



NOT DISCOVERY

THE ONLY MEDICAL PLATFORM YOU CAN TRUST



PROUDLY SPONSORED BY “EASY SCRUM EASY GO”

Zahraa Akhalwaya - 1831974

Ryan Alexander - 1827474

Mahdiyah Manjra - 2140796

Deshan Murugan - 1612943

Xin Nian - 1760829

Kineta Padiachee - 1853416

Mellisha Reddy - 1833200

Bianco Van Der Ross - 1827456



SUMMARY OF CONTENTS

• Software Design & Architecture	page 3
• Logic View	page 5
○ State Diagram	page 5
○ Class Diagram	page 7
• Development View	page 9
○ Component Diagram	page 9
• Process View	page 10
○ Activity Diagram	page 10
○ Sequence Diagram	page 13
• Physical View	page 15
○ Deployment Diagram	page 15
• Use Case Diagram	page 16
• Sprint 1	page 17
• Sprint 2	page 22
• Sprint 3	page 26
• Sprint 4	page 31



Software Design and System Architecture

Software Design

We were tasked with the development of a mobile application and website for viewing and managing patient data. The platform (refers to the mobile or web application) has two users, doctors, and patients respectively. The platform is designed to help doctors see the medical history of their patients and treat patients while patients can book an appointment with the doctor of their choice for any medical issues they may be experiencing. When a patient books an appointment with a particular doctor, the doctor will be able to accept or cancel this appointment. If the doctor cancels an appointment the patient will be notified immediately via email, and he/ she can either reschedule the appointment or find another doctor on the platform. Patients can also cancel an appointment and the doctor will be notified. If the doctor accepts the appointment, and once the appointment has taken place, the doctor can then generate an appointment form. This appointment form will include the patients name, medication administered, date of the appointment, consultation notes, etc. These appointment forms get stored in the database. The patient and doctor will be able to see this appointment form under their respective appointment history tab and the patient can book for a check-up if necessary. If an appointment has been missed the doctor can update the status of an appointment and the patient will be notified via email regarding this missed appointment.

System Architecture

Doctors can log onto the platform and view a list of their upcoming appointments. If the doctor enters the incorrect user credentials (either their email address or password), he/ she will be denied access to the system. A doctor who is not registered on the platform, will be able to register by entering their respective name, phone number, identification number, field of specialization (i.e., optometrist, dentist, surgeon, etc.), qualifications, years of experience, email address and password. Once logged in a doctor can view upcoming appointments, view their appointment history, or update their availability. Doctors can update the days they are available to consult with patients. Here doctors can indicate their available working days, working hours and if they want to consult in 30-minute or 60-minute intervals. Doctors can also continually update the progress of a patient on the system by entering the latest medical data of their patients on an appointment form. This information is then saved in the database and will be stored for the perusal of doctors for their future cases. For example, if a patient comes for a follow-up routine or check-up, doctors can immediately check up on their medical history using their appointment history and provide the necessary medical treatments. Not Discovery is also designed to help patients find doctors to assist them with any medical issues they may be experiencing. Patients can login with their respective phone number and password, if the incorrect user credentials are used, he/ she will be denied access to the system. A patient who is not registered, can register on the platform by entering their respective name, phone number, identification number, email address, and password. Once in the system patients will be able to view their upcoming appointments with a doctor, book for a new appointment and keep track of their recovery process if they are fighting a serious disease / illness by viewing their appointment history. Patients can book an appointment with a specific doctor by selecting a suitable date and a specialist. The patient can then choose from a list of specialists in this field and select a time slot. Once the booking is confirmed,

this appointment will appear in the list of the patients upcoming appointments and the relevant doctor will be notified of this appointment.

Some of our feature include:

- A welcome page where a user can specify if they are a patient or a doctor
- Doctor login / registration
- Patient login / registration
- All user information is stored securely in the database and passwords are hashed for extra security
- A home page for doctors where they can see notes from their last appointment and any upcoming appointments
- A home page for patients where they can see upcoming appointment booked with a doctor
- Doctors have the ability to generate an appointment form on the platform
- Patients have the ability to booking an appointment with a doctor of their choice for a particular medical issue they may be experiencing
- Doctors have the ability to show they availability over a certain period of time and specify if they would like to consult with patients for one hour or half an hour basis
- Displaying a list of upcoming appointments on the home page for a doctor and patient
- Implementation of doctor's appointment form so that this form can later be viewed under appointment history on the patient and doctor's side
- An "Appointment History" where doctors and patients can view a list of previous appointments with the respective appointment form
- When a booking has been made, an email is sent to the doctor and the patient
- Doctors and patients have the ability to cancel an appointment
- Doctors and patients are notified when an appointment has been missed
- Implementation of a "forget password" feature
- Users can reset their password if necessary
- Settings page for the user's convenience – this includes viewing and updating personal information, privacy policy, reset password and a logout function
- Help page in case user needs extra assistance or online support
- Improvements to user interface and overall design of both the app and the website

For more please see our GitHub:

<https://github.com/1853416/SD-Semester2>

<https://github.com/1853416/SDP-Not-Discovery>

For more details and to track our progress, please see:

<https://tree.taiga.io/project/kineta-mobile-patient-tracker/timeline>



Logic View

State Diagram

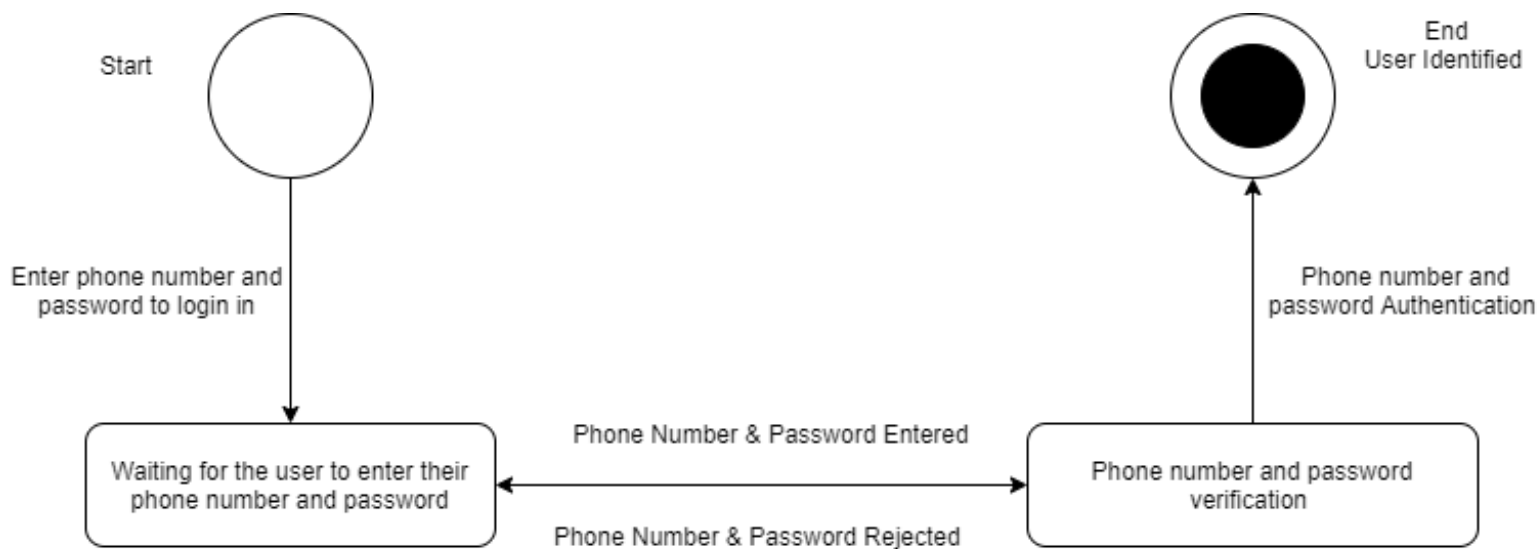


Figure – Sate Diagram for User Login

This diagram is applicable to both patients and doctors. This diagram shows the login process a registered user will go through before being given access to Not Discovery. The user will be required to enter their phone number and password. These login credentials will then be verified by our system, if either of the details are incorrect the user will be denied access to the system. However, if the user has entered the correct username and password, he /she will be given access to the system and will be redirected to the respective home page depending on whether they are registered as a doctor or a patient. Users who have forgotten their password will have the option to reset their password by clicking on “forgot password”. Here the user will be able to reset their password by entering their phone number (on the website) and email address (on the app) and a temporary random code will be sent to their email address. This code can then be used to reset the user’s password.

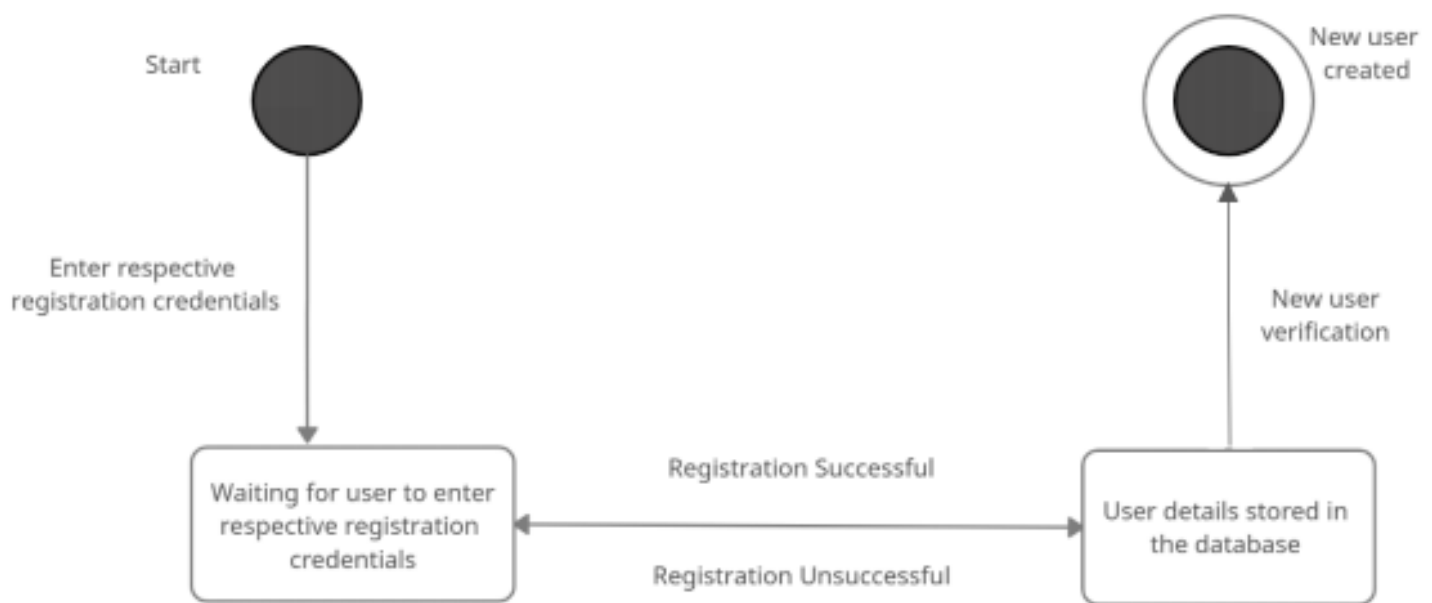


Figure – A state diagram for user registration

This diagram is applicable to both patients and doctors. The figure above shows a state diagram for a new user registering with our system. This process is necessary and must be completed correctly before a user can use on our system.

New users who wish to register as a patient will have to complete the registration process by filling in the necessary credentials such as first name, last name, ID number, cell phone number, email address, and password.

New users who wish to register as a doctor will have to complete the registration process by filling in the necessary credentials such as first name, last name, ID number, email address, cell phone number, occupation (i.e., optometrist, dentist, surgeon, etc.), qualifications, years of experience and password.

If the registration is successful, then the user's information will be saved on the database, and they will be allowed to start using the system. However, if the registration process is unsuccessful due to duplicate credentials, incorrect passwords, empty credentials, or incorrect credentials the user will have to double check the registration form or try to register again.

Class Diagram

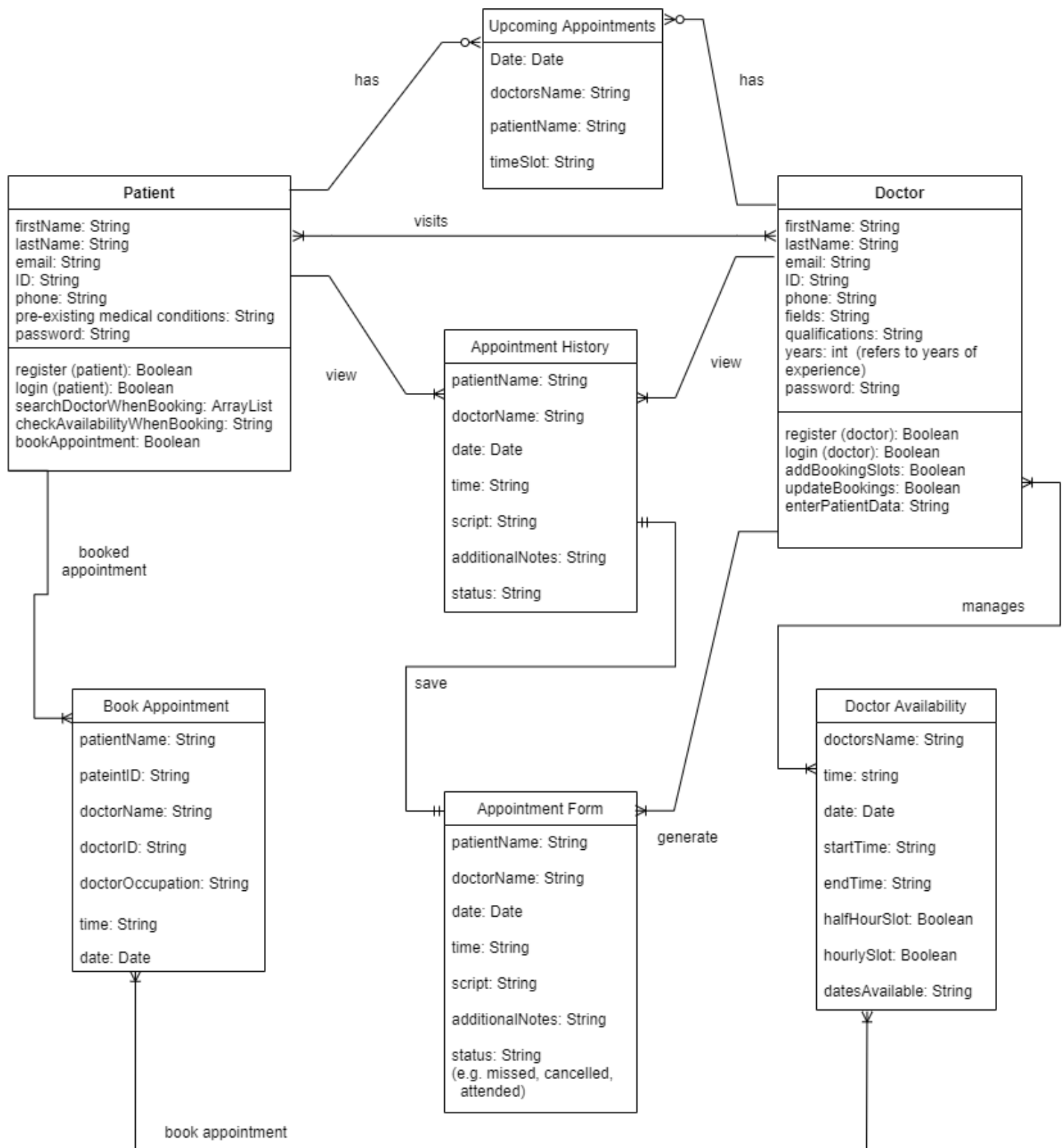


Figure – A class diagram for Not Discovery

The diagram above shows a class diagram for the Not Discovery System. In this diagram we can see the backend structure (i.e., the database) and we can see how the different tables and pieces of information are linked together.

For example, we can see how a patient can be linked to a doctor or many doctors and vice versa. We can also see how doctors can update their available time slots and how all this information is stored and then made available for patients to see when a patients want to book an appointment with this particular doctor. Patients can book an appointment with a doctor and this appointment will be saved and displayed under the list of upcoming appointments on the respective doctor and patient home page. Doctors can also create appointment forms once they have seen a patient, and this can be used to keep track of a patient's medical progress. This appointment form will then be available for the doctor and patient to see under their respective appointment history.

Development View

Component Diagram

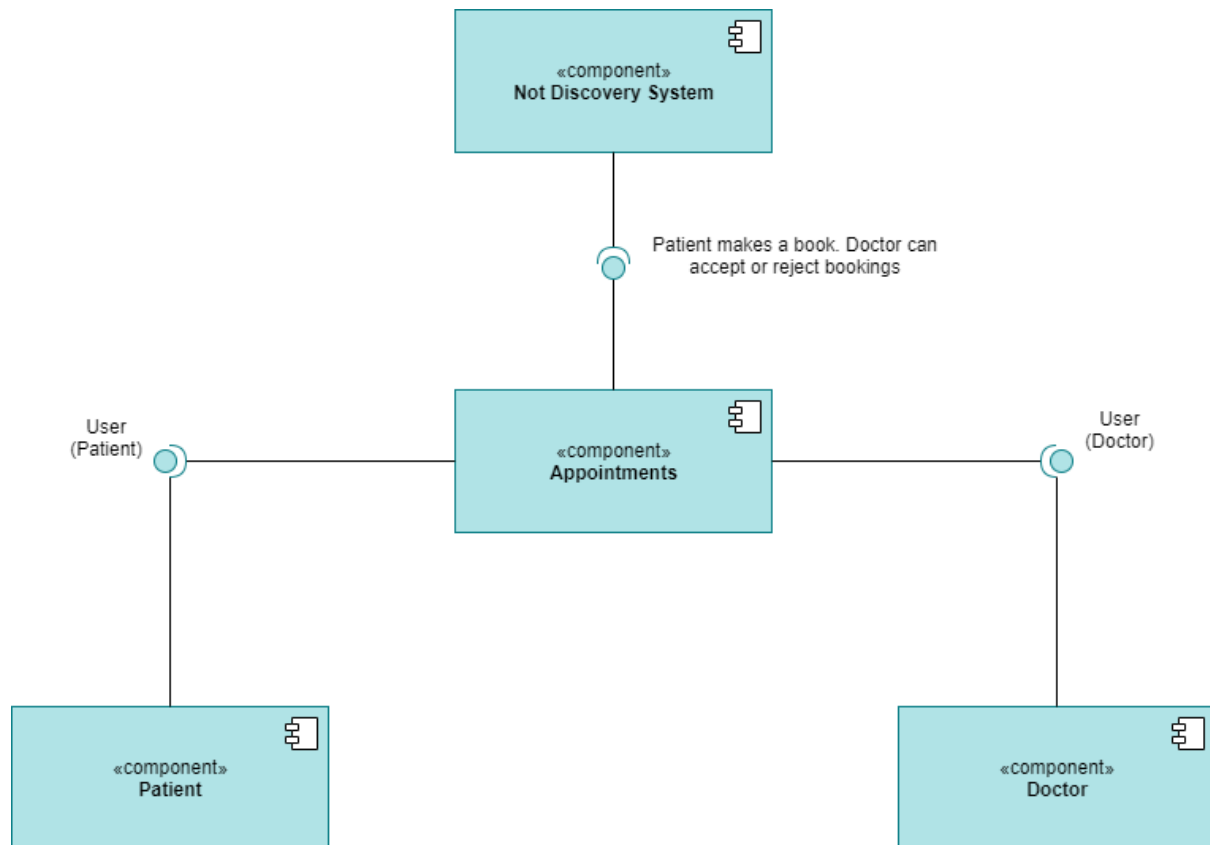


Figure – A component diagram for Not Discovery

The figure above shows a component diagram for the Not Discovery system, and it particularly focuses on the appointment bookings aspect of the website. The appointments require an interface, provided by the Not Discovery component. The patient component requires an interface, provided by the appointment component. Similarly, the doctor component requires, and interface provided by the appointment's component. Here we can see that when a patient makes an appointment with a particular doctor, he/ she is notified and has the ability to accept or cancel the patients request for a consultation. Once a patient has made an appointment, he/ she will be redirected to the home page where they can see upcoming appointments, and the doctor will also be able to see this appointment on their home page.

Process View

Activity Diagram

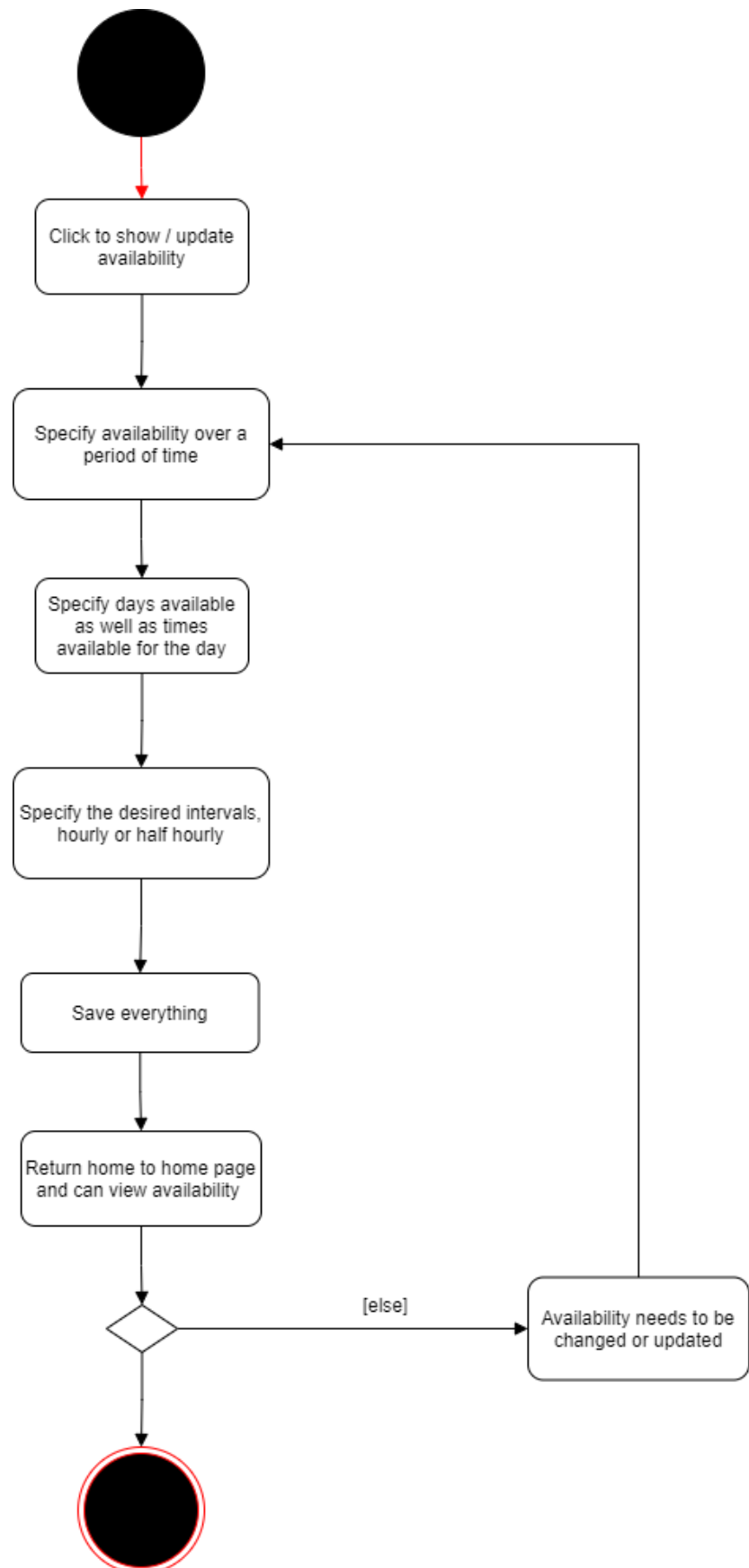


Figure – An activity diagram for Not Discovery Doctors

The diagram above shows an activity diagram for Not Discovery doctors. When a doctor logs into the website / app, and if a doctor wants to update their available working days to consult with patients, he/ she can click on the “available bookings” tab. Here the doctor must specify the starting and ending date that they are available for. They will also be required to specify the hours they are available for by filling in their start time and end time. Lastly the doctor must specify if they would like to see patients in half hourly intervals or hourly intervals. Once all this information has been filled in the doctor can then click on “save” and all this information will be saved and stored in the database. This information will then be presented to patients if they wish to book and appointment with this particular doctor. If the doctor is unhappy with anything he/she can go back into the doctor’s availability and update the necessary information.

Please turn over to see the next diagram - An activity diagram for Not Discovery Patients

The diagram below shows an activity diagram for the Not Discovery System. When a patient logs into the website / app, and if a patient wishes to book an appointment with a particular doctor, he/ she can click on the “book appointment tab”. The patient can select the date they wish to see a doctor and choose from a list of specialists to attend to any medical issue they may be experiencing. If none of these days are suitable the patient can go a back and find a different doctor. Once the patient has chosen a specialist, a list of doctors in that field will appear and the patient can select a doctor of their choice. Once a doctor has been selected the patient can then select an available time slot and confirm their booking. If the patient is not happy with any of these time, he/ she can select a different day or go back and select a different doctor. The patient will then be redirected to the home page and this appointment will appear in the list of the patients upcoming appointments and the relevant doctor will be notified of this appointment.

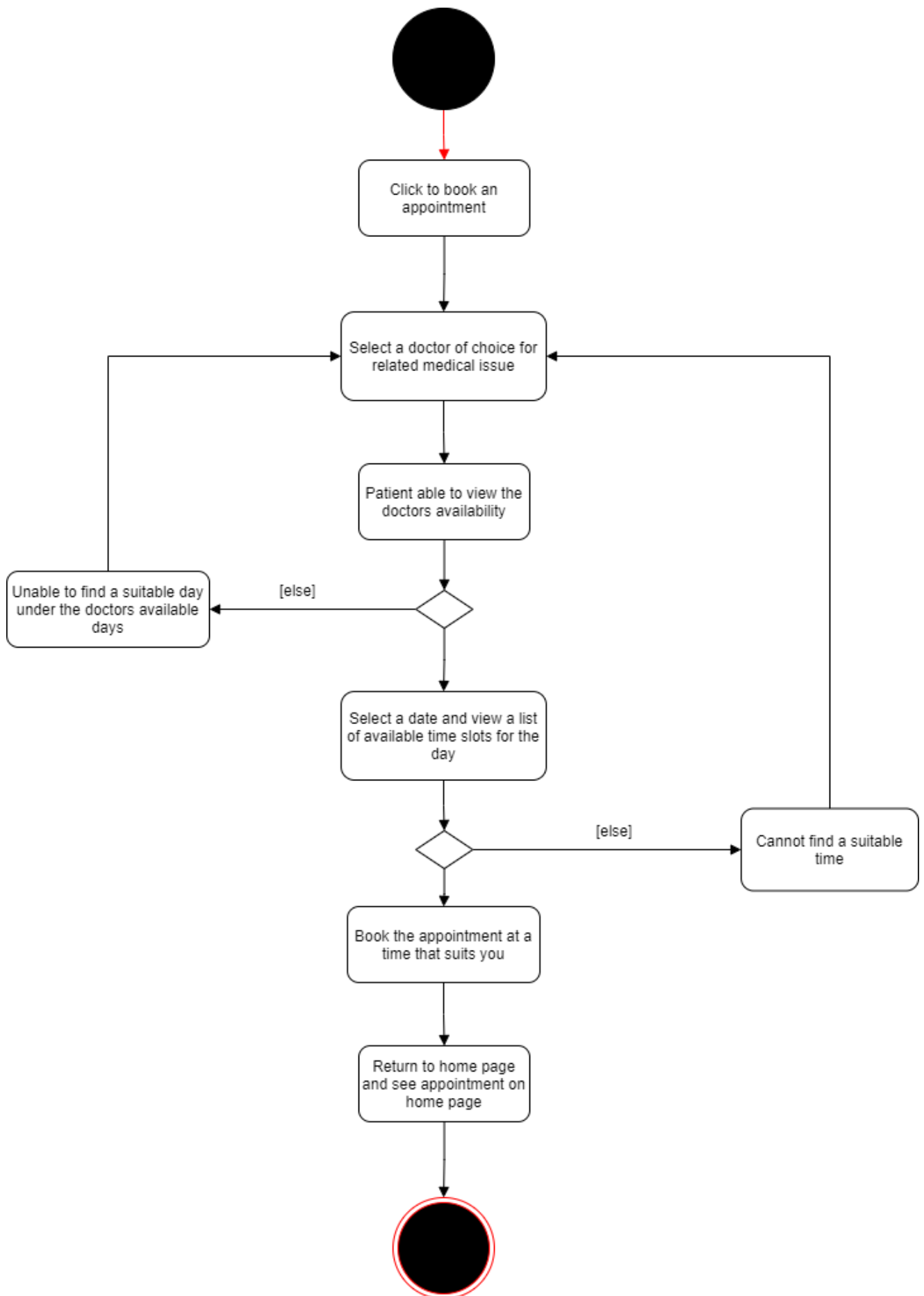


Figure – An activity diagram for Not Discovery Patients

Sequence Diagram

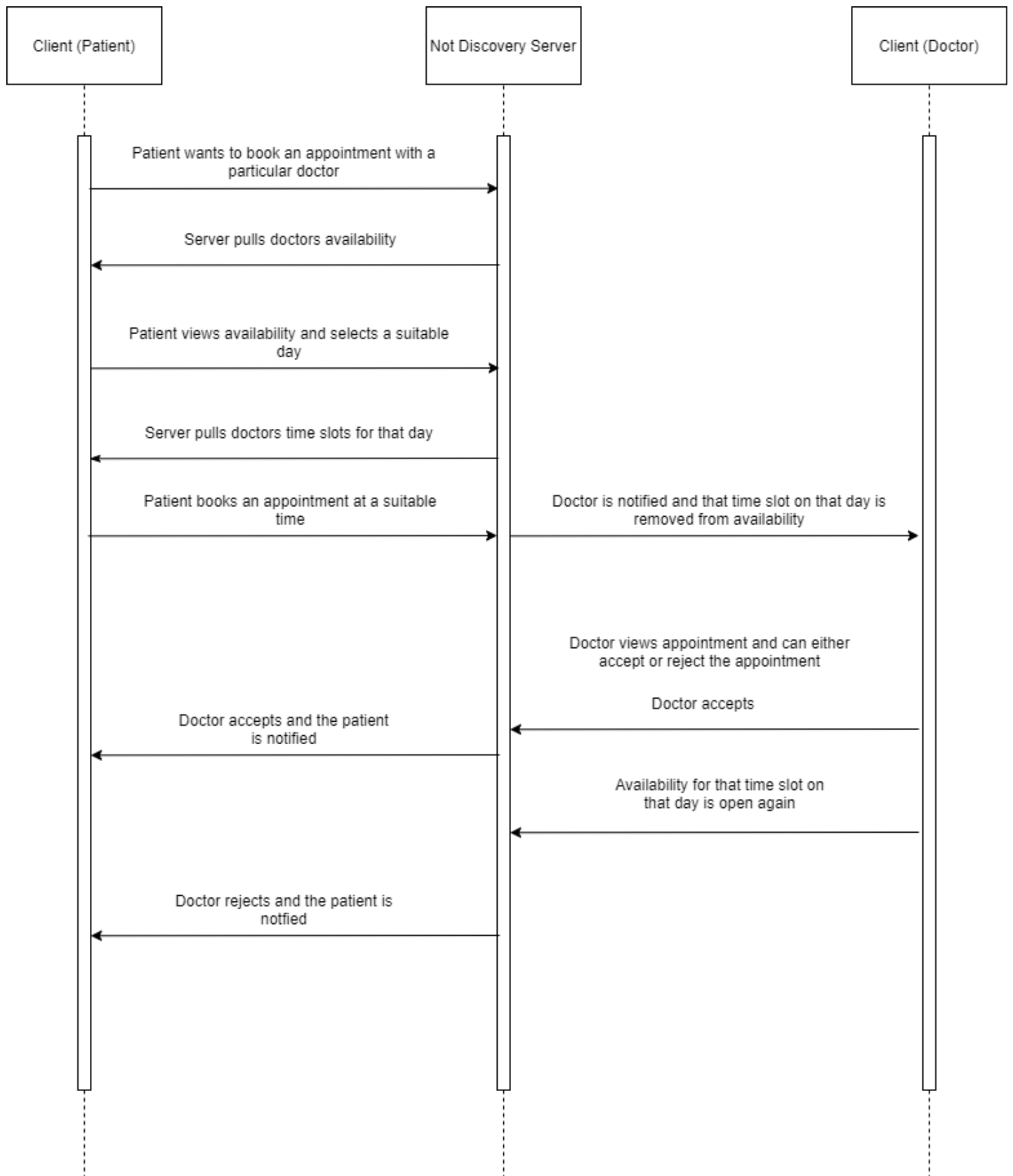


Figure – A sequence diagram for Not Discovery

This figure shows a sequence diagram for the Not Discovery System. This diagram shows how the different components / objects in a system interact in a sequential order (i.e., it describes how and in what order the objects in the system function). Here we can clearly see three objects interaction (the client (a patient), the Not Discovery server, and the second client (a doctor)). When a patient clicks to book an appointment with a certain doctor, the server pulls the information on that doctor's availability. The patient can then click on a suitable day, and the server will pull information on the time slots the doctor has for that day. Once the patient has found a suitable time and books an appointment, the server will notify the doctor via email and remove this time slot from the availability (to avoid double booking). The doctor can either accept or cancel the consultation with the patient. If the doctor accepts then the patient will be notified via email. However, if the doctor cancels, then the patient will be notified and the availability for that slot will become available once again.

Physical View

Deployment Diagram

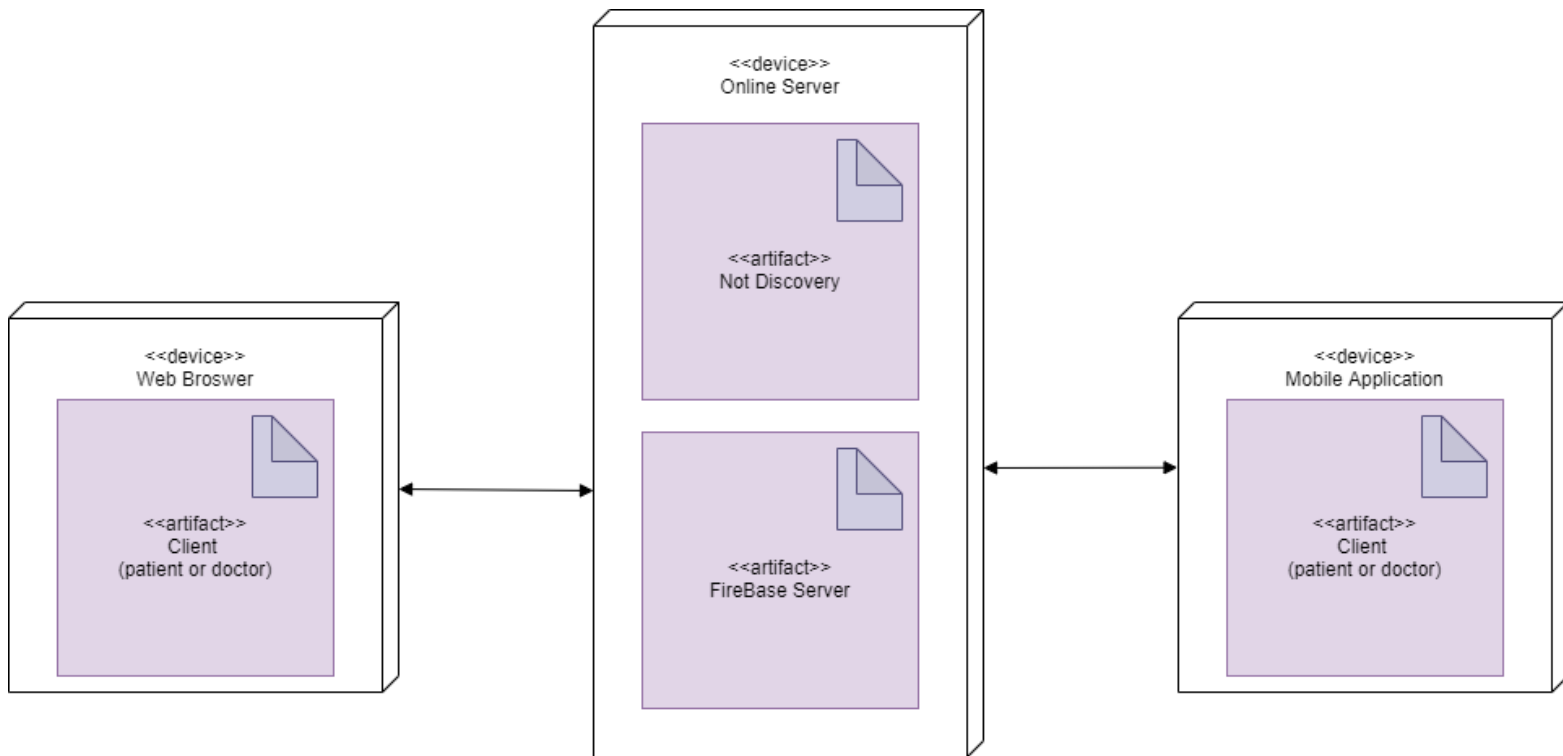


Figure – A deployment diagram for Not Discovery

This figure shows a deployment diagram for the Not Discovery system. This diagram shows the structural view used to model the physical aspects of the software system. Here we see three devices (the web browser, the online server, and the mobile application). In this diagram we also see that there are artifacts associated to each device. Client is associated with the web browser as well as the mobile application, Not Discovery and the Firebase Server are associated with the online server. Both the mobile application and the web browser is hosted on the online server Cloud Firestore (i.e., the Firebase server)

Use Case Diagram

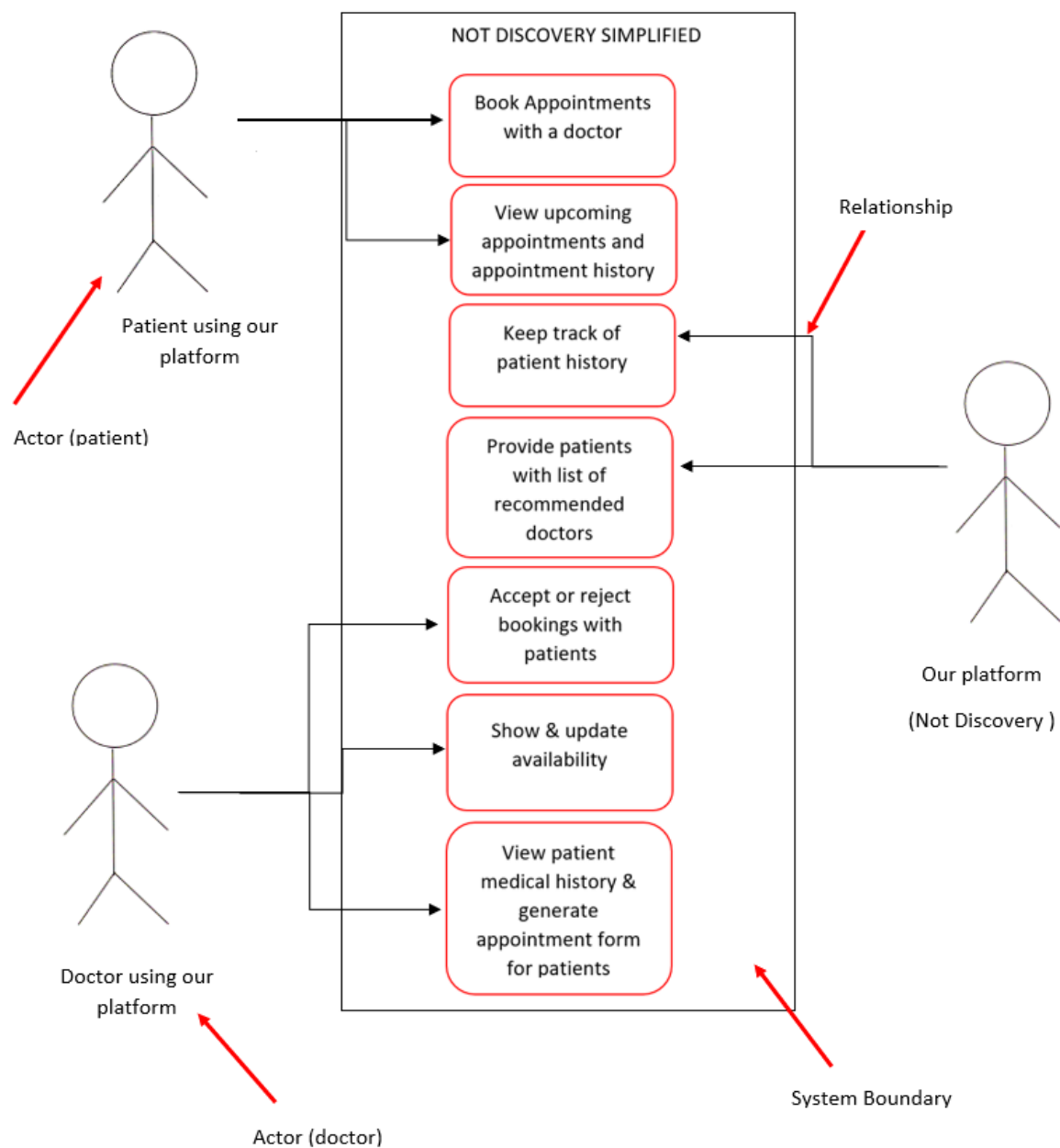


Figure - A use case diagram showing a simplified overview of Not Discovery

The figure above shows a user case diagram. In this diagram we can see the activities that a user (either a patient or doctor) using our system can perform. For a patient some of these activities include booking appointments, viewing appointment history, and viewing upcoming appointments. For a doctor some of these activities include accepting or cancelling appointments, showing availability, viewing patient history, and generating appointment forms after consulting with a patient. The diagram also shows the tasks and activities that the Not Discovery system can perform. These activities include keeping track of patient history and providing patients with a list of recommended doctors.

SPRINT 1

User Stories

1. User Login App

As a user, I want to be able to login to the app with my email address / username and password so that I can use the app.

This includes:

- Creating the respective tables
- Login with username and password
- Incorrect username or password should deny access to the system
- Password must be hashed for security purpose

2. User Login Website

As a user, I want to be able to login to the website with my email address / username and password so that I can use the website.

This includes:

- Creating the respective tables
- Login with username and password
- Incorrect username or password should deny access to the system
- Password must be hashed for security purpose

3. New User Registration App

As a user, I want to be able to register with the app, so that I can use the app.

This includes:

- A registration for doctors and a registration for patients
- Patients must provide their name, age, identification number, place of residence, email address, pre-existing conditions, and password
- Doctors must provide their field of specialization, qualifications, years of experience, email address and password

4. New User Registration Website

As a user, I want to be able to register on the website, so that I can use the website.

This includes:

- A registration for doctors and a registration for patients
- Patients must provide their name, age, identification number, place of residence, email address, pre-existing conditions, and password
- Doctors must provide their field of specialization, qualifications, years of experience, email address and password

5. Landing page / screen (one for the app and one for the website)
As a user, after successfully logging-in I want to be directed to a "home" page so that I can start using the system for all my medical needs and appointments.
 - Note: The doctors landing page and patients User interface should not look the same. The patient should see his/ her last appointment with a doctor and a doctor should see his/her last appointment with a patient
6. Template form for a doctor to record information after / during a patient visit on App
As a doctor, I want to be able to generate an appointment form for patients so that I can keep a record with all the important information from that appointment.

This includes:

- Name of patient
- Date of visit
- Notes from the appointment
- Prescribed medication
- Save button

7. Template form for a doctor to record information after / during a patient visit on Website
As a doctor, I want to be able to generate an appointment form for patients so that I can keep a record with all the important information from that appointment.

This includes:

- Name of patient
- Date of visit
- Notes from the appointment
- Prescribed medication
- Save button

Acceptance Criteria

1. User Login App

As a user, I want to be able to login to the app with my email address / username and password so that I can use the app.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I log onto the app with my respective email address / username, then I should be taken to the home screen off the app. When I type in the incorrect login details, then I should not be taken to the home screen of the app.
- ✓ Given that I am a patient, when I log onto the app with my respective email address / username, then I should be taken to the home screen off the app. When I type in the incorrect login details, then I should not be taken to the home screen of the app.
- ✓ Both the doctor and the patient will be required to login with their respective email address / username and password, if either of these credentials are incorrect the user will be denied access to the app.

2. User Login Website

As a user, I want to be able to login to the website with my email address / username and password so that I can use the website.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I log onto the website with my respective email address / username, then I should be taken to the home page off the website. When I type in the incorrect login details, then I should not be taken to the home page of the website.
- ✓ Given that I am a patient, when I log onto the website with my respective email address / username, then I should be taken to the home page off the website. When I type in the incorrect login details, then I should not be taken to the home page of the website.
- ✓ Both the doctor and the patient will be required to login with their respective email address / username and password, if either of these credentials are incorrect the user will be denied access to the website.

3. New User Registration App

As a user, I want to be able to register with the app, so that I can use the app.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I register on the app, then I should be able to fill out all the necessary information required before I can use the app.
- ✓ Given that I am a patient, when I register on the app, then I should be able to fill out all the necessary information required before I can use the app.
- ✓ Patient registration should include name, age, identification number, place of residence (some address field), email address, field for pre-existing medical conditions and password.
- ✓ Doctor registration should include name, age, field of specialization (i.e., optometrist, dentist, surgeon, etc.), qualifications, years of experience, email address and password.

4. New User Registration Website

As a user, I want to be able to register on the website, so that I can use the website.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I register on the website, then I should be able to fill out all the necessary information required before I can use the website.
- ✓ Given that I am a patient, when I register on the website, then I should be able to fill out all the necessary information required before I can use the website.
- ✓ Patient registration should include name, age, identification number, place of residence (some address field), email address, field for pre-existing medical conditions and password.
- ✓ Doctor registration should include name, age, field of specialization (i.e., optometrist, dentist, surgeon, etc.), qualifications, years of experience, email address and password.

5. Landing page / screen (one for the app and one for the website)

As a user, after successfully logging-in I want to be directed to a "home" page so that I can start using the system for all my medical needs and appointments.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I login successfully and see the home screen of the app, then I should be able to see my most recent patient form.
- ✓ Given that I am a patient, when I login successfully and see the home screen of the app, then I should be able to see my most recent appointment with a doctor.
- ✓ For now, this can be a template form / dummy form saved in the database.

- ✓ Details of the patient form should include patient name, date of visit, notes form the appointment and any prescribed medication.
- ✓ NOTE! Important to also save the relationships between patients and doctors in the database.

6. Template form for a doctor to record information after / during a patient visit on App
As a doctor, I want to be able to generate an appointment form for patients so that I can keep a record with all the important information from that appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I click to generate an appointment form, then I can record all the important information from that appointment.
- ✓ For now, this can be a template form / dummy form saved in the database.
- ✓ Details of the patient form should include patient name, date of visit, notes form the appointment and any prescribed medication as well as a save button so that the information can be stored in the database.
- ✓ NOTE! Important to also save the relationships between patients and doctors in the database.

7. Template form for a doctor to record information after / during a patient visit on Website
As a doctor, I want to be able to generate an appointment form for patients so that I can keep a record with all the important information from that appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I click to generate an appointment form, then I can record all the important information from that appointment.
- ✓ For now, this can be a template form / dummy form saved in the database.
- ✓ Details of the patient form should include patient name, date of visit, notes form the appointment and any prescribed medication as well as a save button so that the information can be stored in the database.
- ✓ NOTE! Important to also save the relationships between patients and doctors in the database.

SPRINT 2

User Stories

1. Bookings Form for Patient – App

As a patient, I want to be able to make an appointment with a doctor of my choice so that a doctor can attend to all my medical needs / problems.

This includes:

- Creating the respective tables
- Patient able to specify field of specialization they want the doctor to be in (e.g., dentist, surgeon, etc.)
- Patient should see a calendar with highlighted days to show when the doctor is available for consultations (i.e., available to see patients)
- When a patient clicks on an available date, a list of times should appear in either hourly or half hourly intervals.
- Once a patient has booked an appointment, that specific slot should no longer be available on the doctor's side. Both the doctor and the patient should be notified.

2. Bookings Form for Patient – Website

As a patient, I want to be able to make an appointment with a doctor of my choice so that a doctor can attend to all my medical needs / problems.

This includes:

- Creating the respective tables
- Patient able to specify field of specialization they want the doctor to be in (e.g., dentist, surgeon, etc.)
- Patient should see a calendar with highlighted days to show when the doctor is available for consultations (i.e., available to see patients)
- When a patient clicks on an available date, a list of times should appear in either hourly or half hourly intervals.
- Once a patient has booked an appointment, that specific slot should no longer be available on the doctor's side. Both the doctor and the patient should be notified.

3. Bookings / Availability for Doctors – App

As a doctor, I want to be able to select my available days in a month so that I can see patients and help them to know when I am available for a consultation.

This includes:

- Storing information in respective tables
- A doctor should be able to specify their availability to see patients in a month or they can select a date range so that patients know when they are available

- The doctor should then be able to specify the hours they are available for.
- The hours the doctor is available for should be specified by either half hour intervals or one-hour intervals
- Once this information has been saved (i.e., stored in the database) the patients should be able to see the doctor's availability.

4. Bookings / Availability for Doctors - Website

As a doctor, I want to be able to select my available days in a month so that I can see patients and help them to know when I am available for a consultation.

This includes:

- Storing information in respective tables
- A doctor should be able to specify their availability to see patients in a month or they can select a date range so that patients know when they are available
- The doctor should then be able to specify the hours they are available for.
- The hours the doctor is available for should be specified by either half hour intervals or one-hour intervals
- Once this information has been saved (i.e., stored in the database) the patients should be able to see the doctor's availability.

Acceptance Criteria

1. Bookings Form for Patient – App

As a patient, I want to be able to make an appointment with a doctor of my choice so that a doctor can attend to all my medical needs / problems.

Acceptance Criteria:

- ✓ Given that I am a patient, when I want to book for an appointment, then I should be able to enter a specific field (e.g., dentist, surgeon, etc.) and a list of relevant doctors should appear.
- ✓ Given that I am a patient, when I select a certain doctor, then the doctors calendar should show up with available days (doctor is able to see a patient) in a month highlighted.
- ✓ Given that I am a patient, when I click on an available date, then a list of corresponding time slots for the day (either in 1 hour or half an hour intervals) should appear.
- ✓ Given that I am a patient, when I have booked an appointment, then the available slot should be removed from the doctor's calendar and the doctor should be notified.

2. Bookings Form for Patient – Website

As a patient, I want to be able to make an appointment with a doctor of my choice so that a doctor can attend to all my medical needs / problems.

Acceptance Criteria:

- ✓ Given that I am a patient, when I want to book for an appointment, then I should be able to enter a specific field (e.g., dentist, surgeon, etc.) and a list of relevant doctors should appear.
- ✓ Given that I am a patient, when I select a certain doctor, then the doctors calendar should show up with available days (doctor is able to see a patient) in a month highlighted.
- ✓ Given that I am a patient, when I click on an available date, then a list of corresponding time slots for the day (either in 1 hour or half an hour intervals) should appear.
- ✓ Given that I am a patient, when I have booked an appointment, then the available slot should be removed from the doctor's calendar and the doctor should be notified.

3. Bookings / Availability for Doctors – App

As a doctor, I want to be able to select my available days in a month so that I can see patients and help them to know when I am available for a consultation.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I want to show my availability in a month, then I can select a date range to show when I am available.
- ✓ Given that I am a doctor , when I specify the days, I am available in a week, then I should be able to specify the hours in a day that I am available.
- ✓ Given that I am a doctor, when I specify the hours, I am available, then I should be able to specify if I am available in hourly or half hourly intervals.
- ✓ Given that I am a doctor, when I specify my intervals and save everything, then my patients should be able to see my availability.

4. Bookings / Availability for Doctors - Website

As a doctor, I want to be able to select my available days in a month so that I can see patients and help them to know when I am available for a consultation.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I want to show my availability in a month, then I can select a date range to show when I am available.
- ✓ Given that I am a doctor , when I specify the days, I am available in a week, then I should be able to specify the hours in a day that I am available.
- ✓ Given that I am a doctor, when I specify the hours, I am available, then I should be able to specify if I am available in hourly or half hourly intervals.
- ✓ Given that I am a doctor, when I specify my intervals and save everything, then my patients should be able to see my availability.

SPRINT 3

User Stories

1. Displaying appointments on doctor side and patient side when a patient books and appointment – Website (fix from sprint 2)
As a user, when an appointment has been made the appointment should appear on the home page of the respective doctor and patient so that both users are informed and made aware of the appointment.
2. Show list of upcoming appointments on doctor side and patient side – App (fix from sprint 2)
As a user, when an appointment has been made the appointment should appear on the home page of the respective doctor and patient in a list format showing all the upcoming appointments.
3. Implementation of doctor's appointment form to bookings – Website
As a doctor, I want to be able to fill out an appointment form for all my patients so that I can keep a history of the appointment.

This includes:

- Clickable option for doctor to generate an appointment form for a patient who has booked an appointment
 - Certain information such as the patients name, date and time of the appointment should be preloaded onto the form
 - The information on this form should be saved in the database and should be accessible to the doctor at a later stage if need be
 - See sprint 1 for a general idea of what the form should have
4. Implementation of doctor's appointment form to bookings – App
As a doctor, I want to be able to fill out an appointment form for all my patients so that I can keep a history of the appointment.

This includes:

- Clickable option for doctor to generate an appointment form for a patient who has booked an appointment
- Certain information such as the patients name, date and time of the appointment should be preloaded onto the form
- The information on this form should be saved in the database and should be accessible to the doctor at a later stage if need be
- See sprint 1 for a general idea of what the form should have

5. Implementation of Appointment History, both the doctor and the patient should be able to see the appointment form once the appointment has taken place – Website
As a user, I should be able to see my appointment history so that I can either track patient progress or view patient medical history.

This includes:

- The doctor being able to see a list of patient histories
- The patient being able to see a list of doctors the patient has recently visited

6. Implementation of Appointment History, both the doctor and the patient should be able to see the appointment form once the appointment has taken place – App
As a user, I should be able to see my appointment history so that I can either track patient progress or view patient medical history.

This includes:

- The doctor being able to see a list of patient histories
- The patient being able to see a list of doctors the patient has recently visited

7. When a booking has been made, a message should be sent to the doctor and the patient in the form of an email – Website
As a user, I want an email sent to me whenever an appointment has been made, so that I am aware of the appointment and so that I can be reminded of the appointment

This includes:

- The patient receiving an email confirming the booking
- The doctor receiving an email notifying him/ her that an appointment had been made

8. When a booking has been made, a message should be sent to the doctor and the patient in the form of an email – App
As a user, I want an email sent to me whenever an appointment has been made, so that I am aware of the appointment and so that I can be reminded of the appointment

This includes:

- The patient receiving an email confirming the booking
- The doctor receiving an email notifying him/ her that an appointment had been made

Acceptance Criteria

1. Displaying appointments on doctor side and patient side when a patient books and appointment – Website (fix from sprint 2)

As a user, when an appointment has been made the appointment should appear on the home page of the respective doctor and patient so that both users are informed and made aware of the appointment.

Acceptance Criteria:

- ✓ Given that I am a patient, when I have booked an appointment with a particular doctor, then the appointment should appear on my home page under a list of upcoming appointments
- ✓ Given that I am a doctor, when a patient has booked an appointment with me, then that available slot should be removed from my calendar and the appointment should appear on my home page under a list of upcoming appointments

2. Show list of upcoming appointments on doctor side and patient side – App (fix from sprint 2)

As a user, when an appointment has been made the appointment should appear on the home page of the respective doctor and patient in a list format showing all the upcoming appointments.

Acceptance Criteria:

- ✓ Given that I am a patient, when I have booked an appointment with a particular doctor, then the appointment should appear on my home page under a list of upcoming appointments
- ✓ Given that I am a doctor, when a patient has booked an appointment with me, then the appointment should appear on my home page under a list of upcoming appointments

3. Implementation of doctor's appointment form to bookings – Website

As a doctor, I want to be able to fill out an appointment form for all my patients so that I can keep a history of the appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I see an appointment on my home page, then I should have the option of filling out an appointment form for the patient.
- ✓ Given that I am a doctor, when I click on the appointment form, then certain information should already be preloaded to make filling out the form much quicker and easier

- ✓ Given that I am a doctor, when click to save the appointment form information, then everything should be saved in the database so that I can view this information at a later stage if need be
- ✓ Note! The appointment should form should have the patients name preloaded, the date and time of the appointment, doctors name and specialization, a text area for a general description where the doctor can make notes on how the appointment went and a second text are for any prescribed medication (this text area is optional, the rest is compulsory)

4. Implementation of doctor's appointment form to bookings – App

As a doctor, I want to be able to fill out an appointment form for all my patients so that I can keep a history of the appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I see an appointment on my home page, then I should have the option of filling out an appointment form for the patient.
- ✓ Given that I am a doctor, when I click on the appointment form, then certain information should already be preloaded to make filling out the form much quicker and easier
- ✓ Given that I am a doctor, when click to save the appointment form information, then everything should be saved in the database so that I can view this information at a later stage if need be
- ✓ Note! The appointment should form should have the patients name preloaded, the date and time of the appointment, doctors name and specialization, a text area for a general description where the doctor can make notes on how the appointment went and a second text are for any prescribed medication (this text area is optional, the rest is compulsory)

5. Implementation of Appointment History, both the doctor and the patient should be

able to see the appointment form once the appointment has taken place – Website

As a user, I should be able to see my appointment history so that I can either track patient progress or view patient medical history.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I want to view my appointment history , then a list of respective appointment forms should appear.
- ✓ Given that I am a patient, when I want to view my appointment history, then a list of doctor's appointment forms should appear.
- ✓ Create an Appointment History Button

6. Implementation of Appointment History, both the doctor and the patient should be able to see the appointment form once the appointment has taken place – App
As a user, I should be able to see my appointment history so that I can either track patient progress or view patient medical history.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I want to view my appointment history , then a list of respective appointment forms should appear.
- ✓ Given that I am a patient, when I want to view my appointment history, then a list of doctor's appointment forms should appear.
- ✓ Create an Appointment History Button

7. When a booking has been made, a message should be sent to the doctor and the patient in the form of an email – Website
As a user, I want an email sent to me whenever an appointment has been made, so that I am aware of the appointment and so that I can be reminded of the appointment

Acceptance Criteria:

- ✓ Given that I am a doctor, when a patient books an appointment with me, then an email should be sent to me informing me about the appointment.
- ✓ Given that I am a patient, when I book an appointment with a doctor, then an email should be sent to me confirming the appointment.

8. When a booking has been made, a message should be sent to the doctor and the patient in the form of an email – App
As a user, I want an email sent to me whenever an appointment has been made, so that I am aware of the appointment and so that I can be reminded of the appointment

Acceptance Criteria:

- ✓ Given that I am a doctor, when a patient books an appointment with me, then an email should be sent to me informing me about the appointment.
- ✓ Given that I am a patient, when I book an appointment with a doctor, then an email should be sent to me confirming the appointment.

SPRINT 4

User Stories

1. Doctors and patients have the ability to cancel an appointment – Website
As a user, I want to be able to cancel an appointment if I am unable to attend the appointment.

This includes:

- Doctor can cancel an appointment and the respective patient should be notified
- Patient can cancel an appointment and the respective doctor should be notified
- Remove appointment from database and free up that specific timeslot in the doctor's availability
- Remove appointment from the respective doctor and patient home page

2. Doctors and patients have the ability to cancel an appointment – App
As a user, I want to be able to cancel an appointment if I am unable to attend the appointment.

This includes:

- Doctor can cancel an appointment and the respective patient should be notified
- Patient can cancel an appointment and the respective doctor should be notified
- Remove appointment from database and free up that specific timeslot in the doctor's availability
- Remove appointment from the respective doctor and patient home page

3. Notify doctor and patient when an appointment has been missed – Website
As a user, I want to be notified when an appointment has been missed, so that I know an appointment has been missed.

This includes:

- Notifying a doctor when an appointment has been missed
- Notifying a patient when an appointment has been missed
- This can be done with an email or with a popup / toast message

4. Notify doctor and patient when an appointment has been missed – App
As a user, I want to be notified when an appointment has been missed, so that I know an appointment has been missed.

This includes:

- Notifying a doctor when an appointment has been missed
- Notifying a patient when an appointment has been missed
- This can be done with an email or with a popup / toast message

5. Implement forget password

As a user, I want to be able to have forget password feature, so that if I do forget my password, I can still access my account.

This includes:

- Implementing a forget password function on the login screen of the website, so that if a user has forgotten their password, they can still get access to their account.
- This had already been implemented on the app User story from the group (this user story was not given by Rylan)

6. User Interface

As a user, I want to be able to interact with a platform that is visually appealing so that my overall experience is better.

This includes:

- On the website, make sure that the website resizes and fills the whole screen correctly despite the screen resolution and the size of the screen
- On the website, make the colour of the welcome page/ login and registration one solid colour
- On the app, when viewing the appointment history, the patient and doctor should not be able to add / change anything on the appointment form (view instead of edit)
- On the website and the app, find a template for the emails to make them look more professional

Acceptance Criteria

1. Doctors and patients have the ability to cancel an appointment – Website
As a user, I want to be able to cancel an appointment if I am unable to attend the appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I am unable to attend an appointment, then I should be able to cancel the appointment and the respective patient should be notified
- ✓ Given that I am a patient, when I am unable to attend an appointment, then I should be able to cancel the appointment and the respective doctor should be notified
- ✓ Given that I am a doctor, when an appointment has been cancelled by a patient, then that timeslot should become available in my available bookings
- ✓ Given that I am a user, when an appointment has been cancelled, then that appointment should be removed from my home page.

2. Doctors and patients have the ability to cancel an appointment – App
As a user, I want to be able to cancel an appointment if I am unable to attend the appointment.

Acceptance Criteria:

- ✓ Given that I am a doctor, when I am unable to attend an appointment, then I should be able to cancel the appointment and the respective patient should be notified
- ✓ Given that I am a patient, when I am unable to attend an appointment, then I should be able to cancel the appointment and the respective doctor should be notified
- ✓ Given that I am a doctor, when an appointment has been cancelled by a patient, then that timeslot should become available in my available bookings
- ✓ Given that I am a user, when an appointment has been cancelled, then that appointment should be removed from my home page.

3. Notify doctor and patient when an appointment has been missed – Website
As a user, I want to be notified when an appointment has been missed, so that I am aware of the fact that an appointment has been missed.

Acceptance Criteria:

- ✓ Given that I am a doctor, when an appointment has been missed, then I should be notified
- ✓ Given that I am a patient, when an appointment has been missed, then I should be notified

4. Notify doctor and patient when an appointment has been missed – App
As a user, I want to be notified when an appointment has been missed, so that I am aware of the fact that an appointment has been missed.

Acceptance Criteria:

- ✓ Given that I am a doctor, when an appointment has been missed, then I should be notified
- ✓ Given that I am a patient, when an appointment has been missed, then I should be notified

5. Implement forget password
As a user, I want to be able to have forget password feature, so that if I do forget my password, I can still access my account.

Acceptance Criteria:

- ✓ Given that I am a user, when I forget my password, then I can click on “forget password” and still have access to my account.

6. User Interface
As a user, I want to be able to interact with a platform that is visually appealing so that my overall experience is better.

Acceptance Criteria:

- ✓ Given that I am a user, when interacting with the website, then the website should correctly fill my screen despite my screen size and screen resolution
- ✓ Given that I am a user, when interacting with the app, then when I click to view appointment history, I should not be able to change or add anything to the appointment form
- ✓ Given that I am a user, when interacting with the website, then the website should have solid colours on the login, registration, and welcome page to make the website look more professional
- ✓ Given that I am a user, when interacting with the website and the app, then when an email is sent to notify me about an appointment, the email should be presented in a more professional way
- ✓ Given that I am a user, when interacting with the website and the app, then when an email is sent to notify me about an appointment, the email should be presented in a more professional way