
Software Requirements Specification

For

DRASSIST

Version 3.0 approved

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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
AaBbCc123	Bold font style was used on highlighted topics.	<ul style="list-style-type: none">▪ 1.3 Purpose▪ 1.4 Product Functions
<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 an additional method for the organization's traditional method of accepting appointments from their dental and derma patients. 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">▪ Manage doctor's schedule▪ Manage payments▪ Manage appointment schedule▪ Re-schedule appointment
Doctor	<ul style="list-style-type: none">▪ View appointment schedule▪ Manage appointment schedule▪ Manage patient record
Therapist	<ul style="list-style-type: none">▪ View patient's appointment schedule
Patient	<ul style="list-style-type: none">▪ Create an account▪ Book an appointment▪ Cancel appointment▪ View appointment history

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

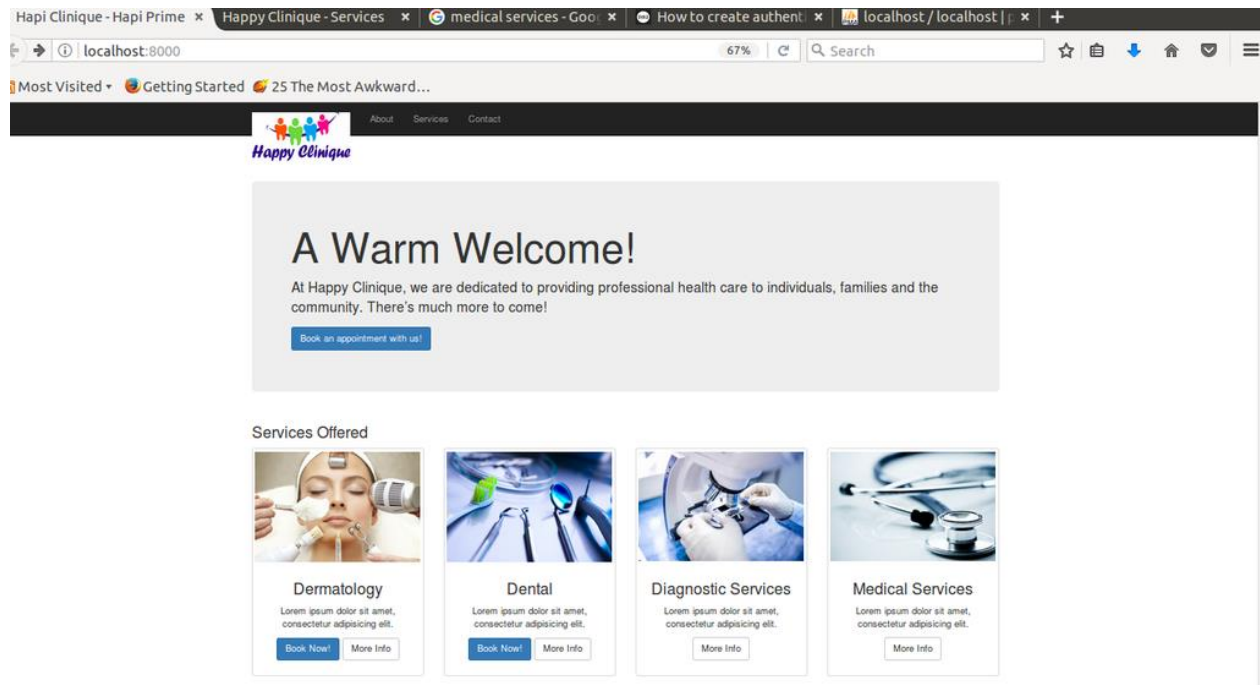
The website will be accessible on desktops and laptops and it will be mobile responsive. It will be hosted initially on a free DNS service. Client can have the option to purchase a web domain. Server can initially run on the clinic's existing desktop but the team will be assisting the client in case 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

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[More Info](#)

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Survey

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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?](#)

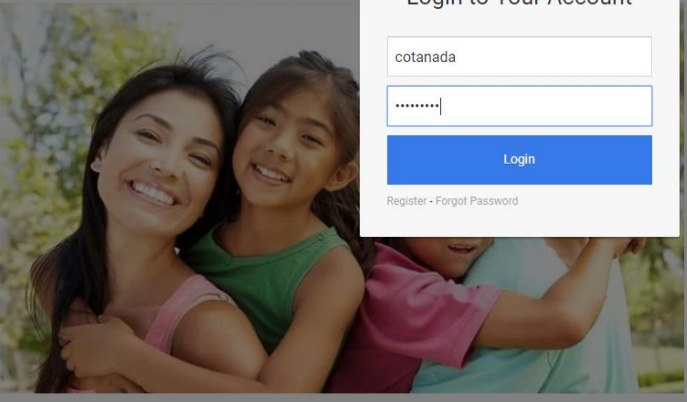
Services Offered



phpoll.com/login

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Happy Clinique

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





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Dermatology

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Dental

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Diagnostic Services

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[More Info](#)




Medical Services

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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

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Experienced Staff Available

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Easy To Use

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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 payments. 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

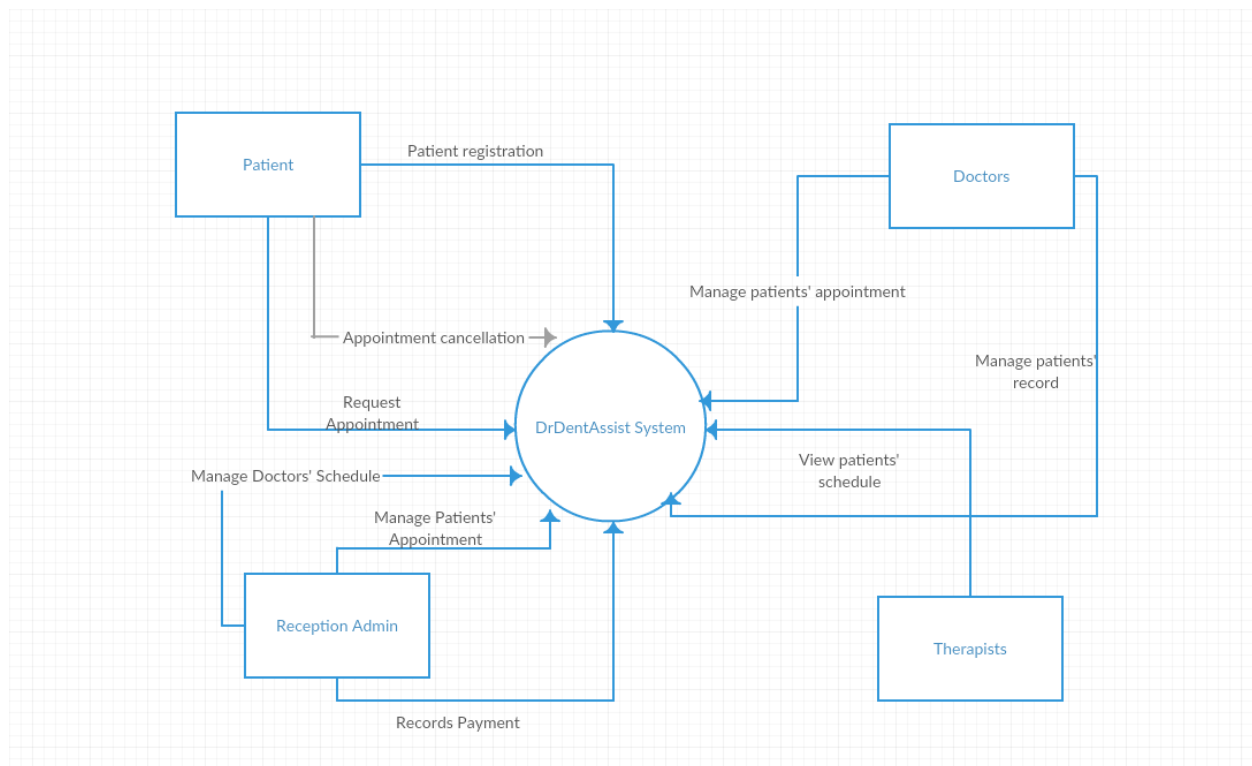


Figure 1: Context Flow Diagram

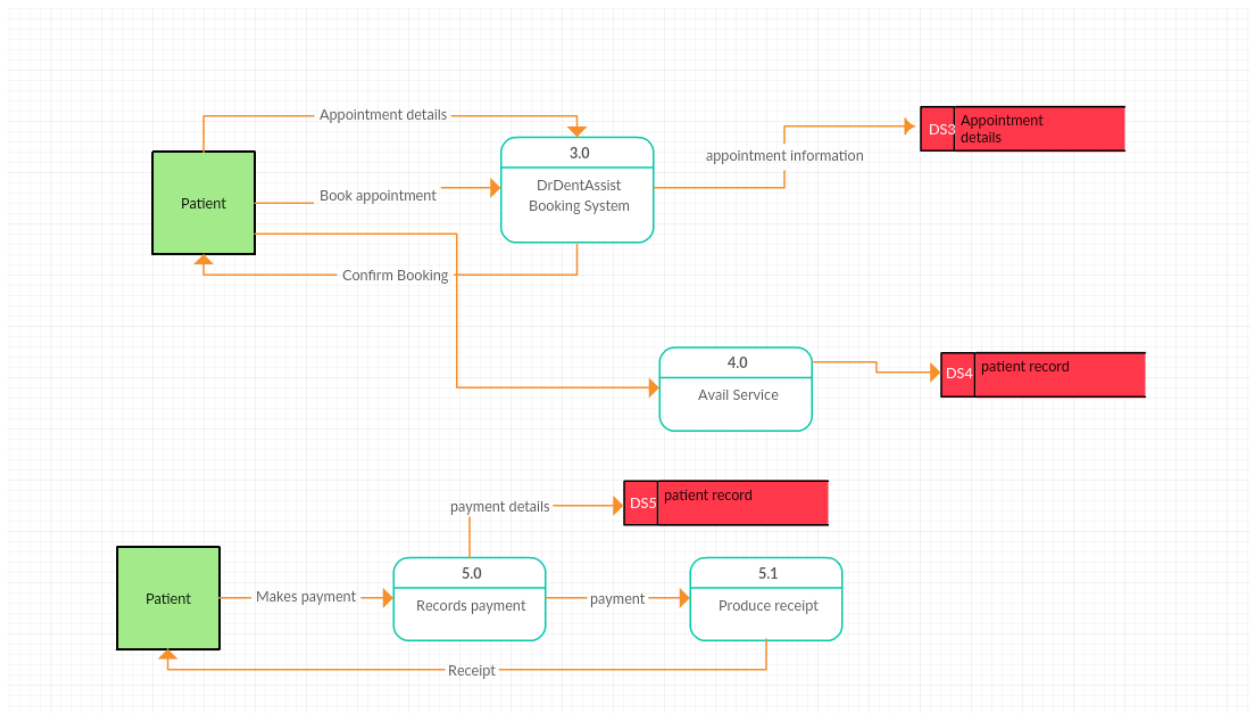
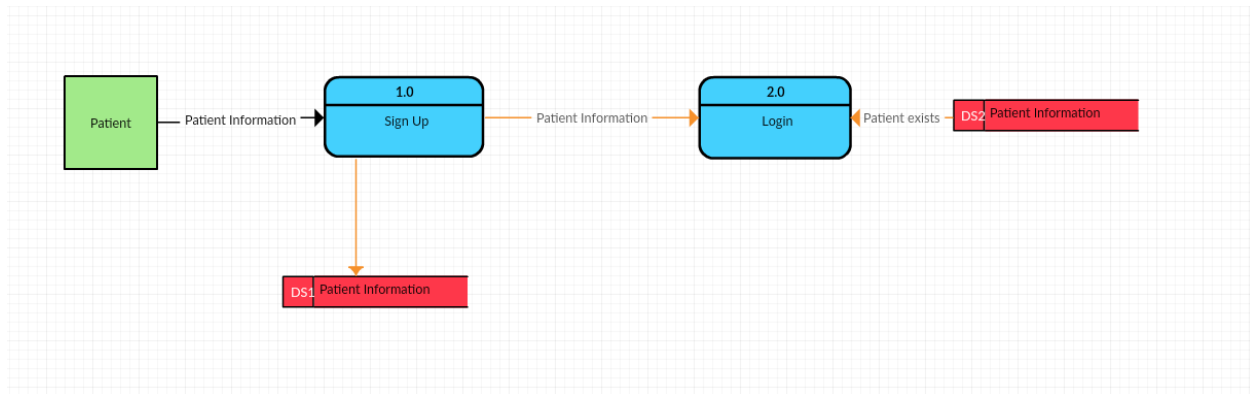


Figure 2. Data Flow Diagram

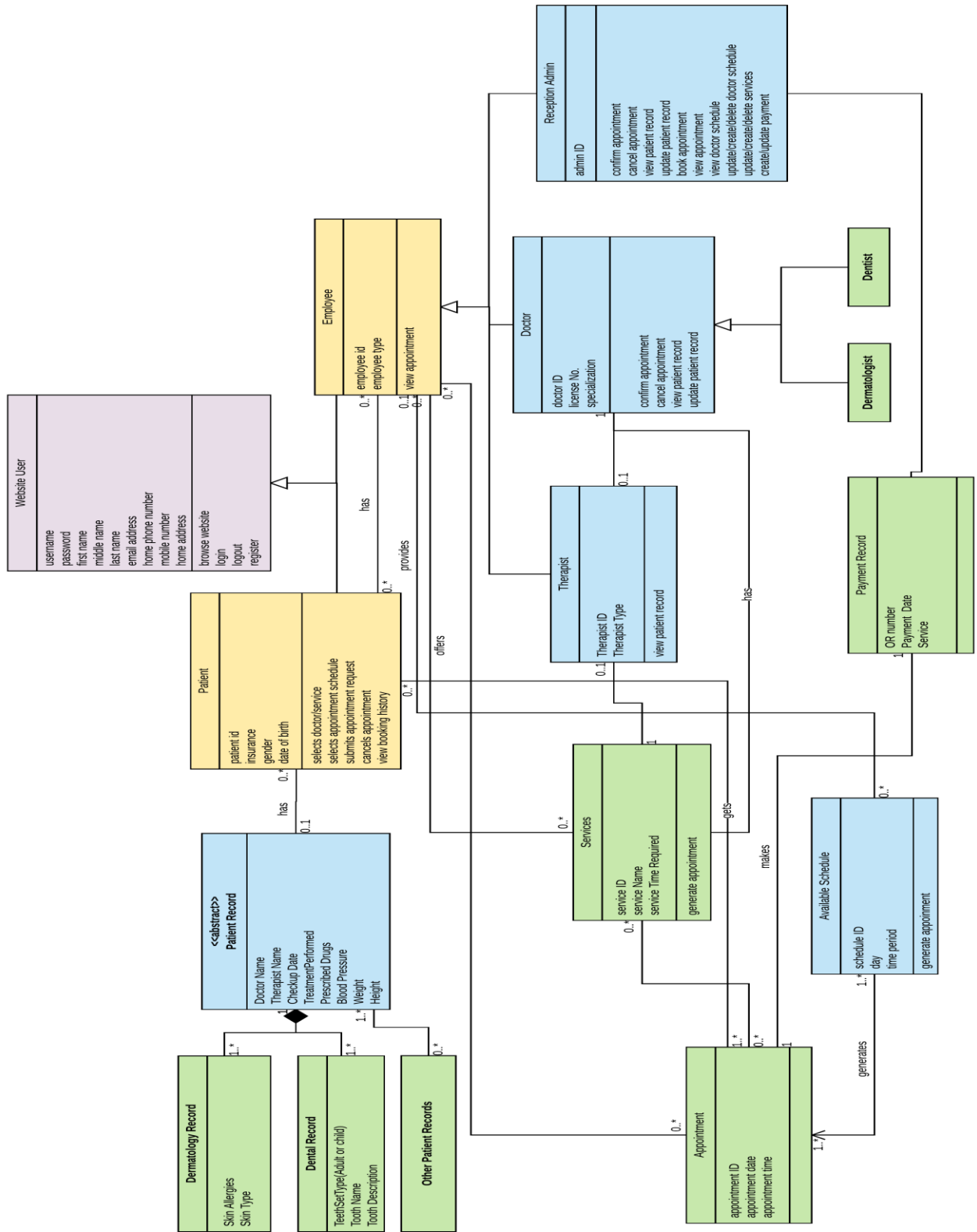


Figure 3. Class Diagram

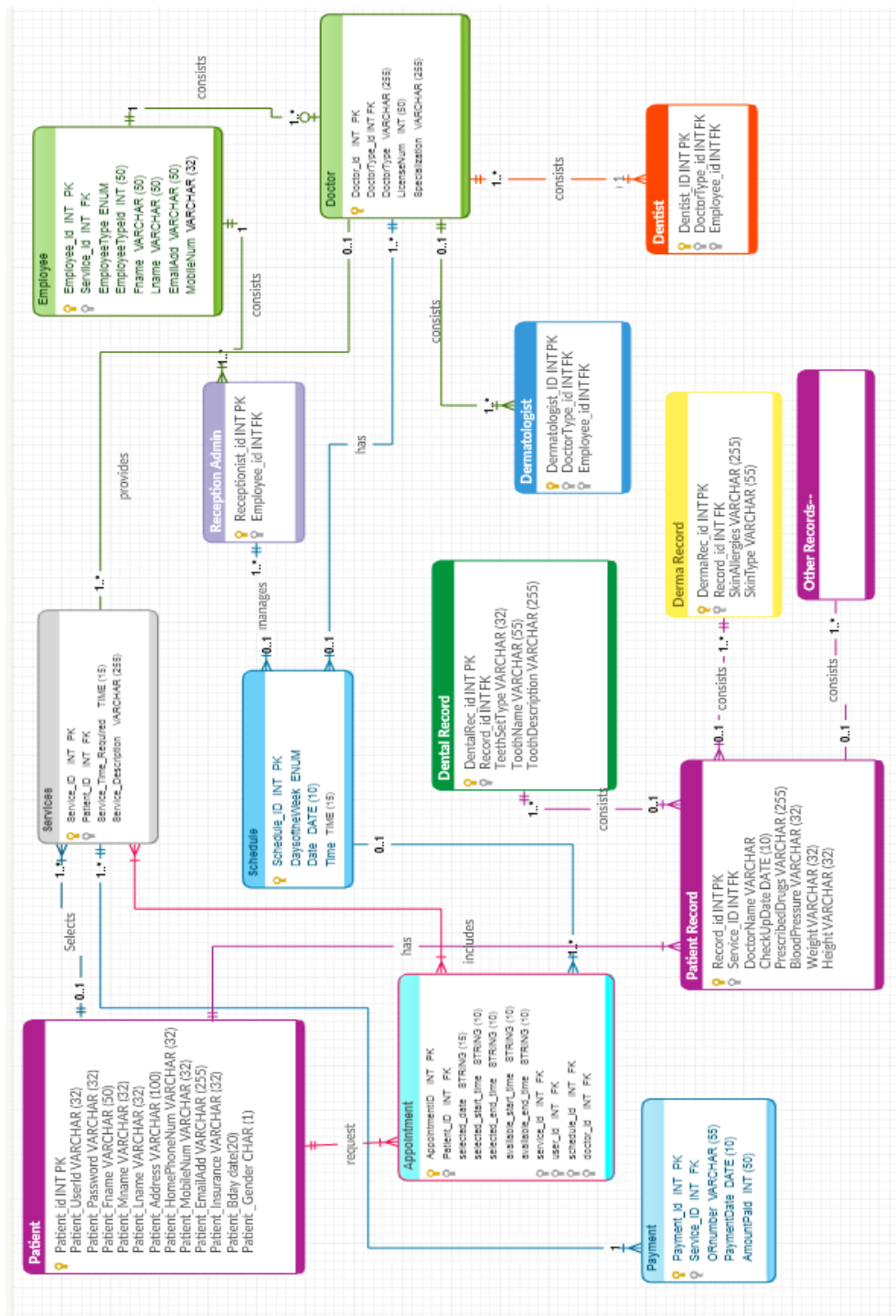


Figure 4. Entity Relationship Diagram (ERD)

