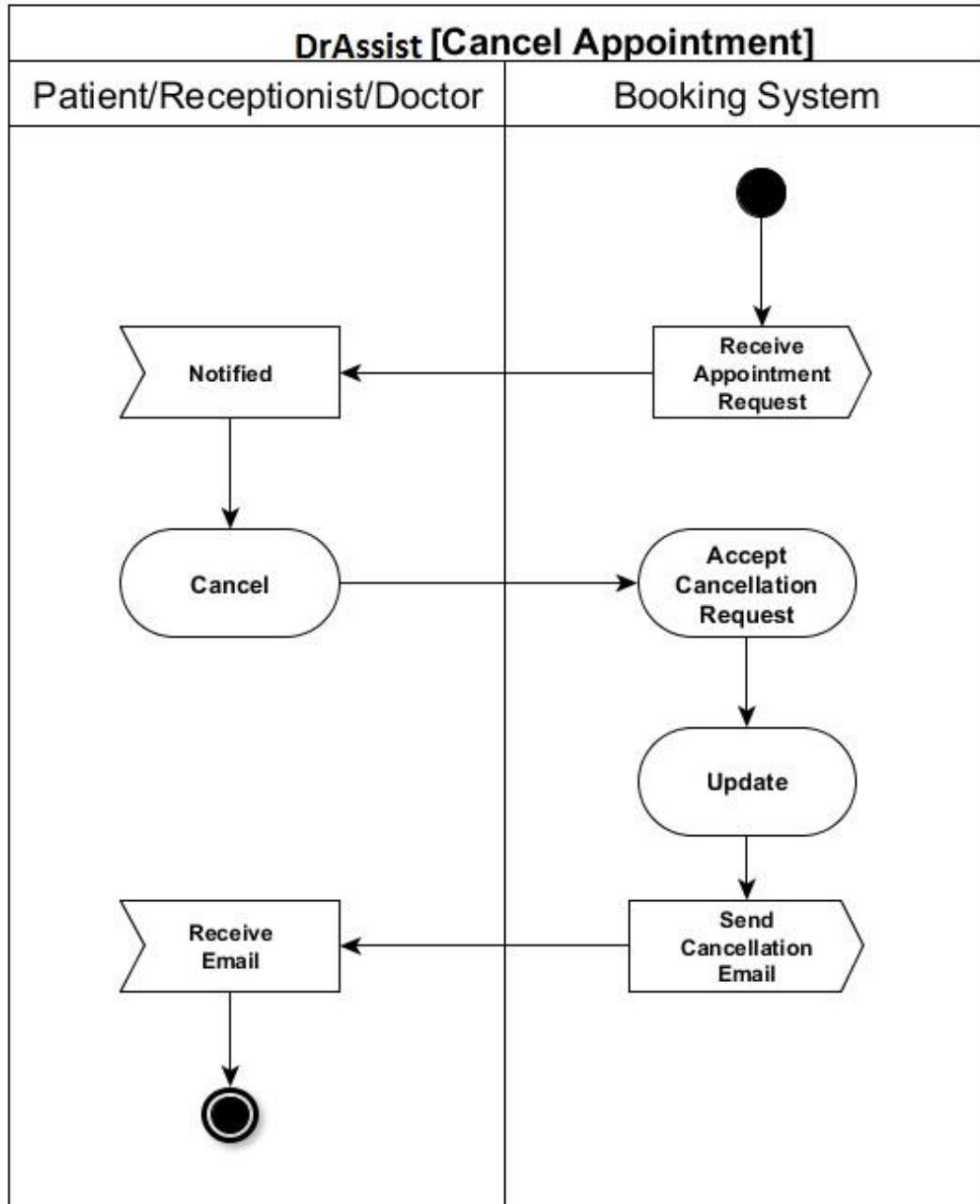
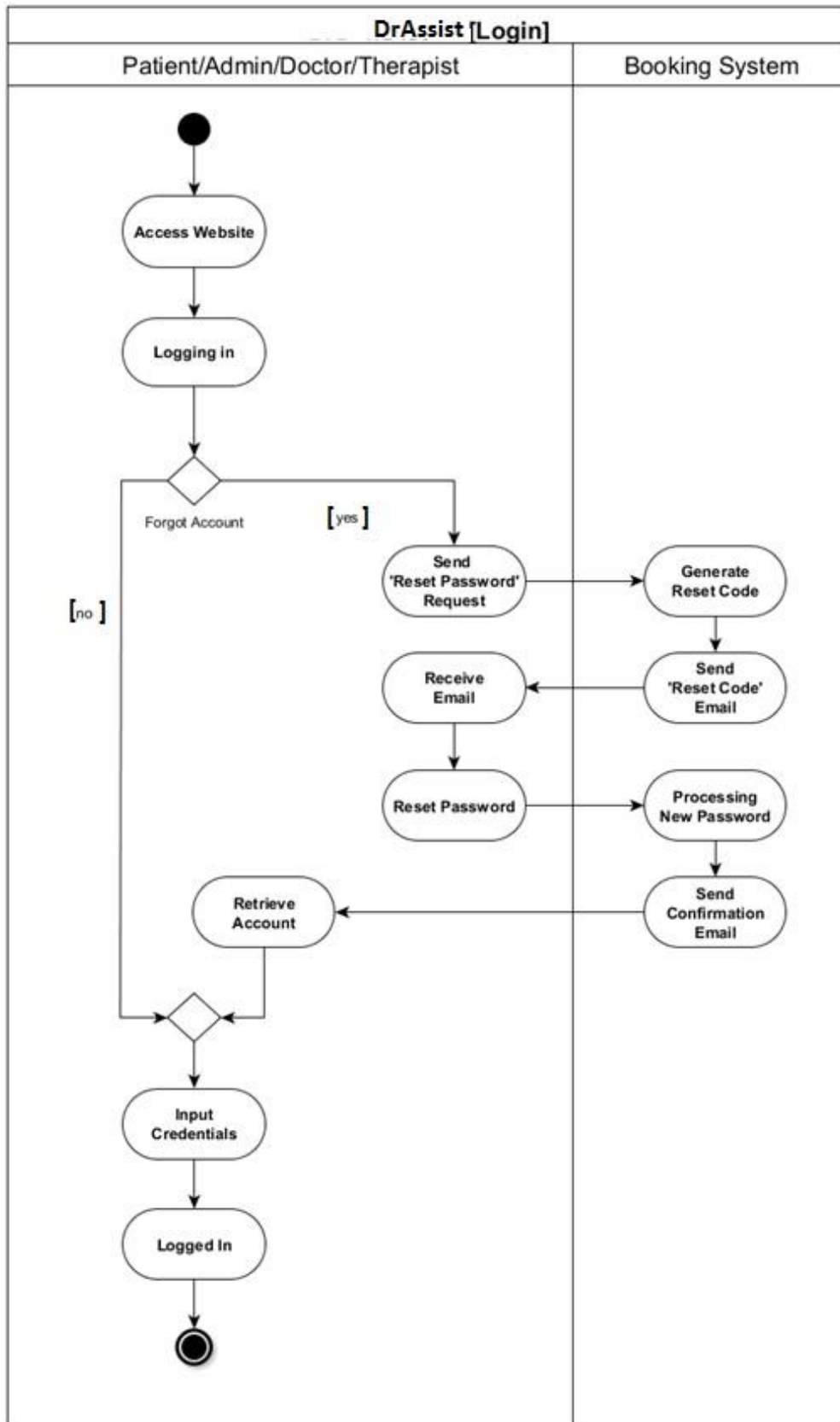
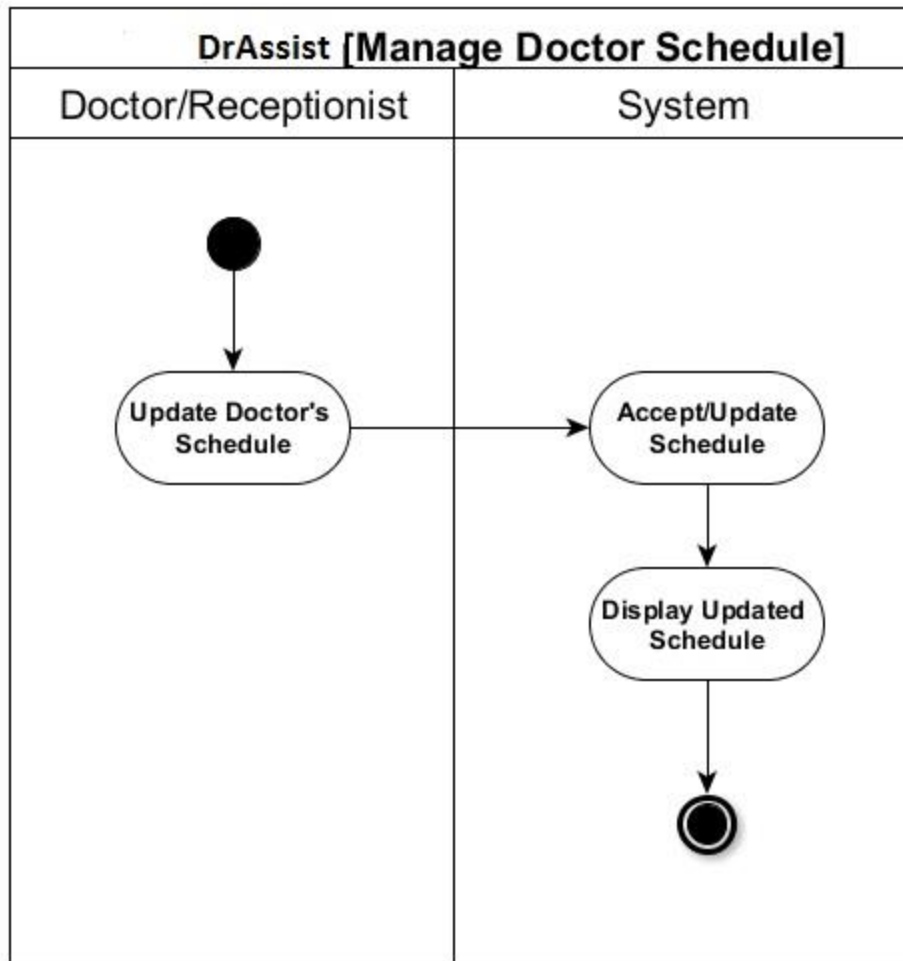


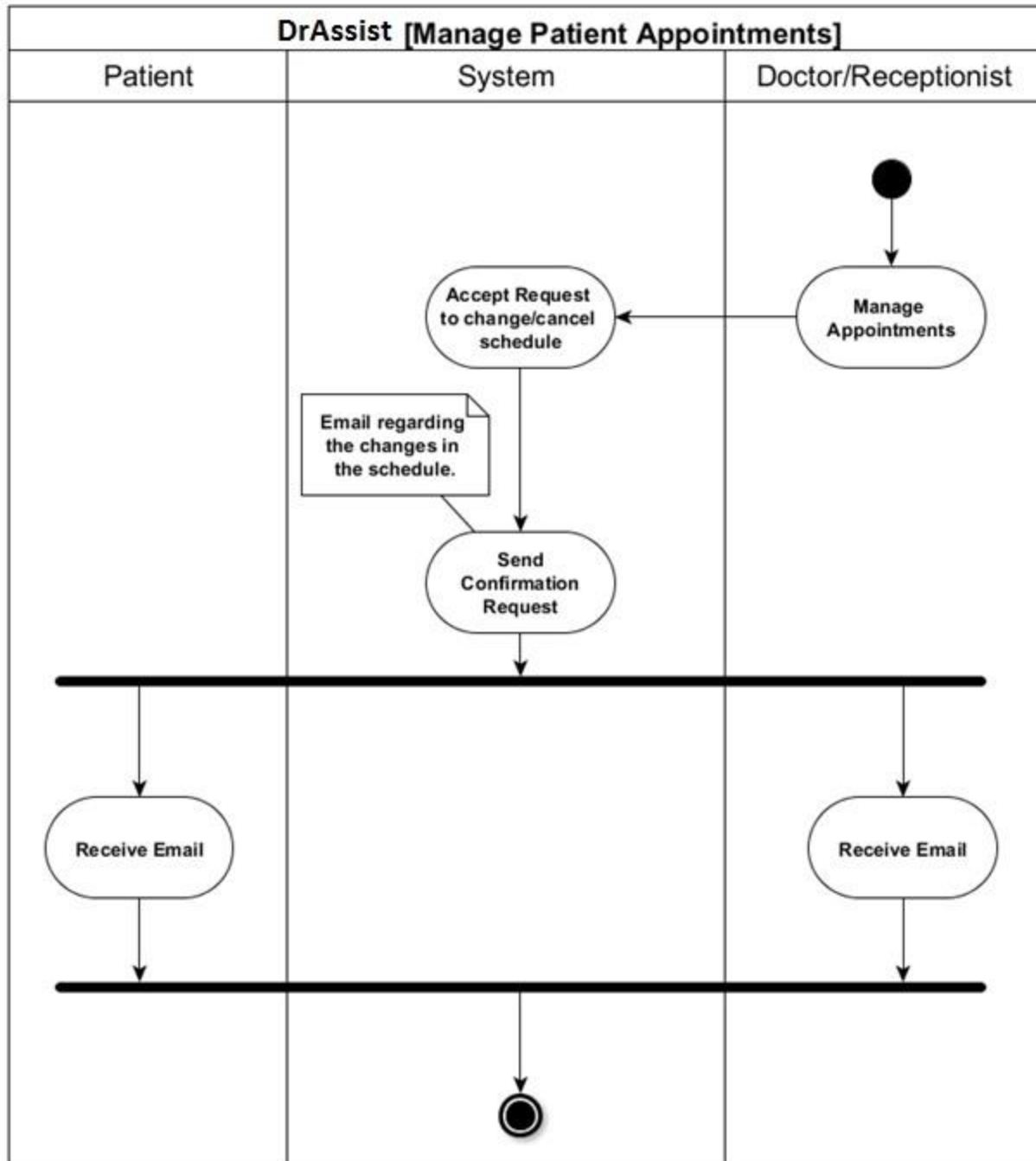


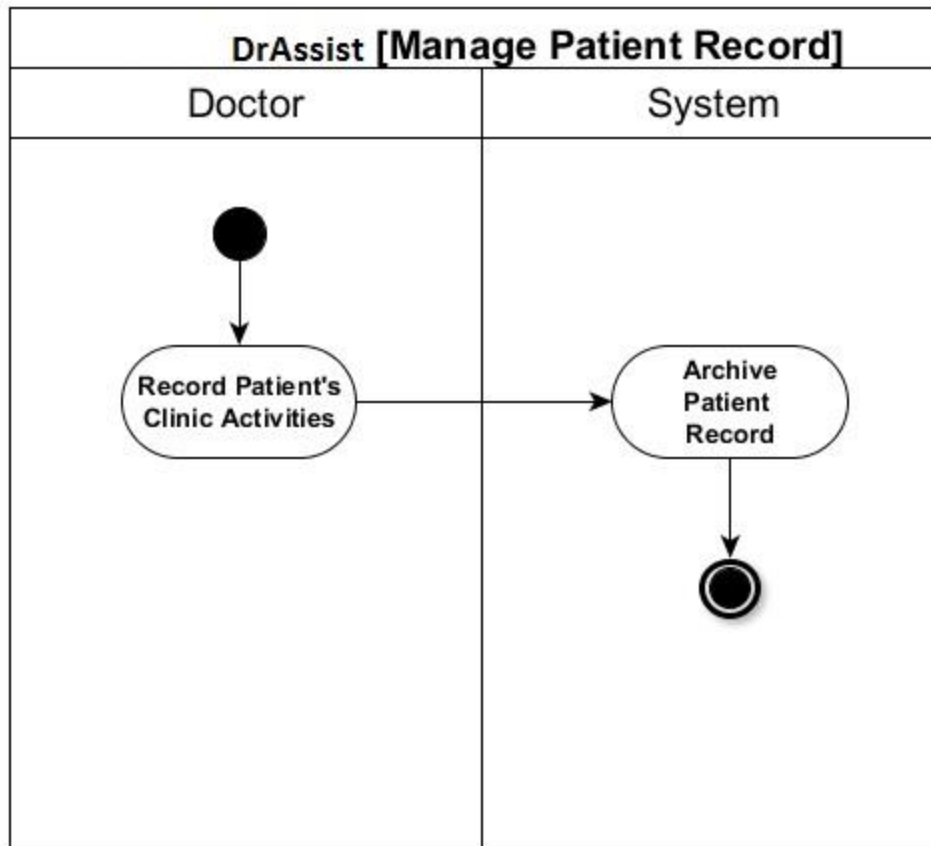
Figure 10: Activity Diagram

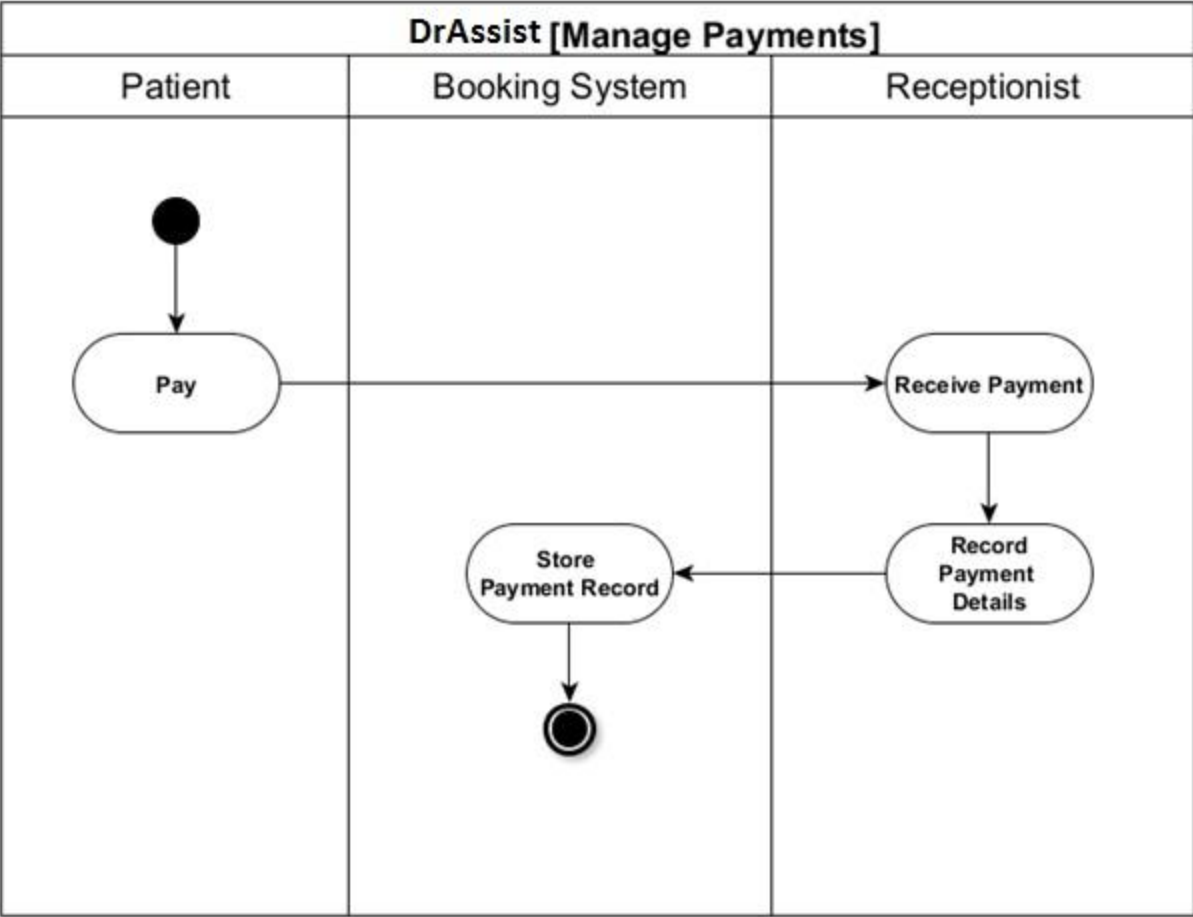


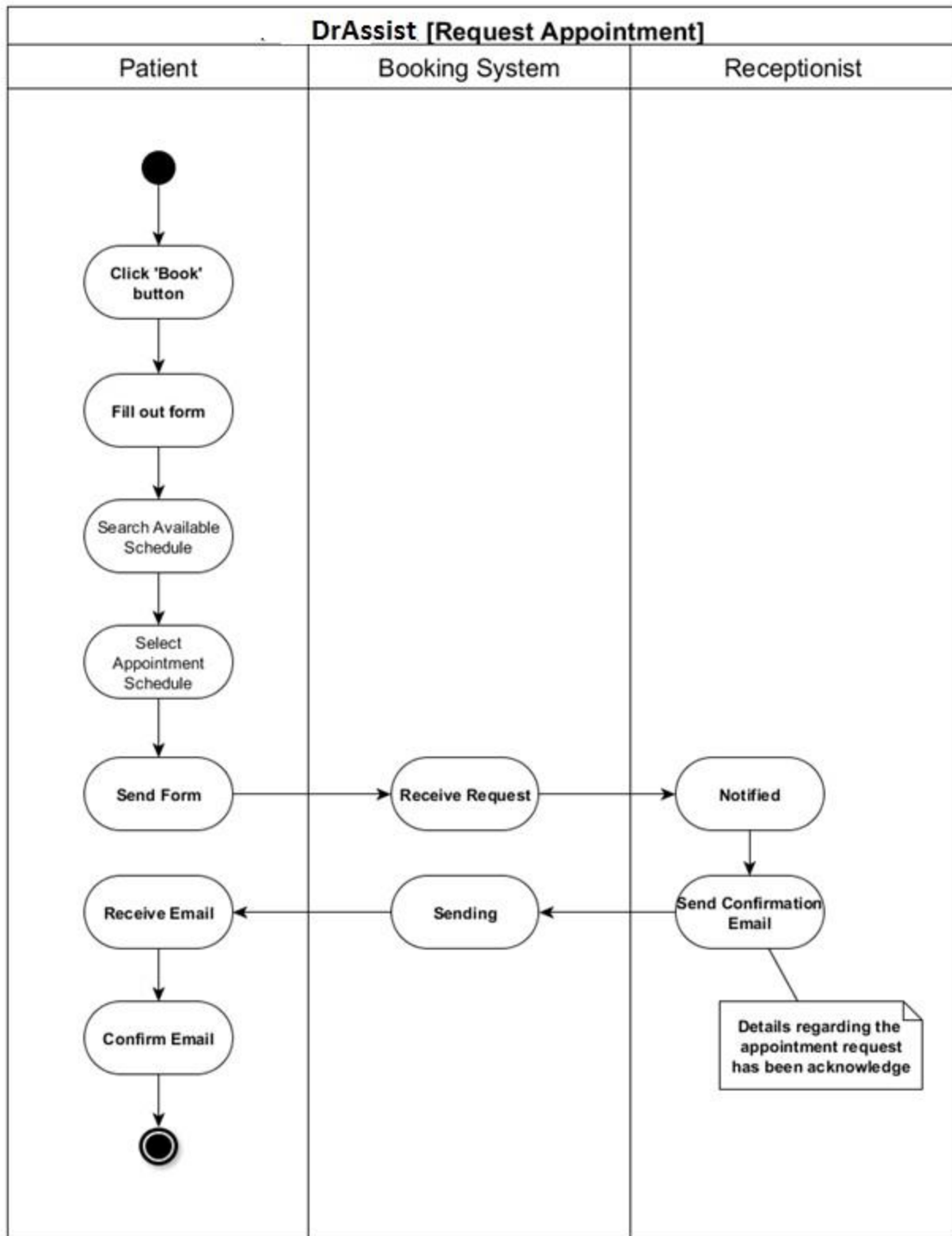


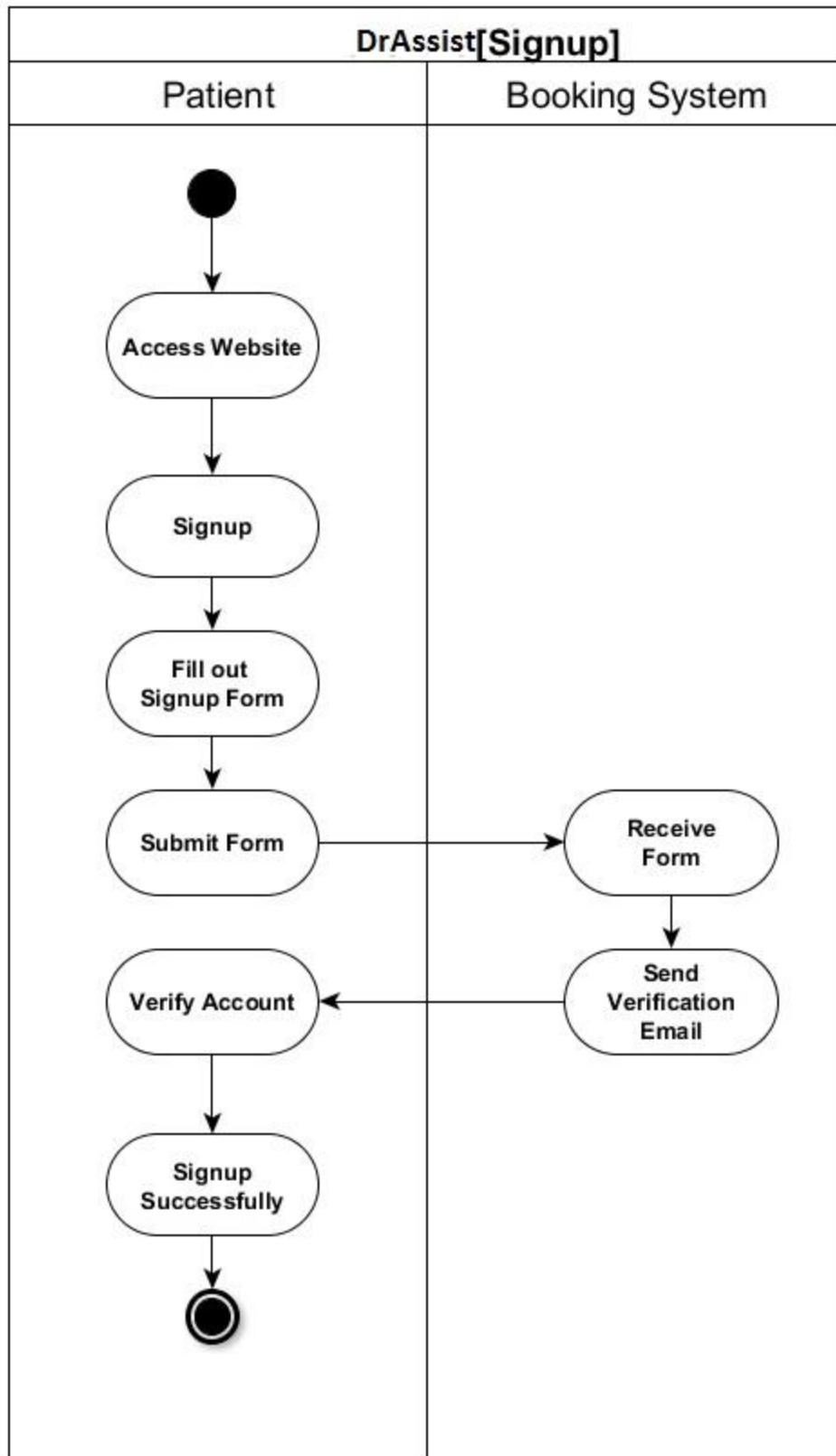




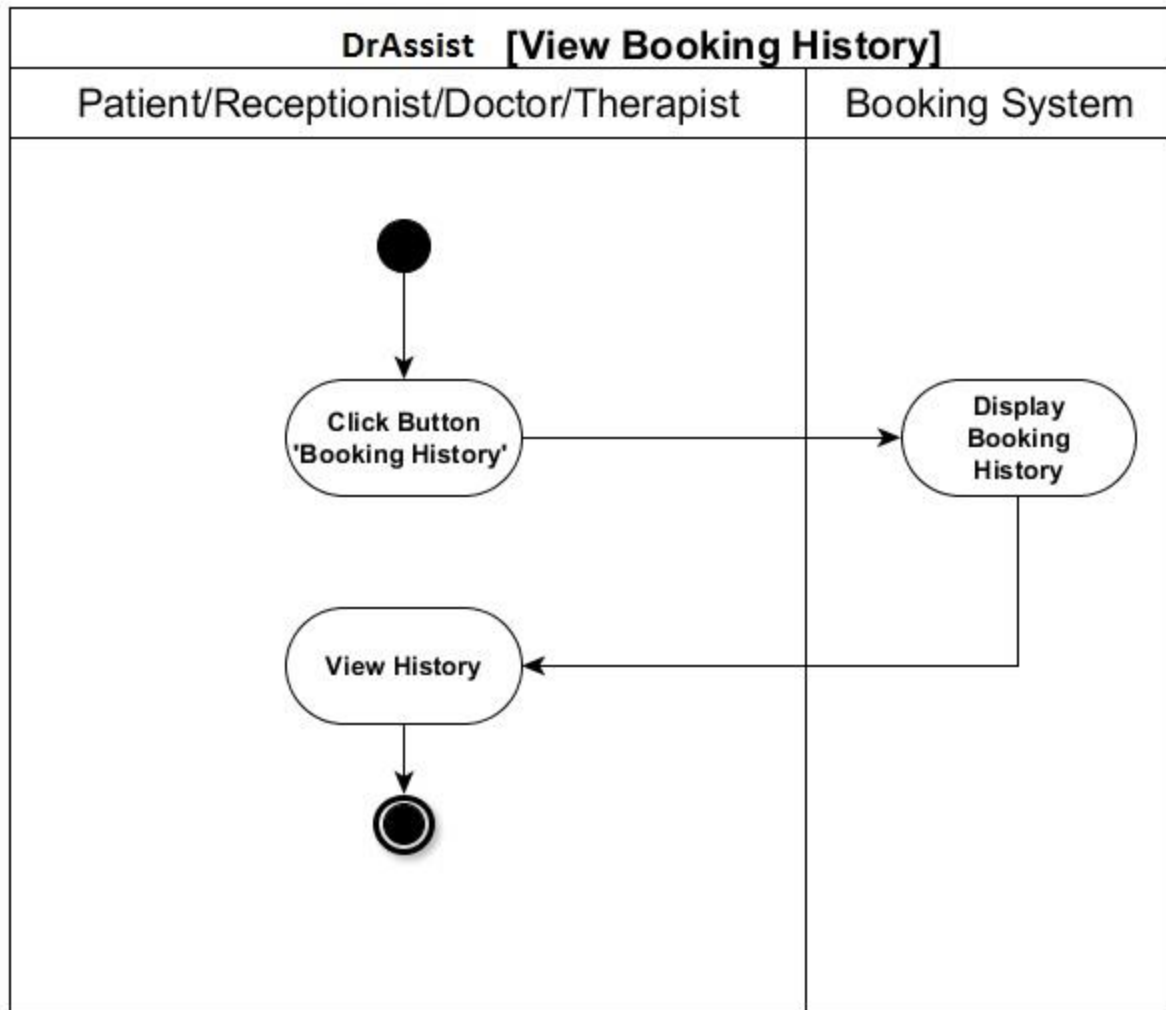












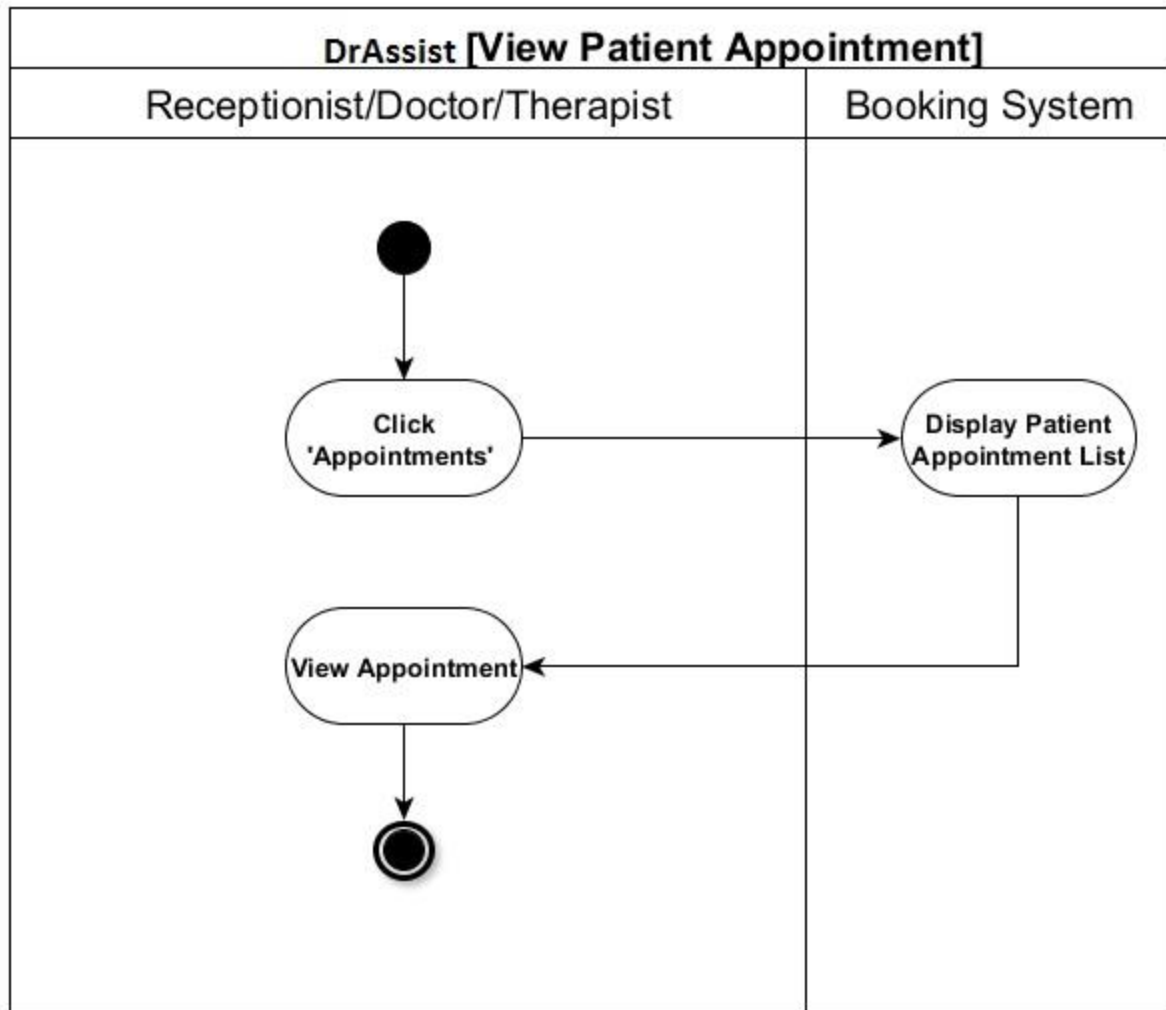


Figure 11: Deployment Diagram

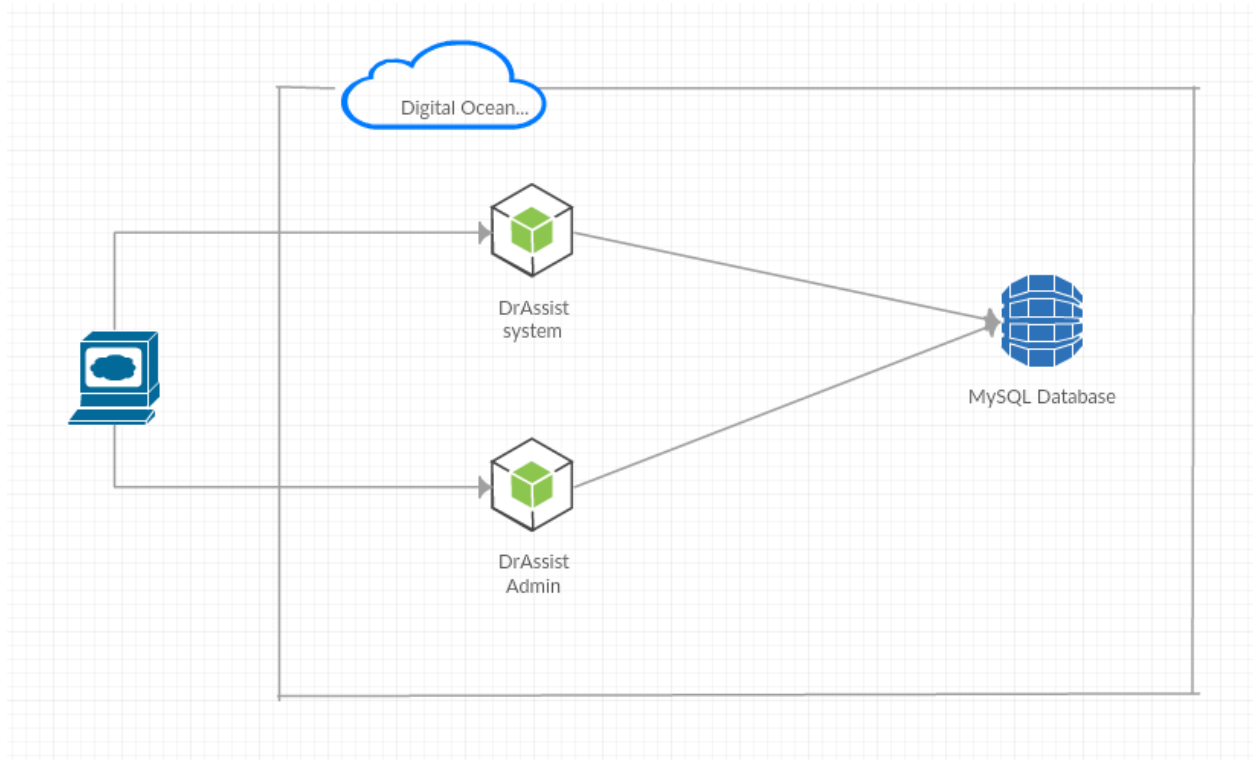


Figure 12. Component Diagram

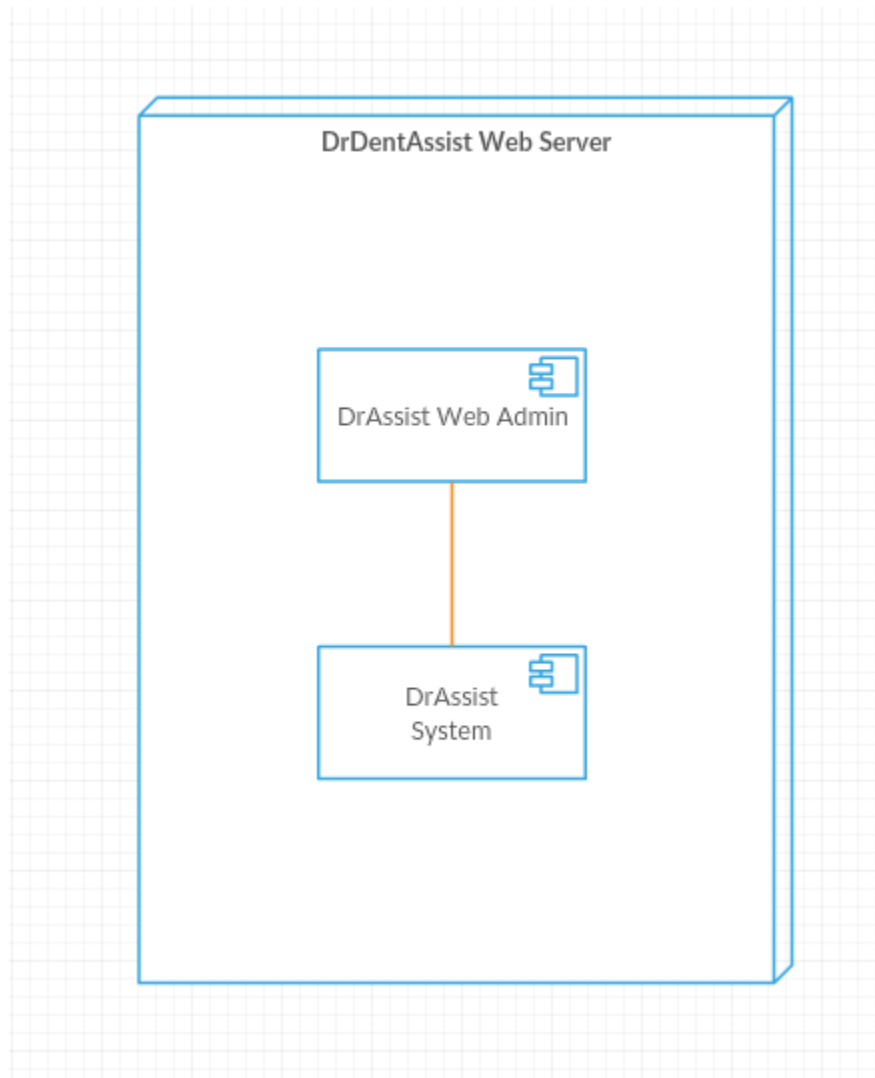
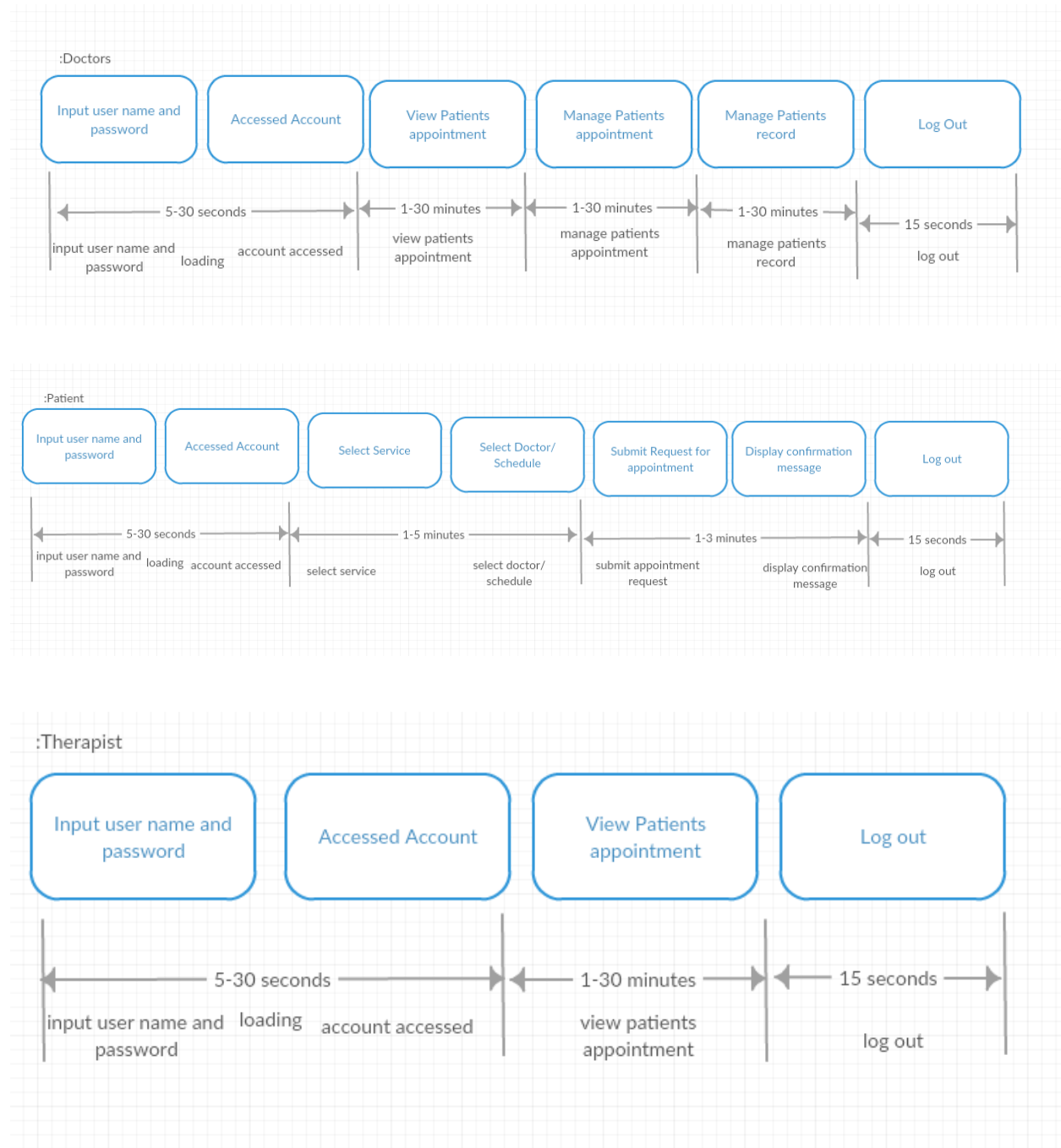


Figure 13: Timing Diagram



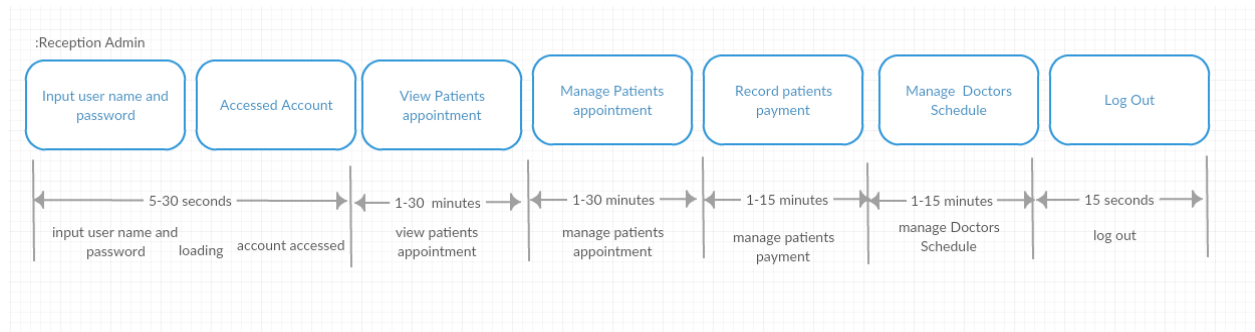


Table 1: Data Dictionary

| Patient              |           |                         |            |     |             |                           |
|----------------------|-----------|-------------------------|------------|-----|-------------|---------------------------|
| Field Name           | Data Type | Field Format            | Field Size | Key | Nullability | Description               |
| Patient_ID           | Integer   | 9999999999              | 50         | PK  | Not Null    | Patient ID Number         |
| Patient_UserId       | VarChar   | XXXXXXXXXXXX            | 32         |     | Not Null    | Patient user id           |
| Patient_Password     | VarChar   | XXXXXXXXXXXX            | 32         |     | Not Null    | Patient password          |
| Patient_Fname        | VarChar   | XXXXXXXXXXXX            | 50         |     |             | Patient first name        |
| Patient_Mname        | VarChar   | XXXXXXXXXXXX            | 32         |     |             | Patient middle name       |
| Patient_Lname        | VarChar   | XXXXXXXXXXXX            | 32         |     |             | Patient last name         |
| Patient_Address      | VarChar   | XXXXXXXXXXXX            | 100        |     |             | Patient address           |
| Patient_HomePhonuNum | VarChar   | XXXXXXXXXXXX            | 32         |     |             | Patient home phone number |
| Patient_MobileNum    | VarChar   | XXXXXXXXXXXX            | 32         |     |             | Patient mobile number     |
| Patient_EmailAdd     | VarChar   | XXXXXXXXXXXX            | 255        |     |             | Patient email address     |
| Patient_Insurance    | VarChar   | XXXXXXXXXXXX            | 32         |     |             | Patient Insurance         |
| Patient_Birthdate    | Date      | MM/DD/YYYY              | 20         |     |             | Patient Birthdate         |
| Patient_Gender       | Char      | X                       | 1          |     |             | Patient Gender            |
|                      |           |                         |            |     |             |                           |
|                      |           |                         |            |     |             |                           |
| Services             |           |                         |            |     |             |                           |
| Field Name           | Data Type | Field Format            | Field Size | Key | Nullability | Description               |
| Service_ID           | Integer   | 9999999999              | 32         | PK  | Not Null    | Service id number         |
| Patient_ID           | Integer   | 9999999999              | 32         | FK  | Not Null    | Patient ID Number         |
| Service_Type         | VarChar   | XXXXXXXXXXXX            | 255        |     |             | Service type requested    |
| Service_description  | VarChar   | XXXXXXXXXXXX            | 255        |     |             | Service description       |
| ServiceTimeRequired  | Time      | hh:mm:ss                | 15         |     |             | Service time rendered     |
|                      |           |                         |            |     |             |                           |
| Schedule             |           |                         |            |     |             |                           |
| Field Name           | Data Type | Field Format            | Field Size | Key | Nullability | Description               |
| Schedule_ID          | Integer   | 9999999999              | 32         | PK  | Not Null    | Schedule id number        |
| Date                 | Date      | MM/DD/YYYY              | 10         |     | Not Null    | Scheduled date            |
| Time                 | Time      | hh:mm:ss                | 10         |     | Not Null    | Scheduled time            |
| DaysoftheWeek        | ENUM      | Monday to Saturdays     | 15         |     | Not Null    | Scheduled Day             |
|                      |           |                         |            |     |             |                           |
| Appointment          |           |                         |            |     |             |                           |
| Field Name           | Data Type | Field Format            | Field Size | Key | Nullability | Description               |
| AppointmentID        | Integer   | 9999999999              | 50         | PK  | Not Null    | Appointment Id number     |
| Patient_ID           | Integer   | 9999999999              | 50         | FK  | Not Null    | Patient ID Number         |
| AvailabilityStatus   | ENUM      | Available/Not available | 50         |     |             | Schedule availability     |
| AppointmentDate      | Date      | MM/DD/YYYY              | 10         |     | Not Null    | Appointment date          |
| AppointmentStartTime | Time      | hh:mm:ss                | 10         |     | Not Null    | Appointment start time    |
| AppointmentEndTime   | Time      | hh:mm:ss                | 10         |     | Not Null    | Appointment end time      |

| Payment          |           |              |            |     |             |   |
|------------------|-----------|--------------|------------|-----|-------------|---|
| Field Name       | Data Type | Field Format | Field Size | Key | Nullability | Description                                   |
| Payment_id       | Integer   | 9999999999   | 50         | PK  | Not Null    | Payment ID number                             |
| Service_ID       | Integer   | 9999999999   | 50         | FK  | Not Null    | Service ID number                             |
| AmountPaid       | Integer   | 9999999999   | 50         |     | Not Null    | Amount Paid                                   |
| PaymentMode      | Varchar   | Xxxxxxxxxxxx | 50         |     | Not Null    | Payment Mode                                  |
| ORNumber         | Varchar   | Xxxxxxxxxxxx | 55         |     | Not Null    | Recipt number                                 |
|                  |           |              |            |     |             |   |
| Patient Record   |           |              |            |     |             |   |
| Field Name       | Data Type | Field Format | Field Size | Key | Nullability | Description                                   |
| Record_id        | Integer   | 9999999999   | 50         | PK  | Not Null    | Record id numbe                               |
| Patient_id       | Integer   | 9999999999   | 50         | FK  | Not Null    | Patient id number                             |
| Service_ID       | Integer   | 9999999999   | 50         | FK  | Not Null    | Service ID number                             |
| DoctorName       | Varchar   | Xxxxxxxxxxxx | 50         |     | Not Null    | Service ID number                             |
| CheckUpDate      | Date      | MM/DD/YYYY   | 10         |     | Not Null    | Check up date of patient                      |
| PrescribedDrugs  | Varchar   | Xxxxxxxxxxxx | 255        |     |             | Prescription of patient                       |
| BloodPressure    | Varchar   | Xxxxxxxxxxxx | 32         |     | Not Null    | Blood pressure of patient                     |
| ProcedureDone    | Varchar   | Xxxxxxxxxxxx | 255        |     | Not Null    | Procedure done to patient                     |
| Weight           | Varchar   | Xxxxxxxxxxxx | 32         |     |             | Patients' weight                              |
| Height           | Varchar   | Xxxxxxxxxxxx | 32         |     |             | Patients height                               |
|                  |           |              |            |     |             |   |
| Dental Record    |           |              |            |     |             |   |
| Field Name       | Data Type | Field Format | Field Size | Key | Nullability | Description                                   |
| DentalRec_id     | Integer   | 9999999999   | 50         |     | Not Null    | Dental record id number                       |
| Record_id        | Integer   | 9999999999   | 50         |     | Not Null    | Record id number                              |
|                  |           |              |            |     |             | Patients tooth set type, whether adult or kid |
| ToothsetType     | Varchar   | Xxxxxxxxxxxx | 32         |     |             |   |
| ToothName        | Varchar   | Xxxxxxxxxxxx | 55         |     |             | Name of the tooth                             |
| ToothDescription | Varchar   | Xxxxxxxxxxxx | 255        |     |             | Description of the tooth                      |
|                  |           |              |            |     |             |   |
| Derma Record     |           |              |            |     |             |   |
| Field Name       | Data Type | Field Format | Field Size | Key | Nullability | Description                                   |
| DermaRec_id      | Integer   | 9999999999   | 50         |     | Not Null    | Derma Record Id number                        |
| Record_id        | Integer   | 9999999999   | 50         |     | Not Null    | Record ID number                              |
| SkinAllergies    | Varchar   | Xxxxxxxxxxxx | 255        |     |             | Allergies of patient                          |
| SkinType         | Varchar   | Xxxxxxxxxxxx | 55         |     |             | Skin type of patient                          |
|                  |           |              |            |     |             |   |
| Doctor           |           |              |            |     |             |   |
| Field Name       | Data Type | Field Format | Field Size | Key | Nullability | Description                                   |
| Doctor_id        | Integer   | 9999999999   | 50         |     | Not Null    | Doctor id number                              |
| DoctorType_id    | Integer   | 9999999999   | 50         |     | Not Null    | Doctor type id number                         |
| DoctorType       | Varchar   | Xxxxxxxxxxxx | 50         |     | Not Null    | Type of Doctor                                |
| LicenseNum       | Integer   | 9999999999   | 50         |     |             | License number of Doctor                      |
| Specialization   | Varchar   | Xxxxxxxxxxxx | 255        |     | Not Null    | Doctor's specialization                       |



| Dentist          |           |                            |            |     |             |                          |
|------------------|-----------|----------------------------|------------|-----|-------------|--------------------------|
| Field Name       | Data Type | Field Format               | Field Size | Key | Nullability | Description              |
| Dentist_ID       | Integer   | 9999999999                 | 50         |     | Not Null    | Dentist id number        |
| DoctorType_id    | Integer   | 9999999999                 | 50         |     | Not Null    | Doctor type id number    |
| Employee_id      | Integer   | 9999999999                 | 50         |     | Not Null    | Employee id number       |
|                  |           |                            |            |     |             |                          |
| Dermatologist    |           |                            |            |     |             |                          |
| Field Name       | Data Type | Field Format               | Field Size | Key | Nullability | Description              |
| Dermatologist_ID | Integer   | 9999999999                 | 50         |     | Not Null    | Dermatologist id number  |
| DoctorType_id    | Integer   | 9999999999                 | 50         |     | Not Null    | Doctor type id number    |
| Employee_id      | Integer   | 9999999999                 | 50         |     | Not Null    | Employee id number       |
|                  |           |                            |            |     |             |                          |
|                  |           |                            |            |     |             |                          |
| Employee         |           |                            |            |     |             |                          |
| Field Name       | Data Type | Field Format               | Field Size | Key | Nullability | Description              |
| Employee_id      | Integer   | 9999999999                 | 50         |     | Not Null    | Employee id number       |
| Service_ID       | Integer   | 9999999999                 | 50         |     |             | Service id number        |
| EmployeeType_id  | Integer   | 9999999999                 | 50         |     |             | Employee type id number  |
| EmployeeType     | ENUM      | Doctor/Reception/Therapist | 50         |     |             | Type of employee         |
| Fname            | Varchar   | Xxxxxxxxxxxx               | 50         |     |             | Employees' first name    |
| Lname            | Varchar   | Xxxxxxxxxxxx               | 50         |     |             | Employees' last name     |
| EmailAdd         | Integer   | 9999999999                 | 50         |     |             | Employees' email address |
| MobileNum        | Integer   | 9999999999                 | 10         |     |             | Employees' mobile number |
|                  |           |                            |            |     |             |                          |
|                  |           |                            |            |     |             |                          |
| Reception Admin  |           |                            |            |     |             |                          |
| Field Name       | Data Type | Field Format               | Field Size | Key | Nullability | Description              |
| Receptionist_Id  | Integer   | 9999999999                 | 50         |     | Not Null    | Receptionist id number   |
| Employee_id      | Integer   | 9999999999                 | 50         |     | Not Null    | Employee id number       |

Table 2: Use Case Narrative

| Use Case                       | Sign Up  |
|--------------------------------|--|
| Actor                          | Patient  |
| Goal in context                | Patient wants to sign up.  |
| Trigger                        | When the patient wants to sign up.   |
| Pre condition                  | The system will show the sign up form.   |
| Post condition                 | Patient successfully signed up to the system.  |
| Scenario                       | <ol style="list-style-type: none"> <li>1. The patient access the website.</li> <li>2. The website will display the sign up button.</li> <li>3. The patient select on sign up button.</li> <li>4. The website will show the sign up page.</li> <li>5. The patient fills up the sign up form.</li> <li>6. The patient submits the form.</li> <li>7. The system receives the form.</li> <li>8. Patient confirms the registration.</li> <li>9. Sign up successfully.</li> </ol>  |
| Alternate Flows                | <p>User Enters Invalid User Account Information If during Sign Up, the system determines that the User entered invalid User Account information, the following occurs:</p> <ol style="list-style-type: none"> <li>1. The system describes which entered data was invalid and presents the User with suggestions for entering valid data.</li> <li>2. The system prompts the User to re-enter the invalid information.</li> <li>3. The User re-enters the information and the system re-validates it.</li> <li>4. If valid information is entered, the User Account Information is stored.</li> <li>5. If invalid information is entered, the Entered Information is Invalid alternative flow is executed again. This continues until the User enters valid information.</li> </ol> <p>Invalid User Account information:</p> <ul style="list-style-type: none"> <li>- Missing information items</li> <li>- Username already exists in the system</li> <li>- User Account information entered does not comply to its definition in the glossary</li> <li>- Not valid e-mail address</li> </ul> |
| Use Case                       | Login  |
| Actor                          | Patient  |
| Goal in context                | Patient wants to login to the website.   |
| Trigger                        | When the patient wants to login.   |
| Pre condition                  | The system will show the login page.   |
| Post condition                 | Patient successfully login to the website.   |
| Scenario                       | <ol style="list-style-type: none"> <li>1. The patient access the website.</li> <li>2. The system shows the login page.</li> <li>3. The patient enters required login credentials.</li> <li>4. The patient clicks on login button.</li> <li>5. The system receives the requests.</li> <li>6. Login Successfully.</li> </ol>   |
| Alternate Flows                |  |
| New User                       | If the Patient does not have an account, the System will give the User the opportunity to sign up for an account. See the Sign Up use case. Once the account is created, the User is considered signed in.   |
| User Forgot User Name/Password | If the Patient forgot his/her user name or password, the System will have the option to retrieve the username or reset the password online.  |
| User Fails Authentication      | <p>the following occurs:</p> <ol style="list-style-type: none"> <li>1. The system describes the reasons why the User failed authentication.</li> <li>2. The system prompts the User to re-enter the valid information.</li> </ol>  |

| Use Case Request Appointment     |   |
|----------------------------------|---|
| Actor                            | Patient   |
| Goal in context                  | Patient wants to request an appointment.  |
| Trigger                          | When patients wants to request an appointment.  |
| Pre condition                    | Patient needs to be login to the website.   |
| Post condition                   | Patient successfully submitted a request for an appointment.  |
| Scenario                         | <ol style="list-style-type: none"> <li>1. Patient will click on "Book" button.</li> <li>2. The system will show the request for appointment form.</li> <li>3. Patient will fill up the form by selecting service, Doctor and schedule.</li> <li>4. Patient will submit the form</li> <li>4. System will display a message that patient's request has been submitted.</li> <li>5. System will send an email with details regarding the appointment request.</li> <li>6. Patient will receive a confirmation email that his request for an appointment has been acknowledge.</li> </ol> |
|                                  |   |
|                                  |   |
| Use Case View Booking History    |   |
| Actor                            | Patient, Doctors, Therapists or Reception Admin   |
| Goal in context                  | Actors would like to view booking history of a patient.   |
| Trigger                          | When one of the actors would like to view booking history of patient.   |
| Pre condition                    | Patient needs to be login to the website.   |
| Post condition                   | Actors successfully view patients booking history.  |
| Scenario                         | <ol style="list-style-type: none"> <li>1. Patient will click on "Booking History" button.</li> <li>2. System will display the "Booking History" page.</li> </ol>  |
| Use Case Cancel Appointment      |   |
| Actor                            | Patient, Doctors or Reception Admin   |
| Goal in context                  | Appointment needs to be cancel.   |
| Trigger                          | When either the patient or the Doctors need to cancel a patient's appointment.  |
| Pre condition                    | Patient have an existing appointment.   |
| Post condition                   | Actors successfully cancelled an appointment.   |
| Scenario                         | <ol style="list-style-type: none"> <li>1. Patient, Doctor or Reception Admin will click on cancel appointment button.</li> <li>2. System will receives the request for cancellation.</li> <li>3. System accepts the cancellation request and will cancel the appointment in the system.</li> <li>4. System will send an email to actors that appointment has been cancelled.</li> <li>5. Actors will receive a confirmation email that appointment has been cancelled.</li> <li>6. System will update schedule.</li> </ol>  |
| Use Case Manage patients record. |   |
| Actor                            | Doctors   |
| Goal in context                  | To put in record patients medical history.  |
| Trigger                          | Doctor needs to update patients medical history.  |
| Pre condition                    | Patient have undergone dental or derma procedure.   |
| Post condition                   | Patients record in the system is updated.   |
| Scenario                         | <ol style="list-style-type: none"> <li>1. Patient have undergone dental or derma procedure.</li> <li>2. Doctor will record any activity done with the patient in the system.</li> <li>3. System will saves patients record.</li> </ol>  |

| Use Case Manage Payments           |  |
|------------------------------------|--|
| Actor                              | Reception Admin  |
| Goal in context                    | Reception Admin is in charge of accepting and recording payments.  |
| Trigger                            | Reception Admin receives payment from patient.   |
| Pre condition                      | Patient has a completed service done by the Doctors.   |
| Post condition                     | Payment of patient has been recorded.  |
| Scenario                           | <ol style="list-style-type: none"> <li>1. Patient have undergone any dental or derma procedure.</li> <li>2. Patient pays for the service to the reception admin.</li> <li>3. Reception Admin accepts the payment</li> <li>4. Reception Admin records payment in the system.</li> <li>5. System records the payment.</li> </ol>   |
| Use Case View patients appointment |  |
| Actor                              | Therapists and Reception Admin   |
| Goal in context                    | To give permission for Therapists and reception admin to view patients requested appointment.  |
| Trigger                            | Reception Admin or therapists would need to view patients appointment.   |
| Pre condition                      | Patient has a confirmed appointment.   |
| Post condition                     | Therapists and Reception Admin is able to view patients appointment.   |
| Scenario                           | <ol style="list-style-type: none"> <li>1. Therapist or reception admin needs to view patients appointment.</li> <li>2. System will display patients appointment.</li> </ol>  |
|                                    |  |
| Use Case Assist Doctors            |  |
| Actor                              | Therapists   |
| Goal in context                    | To assists doctors with their day to day task.   |
| Trigger                            | Doctors will be needing assistance from therapist.   |
| Pre condition                      | Doctors needs assistance.  |
| Post condition                     | Therapists assisted Doctors with their day to day task.  |
| Scenario                           | <ol style="list-style-type: none"> <li>1. Doctors needs assistance from therapists to perform his day to day task.</li> <li>2. Therapist will assist Doctors.</li> </ol>   |
| Use Case Manage Doctors Schedule   |  |
| Actor                              | Reception Admin  |
| Goal in context                    | To manage Doctors schedule.  |
| Trigger                            | Changes in Doctors schedule.   |
| Pre condition                      | Doctor is an employee in the clinique.   |
| Post condition                     | Doctors schedule are managed.  |
| Scenario                           | <ol style="list-style-type: none"> <li>1. Doctors needs to change their schedule.</li> <li>2. Reception Admin in behalf of Doctors request can manage their schedule in the system.</li> <li>3. Reception Admin will update Doctors schedule in system.</li> <li>4. The system receives, accepts and update Doctors schedule.</li> <li>5. System will display Doctors schedule.</li> </ol> |
| Use Case Make Payment              |  |
| Actor                              | Patient  |
| Goal in context                    | Patient to make payment.   |
| Trigger                            | Patient had avail the service and will make payment  |
| Pre condition                      | Patient had avail a service  |
| Post condition                     | Patients' payment is recorded  |
| Scenario                           | <ol style="list-style-type: none"> <li>1. Patient had avail service/s from Happy Clinique.</li> <li>2. Patient will pay for the service.</li> <li>3. Reception Admin will accept the payment.</li> <li>4. Reception Admin will record patients' payment in the system.</li> <li>5. System saves the input.</li> </ol>  |

Table 3: Project Estimates

| Staff                  | Stages                 |                        |                         |                         |                        |                          | Total Time        |
|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|--------------------------|-------------------|
|                        | Planning<br>(1 week)   | Analyzing<br>(1 week)  | Designing<br>(3 weeks)  | Developing<br>(3 weeks) | Testing<br>(1 week)    | Implementing<br>(1 week) |                   |
| Project Manager        | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week  | 40.0 hours *<br>3 weeks | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week   | 320 hours         |
| Instructional Designer | 40.0 hours *<br>2 week | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week  | 40.0 hours *<br>3 weeks | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week   | 360 hours         |
| Subject Matter Expert  |                        |                        | 40.0 hours *<br>3 weeks |                         |                        |                          | 120 hours         |
| Graphic Designer       |                        |                        | 40.0 hours *<br>3 weeks | 40.0 hours *<br>3 weeks | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week   | 320 hours         |
| System Programmer      |                        |                        | 40.0 hours *<br>2 weeks | 40.0 hours *<br>3 weeks | 40.0 hours *<br>1 week | 40.0 hours *<br>1 week   | 280 hours         |
| Writer/Editor          |                        |                        | 40.0 hours *<br>2 weeks | 40.0 hours *<br>1 week  | 40.0 hours *<br>1 week |                          | 160 hours         |
| Reviewer               |                        |                        | 40.0 hours *<br>1 week  |                         | 40.0 hours *<br>1 week |                          | 80 hours          |
| <b>Total Time</b>      | <b>120 hours</b>       | <b>80 hours</b>        | <b>520 hours</b>        | <b>520 hours</b>        | <b>200 hours</b>       | <b>120 hours</b>         | <b>1640 hours</b> |

Table 4: Event Table

| EVENT TABLE                        |   |  |                             |  |                 |
|------------------------------------|---|--|-----------------------------|--|-----------------|
| EVENT                              | TRIGGER   | SOURCE                                       | USE CASE                    | RESPONSE   | DESTINATION     |
| Patient signs up                   | When the patient wants to sign up.  | Patient                                      | Sign Up                     | Patient details  | System          |
| Patient Login                      | When the patient wants to login.  | Patient                                      | Login                       | Patient details  | System          |
| Request Appointment                | Patient wants to request an appointment.                                  | Website                                      | Request Appointment         | Appointment Request  | System/Employee |
| View booking history               | When patient or admins wants to view booking history                      | System/Doctor/<br>Reception<br>Admin/patient | View booking history        | System to display booking history                                    | Patient         |
| Confirmed Appointment Cancellation | When either the patient or the admins need to cancel patients appointment | Doctor/ Reception<br>Admin/Patient           | Cancel Appointment          | Appointment open for other patients/Appointment blocked by doctor    | System          |
| Manage patients record             | Doctor needs to update patients medical history.                          | Doctor/ Reception<br>Admin                   | Manage patients record      | Patients record in the system is updated.                            | System          |
| Manage patients appointment        | When Doctor or Reception Admin needs to make changes on appointment.      | Doctor/ Reception<br>Admin                   | Manage patients appointment | Patients appointment has been updated in the system.                 | System          |
| Patient wants to make payment      | Patient had availed service   | Patient/reception<br>admin                   | Manage payments             | Reception Admin records payment                                      | System          |
| View patients appointment          | Reception Admin or therapists would need to view patients appointment.    | Therapists/reception<br>admin                | View patients appointment   | Therapists and Reception Admin is able to view patients appointment. | System          |
| Therapists to Assist Doctors       | Doctors will be needing assistance from therapist.                        | Therapists                                   | Assist Doctors              | Therapists assisted Doctors with their day to day task.              | Doctors         |
| Manage Doctors Schedule            | Changes in Doctors schedule.  | Doctors/Reception<br>Admin                   | Manage Doctors Schedule     | Doctors schedule are managed.  | System          |

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# One Page Curriculum Vitae

For

# DrAssist

Version 1.0 approved

Prepared by:

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Maria Kristina Punla  
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August 17, 2017, 2017

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## **Maria Kristina G. Punla**

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### **EDUCATION**

|            |   |
|------------|---|
| Tertiary   | Asia Pacific College, Makati City, Philippines<br>Bachelor of Science in Information<br>Technology (BSIT)<br>September 2012 – Present |
|            | Polytechnic University of the Philippines<br>Bachelor of Science in Banking and Finance<br>Graduated May 2000                         |
| Secondary  | Sacred Heart Academy<br>Sta. Maria, Bulacan<br>1994-1996  |
| Elementary | Sacred Heart Academy<br>Sta. Maria, Bulacan<br>1988-1994  |

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### **Skills**

- Remedy, Lynx, OTRS
- Completed ITIL V3 training
- MySQL, DB2, SQL Server
- Java and Microsoft Visual C#
- Red Hat/CentOS and Ubuntu Enterprise Linux
- Advanced knowledge in MS Applications, VDI Infrastructure, Active Directory
- Management of Windows Server.
- VMware management
- SCCM 2007 and 2012

### **REFERENCES**

Available upon request.

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### COMPUTER COMPETENCIES

#### HARD WARE :

PC assembly and troubleshooting  
Operating System and Software installation  
Network troubleshooting, monitoring and maintenance (CISCO, Juniper, UNIX based servers)  
Server Installation and Administration: Windows Server 2012 / Red Hat Linux

#### SOFTWARE :

**DATABASE:** MS SQL, MySQL, IBM DB2

**APPLICATION AND WEB:** HTML/JavaScript/CSS, Java(JSF, J2EE, Android Programming),  
Visual Basic.Net, PHP

### Education

|   |  |                          |
|---|--|--------------------------|
| Oct 2012 – present                              | Asia Pacific College                       | Makati City              |
| ▪ Bachelor of Science In Information Technology |  |                          |
| 1998–2004                                       | Polytechnic University of the Philippines  | Sta. Mesa, Manila        |
| ▪ Bachelor of Science in Computer Engineering   |  |                          |
| ▪ DOST-SEI Scholar                              |  |                          |
| 1994–1998                                       | General de Jesus College                   | San Isidro, Nueva Ecija  |
| ▪ Among the top 5% of the graduating class      |  |                          |
| 1993–1994                                       | San Mariano West Elementary School         | San Antonio, Nueva Ecija |
| ▪ Valedictorian, Class '94                      |  |                          |
| 1992–1993                                       | General Licerio Geronimo Elementary School | Sampaloc, Manila         |
| 1991–1992                                       | Karangalan Village, Elementary School      | Cainta, Rizal            |
| 1988–1991                                       | St. Paul School                            | San Antonio, Nueva Ecija |

### References

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## EDUCATION

|            |   |
|------------|---|
| Tertiary   | Asia Pacific College<br>Makati City, Philippines<br>Bachelor of Science in Information Technology (BSIT)<br>June 2014 – Present |
| Secondary  | Sta. Clara Parish School<br>Pasay City, Philippines<br>2010 – 2014  |
| Elementary | St. Gabriel Academy<br>Parañaque City, Philippines<br>2003 - 2010   |

## SKILLS

### Hardware:

- PC assembly and troubleshooting
- Operating System and Software Installation (Windows, Red Hat Linux, CentOS)
- Network troubleshooting, monitoring and maintenance (CISCO)
- Server Installation and Administration: DNS Server

### Software:

#### Database:

- MS SQL
- MySQL
- IBM DB2

#### Application and Web:

- HTML/CSS/PHP/
- Java (JSP, Servlet, Android Programming, Enterprise Java)
- Advanced knowledge in Microsoft Office 2016 Applications
- Web Application Security

## REFERENCES

Available upon request.