

**CSIT314**  
**Software Development Methodologies**  
**Group Project - Electronic Prescription System**

**Group Name:** TFanClub

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# **Content Page**

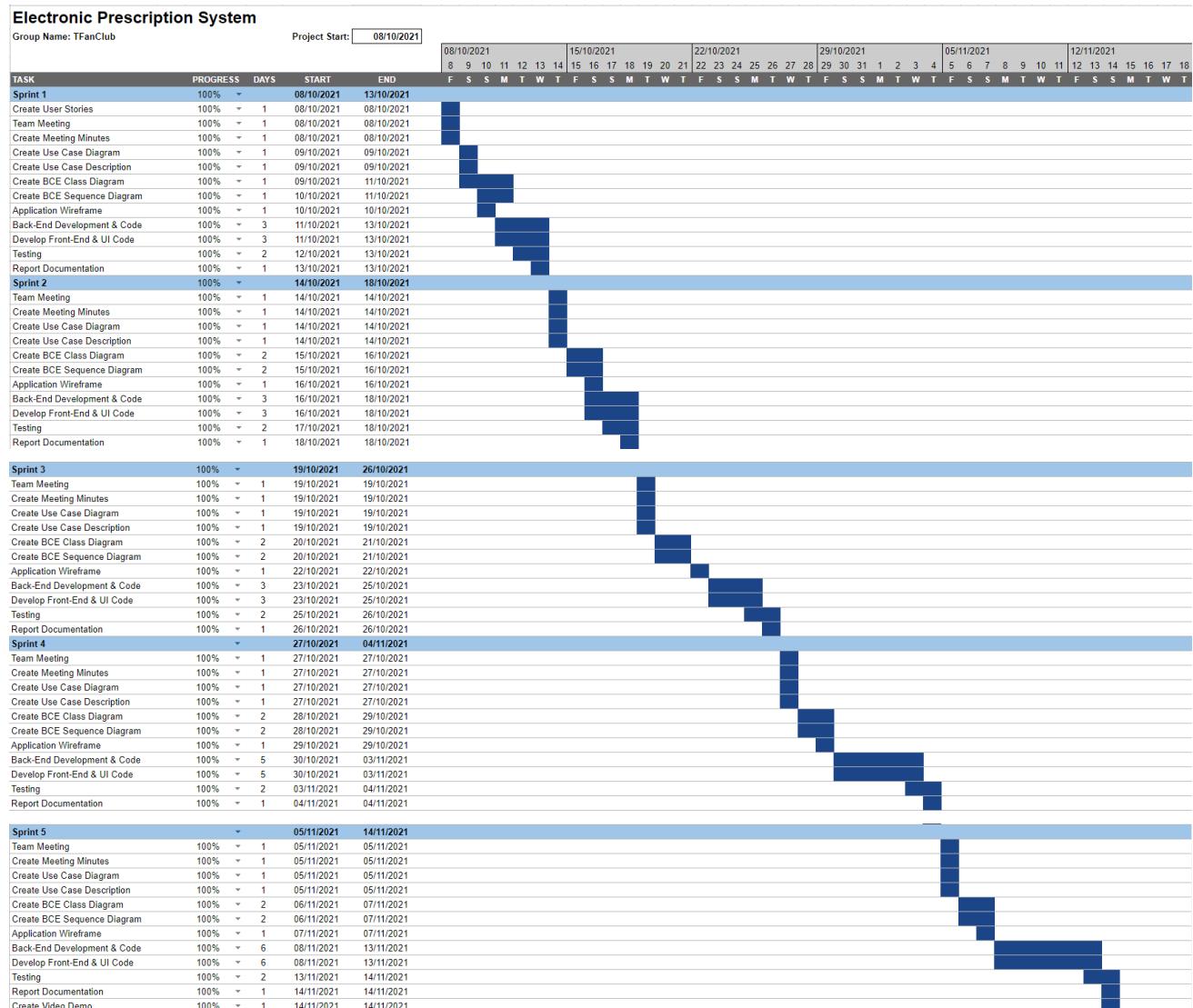
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# 1. Gantt Chart



## 2. Complete List of User Stories

Taiga ID	<b>Pharmacist</b>
2	As a Pharmacist, I want to login into my account, so that I can get access to data of patients and medications.
3	As a Pharmacist, I want to logout of my account, so that I can stop accessing data of patients and medications.
12	As a Pharmacist, I want to be able to update the status of the medications so that I know which patient has collected their prescription.
13	As a Pharmacist, I want to be able to view the prescriptions that have been prescribed so that I know which drugs to give the patient.
14	As a Pharmacist, I want to be able to enter the token given to the patient so that I can give the correct prescription to the patient.
	<b>Doctor</b>
4	As a Doctor, I want to login into my account, so that I can get access to data of my patients.
5	As a Doctor, I want to logout of my account, so that I can stop accessing data of my patients.
6	As a Doctor, I want to be able to add prescriptions for patients so that they know what drugs to get from the pharmacy
7	As a Doctor, I want to be able to update prescriptions, so I can prescribe the drugs to the patient.
8	As a Doctor, I want to be able to search prescriptions given to patients so I can understand what I have previously prescribed and what I should be prescribing next
9	As a Doctor, I want to be able to view prescriptions given to patients, so I can see what I have previously prescribed and what I have prescribed currently.
10	As a Doctor, I want to send electronic tokens to patients, so that they can collect their prescription at the pharmacy.
	<b>Patient</b>
15	As a Patient, I want to login into my account, so that I can access information about my prescriptions.
16	As a Patient, I want to logout of my account, so that I can stop accessing information.
17	As a Patient, I want to search for past prescriptions so that I can get information about the drugs I've taken before.
18	As a Patient, I want to view past prescriptions so that I know what drugs I was prescribed before.

19	As a Patient, I want to search for new prescriptions so that I can get information about the drugs I am prescribed
20	As a Patient, I want to view new prescriptions so that I know what drugs are prescribed to me.
	<b>Admin</b>
21	As an Admin, I want to login into my account, so that I can get access to the data of patients and staff.
22	As an Admin, I want to logout of my account, so that I can stop accessing data of patients and staff.
23	As an Admin, I want to edit account, so that I can update outdated information for patients
24	As an Admin, I want to add accounts, so that I can manually add in accounts for walk in patients
25	As an Admin, I want to search accounts, so that I can search information of patients and staff
26	As an Admin, I want to view account information, so that I can view information of patients and staff
27	As an Admin, I want to edit user profiles, so that I can update outdated accounts
28	As an Admin, I want to add user profiles, so that I can add in new staff or patients.
29	As an Admin, I want to search user profiles, so that I can search for a specific staff or patients.
30	As an Admin, I want to view user profiles, so that I can identify the profiles of users recorded.

### 3. Ethical Consideration and Discussion

#### Introduction

Ethics are considered critical when it comes to software development. Almost everyone is in contact with software today, be it using social media or buying food. With the establishment of the ACM Code of Ethics (for Software Development) in 1947, the code guidelines have been updated back in 2018, to keep up with the latest technology and the societal changes around said technology.

Maintaining such standards allow transparency and prevent unethical practices that prioritize profits over people's lives. With software playing a huge part in our daily lives, it is difficult to separate the ethics that affect people's daily life.

#### Ethical Considerations

##### 1. PUBLIC

Public interests have the highest priority when it comes to software development. Any software that does not adhere to the appropriate guidelines for ethical issues such as

accountability, health and safety, privacy, compliance with the law and more will not be approved for use.

## 2. CLIENT AND EMPLOYER

In the best interest of clients and employers, the software development team will provide services in areas of competence and be forthright and honest regarding any limitations with their experience and education. They will only legally and ethically obtain software for usage and any confidential information to be kept private, consistent with the public interest and the law.

## 3. PRODUCT

Only products and related modifications of the highest quality, acceptable cost and reasonable schedule, which have been cleared by clients and employers, are available for consideration by users and the public. Before this, adequate testing, debugging and review of software must be done to be in line and address any ethical, economic, cultural, legal and environmental issues.

## 4. JUDGEMENT

Only documents that were prepared under the supervision and disclosed to relevant parties of those conflicts of interest, that cannot be avoided, can be endorsed. The team must maintain integrity and independence in their professional judgement.

## 5. MANAGEMENT

Management for software development and maintenance must be ethical by ensuring good management for any projects, inclusive of any effective procedures for promotion of quality and reduction of risk. There needs to be fair agreement concerning ownership for any software, processes or intellectual property to which a software team member has contributed.

## 6. PROFESSION

The integrity and reputation of the profession must be consistent with the public interest, especially when it comes to any software and document the team is working on. The team must take responsibility, such as detecting, correcting and reporting errors.

## 7. COLLEAGUES

Members of the team should be fair and support each other, giving full credit for the work done by others and refraining from taking undue credit. Reviewing others' work must be done in an objective, candid and properly documented way.

## 8. SELF

Members themselves are participating in lifelong learning journeys when it comes to their profession and promotes ethical behaviours of said profession. Deepening individual knowledge and improvement of their abilities are to create safe, reliable, useful and high-quality software at reasonable cost and time.

## 4. CI/CD

We have tried to develop the Continuous Integration/Continuous Deployment (CI/CD) on the GitLab platform, but we faced difficulty and we are unable to solve the error. We followed what the lecturer had taught in the lecture, but we still faced errors such as 'cannot find symbols' and 'package does not exist'. We tried to include the package path just like how the lecturer taught us to include the junit's path and the other packages that we used while coding. We tried to recompile with -Xlint:unchecked for details according to the gitlab note and finding solutions online, however the error still persists.

.gitlab-ci.yml 424 Bytes

Edit Web IDE Pipeline Editor Replace

```
1 image: java:latest
2
3 stages:
4   - build
5   - test
6
7 build:
8   stage: build
9   script: /usr/lib/jvm/java-8-openjdk-amd64/bin/javac -cp .:ConnectionJarFiles/rs2xml.jar tFanClubProject/src/tFanClubProject/*.java
10  artifacts:
11    paths:
12      - tFanClubProject/src/tFanClubProject/.*
13
14
15 test:
16   stage: test
17   script: /usr/lib/jvm/java-8-openjdk-amd64/bin/javac -cp .:libs/junit-4-13.2.jar LoginPage
```

All 22 Finished Branches Tags

Clear runner caches CI lint Run pipeline

Filter pipelines

Status	Pipeline ID	Triggerer	Commit	Stages	Duration	C	⋮
✖ failed	#408949856 latest	●	▶ master -o 16a7571b ● Update .gitlab-ci.yml	✖ ➕	⌚ 00:00:34 ⌚ 4 hours ago	C	⋮
✖ failed	#408944174	●	▶ master -o 8371e61b ● Update .gitlab-ci.yml	✖ ➕	⌚ 00:00:36 ⌚ 4 hours ago	C	⋮
✖ failed	#408939929	●	▶ master -o 6b6f81b8 ● Update .gitlab-ci.yml	✖ ➕	⌚ 00:00:33 ⌚ 4 hours ago	C	⋮
✖ failed	#408938827	●	▶ master -o fedfad32 ● Update .gitlab-ci.yml	✖ ➕	⌚ 00:00:32 ⌚ 4 hours ago	C	⋮
✖ failed	#408485870 yaml invalid error	●	▶ master -o 4fa596f9 ● Update .gitlab-ci.yml		⌚ 1 day ago	⋮	
✖ failed	#408485370	●	▶ master -o 662a8b7f ● Update .gitlab-ci.yml	✖ ➕	⌚ 00:00:32 ⌚ 1 day ago	C	⋮



## 5.Sprint 1

### 5.1 User Stories & Diagrams

#### 5.1.1 Login (User Story #2 #4 #15 #21)

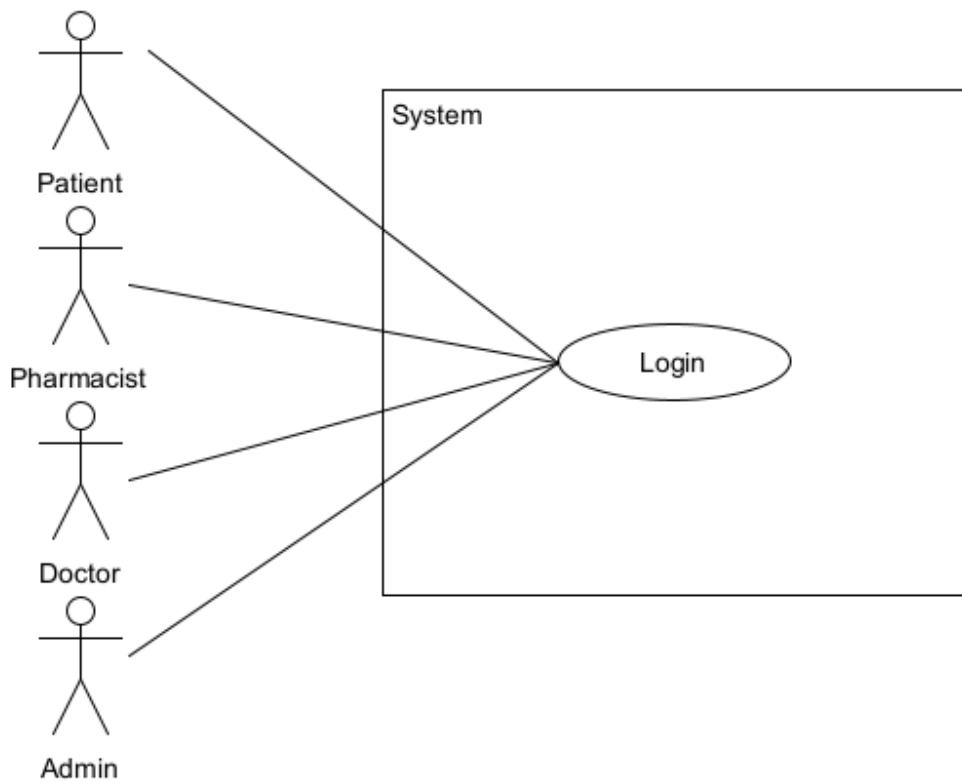
As a Pharmacist, I want to login into my account, so that I can get access to data of patients and medications.

As a Doctor, I want to login into my account, so that I can get access to data of my patients.

As a Patient, I want to login into my account, so that I can access information about my prescriptions.

As an Admin, I want to login into my account, so that I can get access to the data of patients and staff.

#### Use Case Diagram



#### Use Case Description

<b>Name:</b> LoginPage	<b>ID:</b> 2, 4, 15, 21
<b>Stakeholders and goals:</b> User - wants to login to their account	
<b>Actors:</b> Admin	
<b>Trigger:</b> User launches the system and loads the main page.	
<b>Preconditions:</b> -	
<b>Normal Flow:</b>	

1. User opens the application
2. User input username, password and clicks on log in
3. End

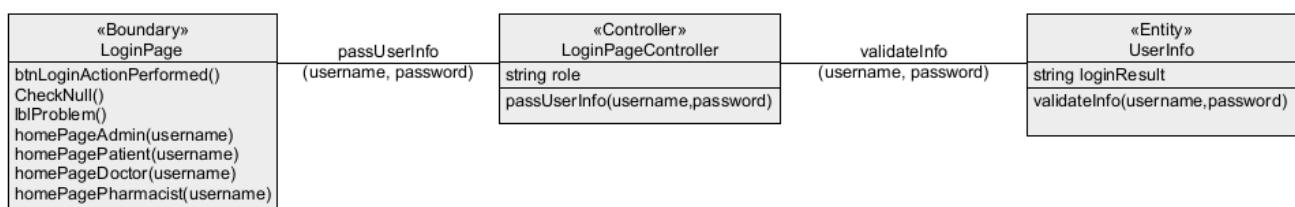
### Sub-Flows:

#### Alternatives/Exceptional Flows:

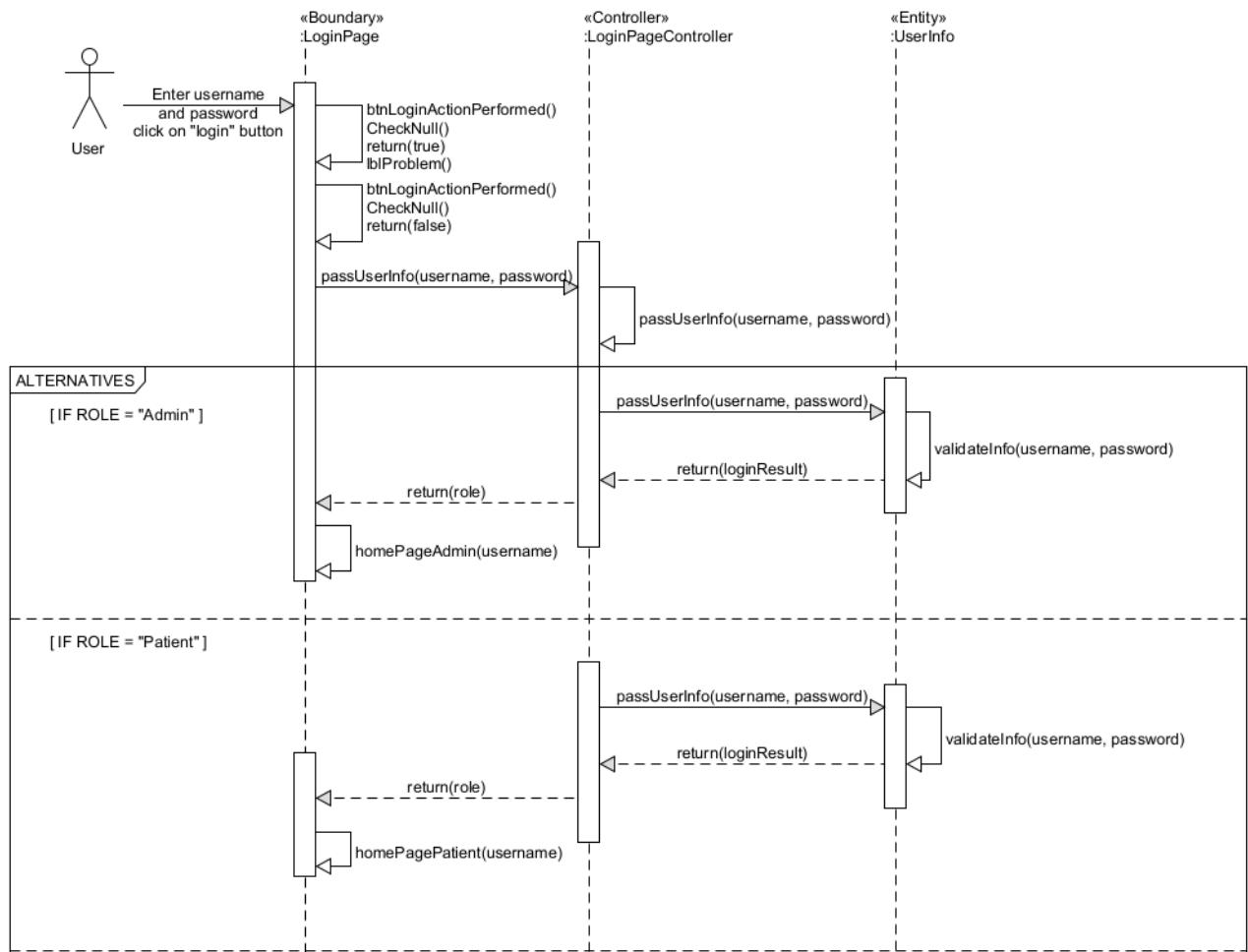
2a. The system detects that the field(s) are null. It will display an error message “Please enter both username and password”.

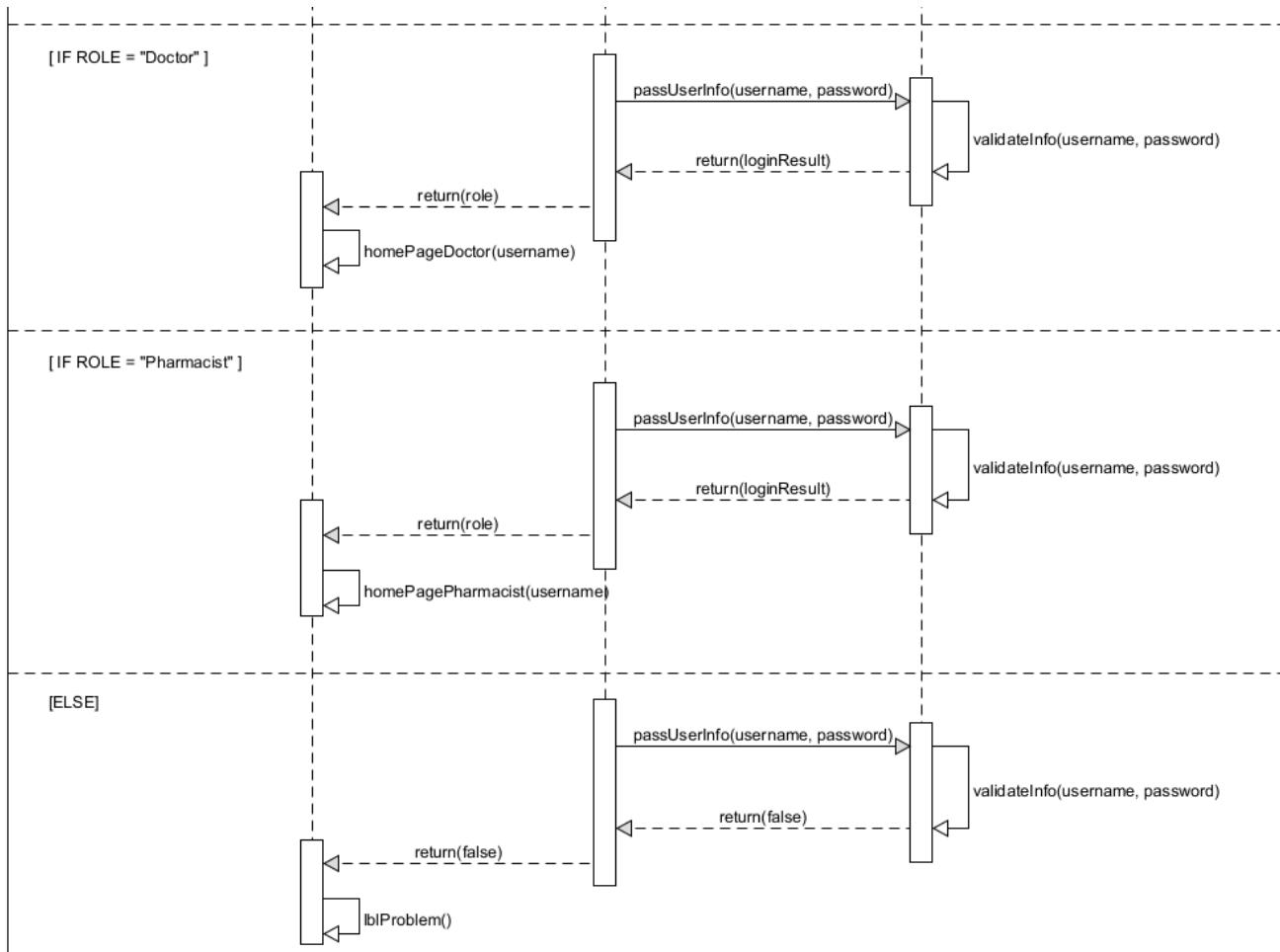
2b. The system detects that the field(s) are incorrect. It will display an error message “Incorrect username or password”

### BCE Diagram



### Sequence Diagram



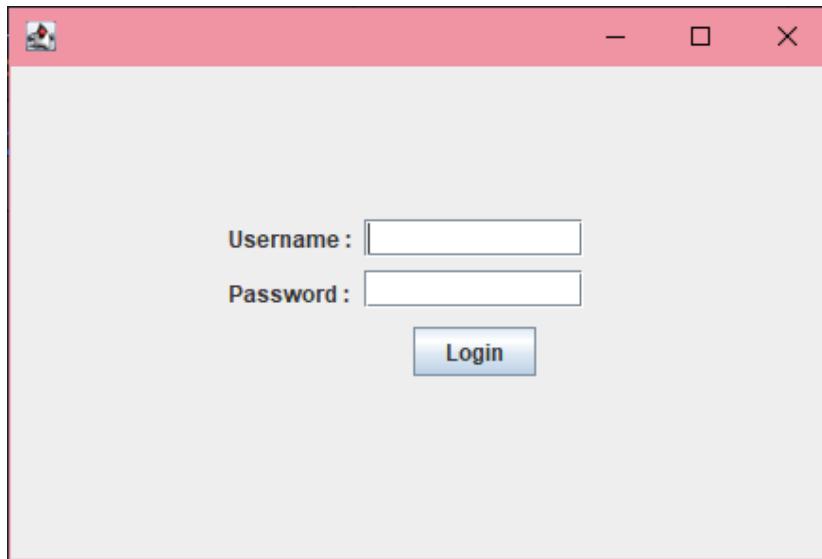


Wireframe

The wireframe shows a simple login interface within a rectangular frame:

- Username:** A text input field.
- Password:** A text input field.
- Login:** A blue rectangular button labeled "Login".

## GUI



## Test Case

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-1.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.1.2	Press the login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-2.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Junior Tantono
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-2.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-2.1.2	Press the login text box Enter Username and password Click 'login' button	patient userID = patient26 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-2.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-3.1
<b>Test Case Description :</b>	User login and logout
<b>Created by :</b>	Leviandran
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-3.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.1.2	Press the login text box Enter Username and password Click 'login' button	doctor userID = doctor1 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-3.1.3	Click 'log out' button	Click 'log out' button	Redirect to login page	Redirect to login page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-4.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-4.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-4.1.2	Press the login text box Enter Username and password Click 'login' button	userID = pharma2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-4.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

### 5.1.2 Logout (User Story #3 #5 #16 #22)

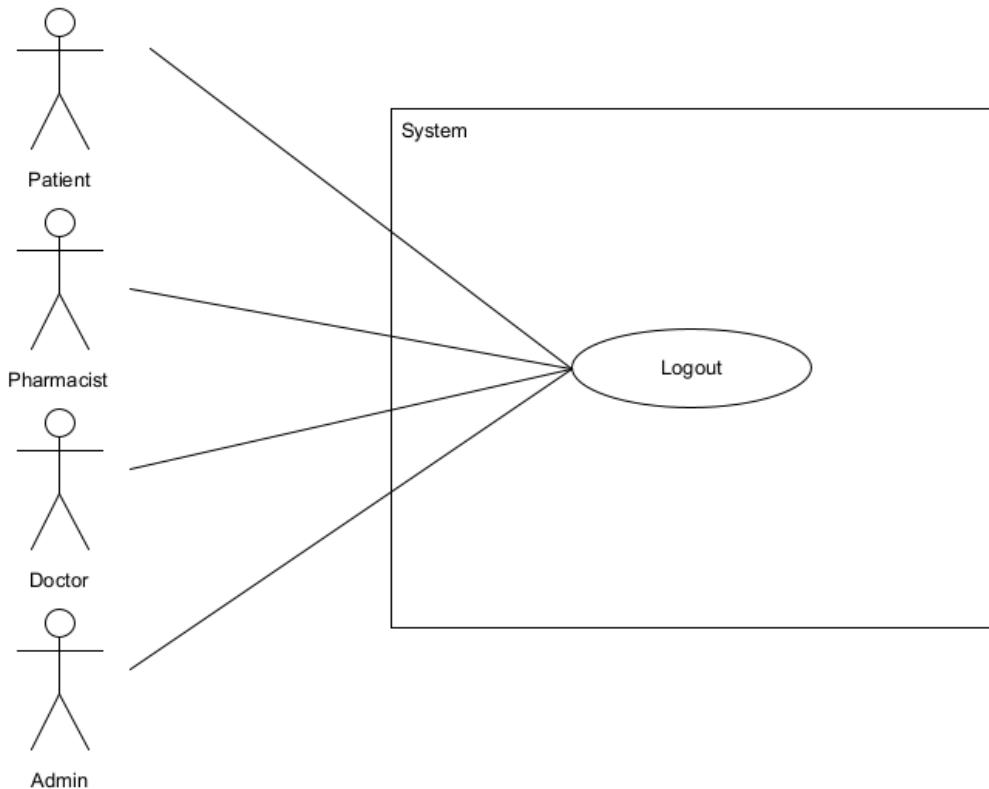
As a Pharmacist, I want to logout of my account, so that I can stop accessing data of patients and medications.

As a Doctor, I want to logout of my account, so that I can stop accessing data of my patients.

As a Patient, I want to logout of my account, so that I can stop accessing information.

As an Admin, I want to logout of my account, so that I can stop accessing data of patients and staff.

### Use Case Diagram



### Use Case Description

<b>Name:</b> Logout	<b>ID:</b> 3, 5, 16, 22
<b>Stakeholders and goals:</b> User - wants to logout of the system	
<b>Actors:</b> Pharmacist, Doctor, Patient, Admin	
<b>Trigger:</b> User clicks on logout button	

**Preconditions:** User must be logged in to the system

**Normal Flow:**

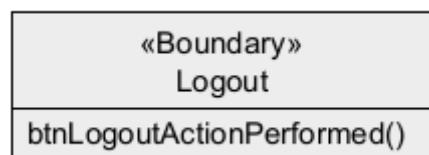
1. User clicks on logout button
2. User redirected to login page
3. End

**Sub-Flows:** -

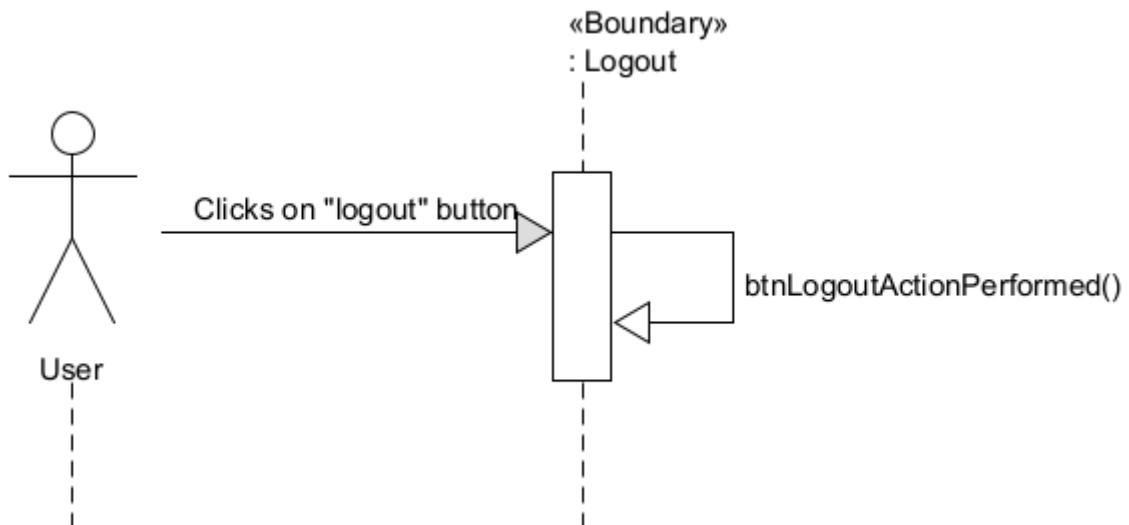
**Alternatives/Exceptional Flows:**

-

BCE Diagram



Sequence Diagram



Wireframe

*Pharmacist*

Logout

Update

Search Patient:

Existing Prescriptions:

*Patient*

Logout

Prescription Number:  Search

*Admin*

[Add/Update](#)    [Logout](#)

Patient

Search ID:

Username:

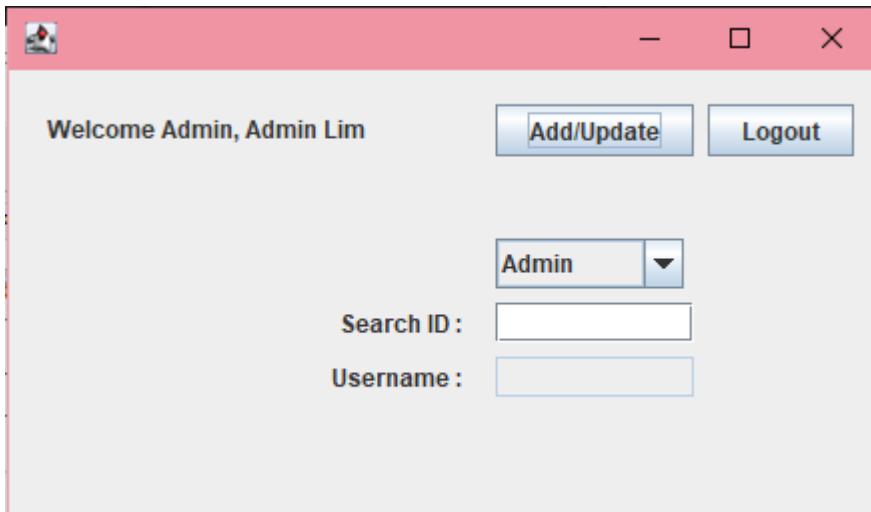
*Doctor*

[Logout](#)

Search :  [View](#)

PatientID	username	Full Name	Last Name	DOB	Email	token
1	patient1	Ben	A	10101999	p1@gmail.com	
2	patient2	Ben	B	11101999	p2@gmail.com	
3	patient3	Ben	C	12101999	p3@gmail.com	
4	patient4	Ben	D	13101999	p4@gmai.lcom	

## GUI



Welcome Admin, Admin Lim

Add/Update    Logout

Admin

Search ID :

Username :



Welcome John

Log Out

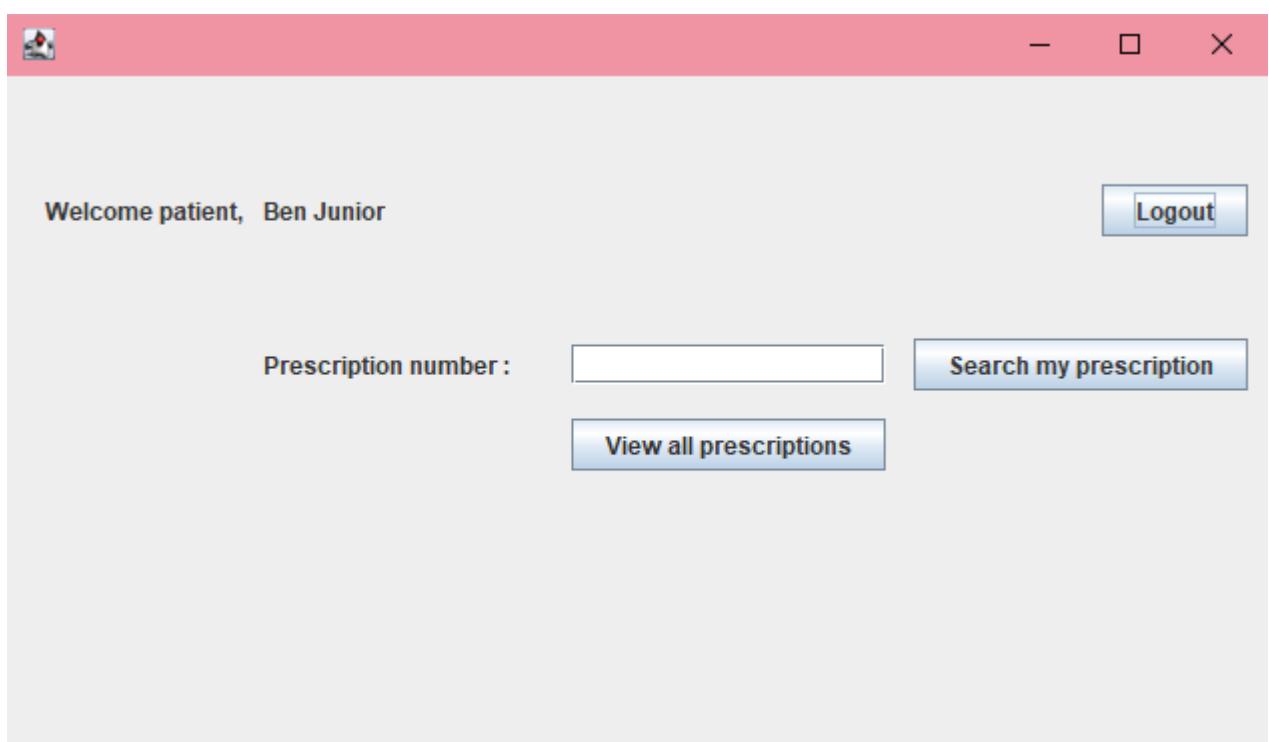
Update Prescription

Search Patient :

Existing Prescriptions : Please enter a valid patient ID



A screenshot of a Windows application window titled "Doctor". The window has a red header bar with standard minimize, maximize, and close buttons. The main content area contains the word "Doctor" in large black font, followed by a red error message "Please enter Patient Name". On the right side, there is a blue "Logout" button. Below this, there is a search bar labeled "Search patient ID:" with a text input field and a "View" button. A large empty rectangular area is present below the search bar.



A screenshot of a Windows application window showing a welcome message. The header bar is red with standard buttons. The main content area displays the text "Welcome patient, Ben Junior" and a blue "Logout" button. Below this, there is a search bar labeled "Prescription number:" with a text input field and a "Search my prescription" button. A blue "View all prescriptions" button is also visible.

## Test Case

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-1.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.1.2	Press the login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-2.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Junior Tantono
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-2.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-2.1.2	Press the login text box Enter Username and password Click 'login' button	patient userID = patient26 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-2.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-3.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Leviandran
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-3.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.1.2	Press the login text box Enter Username and password Click 'login' button	doctor userID = doctor1 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-3.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-4.1
<b>Test Case Description :</b>	User Login and Logout
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-4.1.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-4.1.2	Press the login text box Enter Username and password Click 'login' button	userID = pharma2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-4.1.3	Press 'Log out' button	Click logout button	Redirect to log in page	Redirect to log in page	Pass		

## 5.2 Evidence of Methodologies

### 5.2.1 Meeting Minutes

## TFanClub

## Meeting Minutes

08 October, 2021

**Project Name: Electronic Prescription System**

**Present:** Junior Tantono, Leviandran S/O Selvakumaran, Brandon Wong, Tan Zhen Yi, Jimson Wong Yew Kee, Chng Yia Qing Whitney, Mao Xingyu, Yin Pei Ying

**Meeting Objective:** Begin Sprint 1, Further discussion of application expectations and planning

### **Agenda:**

- Review user stories
- Define deliverables in Sprint 1
- Create product backlog
- Create Sprint 1 backlog

S/No	Action Item	Person Responsible	Due Date
1	Assign team member roles	Whitney Chng, Junior Tantono	08/10/2021
2	Creation of user stories	Done by Team	08/10/2021
3	Reviewing user stories	Done by team	08/10/2021
4	Discussion and implementation of necessary diagrams for sprint 1	Whitney, Zhen Yi, Pei Ying, Xing Yu	11/10/2021
5	Planning and implementation of application for sprint 1	Junior, Brandon, Leviandran, Jimson	13/10/2021

S/No	Notes
1	Identify members' strengths and weaknesses to utilize everyone to their fullest potential and produce the best results. Discussion between members to create

	a mutual understanding of expectations and standards to prevent any miscommunication in the future as not everyone has worked together before
2	Identify project requirements and expectations to create user stories
3	Finalize user stories and deciding on sprint 1 goals and deliverables
4	Do up use case diagrams, descriptions, bce diagram, sequence diagrams
5	Decide on application language, UI, database. Implement requirements and do necessary testing

**Date and time of next meeting:** 14/10/2021, 2:00PM – 3:00PM

Prepared By: Whitney Chng

## 5.2.2 Taiga

USER STORY	>	>	>	CLOSED	<
<p>^ #2 As a Pharmacist, I want to login into my account, so that I can get access to data of patients and medications.</p> <p>N/E</p>	NEW			<p>#78 Create Use Case Diagram for Login</p> 	
				<p>#79 Create Use Case Description for Login</p> 	
				<p>#80 Create BCE + Sequence Diagram for Login</p> 	
				<p>#81 Back-end Development for Login</p> 	
				<p>#268 Back-end Code for Login</p> 	
				<p>#82 Front-end Code for Login</p> 	
				<p>#83 Create UI for Login</p> 	
				<p>#180 Create Test Data for Login</p> 	
				<p>#84 Test Case for Login</p> 	

<p>^</p>	<p>#21 As an Admin, I want to login into my account, so that I can get access to the data of patients and staffs.</p>	<p>+ +</p>	<p><b>N/E</b></p>
			<p>NEW</p>
			<p><b>#31 Create Use Case Diagram for Login</b></p>
			
			<p><b>#32 Create Use Case Description for Login</b></p>
			
			<p><b>#33 Create BCE + Sequence Diagram for Login</b></p>
			
			<p><b>#34 Back-end Development for Login</b></p>
			
			<p><b>#263 Back-end Code for Login</b></p>
			
			<p><b>#35 Front-end Code for Login</b></p>
			
			<p><b>#37 Create UI for Login</b></p>
			
			<p><b>#177 Create Test Data for Login</b></p>
			
			<p><b>#39 Test Case for Login</b></p>
			

<p>^</p> <p>#4 As a Doctor, I want to login into my account, so that I can get access to data of my patients.</p> <p>N/E</p>	<p>+ </p> <p>NEW</p>	<p>#49 Create Use Case Diagram for Login</p> <p>#50 Create Use Case Description for Login</p> <p>#51 Create BCE + Sequence Diagram for Login</p> <p>#52 Back-end Development for Login</p> <p>#266 Back-end Code for Login</p> <p>#53 Front-end Code for Login</p> <p>#54 Create UI for Login</p> <p>#178 Create Test Data for Login</p> <p>#56 Test Case for Login</p>
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<p>^ #15 As a Patient, I want to login into my account, so that I access information about my prescriptions.</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p> <ul style="list-style-type: none"> <li>#40 Create Use Case Diagram for Login </li> <li>#42 Create Use Case Description for Login </li> <li>#43 Create BCE + Sequence Diagram for Login </li> <li>#44 Back-end Development for Login </li> <li>#267 Back-end Code for Login </li> <li>#45 Front-end Code for Login </li> <li>#46 Create UI for Login </li> <li>#179 Create Test Data for Login </li> <li>#48 Test Case for Login </li> </ul>
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^ #5 As a Doctor, I want to logout of my account, so that I can stop accessing data of my patients.

N/E

+ +≡

NEW

#86 Create Use Case Diagram for Logout



#87 Create Use Case Description for Logout



#88 Create BCE + Sequence Diagram For Logout



#264 Back-end Code for Logout



#90 Front-end Code for Logout



#91 Create UI for Logout



#92 Test Case for Logout



<p>^ #16 As a Patient, I want to logout of my account, so that I can stop accessing information.</p> <p>N/E</p>	<p>+</p> <p>NEW</p>	<p>#58 Create Use Case Diagram for Logout</p> 
		<p>#59 Create Use Case Description for Logout</p> 
		<p>#60 Create BCE + Sequence Diagram for Logout</p> 
		<p>#271 Back-end Code for Logout</p> 
		<p>#62 Front-end Code for Logout</p> 
		<p>#63 Create UI for Logout</p> 
		<p>#64 Test Case for Logout</p> 

^ #3 As a Pharmacist, I want to logout of my account, so that I can stop accessing to data of patients and medications.

N/E

NEW

#65 Create Use Case Diagram for Logout



#66 Create Use Case Description for Logout



#67 Create BCE + Sequence Diagram for Logout



#270 Back-end Code for Logout



#68 Front-end Code for Logout



#69 Create UI for Logout



#71 Test Case for Logout



<p>^ #22 As an Admin, I want to logout of my account, so that I can stop accessing data of patients and staffs.</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p>		<p>#73 Create Use Case Diagram for Log Out</p>  <p>#74 Create Use Case Description for Logout</p>  <p>#85 Create BCE + Sequence Diagram for Logout</p>  <p>#269 Back-end Code for Logout</p>  <p>#41 Front-End Code for Log out</p>  <p>#57 Design UI for Log Out</p>  <p>#77 Test case for Log Out</p> 
<p>^ Storyless tasks</p>	<p>+ +≡</p>		<p>#276 Final Report Documentation</p>  <p>Not assigned</p>

## 5.2.3 Sprint Review

### Progress Report 1

**Project Name:** Electronic Prescription System

**Team Members:** Junior Tantono, Whitney Chng, Brandon Wong, Leviandran S/O Selvakumaran, Tan Zhen Yi, Jimson Wong, Mao Xingyu, Yin Pei Ying

**Date:** 13/10/2021

**Reporting Period:** 08/10/2021 - 13/10/2021

#### **Work completed this reporting period:**

This is the first sprint of the project. The team was formed and members were formally introduced to each other. The team was required to start on the project by identifying the project requirements and to develop the user stories. The team also had a discussion about the type of programming language and platform to utilise for the project. After a mutual agreement between the team, the user stories are uploaded into Taiga. Subsequently, the team completed sprint 1's deliverables.

#### **Work to complete next reporting period:**

The team needs to discuss and select the prioritized user stories for the second sprint. This will allow for better time and resource management to ensure that the project is going in the correct direction.

#### **What's going well and why:**

Team members are open-minded and friendly. Discussion of roles and responsibilities went smoothly as well. The team had a mutual understanding of their own capability and expectations which helped boost team confidence although some of us had never worked together before. A few members have some experience with project management before which made it easier to understand the project needs. The features needed to be done were doable and the first sprint was completed in time.

#### **What's not going well and why:**

Several team members have weaker programming backgrounds which caused a minor inconvenience to the discussion plan as the team had to simplify the terms in order for everyone to understand.

**Suggestions/Issues:**

Due to the lack of programming knowledge within the team, the project team will be split into 2 main sub-teams, development of the online system and documentation. To reduce the probability of miscommunication between each sub-team, the members are to cross check their progress with each other.

## Member Contribution

Name	Task(s) Completed
Junior Tantono	Database development Testing
Brandon Wong	Front-end, UI, Back-end Coding Testing
Leviandran S/O Selvakumaran	Database development Testing
Jimson Wong Yew Kee	Database development
Whitney Chng	Class Diagram Sequence Diagram Final Report
Mao Xingyu	Class Diagram Sequence Diagram Final Report
Tan Zhen Yi	Use Case Diagram Use Case Description Final Report
Yin Pei Ying	Wireframe Update Taiga Final Report

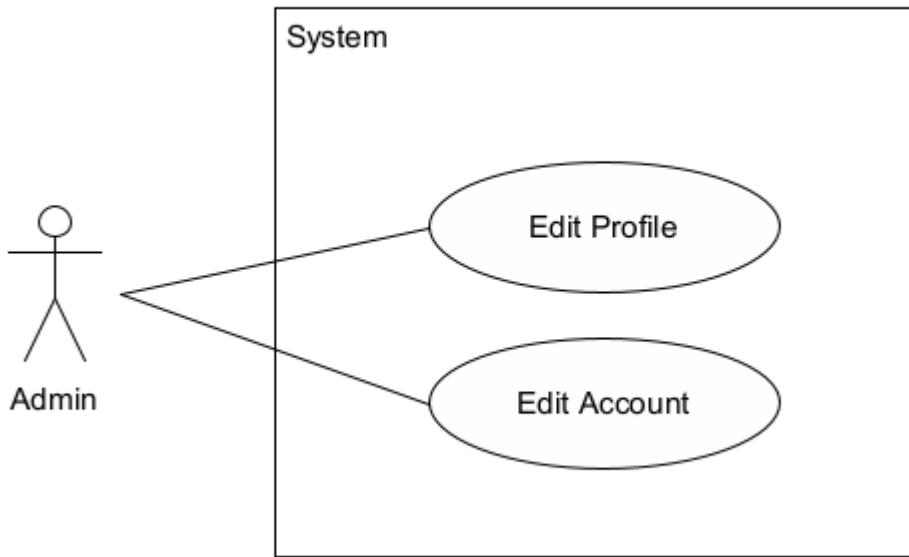
## 6.Sprint 2

### 6.1 User Stories & Diagrams

#### 6.1.1 Admin Edit Account (User Story #23, #27)

As an Admin, I want to edit account, so that I can update outdated information for patients  
As an Admin, I want to edit user profiles, so that I can update outdated accounts.

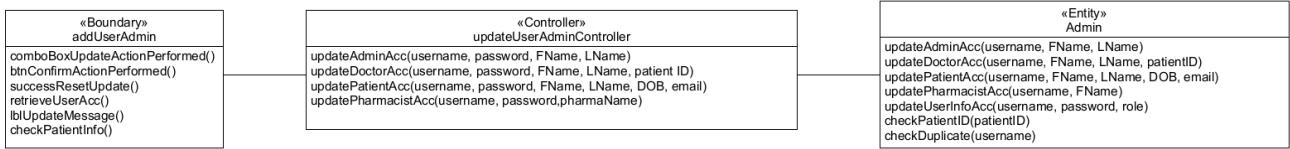
## Use Case Diagram



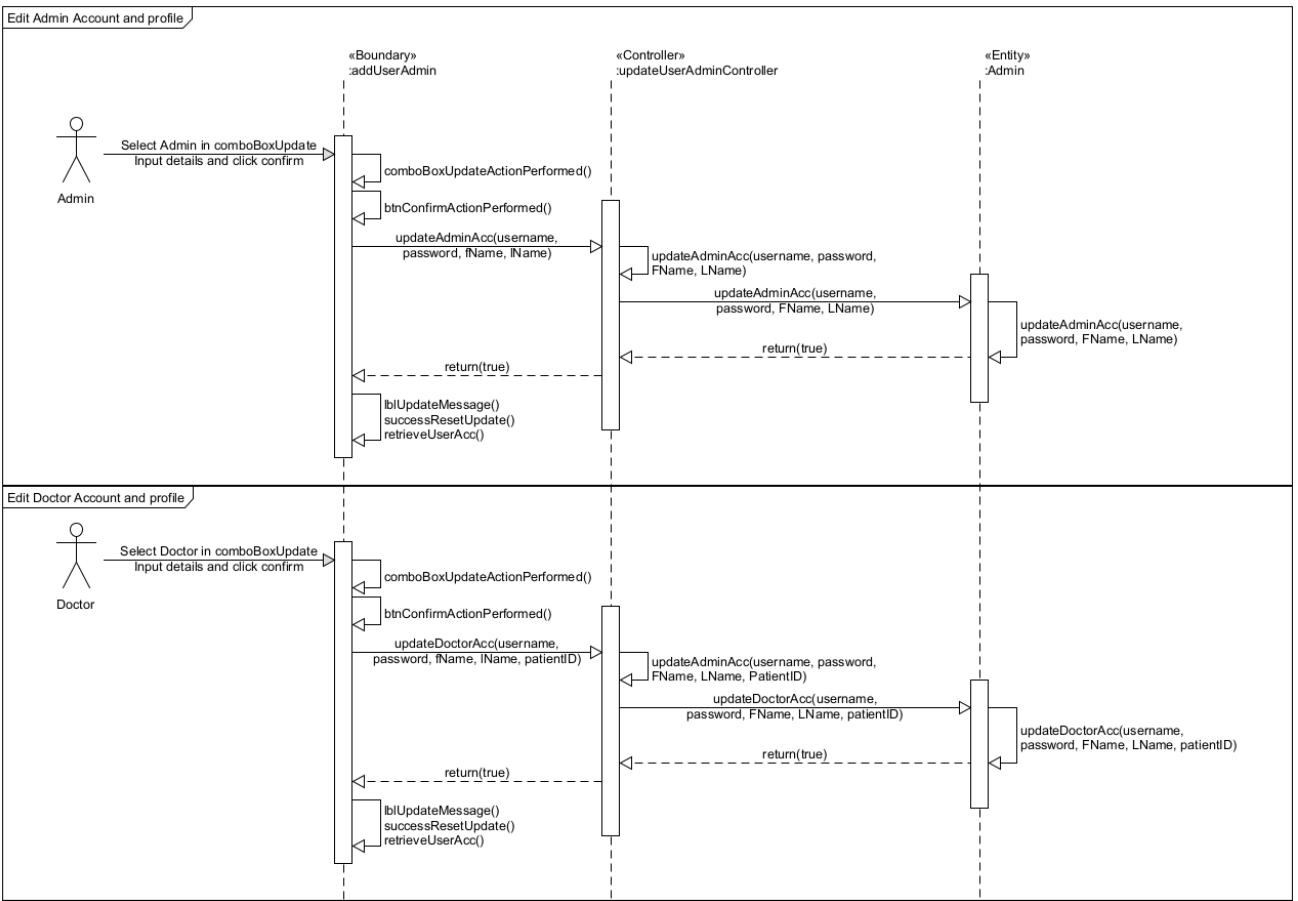
## Use Case Description

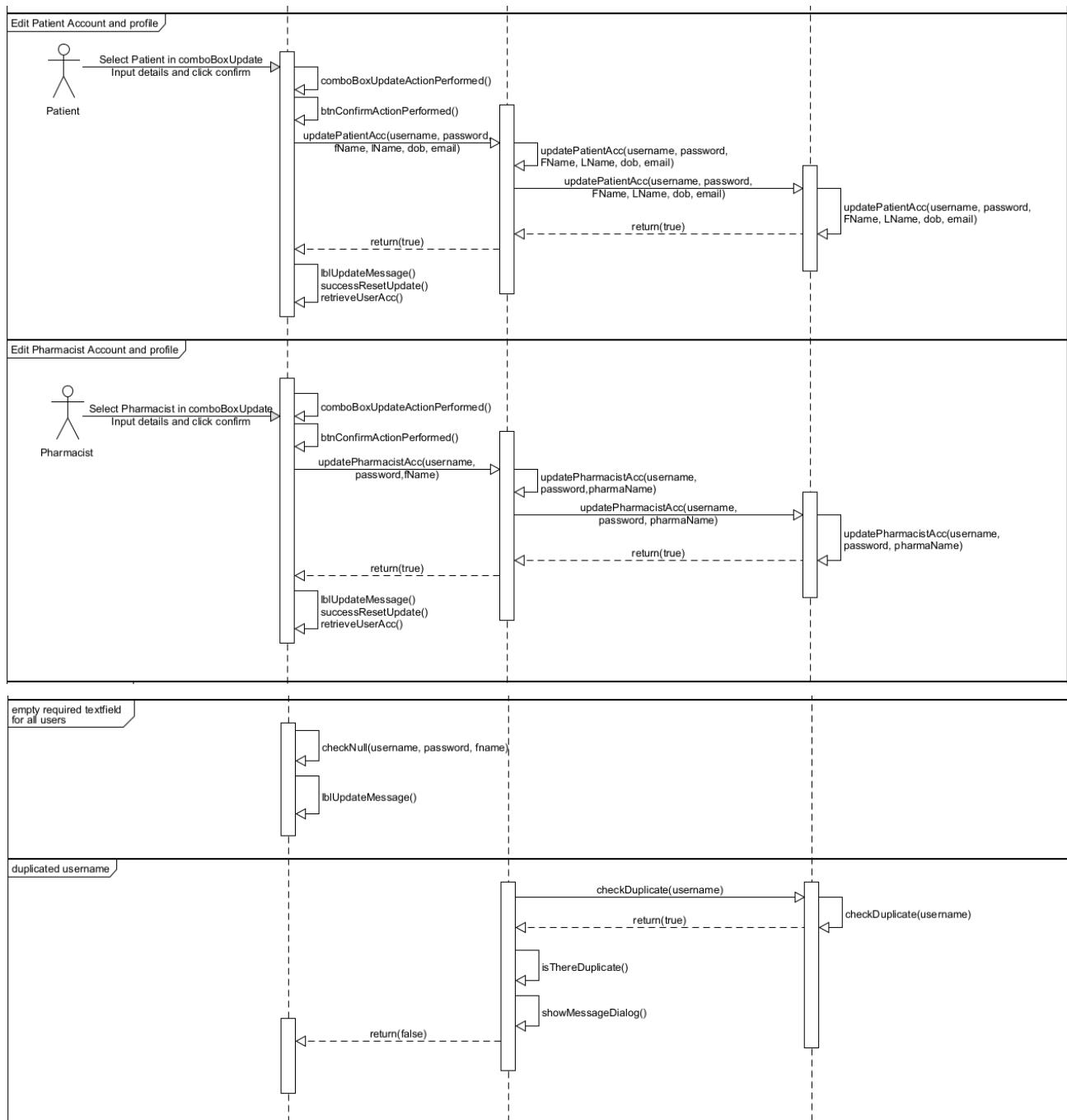
<b>Name:</b> AdminEditAccount	<b>ID:</b> 23, 27
<b>Stakeholders and goals:</b> Admin want to edit account and profiles, so that he can update outdated information for patients	
<b>Actors:</b> Admin	
<b>Trigger:</b> Click on "Confirm" button	
<b>Preconditions:</b> Admin must be logged in to their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"><li>1. Choose the a type of user</li><li>2. Enter the username tagged to the user</li><li>3. Change the outdated information of the account and profile</li><li>4. Click the confirm button</li><li>5. End.</li></ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> <ul style="list-style-type: none"><li>3a. If any required field is empty, the system will display an error message "Please key in all required fields". (adding any user)</li><li>3b. If there is a duplicated username, the system will display an error message "Duplicate username" (adding any user)</li></ul>	

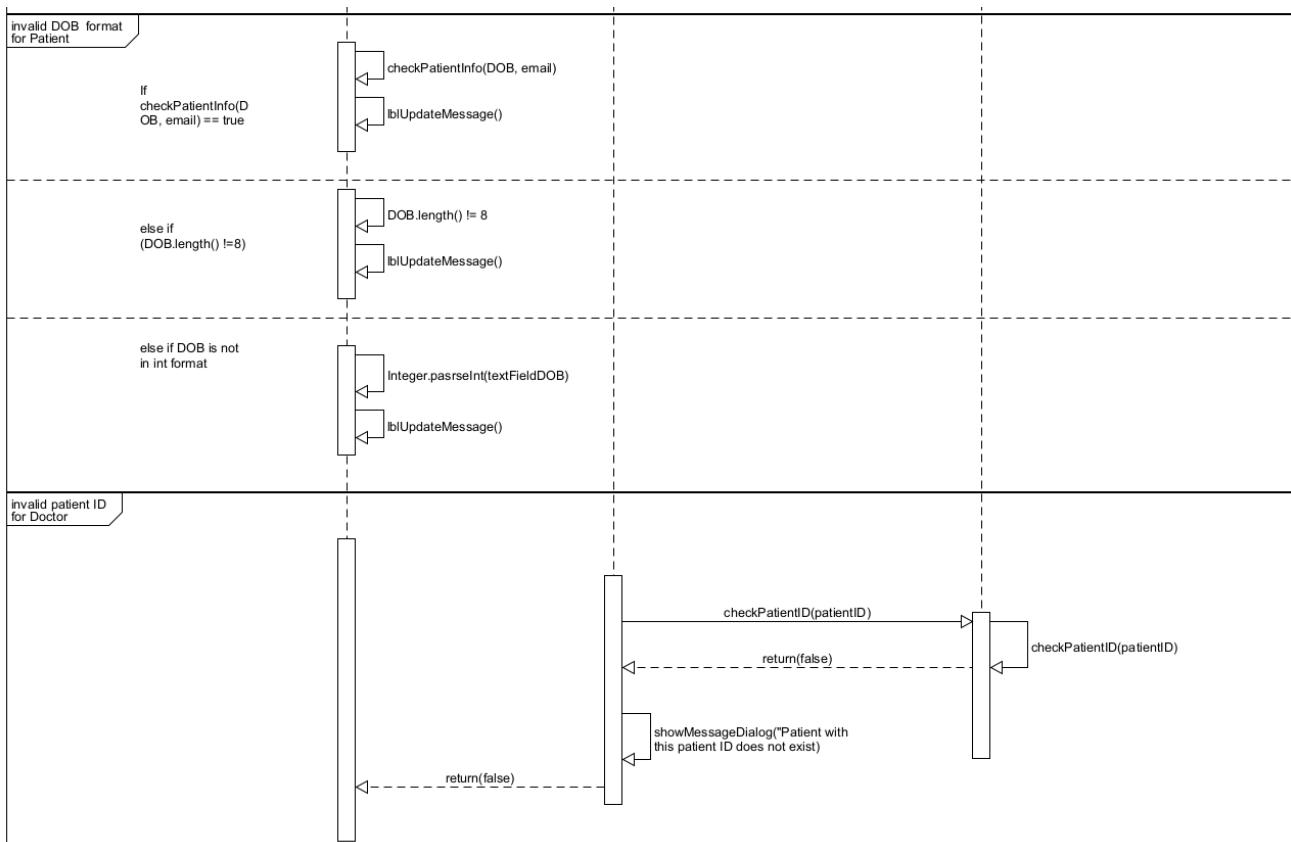
## BCE Diagram



## Sequence Diagram



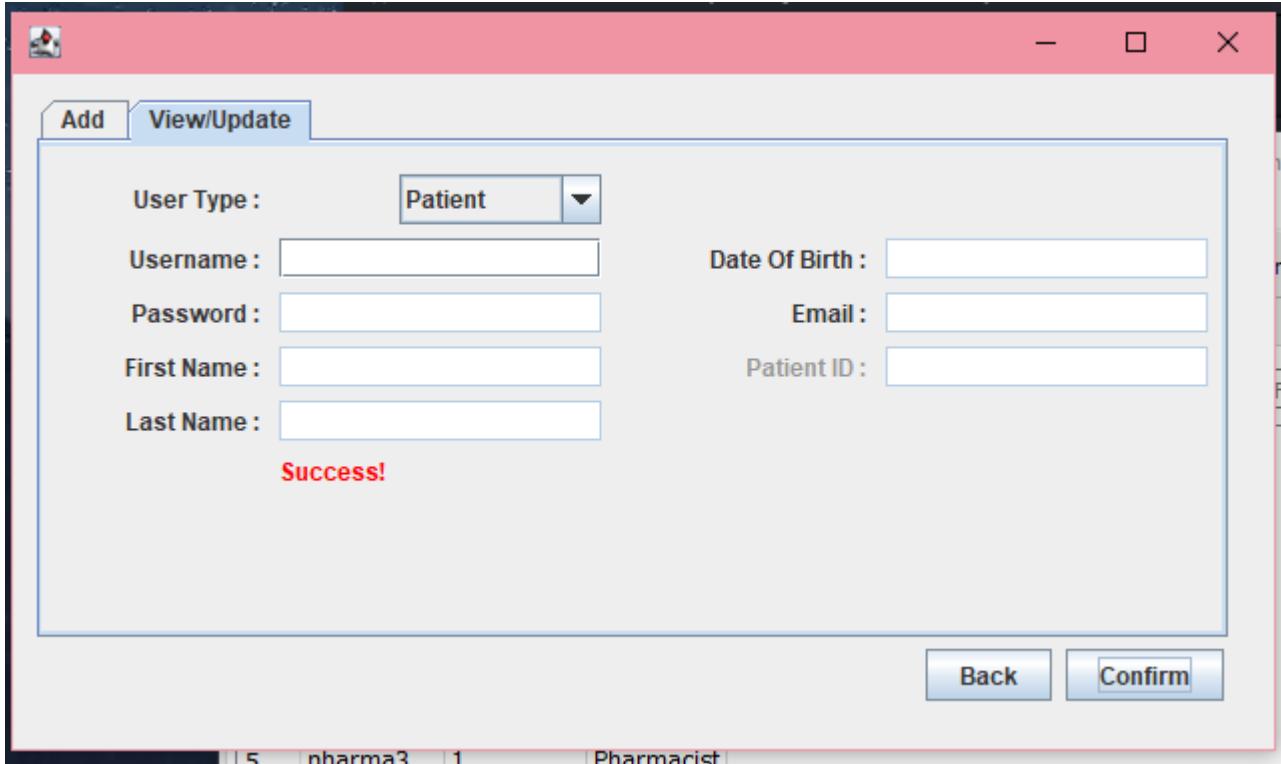




## Wireframe

<b>Add</b>	<b>View/ Update</b>
User Type:	<input style="width: 100px; height: 30px; border: none; background-color: #e0e0ff; color: blue; font-weight: bold; padding: 5px; border-radius: 5px; margin-bottom: 10px;" type="button" value="Patient"/>
Username:	<input style="width: 200px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="text" value="patient1"/>
Password:	<input style="width: 200px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="password" value="....."/>
Date Of Birth:	<input style="width: 150px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="text" value="15121999"/>
Email:	<input style="width: 200px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="text" value="patient1@gmail.com"/>
First Name:	<input style="width: 150px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="text" value="Ben"/>
Last Name:	<input style="width: 150px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px;" type="text" value="Juniorr"/>
PatientID :	<input style="width: 150px; height: 30px; border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-bottom: 10px; background-color: #e0e0ff;" type="text" value=""/>
<b>Success!</b>	
<input style="width: 100px; height: 30px; border: none; background-color: #e0e0ff; color: blue; font-weight: bold; padding: 5px; border-radius: 5px; margin-bottom: 10px;" type="button" value="Back"/>	<input style="width: 100px; height: 30px; border: none; background-color: #e0e0ff; color: blue; font-weight: bold; padding: 5px; border-radius: 5px; margin-bottom: 10px;" type="button" value="Confirm"/>

## GUI



## Test Case

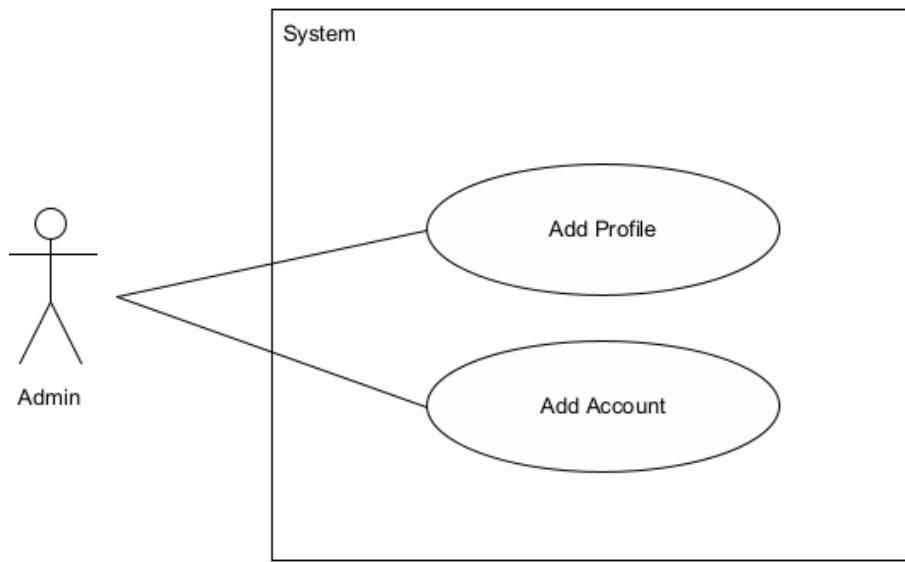
<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-1.2
<b>Test Case Description :</b>	Update outdated information.
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.2.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.2.2	Press the login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.2.3	Click 'Add/Update' button	Click Add/Update button	Redirect to Add panel	Redirect to Add panel	Pass		
TC-1.2.4	Click 'Update' button	Click Update button	Redirect to Update panel	Redirect to Update panel			
TC-1.2.5	Select user type Enter Username to get the data.	userType = patient username = patient1	Patient1 info will be filled.	Patient1 info will be filled.	Pass		
TC-1.2.6	Press the email text box Enter the new email Click "Confirm" button	Email: patient1@gmail.com click confirm button	Successfully updated	Successfully updated	Pass		

### 6.1.2 Admin Add Account (User Story #24, #28)

As an Admin, I want to add accounts, so that I can manually add in accounts for walk in patients.  
As an Admin, I want to add user profiles, so that I can add in new staff or patients.

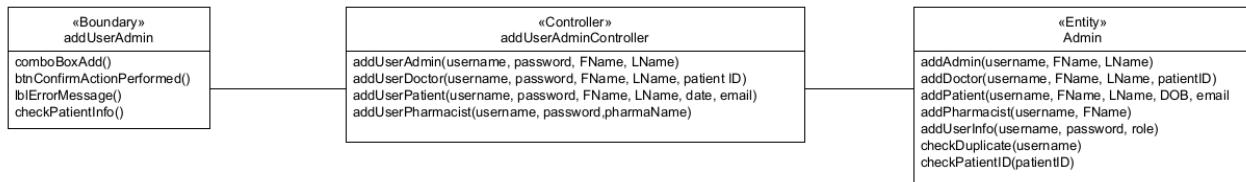
## Use Case Diagram



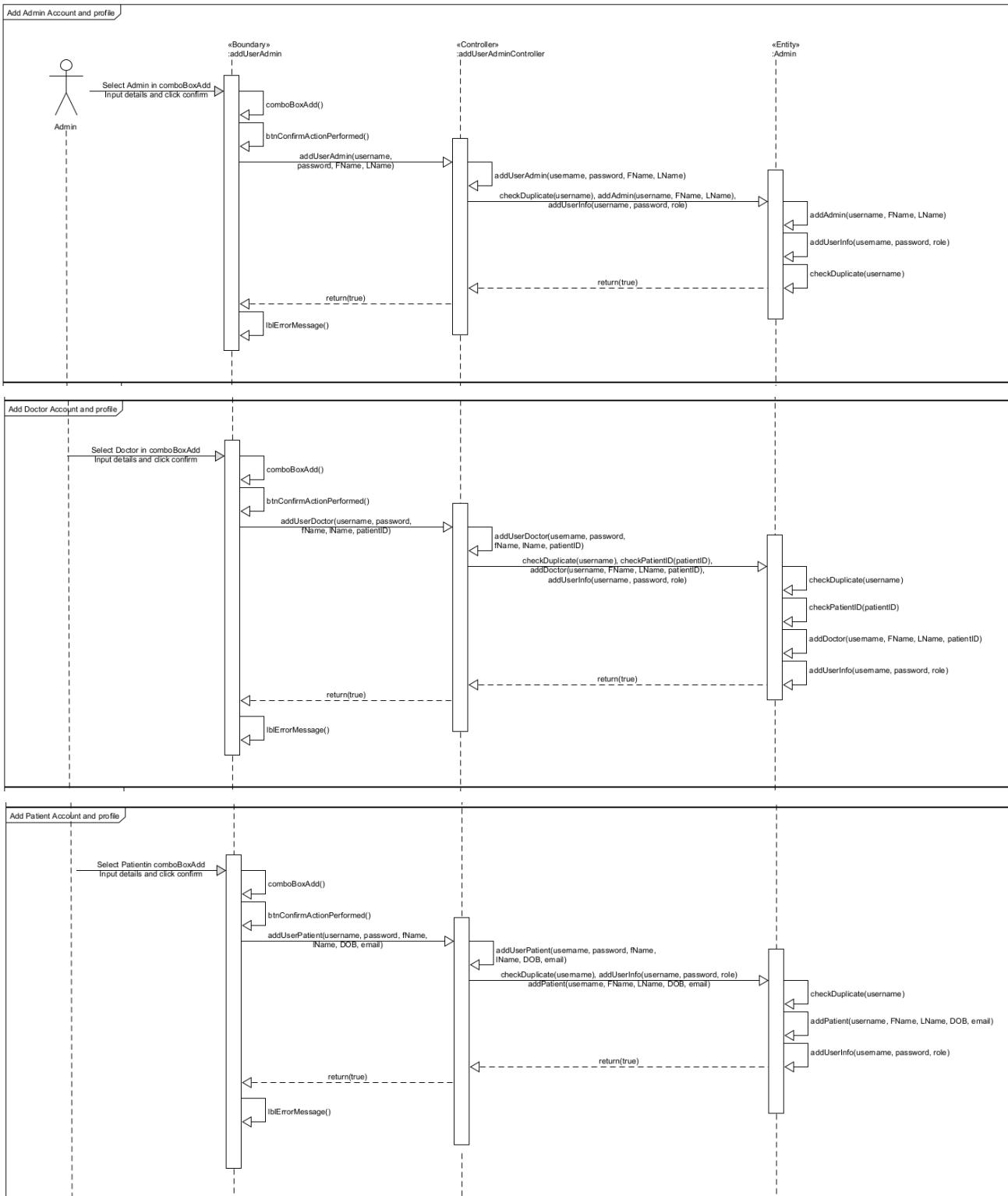
## Use Case Description

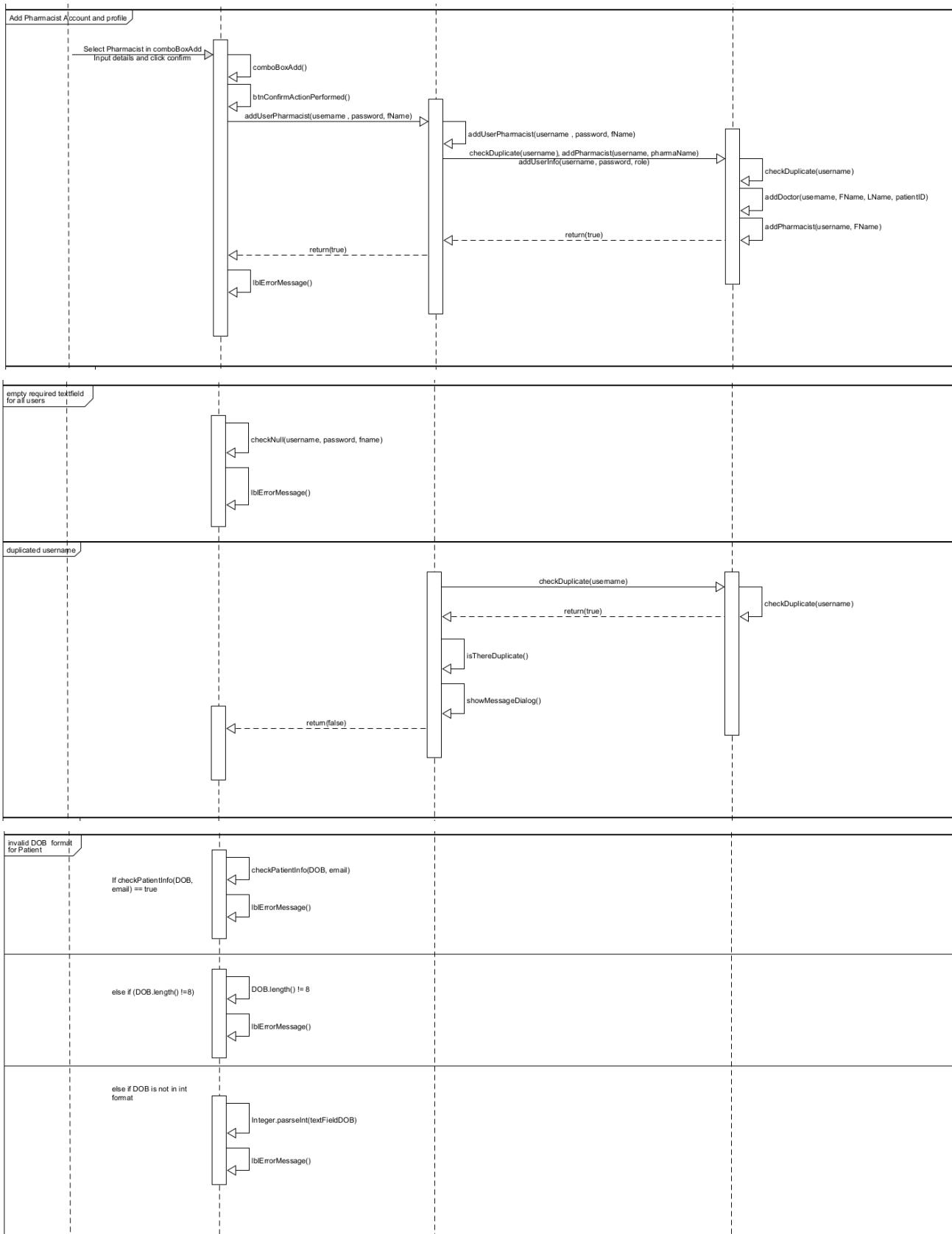
<b>Name:</b> AdminAddAccountProfile	<b>ID:</b> 24, 28
<b>Stakeholders and goals:</b> Admin wants to add account and profiles, so that he can manually add in new staff or patients' information	
<b>Actors:</b> Admin	
<b>Trigger:</b> Click on "Confirm" button	
<b>Preconditions:</b> Admin must be logged into their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"> <li>1. Choose the type user role to add information for</li> <li>2. Key in all relevant information</li> <li>3. Click the confirm button</li> <li>4. End</li> </ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> <ul style="list-style-type: none"> <li>3a. If any required field is empty, the system will display an error message "Please key in all required fields". (adding any user)</li> <li>3b. If there is a duplicated username, the system will display an error message "Duplicate username" (adding any user)</li> <li>3c. If DoB format is wrong, the system will display an error message "DOB needs to be in DDMMYYYY format" (Adding patient)</li> <li>3d. If there isn't a patient with the patient ID, the system will display an error message "patient with this patient ID does not exist" (Adding Doctor)</li> </ul>	

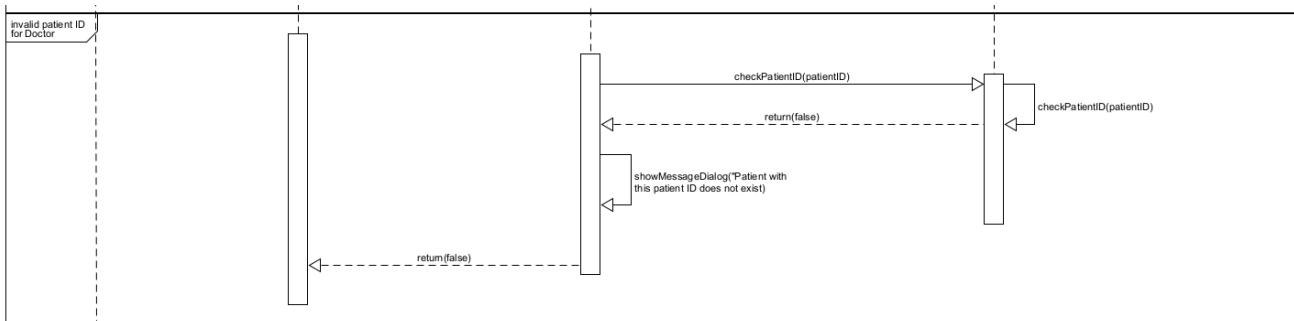
## BCE Diagram



## Sequence Diagram





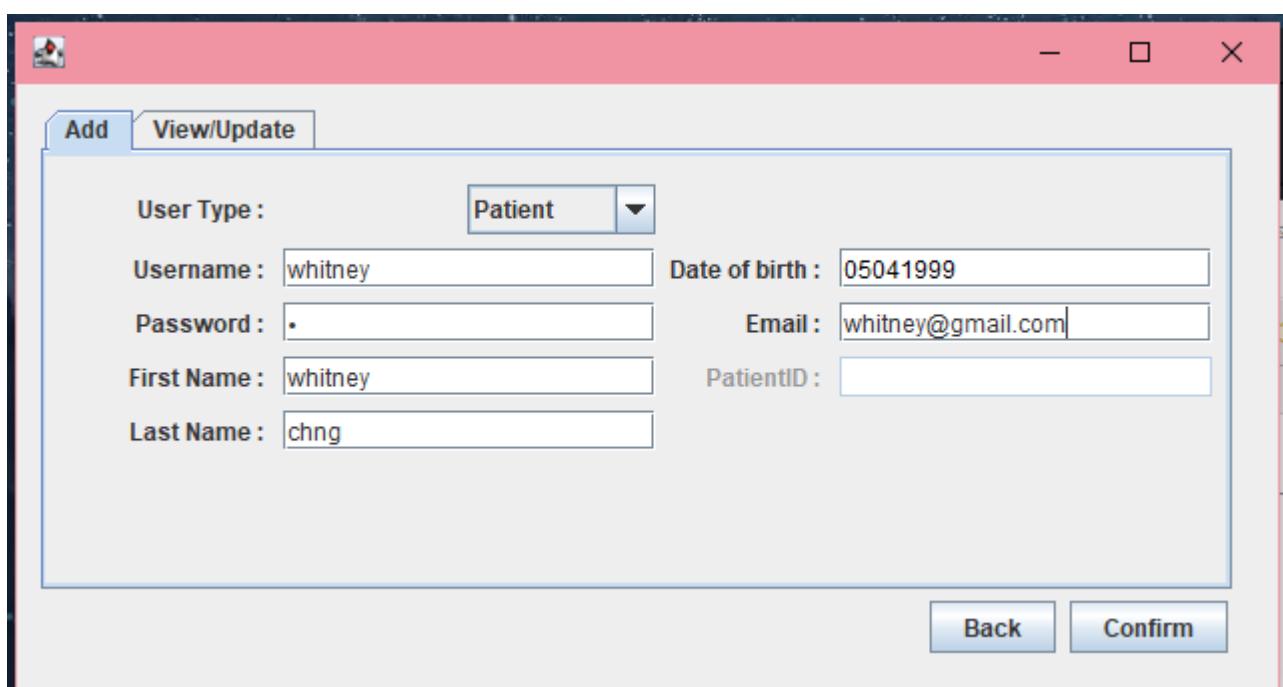


Wireframe

This wireframe represents the user interface for adding or viewing/updating a user. It includes fields for User Type (Admin dropdown), Username, Password, First Name, Last Name, Date Of Birth (DD/MM/YYYY), Email, and PatientID (disabled). Navigation buttons for Back and Confirm are also present.

Add	View/Update
User Type:	Admin
Username:	
Password:	
First Name:	
Last Name:	
Date Of Birth:	DD/MM/YYYY
Email:	
PatientID :	
Back	Confirm

GUI



Add View/Update

User Type : Patient

Username :

Date of birth :

Password :

Email :

First Name :

PatientID :

Last Name :

**Success!**

Back Confirm

### Test Case

Project Name :	TFanClub Electronic Prescription System
Test CaseID :	TC-1.3
Test Case Description :	Add accounts and profile for all user types
Created by :	Jimson Wong
Pre-Condition :	Assume all the data are stored in the database userinfo_3
Test Data File :	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.3.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.3.2	Press the Login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.3.3	Click 'Add/Update' button	Click Add button	Redirect to Add page	Redirect to Add page	Pass		
TC-1.3.4	Select user type Enter new user info.	usestype = patient username = patient101 password = 1 Firstname = patient Lastname = 101 DateofBirth= 11112021 Email= patient101@gmail.com Click Confirm button	Patient 101 will be successfully created	Patient 101 will be successfully created	Pass		

## 6.2 Evidence of Methodologies

### 6.2.1 Meeting Minutes

## TFanClub

## Meeting Minutes

14 October, 2021

**Project Name: Electronic Prescription System**

**Present:** Junior Tantono, Leviandran S/O Selvakumaran, Brandon Wong, Tan Zhen Yi, Jimson Wong Yew Kee, Chng Yia Qing Whitney, Mao Xingyu, Yin Pei Ying

**Meeting Objective:** Begin Sprint 2, Further discussion of application expectations and planning

**Agenda:**

- Define deliverables in Sprint 2
- Create Sprint 2 backlog
- Discuss about final report

S/No	Action Item	Person Responsible	Due Date
1	Reviewing of user stories	Done by Team	14/10/2021
2	Discussion and implementation of necessary diagrams for sprint 2	Whitney, Zhen Yi, Pei Ying, Xing Yu	16/10/2021
3	Planning and implementation of application for sprint 2	Junior, Brandon, Leviandran, Jimson	18/10/2021
4	Final Report Discussion	Done By Team	18/10/2021

S/No	Notes
1	Decide of priority and importance of user story to determine the main focus of sprint 2
2	Do up use case diagrams, descriptions, bce diagram, sequence diagrams and other documentations
3	Implement functions for sprint 2 and do necessary testing

**Date and time of next meeting:** 19/10/2021, 2:00PM – 3:00PM

### 6.2.2 Taiga

The screenshot shows a Taiga user story board. At the top, there's a header with 'USER STORY' and a 'CLOSED' status indicator. Below the header, a backlog item is listed:

^ #23 As an Admin, I want to edit account, so that I can update outdated information for users  
N/E NEW

To the right of the backlog item, a vertical stack of tasks is shown, each with a small circular icon and a task ID and description:

- #135 Create Use Case Diagram for Admin Edit Account
- #136 Create Use Case Description for Admin Edit Account
- #137 Create BCE + Sequence Diagram for Admin Edit Account
- #138 Back-End Development for Admin Edit Account
- #272 Back-end Code for Admin Edit Account
- #139 Front-End Code for Admin Edit Account
- #140 Create UI for Admin Edit Account
- #141 Test case for Admin Edit Account

<span data-bbox="160 168 182 190">^</span>	<p>#24 As an Admin, I want to add accounts, so that I can manually add in accounts for walk in patients</p>	<span data-bbox="526 168 601 190">+ +</span> <span data-bbox="553 316 601 339">NEW</span>		<div data-bbox="971 204 1348 260"> <span data-bbox="971 249 1035 316"></span> <span data-bbox="971 204 1348 260">#142 Create Use Case Diagram for Admin Add Account</span> </div> <div data-bbox="971 384 1348 440"> <span data-bbox="971 428 1035 496"></span> <span data-bbox="971 384 1348 440">#143 Create Use Case Description for Admin Add Account</span> </div> <div data-bbox="971 563 1326 619"> <span data-bbox="971 608 1035 676"></span> <span data-bbox="971 563 1326 619">#144 Create BCE + Sequence Diagram for Admin Add Account</span> </div> <div data-bbox="971 743 1329 799"> <span data-bbox="971 788 1035 855"></span> <span data-bbox="971 743 1329 799">#145 Back-End Development for Admin Add Account</span> </div> <div data-bbox="971 923 1357 979"> <span data-bbox="971 968 1035 1035"></span> <span data-bbox="971 923 1357 979">#273 Back-end Code for Admin Add Account</span> </div> <div data-bbox="971 1102 1373 1158"> <span data-bbox="971 1147 1035 1215"></span> <span data-bbox="971 1102 1373 1158">#146 Front-End Code for Admin Add Account</span> </div> <div data-bbox="971 1282 1303 1338"> <span data-bbox="971 1327 1035 1394"></span> <span data-bbox="971 1282 1303 1338">#147 Create UI for Admin Add Account</span> </div> <div data-bbox="971 1462 1303 1529"> <span data-bbox="971 1507 1035 1574"></span> <span data-bbox="971 1462 1303 1529">#148 Test Case for Admin Add Account</span> </div>
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^ #28 As an Admin, I want to add user profiles, so that I can add in new staffs or patients.

N/E

+ +≡

NEW

#156 Create Use Case Diagram for Admin Add Profile



#157 Create Use Case Description for Admin Add Profile



#158 Create BCE + Sequence Diagram for Admin Add Profile



#159 Back-End Development for Admin Add Profile



#275 Back-end Code for Admin Add Profile



#160 Front-End Code for Admin Add Profile



#161 Create UI for Admin Add Profile



#162 Test Case for Admin Add Profile



<p>^</p> <p>#27 As an Admin, I want to edit user profiles, so that I can update outdated accounts.</p>	<p>N/E</p>	<p>+ +≡</p> <p>NEW</p>	<p>#149 Create Use Case Diagram for Admin Edit Profile</p>  <p>#150 Create Use Case Description for Admin Edit Profile</p>  <p>#151 Create BCE + Sequence Diagram for Admin Edit Profile</p>  <p>#152 Back-End Development for Admin Edit Profile</p>  <p>#274 Back-end Code for Admin Edit Profile</p>  <p>#153 Front-End Code for Admin Edit Profile</p>  <p>#154 Create UI for Admin Edit Profile</p>  <p>#155 Test Case for Admin Edit Profile</p> 
<p>^</p> <p>Storyless tasks</p>	<p>+ +≡</p>		<p>#277 Final Report Documentation</p>  <p>Not assigned</p>

## 6.2.3 Sprint Review

### Progress Report 2

<p><b>Project Name:</b> Electronic Prescription System</p> <p><b>Team Members:</b> Junior Tantono, Whitney Chng, Brandon Wong, Leviandran S/O Selvakumaran, Tan Zhen Yi, Jimson Wong, Mao Xingyu, Yin Pei Ying</p> <p><b>Date:</b> 18/10/2021</p> <p><b>Reporting Period:</b> 14/10/2021 - 18/10/2021</p>
<p><b>Work completed this reporting period:</b></p> <ul style="list-style-type: none"><li>• Discussion of project deliverables for sprint 2</li><li>• Update user story and tasks in Taiga</li><li>• Completion of tasks required for each user story</li><li>• Testing of functions to ensure that they work accordingly</li><li>• Create final report document</li></ul>
<p><b>Work to complete next reporting period:</b></p> <p>The team has to discuss and select the prioritized user stories for the third sprint.</p>
<p><b>What's going well and why:</b></p> <p>Understanding the project and product needs was simple, and the team was able to meet the sprint goals on time. The team came to a mutual agreement easily and the work that had to be completed was done smoothly.</p>
<p><b>What's not going well and why:</b></p> <p>Team members have personal commitments to attend that other members were not notified about. This caused a small disruption in the scheduling plan.</p>
<p><b>Suggestions/Issues:</b></p> <p>The team has to communicate with one another so that we are aware of each others' personal commitments in order to improve the project scheduling and resource management. This is also to ensure that the team leader can delegate tasks to each member with proper considerations in mind. Members who are busy with their personal</p>

commitments have to manage their time efficiently in order to complete their tasks on time.

#### Member Contribution

Name	Task(s) Completed
Junior Tantono	Back-End Development Populate database
Brandon Wong	Front-End, Back-End UI Code Testing
Leviandran S/O Selvakumaran	Back-End Development Populate database
Jimson Wong Yew Kee	Back-End Development Populate database
Whitney Chng	Gantt Chart Final Report
Mao Xingyu	Use Case Diagram & Description Class Diagram Sequence Diagram
Tan Zhen Yi	Update Taiga Final Report
Yin Pei Ying	Gantt Chart Wireframe

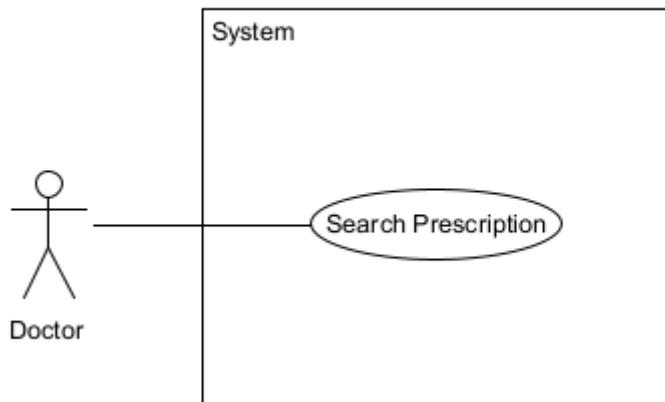
## 7. Sprint 3

### 7.1 User Stories & Diagrams

#### 7.1.1 Doctor Search (#8)

As a Doctor, I want to be able to search prescriptions given to patients so I can understand what I have previously prescribed and what I should be prescribing next.

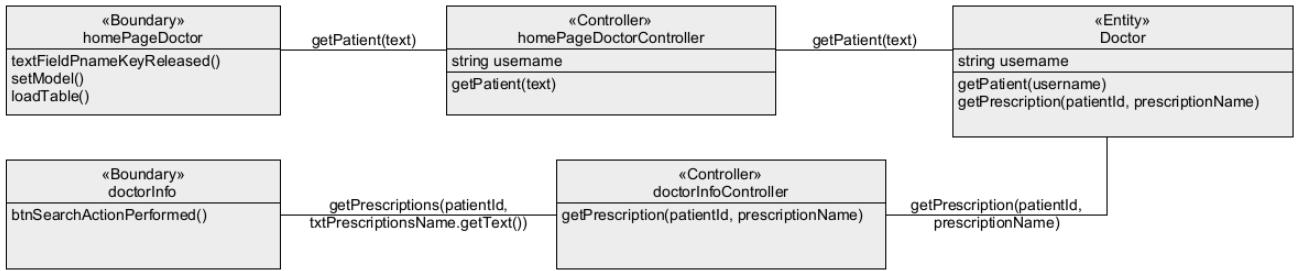
## Use Case Diagram



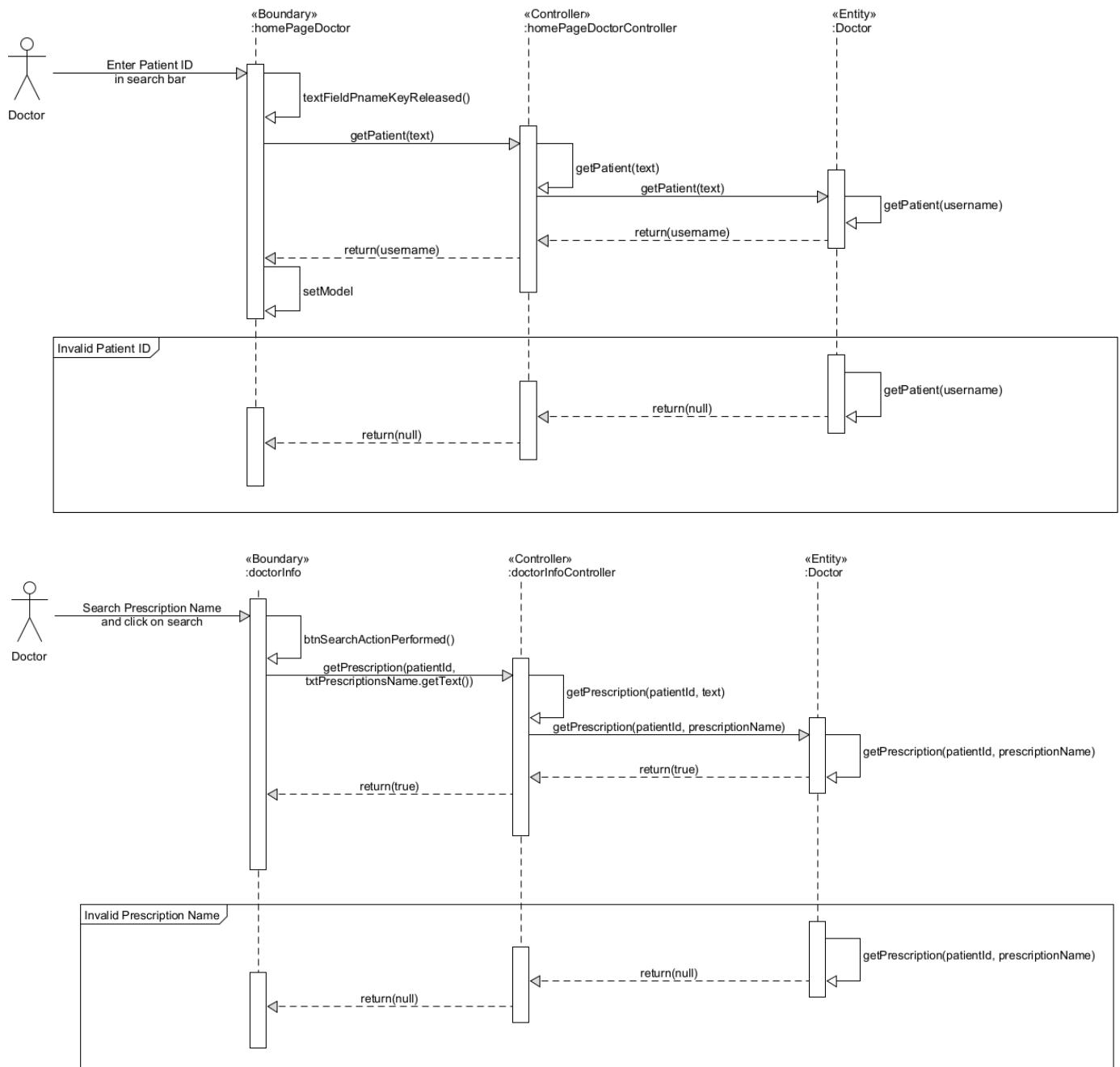
## Use Case Description

<b>Name:</b> DoctorSearch	<b>ID:</b> 8
<b>Stakeholders and goals:</b>	
A. Doctor wants to search for patient to find their prescription history B. Doctor wants to search for specific prescriptions he has prescribed to his patient	
<b>Actors:</b> Doctor	
<b>Trigger:</b>	
A. Doctor input patient ID onto the search bar B. Click on "Search" button	
<b>Preconditions:</b> Doctor must be logged into their account.	
<b>Normal Flow:</b>	
A.	
1. User input patient ID onto the search bar 2. The system will search for the patient ID 3. The system will display the patient information as a row	
B.	
1. User input prescription name and click on the "Search" button 2. The system will search for the prescription tagged with the patient's prescription list 3. The system will display the searched prescription	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b>	
A.	
2a. System detects that the patient ID is null, an error message "Please enter Patient Name" 2b. System detects that the patient ID does not exist, nothing will be displayed.	
B.	
1a. System detects that the prescription name does not exist, nothing will be displayed.	

## BCE Diagram



## Sequence Diagram



Wireframe

*Doctor*

Logout

Search :  View

PatientID	username	Full Name	Last Name	DOB	Email
1	patient1	whitney	chng	10101999	whitney@gmail.com

*Doctor*

Back

Search Prescriptions:  Search

History of Patient

Add Update

Date Prescribed	Medication	Dosage
18022021	Aderall	1

GUI

The screenshot shows a Windows application window titled "Doctor". In the top right corner, there are standard window controls: a minimize button, a maximize button, and a close button. Below the title bar, the word "Logout" is displayed in a blue rectangular button. The main content area has a light gray background. At the top left, the word "Doctor" is written in a large, bold, dark font. Below it, a red error message reads "Please enter Patient Name". A search bar is present with the placeholder text "Search patient ID:" followed by a text input field containing the number "1" and a "View" button. Below the search bar is a table with six columns: patientID, username, patientFName, patientLName, patientDOB, and patientEmail. The first row contains the data: patientID 1, username patient1, patientFName Ben, patientLName Junior, patientDOB 10111999, and patientEmail onetime@gmai... The rest of the window is a large, empty gray space.

This screenshot shows a Windows application window titled "Doctor". The window has a pink header bar with standard window controls. In the top right corner, there is a "Back" button. The main content area has a light gray background. At the top left, the word "Doctor" is written in a large, bold, dark font. Below it, a search bar is labeled "Search Prescriptions:" with the placeholder text "Aderall" and a "Search" button. Underneath the search bar, the text "History of Ben Junior" is displayed. Below this, there are two buttons: "Add" and "Update". A table with three columns: datePrescribed, medication, and dosage is shown. It contains two rows of data: one for 20042020 with medication Aderall and dosage 1, and another for 15012020 with medication Aderall and dosage 1. The rest of the window is a large, empty gray space.

## Test Case

<b>Project Name</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-3.3
<b>Test Case</b>	Search for prescribed prescriptions
<b>Created by :</b>	Leviandran
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if
TC-3.3.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.3.2	Press the login text box Enter Username and password Click 'login' button	doctor userID = doctor1 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-3.3.3	Press the search text box Enter patientID	Search patient = patient1	A row of information related to patient1 will be displayed	A row of information related to patient1 will be displayed	Pass		
TC-3.3.4	Click 'view' button	Click 'view' button	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Pass		
TC-3.3.5	Press the search text box Enter prescription name Click 'search' button	Search prescription = Aderall Click 'search' button	Table will only show Aderall prescriptions with the prescribed date and dosage	Table shows Aderall prescriptions with the prescribed date and dosage	Pass		

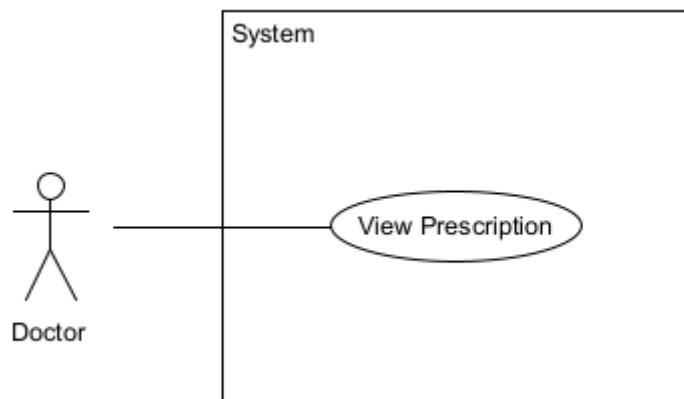
<b>Project Name</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-3.3
<b>Test Case</b>	Search for prescribed prescriptions
<b>Created by :</b>	Leviandran
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if
TC-3.3.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.3.2	Press the login text box Enter Username and password Click 'login' button	doctor userID = doctor1 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-3.3.3	Press the search text box Enter patientID	Search patient = patient1	A row of information related to patient1 will be displayed	A row of information related to patient1 will be displayed	Pass		
TC-3.3.4	Click 'view' button	Click 'view' button	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Pass		
TC-3.3.5	Press the search text box Enter prescription name Click 'search' button	Search prescription = Aderall Click 'search' button	Table will only show Aderall prescriptions with the prescribed date and dosage	Table shows Aderall prescriptions with the prescribed date and dosage	Pass		

### 7.1.2 Doctor View (#9)

As a Doctor, I want to be able to view prescriptions given to patients, so I can see what I have previously prescribed and what I have prescribed currently.

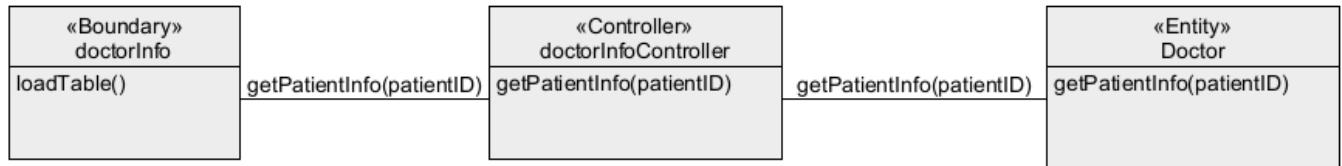
Use Case Diagram



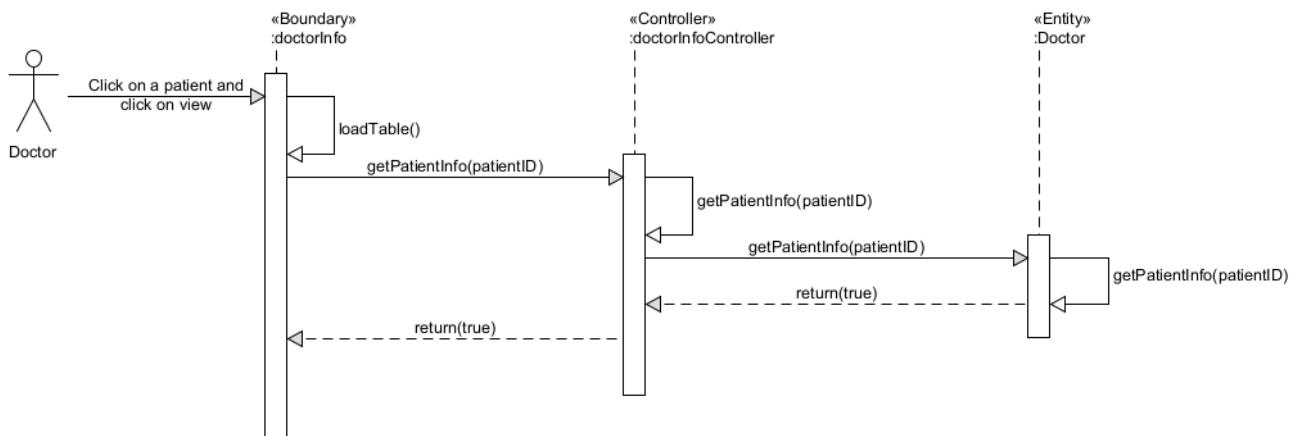
## Use Case Description

<b>Name:</b> DoctorView	<b>ID:</b> 9
<b>Stakeholders and goals:</b> Doctor wants to view a patient's prescription history.	
<b>Actors:</b> Doctor	
<b>Trigger:</b> The doctor clicks onto the "View" button	
<b>Preconditions:</b> Doctor must be logged into their account.	
<b>Normal Flow:</b> <ol style="list-style-type: none"> <li>1. The doctor selects a patient's name and clicks "view" button to view the medication history of that particular selected patient.</li> <li>2. The system will redirect the user to another page with the prescription history loaded</li> <li>3. End.</li> </ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> -	

## BCE Diagram



## Sequence Diagram



Wireframe

*Doctor*

Search Prescriptions:

History of Patient

Add      Update

Date Prescribed	Medication	Dosage
18022021	Aderall	1
20022020	Ibuprofen	1
13102021	Panadol	2

GUI

 Back

**Doctor**

Search Prescriptions:

History of Ben Junior

Add      Update

DatePrescribed	Medication	dosage
20042020	Aderall	1
15062020	Panadol	1
20102021	Pandaol	1
15012020	Aderall	1
13112021	Meth	1
13112021	Codeine	10
14112021	Meth	1

## Test Case

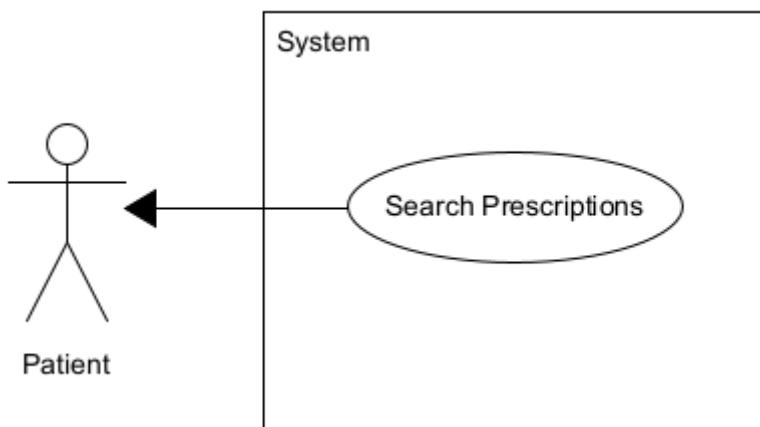
<b>Project Name</b>	TFanClub Electronic Prescription System						
<b>Test CaseID :</b>	TC-3.3						
<b>Test Case</b>	Search for prescribed prescriptions						
<b>Created by :</b>	Leviandran						
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3						
<b>Test Data File</b>	userinfo_3						
Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot i
TC-3.3.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.3.2	Press the login text box Enter Username and password Click 'login' button	doctor userID = doctor1 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-3.3.3	Press the search text box Enter patientID	Search patient = patient1	A row of information related to patient1 will be displayed	A row of information related to patient1 will be displayed	Pass		
TC-3.3.4	Click 'view' button	Click 'view' button	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Redirect to doctorInfo page where prescribed prescriptions will be displayed	Pass		
TC-3.3.5	Press the search text box Enter prescription name Click 'search' button	Search prescription = Aderall Click 'search' button	Table will only show Aderall prescriptions with the prescribed date and dosage	Table shows Aderall prescriptions with the prescribed date and dosage	Pass		

### 7.1.3 Patient Search (#17 #19)

As a Patient, I want to search for past prescriptions so that I can get information about the drugs I've taken before.

As a Patient, I want to search for new prescriptions so that I can get information about the drugs I am prescribed

#### Use Case Diagram



#### Use Case Description

<b>Name:</b> PatientSearch	<b>ID:</b> 17,19
<b>Stakeholders and goals:</b> User wants to search his/her prescription.	
<b>Actors:</b> Patient	
<b>Trigger:</b> The User - Patient input their prescription ID into the search bar and clicks on the "Search my prescription" button.	
<b>Preconditions:</b> Patient must be logged into their account	
<b>Normal Flow:</b> 1. The user clicks on the "Search my prescription"	

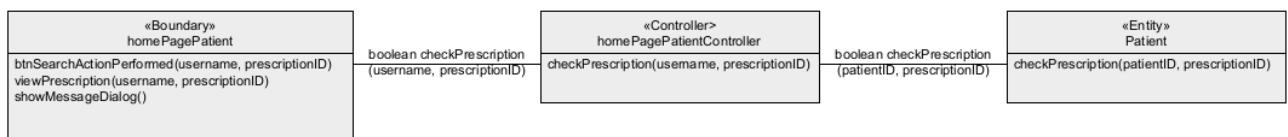
2. The user will then be redirected to view the prescription he/she has searched for.
3. End

#### Sub-Flows: -

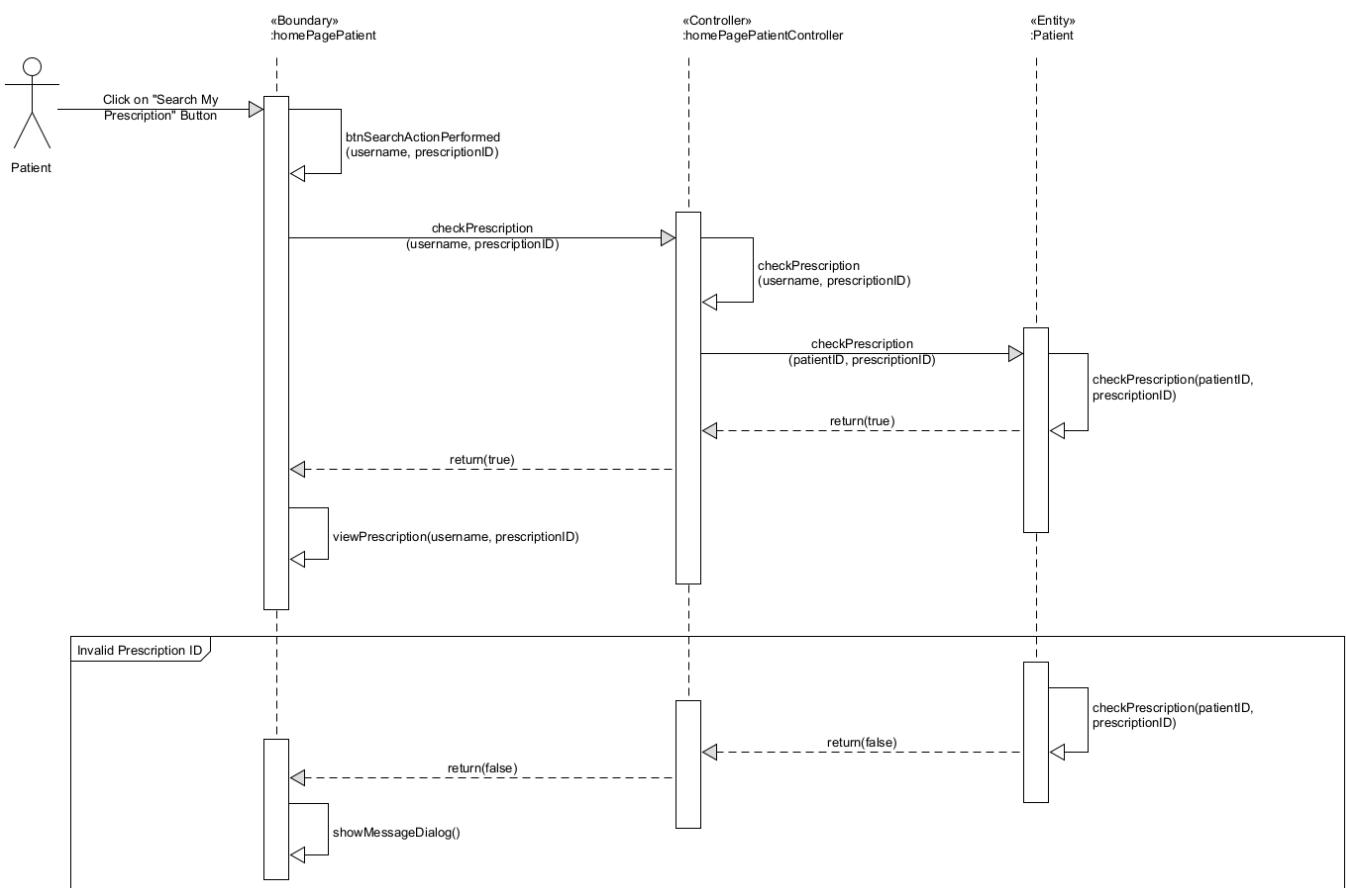
#### Alternatives/Exceptional Flows:

- 1a. The system detects that the prescription ID is null. The system will display an error message “Please key in the prescription ID”.
- 1b. The system detects that the prescription ID is invalid. The system will display an error message “The prescription ID entered does not belong to you or doesn’t exist.”
- 1c. The system detects that the prescription ID is not an integer. The system will display an error message “Please enter an integer for the ID.”

#### BCE Diagram



#### Sequence Diagram



Wireframe

The wireframe shows a top-level window titled "Patient". In the top right corner is a blue rectangular button labeled "Logout". Below the title, there is a text input field with the placeholder "Prescription Number:" followed by a blue rectangular button labeled "Search". Below these controls is another blue rectangular button labeled "View All".

GUI

The screenshot shows a standard window frame with a red header bar containing a logo, a minimize button, a maximize button, and a close button. Inside the window, the text "Welcome patient, Ben Junior" is displayed. In the top right corner is a blue rectangular button labeled "Logout". Below this, there is a text input field with the placeholder "Prescription number:" followed by a blue rectangular button labeled "Search my prescription". Below these controls is another blue rectangular button labeled "View all prescriptions".

## Test Case

<b>Project Name :</b>	TFanClub Electronic Prescription System						
<b>Test CaseID :</b>	TC-2.2						
<b>Test Case Description :</b>	Patient search for prescription   Patient view prescriptions						
<b>Created by :</b>	Junior Tantono						
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3						
<b>Test Data File :</b>	userinfo_3						
Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-2.2.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-2.2.2	Press the logging text box Enter Username and password Click 'login' button	patient userID = patient26 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-2.2.3	Start of patient homepage	Nil	A home page appears on screen	A home page appears on screen	Pass		
TC-2.2.4	We assume that the patient do not know the prescriptionID of their new or past prescription. Click on view all prescription to view all prescription belonging to the patient	Nil	A new page with a table of all the prescription belonging to patient26 will appear. The dispensed or older prescriptions will be at the top	A new page with a table of all the prescription belonging to patient26 will appear. The dispensed or older prescriptions will be at the top	Pass		
TC-2.2.5	Key in the prescription ID of that want to be seen in the search box then press search. The id must belong to the particular patient.	prescriptionID = 20	A new page with info of the particular prescription and medication prescribed.	A new page with info of the particular prescription and medication prescribed.	Pass		

## 7.2 Evidence of Methodologies

### 7.2.1 Meeting Minutes

#### TFanClub

#### Meeting Minutes

19 October, 2021

#### Project Name: Electronic Prescription System

**Present:** Junior Tantono, Leviandran S/O Selvakumaran, Brandon Wong, Tan Zhen Yi, Jimson Wong Yew Kee, Chng Yia Qing Whitney, Mao Xingyu, Yin Pei Ying

**Meeting Objective:** Begin Sprint 3, Further discussion of application expectations and planning

#### Agenda:

- Define deliverables in Sprint 3
- Create Sprint 3 backlog
- Discuss about final report

S/No	Action Item	Person Responsible	Due Date
1	Cross-check with team	Done by Team	19/10/2021

2	Discussion and implementation of necessary diagrams for sprint 3	Whitney, Zhen Yi, Pei Ying, Xing Yu	21/10/2021
3	Planning and implementation of application for sprint 3	Junior, Brandon, Leviandran, Jimson	26/10/2021
4	Final Report Discussion	Done By Team	26/10/2021

S/No	Notes
1	Members are to discuss and update on their progress to cross-check and to prevent any miscommunication
2	Do up use case diagrams, descriptions, bce diagram, sequence diagrams
3	Implement functions for sprint 3 and do necessary testing
4	Do up final report documentation

**Date and time of next meeting:** 27/10/2021, 2:00PM – 3:00PM

Prepared By: Whitney Chng

## 7.2.2 Taiga

The screenshot shows a Taiga backlog interface. At the top, there's a header with 'USER STORY' and 'CLOSED' status indicators. Below this, a user story is listed:

^ #8 As a Doctor, I want to be able to search prescriptions given to patients so I can understand what I have previously prescribed and what I should be prescribing next

This story has a status of 'N/E' and is labeled 'NEW'. To the right of the backlog board, a vertical list of tasks is shown, each with a green owl icon:

- #128 Create Use Case Diagram for DoctorSearch
- #129 Create Use Case Description for DoctorSearch
- #130 Create BCE + Sequence Diagram for DoctorSearch
- #131 Back-end Development & Code for DoctorSearch
- #132 Front-end Code for DoctorSearch
- #133 Create UI for DoctorSearch
- #183 Create Test Data
- #134 Test Case for DoctorSearch

<p><b>#9</b> As a Doctor, I want to be able to view prescriptions given to patients, so I can see what I have previously prescribed and what I have prescribed currently.</p> <p>N/E</p>	<p>+</p> <p>NEW</p>	<p><b>#121</b> Create Use Case Diagram for DoctorView</p> 
		<p><b>#122</b> Create Use Case Description for DoctorView</p> 
		<p><b>#123</b> Create BCE + Sequence Diagram for DoctorView</p> 
		<p><b>#124</b> Back-end Development &amp; Code for DoctorView</p> 
		<p><b>#125</b> Front-end Code for DoctorView</p> 
		<p><b>#126</b> Create UI for DoctorView</p> 
		<p><b>#127</b> Create Test Data</p> 
		<p><b>#128</b> Test Case for DoctorView</p> 

^ #19 As a Patient, I want to search for new prescriptions so that I can get information about the drugs I am prescribed

N/E

NEW

#163 Create Use Case Diagram for PatientSearch



#164 Create Use Case Description for PatientSearch



#165 Create BCE + Sequence Diagram for PatientSearch



#166 Back-End Development & Code for PatientSearch



#167 Front-End Code for PatientSearch



#168 Create UI for PatientSearch



#185 Create Test Data



#169 Test case for PatientSearch



<p>^ #17 As a Patient, I want to search for past prescriptions so that I can get information about the drugs I've taken before.</p> <p>N/E</p>	<p>+ +≡</p>			<p>#171 Create Use Case Diagram for PatientSearch</p>  <p>#170 Create Use Case Description for PatientSearch</p>  <p>#172 Create BCE + Sequence Diagram for PatientSearch</p>  <p>#173 Back-End Development &amp; Code for PatientSearch</p>  <p>#174 Front-End Code for PatientSearch</p>  <p>#175 Create UI for PatientSearch</p>  <p>#186 Create Test Data</p>  <p>#176 Test case for PatientSearch</p> 
<p>^ Storyless tasks</p>	<p>+ +≡</p>			<p>#278 Final Report Documentation</p>  <p>Not assigned</p>

## 7.2.3 Sprint Review

### Progress Report 3

<p><b>Project Name:</b> Electronic Prescription System</p> <p><b>Team Members:</b> Junior Tantono, Whitney Chng, Brandon Wong, Leviandran S/O Selvakumaran, Tan Zhen Yi, Jimson Wong, Mao Xingyu, Yin Pei Ying</p> <p><b>Date:</b> 26/10/2021</p> <p><b>Reporting Period:</b> 19/10/2021 - 26/10/2021</p>
<p><b>Work completed this reporting period:</b></p> <ul style="list-style-type: none"><li>• Discussion of project deliverables for sprint 3</li><li>• Update user story and tasks in Taiga</li><li>• Completion of tasks required for each user story</li><li>• Testing of functions to ensure that they work accordingly</li><li>• Update final report document</li></ul>
<p><b>Work to complete next reporting period:</b></p> <p>The team has to discuss and select the prioritized user stories for the third sprint .</p>
<p><b>What's going well and why:</b></p> <p>The members understood the work needed to be done and their responsibility for this phase which made the development process run very smoothly with very little issues. The members cross-checked with each other very frequently during this period which helped the team stay calm and focused even with the heavy programming and documentation load.</p>
<p><b>What's not going well and why:</b></p> <p>Due to the lack of physical meetings, the team had some difficulties understanding and communicating during the process as we only could share our screens on communication platforms to explain and that caused a minor inconvenience.</p>
<p><b>Suggestions/Issues:</b></p> <p>Team members had to be patient and understanding with each other with this minor inconvenience that cannot be changed due to the circumstances.</p>

## Member Contribution

Name	Task(s) Completed
Junior Tantono	Front-End & UI Coding Back-End Coding Testing
Brandon Wong	Front-End Coding Testing
Leviandran S/O Selvakumaran	Front-End & UI Coding Back-End Coding Testing
Jimson Wong Yew Kee	Front-End & UI Coding Back-End Coding Testing
Whitney Chng	Use Case Diagram & Description Class and Sequence Diagram Final Report
Mao Xingyu	Use Case Diagram & Description Class and Sequence Diagram Final Report
Tan Zhen Yi	Use Case Diagram & Description Class and Sequence Diagram Final Report
Yin Pei Ying	Use Case Diagram & Description Class and Sequence Diagram Wireframe Final Report

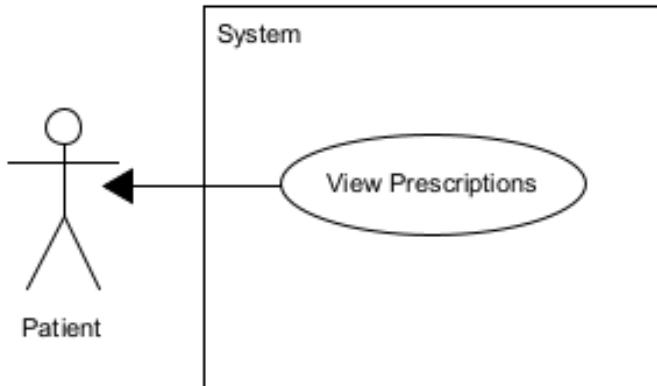
## 8. Sprint 4

### 8.1 User Stories & Diagrams

#### 8.1.1 Patient View (#18, #20)

As a Patient, I want to view past prescriptions so that I know what drugs I was prescribed before.  
As a Patient, I want to view new prescriptions so that I know what drugs are prescribed to me.

## Use Case Diagram

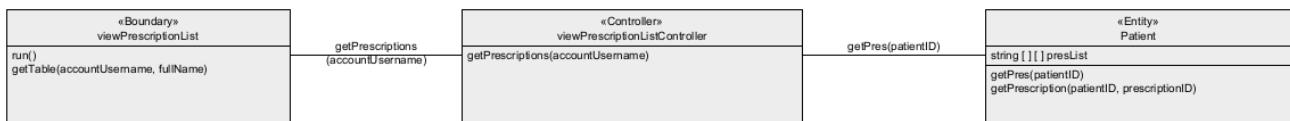


## Use Case Description

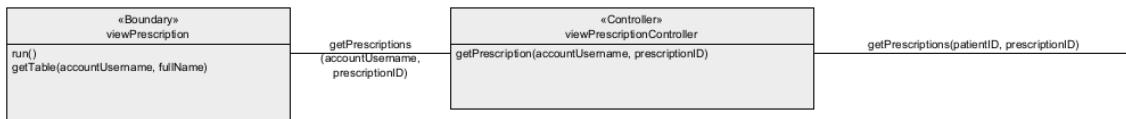
<b>Name:</b> PatientView	<b>ID:</b> 18, 20
<b>Stakeholders and goals:</b> User wants to view their prescriptions	
<b>Actors:</b> Patient	
<b>Trigger:</b> <ol style="list-style-type: none"><li>1. The User - Patient clicks on "View all prescriptions"</li><li>2. The User - Patient clicks on "Search my prescription"</li></ol>	
<b>Preconditions:</b> Patient must be logged in to their account.	
<b>Normal Flow:</b> <ol style="list-style-type: none"><li>1. User clicks on the "View all prescriptions" button.</li><li>2. The system will redirect the user to a new page which displays Prescription ID, Prescribed Date, and Prescribed Status.</li><li>3. User inputs a specific prescription ID and clicks on the "Search" button.</li><li>4. The system will redirect the user to another page which displays Date, Status, Medicine and dosage</li><li>5. End.</li></ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> -	

## BCE Diagram

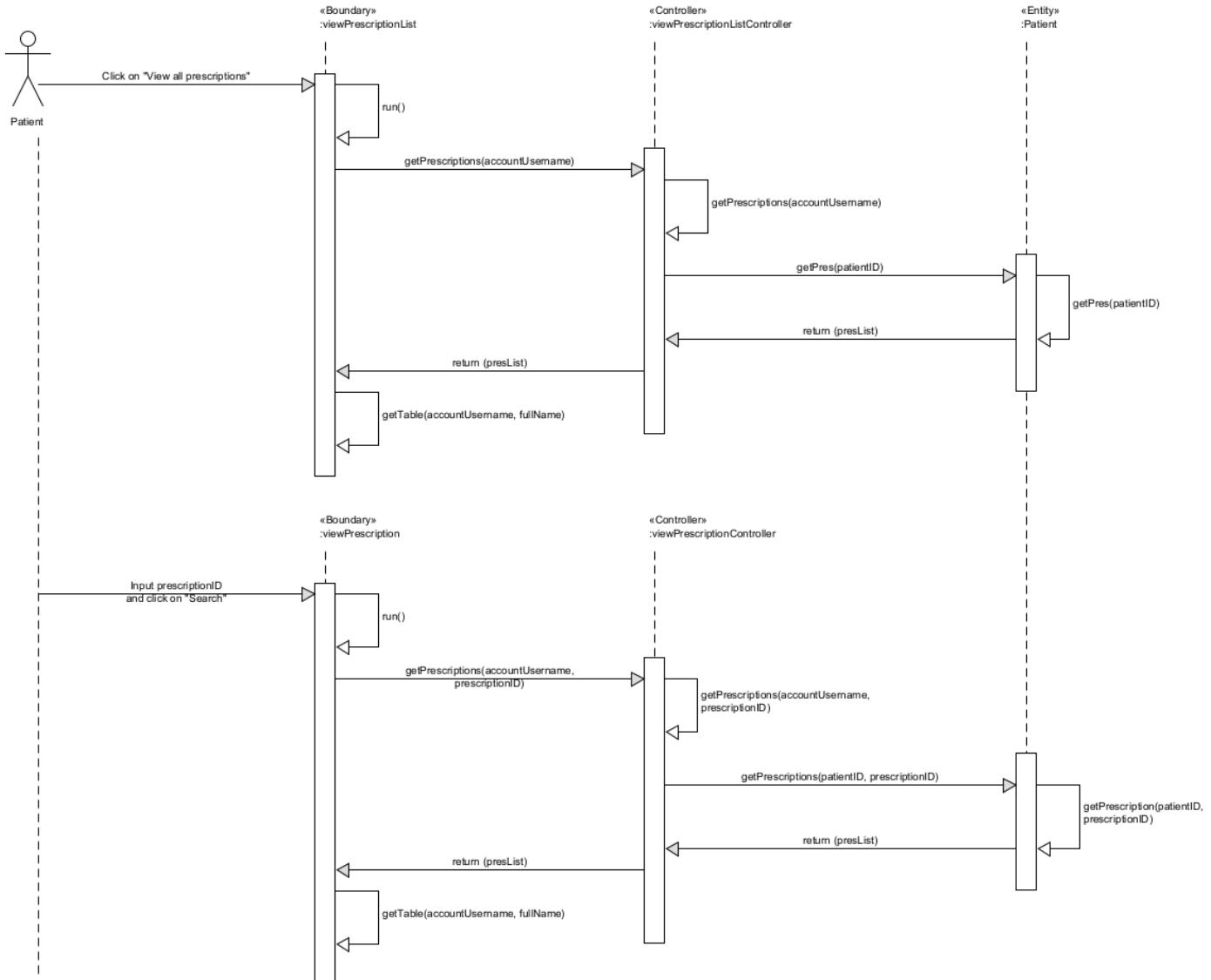
View All Prescriptions



View Specific Prescription



## Sequence Diagram



Wireframe

*Patient*

Prescription Number:

Prescription ID	Prescribed Date	Prescribed Status
26	12/11/2021	Pending

*Patient*

Date Dispensed: 12/11/2021  
Prescribed Status: Pending

Medicine	Dosage
Panadol	2

## GUI

Patient: Ben Junior

Prescription ID:  Search

Prescription ID	Prescribed date	Prescribed st...
33	20-04-2020	Pending
43	15-06-2020	Pending
54	20-10-2021	Pending
55	15-01-2020	Pending

Patient: Ben Junior

Date dispensed: 15-06-2020

Status: Pending

Medicine	Dosage
Panadol	1

## Test Case

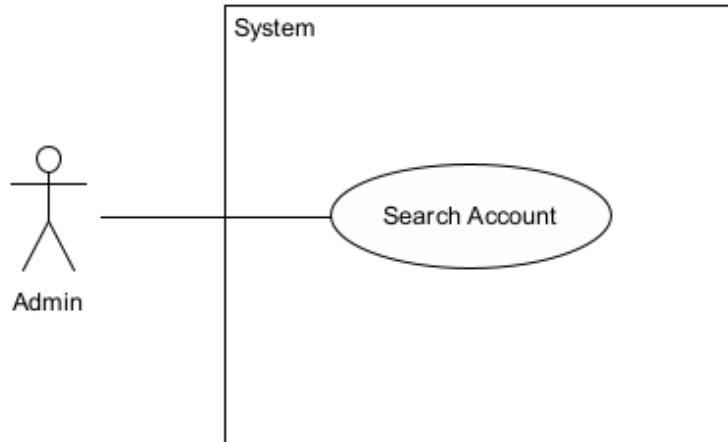
<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-2.2
<b>Test Case Description :</b>	Patient search for prescription   Patient view prescriptions
<b>Created by :</b>	Junior Tantono
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-2.2.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-2.2.2	Press the logging text box Enter Username and password Click 'Login' button	patient userID = patient26 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-2.2.3	Start of patient homepage	Nil	A home page appears on screen	A home page appears on screen	Pass		
TC-2.2.4	We assume that the patient do not know the prescriptionID of their new or past prescription. Click on view all prescription to view all prescription belonging to the patient	Nil	A new page with a table of all the prescription belonging to patient26 will appear. The dispensed or older prescriptions will be at the top	A new page with a table of all the prescription belonging to patient26 will appear. The dispensed or older prescriptions will be at the top	Pass		
TC-2.2.5	Key in the prescription ID of that want to be seen in the search box then press search. The id must belong to the particular patient.	prescriptionID = 20	A new page with info of the particular prescription and medication prescribed.	A new page with info of the particular prescription and medication prescribed.	Pass		

### 8.1.2 Admin Search Account (#25, #29)

As an Admin, I want to search accounts, so that I can search information of patients and staff.  
As an Admin, I want to search user profiles, so that I can search for a specific staff or patients.

#### Use Case Diagram



#### Use Case Description

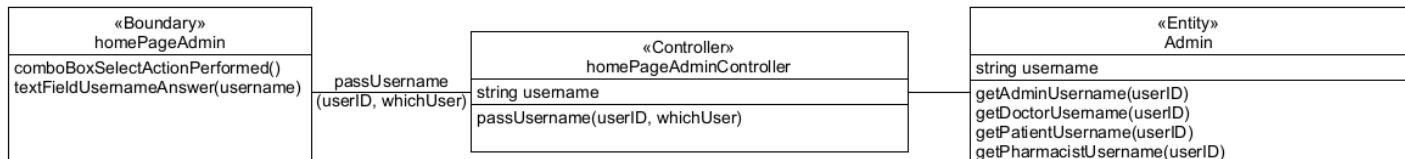
<b>Name:</b> AdminSearch	<b>ID:</b> 25,29
<b>Stakeholders and goals:</b> Admin wants to search an account stored in the system, so he can view the account information which includes the user profile.	
<b>Actors:</b> Admin	
<b>Trigger:</b> Admin types search ID in the box	
<b>Preconditions:</b> Admin must be logged into their account	
<b>Normal Flow:</b>	
1. User click on the drop down list to select the category of accounts he wants to view 2. User type down the search ID of the account 3. System checks if the search ID is recorded, if yes, the username of the search ID is shown.	

**Sub-Flows:** -

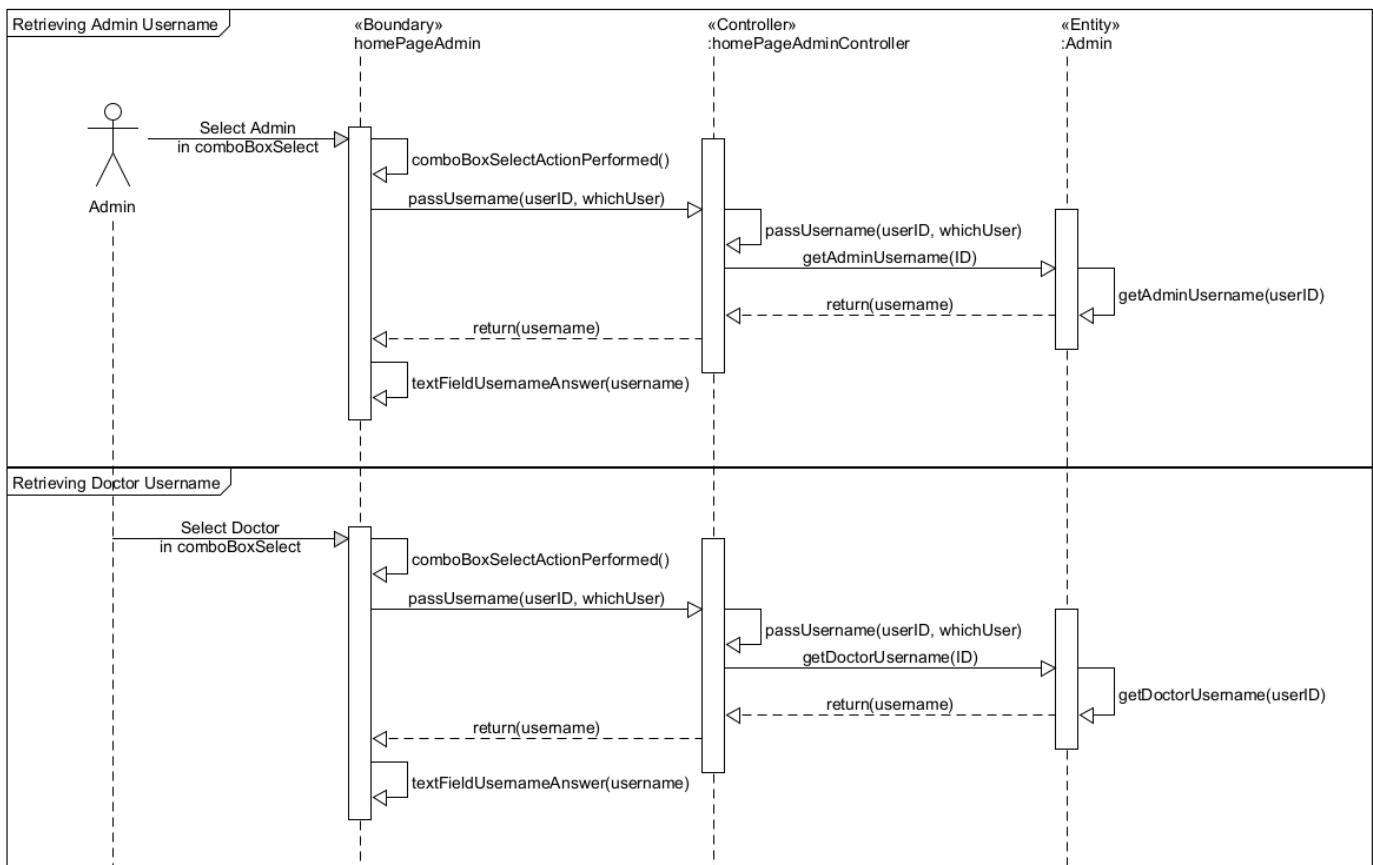
**Alternatives/Exceptional Flows:**

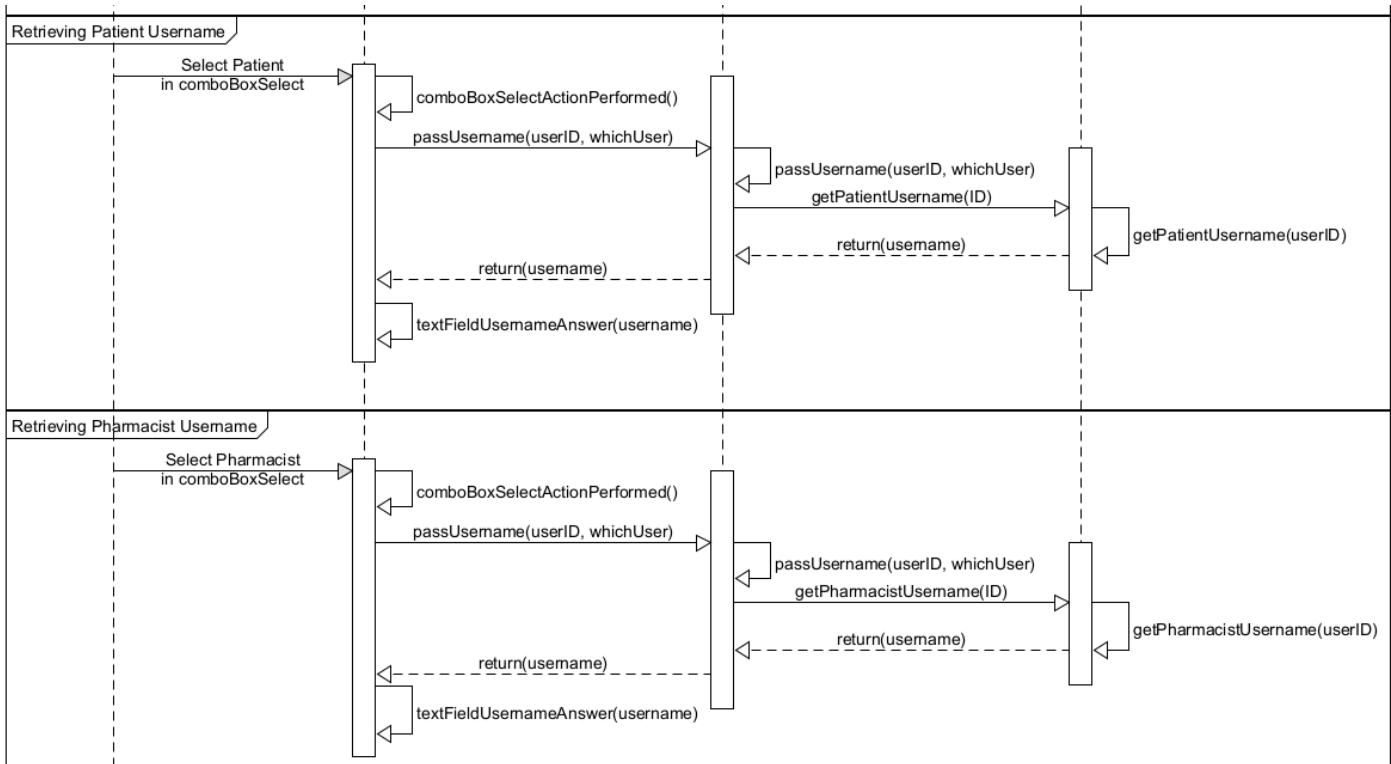
- 

## BCE Diagram



## Sequence Diagram.

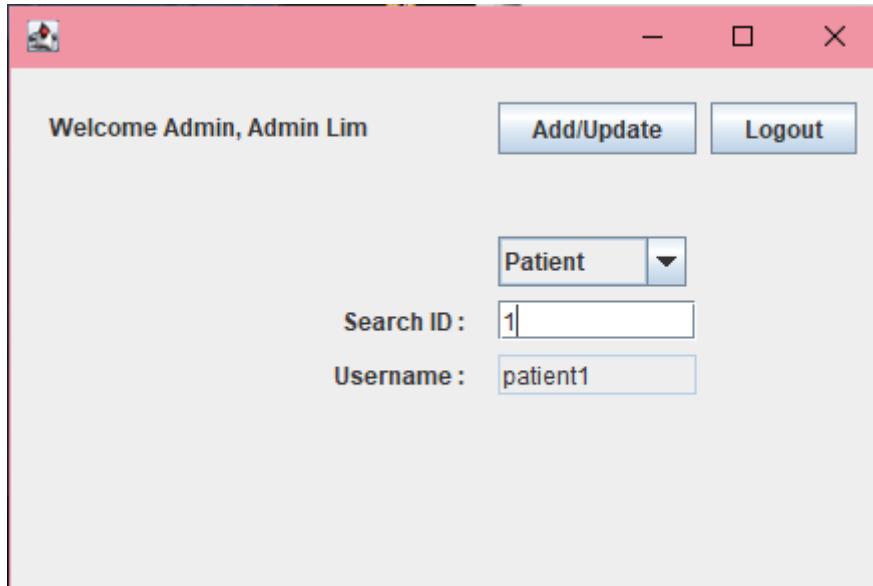




Wireframe

The wireframe shows a user interface for an 'Admin' application. At the top left is the title 'Admin'. To the right are two blue rectangular buttons labeled 'Add/Update' and 'Logout'. Below the title are three input fields arranged vertically. The first is a dropdown menu with the text 'Patient' and a downward arrow. The second is a text input field labeled 'Search ID:' containing the number '1'. The third is a text input field labeled 'Username:' containing the text 'patient1'.

## GUI



## Test Case

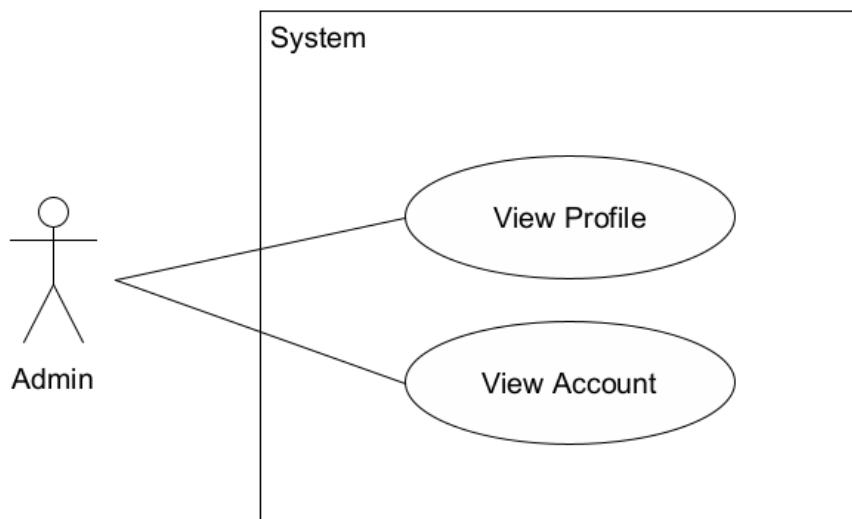
Project Name :	TFanClub Electronic Prescription System
Test CaseID :	TC-1.4
Test Case Description :	Search accounts to view info
Created by :	Jimson Wong
Pre-Condition :	Assume all the data are stored in the database userinfo_3
Test Data File :	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.4.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.4.2	Press the login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.4.3	Click the dropdown bar and select user type Press the Search ID text box Enter ID	Dropdown bar = Patient Search ID = 101	Username will show Patient101	Username will show Patient101	Pass		

### 8.1.3 Admin View Account and Profile (#26, #30)

As an Admin, I want to view account information, so that I can view information of patients and staff.  
As an Admin, I want to view user profiles, so that I can identify the profiles of users recorded.

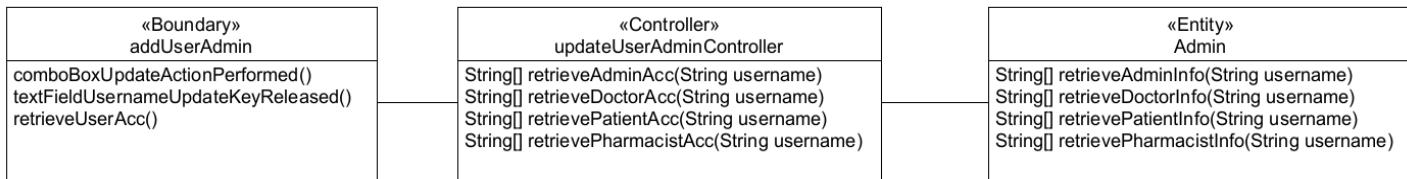
## Use Case Diagram



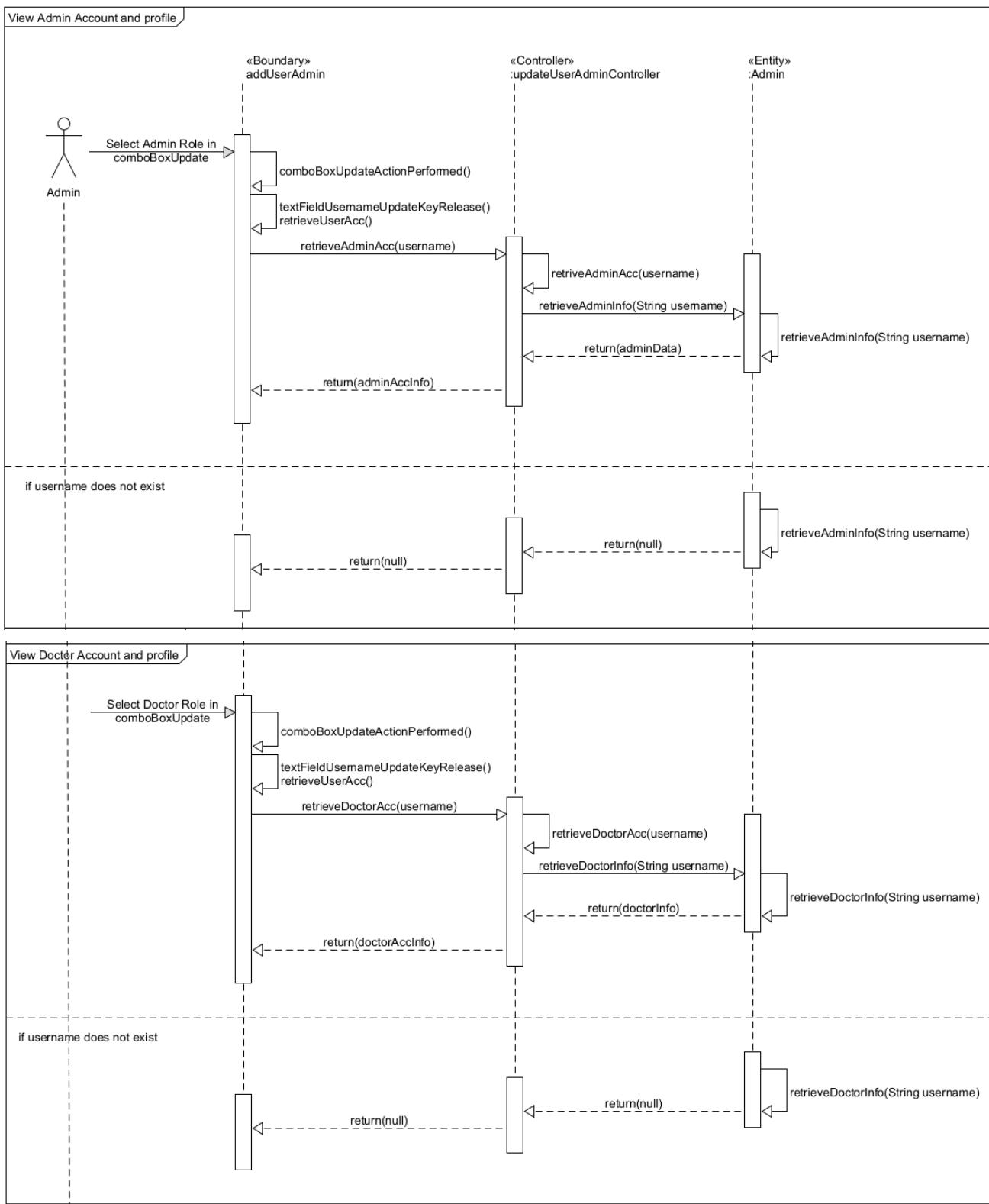
## Use Case Description

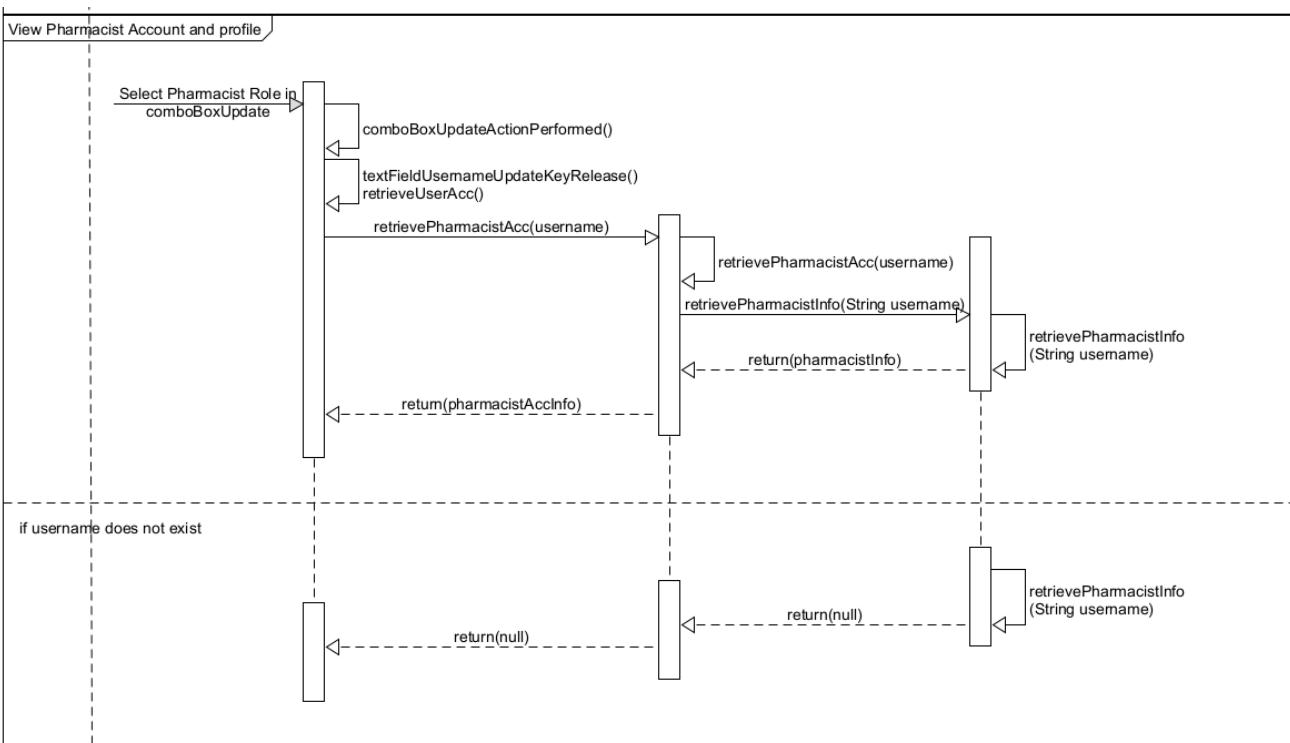
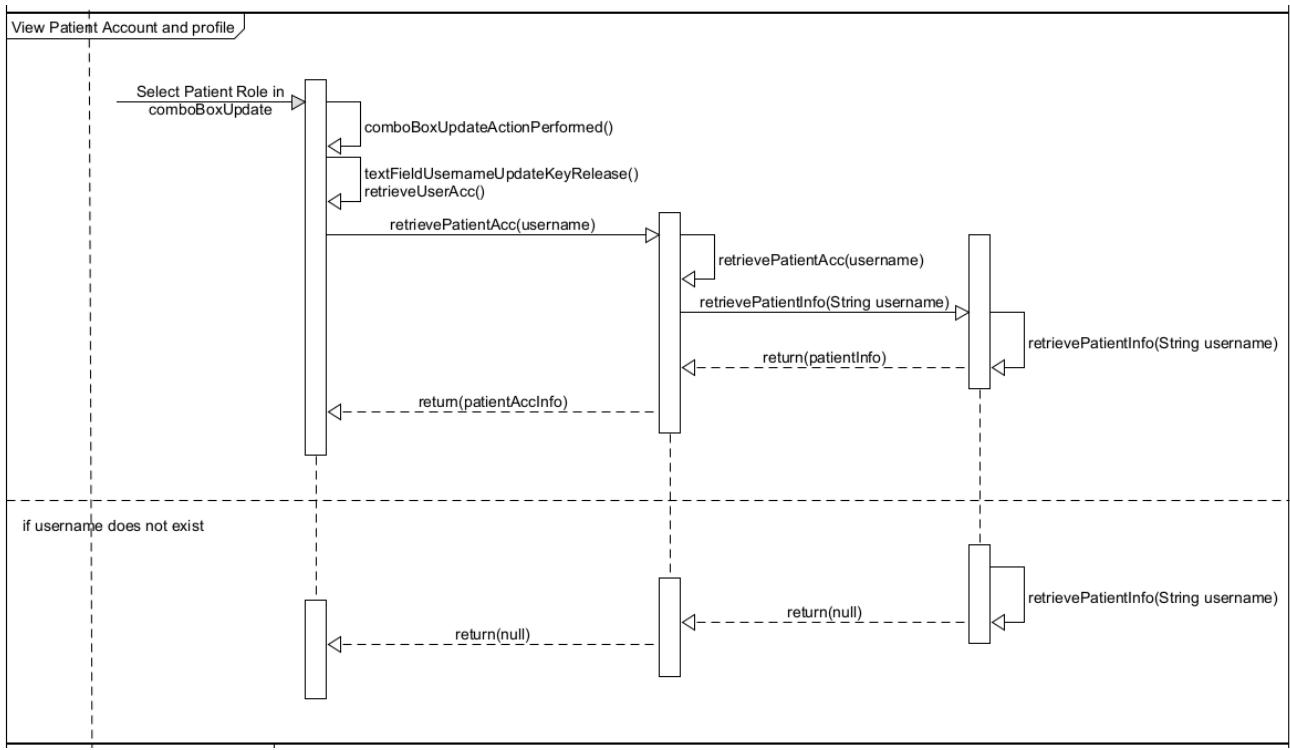
<b>Name:</b> AdminView	<b>ID:</b> 26, 30
<b>Stakeholders and goals:</b> Admin wants to view accounts and profiles stored in the system, so to make any updates to them.	
<b>Actors:</b> Admin	
<b>Trigger:</b> Admin types Username in the textbox	
<b>Preconditions:</b> Admin must be logged into their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"> <li>1. User click on the drop down list to select the userType of the account he wants to view</li> <li>2. User type down the Username of the account he wants to view</li> <li>3. System checks if the Username and respective userType is recorded, if yes, account and profile information will be shown</li> </ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> -	

## BCE Diagram



## Sequence Diagram





## Wireframe

The wireframe shows a user registration interface. At the top left are two buttons: "Add" and "Search/Update". Below these are several input fields: "User Type" (dropdown menu set to "Patient"), "Username" (text input: "patient1"), "Password" (text input: "\*\*\*\*\*"), "First Name" (text input: "Ben"), "Last Name" (text input: "Juniorr"), "Date Of Birth" (text input: "15121999"), "Email" (text input: "patient1@gmail.com"), and "PatientID" (text input: " "). At the bottom are two buttons: "Back" and "Confirm".

## GUI

The screenshot shows the same user registration interface as the wireframe, but with a window title bar and standard operating system controls (minimize, maximize, close). The fields and their values are identical to those in the wireframe.

## Test Case

<b>Project Name :</b>	TFanClub Electronic Prescription System
<b>Test CaseID :</b>	TC-1.5
<b>Test Case Description :</b>	Search accounts to view info
<b>Created by :</b>	Jimson Wong
<b>Pre-Condition :</b>	Assume all the data are stored in the database userinfo_3
<b>Test Data File :</b>	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-1.5.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-1.5.2	Press the login text box Enter Username and password Click 'login' button	userID = Admin2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-1.5.3	Click 'Add/Update' button	Click Add/update button	Redirect to Add panel	Redirect to Add panel	Pass		
TC-1.5.4	Click 'Update' button	Click update button	Redirect to update panel	Redirect to update panel	Pass		
TC-1.5.5	Select user type Enter Username to get the data.	usertype = Pharmacist username = pharma1	pharma1 info will be retrieved.	pharma1 info will be retrieved	Pass		

## 8.2 Evidence of Methodologies

### 8.2.1 Meeting Minutes

#### TFanClub

#### Meeting Minutes

27 October, 2021

#### Project Name: Electronic Prescription System

**Present:** Junior Tantono, Leviandran S/O Selvakumaran, Brandon Wong, Tan Zhen Yi, Jimson Wong Yew Kee, Chng Yia Qing Whitney, Mao Xingyu, Yin Pei Ying

**Meeting Objective:** Begin Sprint 4, Further discussion of application expectations and planning

#### Agenda:

- Define deliverables in Sprint 4
- Create Sprint 4 backlog
- Discuss about final report
- Discuss about video

S/No	Action Item	Person Responsible	Due Date
1	Discussion and implementation of necessary diagrams for sprint 4	Whitney, Zhen Yi, Pei Ying, Xing Yu	29/10/2021

2	Planning and implementation of application for sprint 4	Junior, Brandon, Leviandran, Jimson	04/11/2021
3	Final Report Discussion	Done By Team	04/11/2021

S/No	Notes
1	Do up use case diagrams, descriptions, bce diagram, sequence diagrams
2	Implement functions for sprint 4 and do necessary testing
3	Do up final report documentation

**Date and time of next meeting:** 05/11/2021, 2:00PM – 3:00PM

Prepared By: Whitney Chng

## 8.2.2 Taiga

USER STORY	>	>	>	CLOSED	<
^ #18 As a Patient, I want to view for past prescriptions so that I know what drugs I was prescribed before. N/E	+ +≡				
				#99 Create Use Case Diagram for PatientView 	
				#100 Create Use Case Description for PatientView 	
				#102 Back-End Development & Code for PatientView 	
				#101 Create BCE + Sequence Diagram for PatientView 	
				#103 Front-End Code for PatientView 	
				#104 Create UI for PatientView 	
				#189 Create Test Data 	
				#105 Test case for PatientView 	

<span data-bbox="160 168 182 190">^</span>	<p>#25 As an Admin, I want to search accounts, so that I can search information of patients</p>	<span data-bbox="526 168 548 190">+ </span> <span data-bbox="548 168 596 190"> NEW</span>	<ul style="list-style-type: none"> <li>#209 Create Use Case Diagram for Admin Search Accounts </li> <li>#210 Create Use Case Description for Admin Search Accounts </li> <li>#211 Create BCE + Sequence Diagram for Admin Search Accounts </li> <li>#216 Test case for Admin Search Accounts </li> <li>#212 Back-End Development &amp; Code for Admin Search Accounts </li> <li>#213 Front-End Code for Admin Search Accounts </li> <li>#214 Create UI for Admin Search Accounts </li> <li>#215 Create Test Data Admin Search Accounts </li> </ul>
--------------------------------------------	-------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

^ #29 As an Admin, I want to search user profiles, so that I can search for specific staffs or patients.

N/E

NEW

#247 Create Use Case Diagram for Admin Search User Profile



#248 Create Use Case Description for Admin Search User Profile



#249 Create BCE + Sequence Diagram for Admin Search User Profile



#250 Back-End Development & Code for Admin Search User Profile



#251 Front-End Code for Admin Search User Profile



#252 Create UI for Admin Search User Profile



#253 Create Test Data Admin Search User Profile



#254 Test case for Admin Search User Profile



<p>^ #26 As an Admin, I want to view account information, so that I can view information of patients</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p> <ul style="list-style-type: none"> <li>#223 Create User Case Diagram for Admin View Account </li> <li>#224 Create Use Case Description for Admin View Account </li> <li>#225 Create BCE + Sequence Diagram for Admin View Account </li> <li>#226 Back-End Development &amp; Code for Admin View Account </li> <li>#227 Front-End Code for Admin View Account </li> <li>#229 Create Test Data Admin View Account </li> <li>#228 Create UI for Admin View Account </li> <li>#230 Test case for Admin View Account </li> </ul>
---------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>^ #30 As an Admin, I want to view user profiles, so that I can identify the profiles of users recorded.</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p>	<p>#234 Create Use Case Diagram for Admin View User Profile</p> 
		<p>#235 Create Use Case Description for Admin View User Profile</p> 
		<p>#236 Create BCE + Sequence Diagram for Admin View User Profile</p> 
		<p>#237 Back-End Development &amp; Code for Admin View User Profile</p> 
		<p>#238 Front-End Code for Admin View User Profile</p> 
		<p>#241 Test case for Admin View User Profile</p> 
		<p>#239 Create UI for Admin View User Profile</p> 
		<p>#240 Create Test Data Admin View User Profile</p> 

<p>^ #20 As a Patient, I want to view for new prescriptions so that I know what drugs is prescribed to me.</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p>	<p>#107 Create Use Case Diagram for PatientView</p> 
		<p>#108 Create Use Case Description for PatientView</p> 
		<p>#109 Create BCE + Sequence Diagram for PatientView</p> 
		<p>#110 Back-End Development &amp; Code for PatientView</p> 
		<p>#111 Front-End Code for PatientView</p> 
		<p>#190 Create Test Data</p> 
		<p>#112 Create UI for PatientView</p> 
		<p>#120 Test case for PatientView</p> 
<p>^ Storyless tasks</p>	<p>+ +≡</p>	<p>#279 Final Report Documentation</p> <p> Not assigned</p>

## 8.2.3 Sprint Review

### Progress Report 4

<p><b>Project Name:</b> Electronic Prescription System</p> <p><b>Team Members:</b> Junior Tantono, Whitney Chng, Brandon Wong, Leviandran S/O Selvakumaran, Tan Zhen Yi, Jimson Wong, Mao Xingyu, Yin Pei Ying</p> <p><b>Date:</b> 04/11/2021</p> <p><b>Reporting Period:</b> 27/10/2021 - 04/11/2021</p>
<p><b>Work completed this reporting period:</b></p> <ul style="list-style-type: none"><li>• Discussion of project deliverables for sprint 4</li><li>• Update user story and tasks in Taiga</li><li>• Completion of tasks required for each user story</li><li>• Testing of functions to ensure that they work accordingly</li></ul>
<p><b>Work to complete next reporting period:</b></p> <p>The team has to discuss and select the prioritized user stories for the fourth sprint</p>
<p><b>What's going well and why:</b></p> <p>The progress and development of the project is going smoothly as the team has familiarized themselves with the processes over time. Team members are actively communicating and checking with each other and this ensures that the work provided by each member is consistent.</p>
<p><b>What's not going well and why:</b></p> <p>With the project deadline closing up, members are feeling pressured and worried. The team is worried that the entire project might not meet our personal expectations.</p>
<p><b>Suggestions/Issues:</b></p> <p>Team members have to communicate and motivate each other and provide their help whenever needed by others and to guide the others if any last minute issues pop up.</p>

## Member Contribution

Name	Task(s) Completed
Junior Tantono	Front-End & UI Coding Back-End Development & Coding Testing
Brandon Wong	Front-End & UI Coding Back-End Development & Coding Testing
Leviandran S/O Selvakumaran	Front-End & UI Coding Back-End Development & Coding Testing
Jimson Wong Yew Kee	Testing
Whitney Chng	Use Case Diagram & Description Class and Sequence Diagram Final Report
Mao Xingyu	Use Case Diagram & Description Class and Sequence Diagram Final Report
Tan Zhen Yi	Use Case Diagram & Description Class and Sequence Diagram Final Report
Yin Pei Ying	Use Case Diagram & Description Class and Sequence Diagram Wireframe

## 9. Sprint 5

### 9.1 User Stories & Diagrams

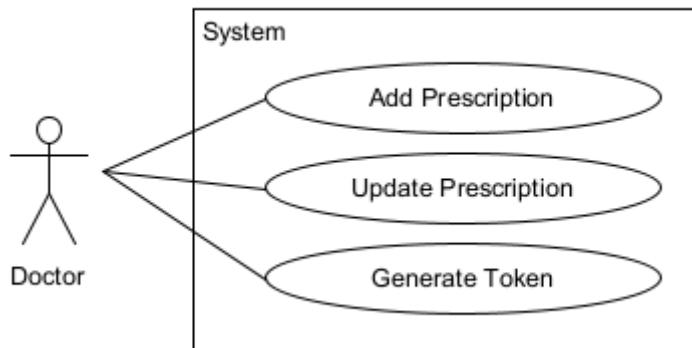
#### 9.1.1 Doctor Add & Update & Token (#6, # 7 #10)

As a Doctor, I want to be able to add prescriptions for patients so that they know what drugs to get from the pharmacy.

As a Doctor, I want to be able to update prescriptions, so I can prescribe the drugs to the patient.

As a Doctor, I want to send electronic tokens to patients, so that they can collect their prescription at the pharmacy.

## Use Case Diagram



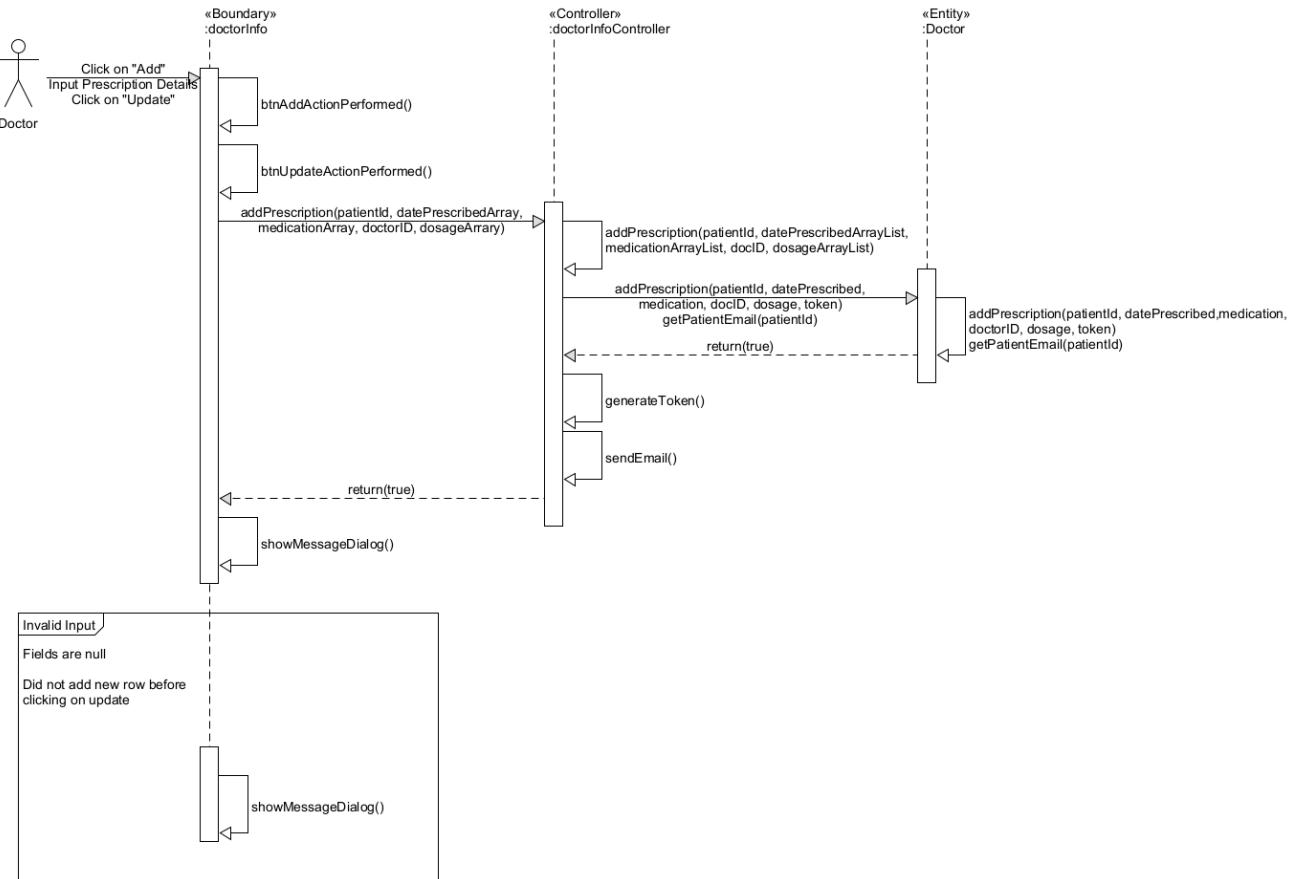
## Use Case Description

<b>Name:</b> DoctorAddUpdateToken	<b>ID:</b> 6, 7, 10
<b>Stakeholders and goals:</b> Doctor wants to add prescription for patients and send electronic token - which contains prescription info, to his patients	
<b>Actors:</b> Doctor	
<b>Trigger:</b> The User - Doctor clicks on the “Add” button and input the necessary fields then the “Update” button	
<b>Preconditions:</b> Doctor must be logged in to their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"> <li>1. User clicks on “Add” button which adds a new blank row</li> <li>2. User types in the new row with prescription and medication details</li> <li>3. User clicks on “Update” button which will add the inputs into the patient’s prescription history</li> <li>4. The system will also send out an email to the patient which contains the token</li> <li>5. End.</li> </ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> <ul style="list-style-type: none"> <li>3a. If user did not add a new row before updating, the system will display an error message “Please add the row first!”</li> <li>3b. If user did not fill in all the required fields before updating, the system will display an error message “Please fill both fields!”</li> </ul>	

## BCE Diagram



## Sequence Diagram



## Wireframe

Doctor

Search Prescriptions:

History of Patient

Date Prescribed	Medication	Dosage
18022021	Aderall	1
20022020	Ibuprofen	1

*Doctor*

Search Prescriptions:

History of Patient

Date Prescribed	Medication	Dosage
18022021	Aderall	1
20022020	Ibuprofen	1
13102021	Tramadol	2

Prescription Updated !

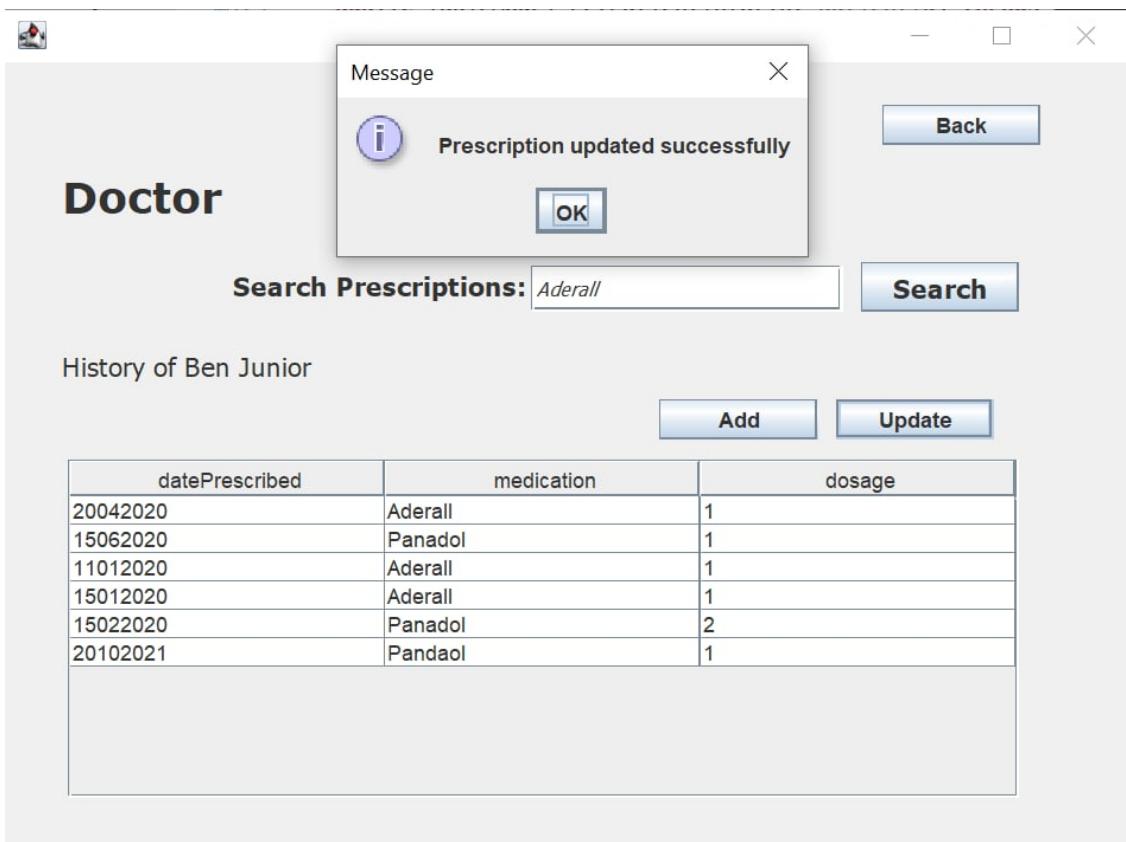
GUI

Doctor

Search Prescriptions:

History of Ben Junior

DatePrescribed	Medication	dosage
20042020	Aderall	1
15062020	Panadol	1
20102021	Pandaol	1
15012020	Aderall	1



 sgxgamers@gmail.com 6:15 AM (1 minute ago) ☆ ↶ ⋮  
 to me ▾  
 Hello Ben,  
 Your prescription for Pandao is ready for collection. Please proceed to the pharmacy and show this token: iNTI5  
 Yours Sincerely,  
 iFanClub Hospital

## Test Case

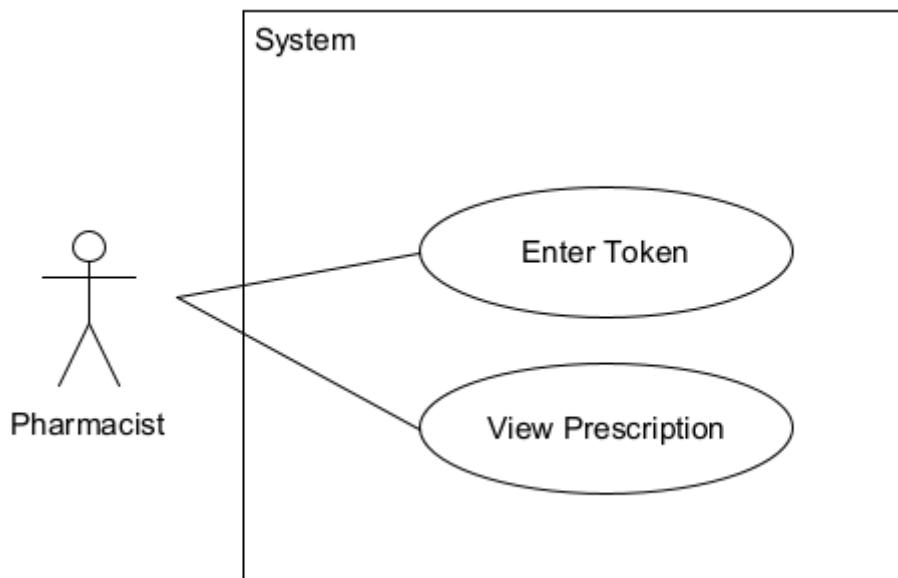
Project Name :	TFanClub Electronic Prescription System						
Test CaseID :	TC-3.5						
Test Case Description :	Send Token						
Created by :	Leviandran						
Pre-Condition :	Assume all the data are stored in the database userinfo_3						
Test Data File :	userinfo_3						
Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-3.5.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-3.5.2	Press the login text box	doctor userID = doctor1	Successfully login	Successfully login	Pass		
TC-3.5.3	Press the search text box Enter patientID Click 'view' button	Search patient = patient1 Click 'view' button	Redirect to doctorinfo page where prescribed prescriptions will be displayed	Redirect to doctorinfo page where prescribed prescriptions will be displayed	Pass		
TC-3.5.4	Click the 'Add' button	Click 'Add' button	New row is added	New row is added	Pass		
TC-3.5.5	Fill in the details of the prescription in the new row Click 'update' button	Medication = Codine Date Prescribed = 11012020 dosage = 1 Click 'Update' button	Prescription of Codine will be successfully updated An auto-generated email will also be sent out to the patient containing the Token ID for the prescription	Prescription of Codine update successfully An auto-generated email was sent out to the patient containing the Token ID for the prescription	Pass		

### 9.1.2 Pharmacist Enter Token and View Prescription (#14, #13)

As a Pharmacist, I want to be able to enter the token given to the patient so that I can give the correct prescription to the patient.

As a Pharmacist, I want to be able to view the prescriptions that have been prescribed so that I know which drugs to give the patient.

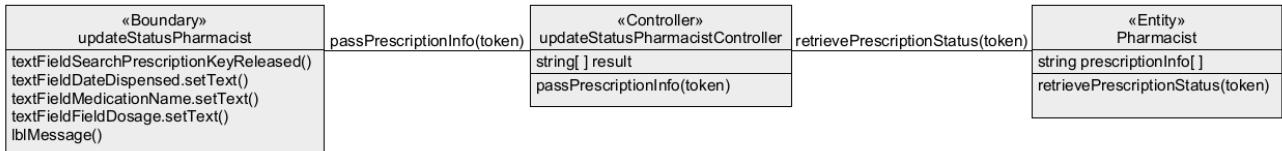
Use Case Diagram



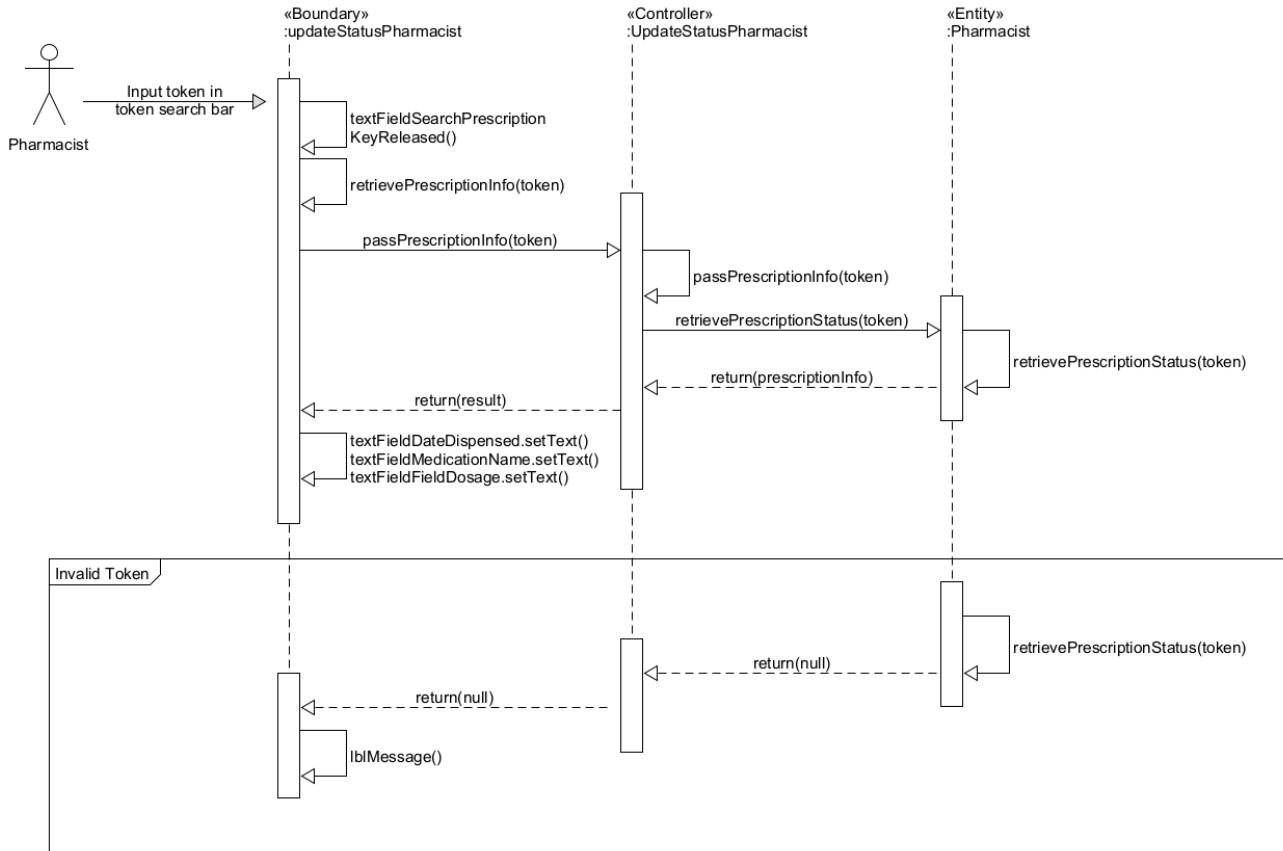
Use Case Description

<b>Name:</b> PharmacistToken	<b>ID:</b> 14, 13
<b>Stakeholders and goals:</b> User wants to enter token and view the prescription tagged to the token to provide prescribe correct prescription to patients	
<b>Actors:</b> Pharmacist	
<b>Trigger:</b> Pharmacist inputs token details in the search bar	
<b>Preconditions:</b> Pharmacist must be logged into their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"><li>1. User enter token number into search token box</li><li>2. The system will check the system for the token number</li><li>3. If it exists, the system will display the prescription details</li><li>4. End</li></ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> 1a. The system detects that the token input is invalid. The system will display an error message "No such token".	

## BCE Diagram



## Sequence Diagram



## Wireframe

Search Token:

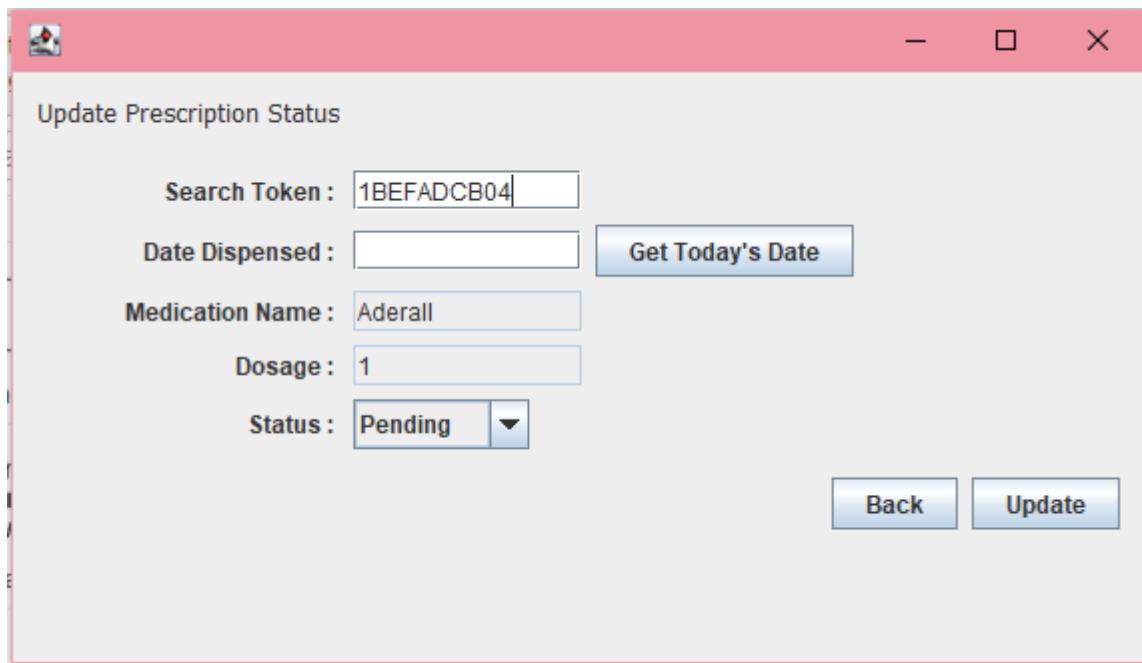
Date Dispensed:

Medication Name:

Dosage:

Status:

GUI



Test Case

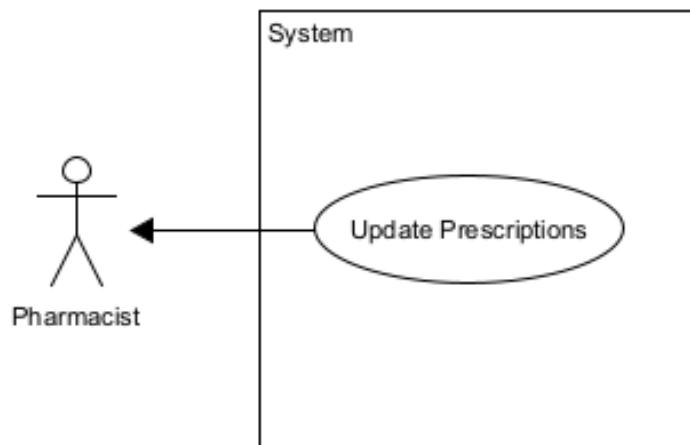
Project Name :	TFanClub Electronic Prescription System
Test CaseID :	TC-4.2
Test Case Description :	Enter Token & View Prescription
Created by :	Jimson Wong
Pre-Condition :	Assume all the data are stored in the database userinfo_3
Test Data File :	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-4.4.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-4.4.2	Press the login text box Enter Username and password Click 'login' button	userID = pharma2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-4.4.3	Click on 'update' button Search token to retrieve prescription details	Token = 1BEFADCB04	Prescription detail successfully loaded	Prescription detail successfully loaded	Pass		

### 9.1.3 Pharmacist Update (#12)

As a Pharmacist, I want to be able to update the status of the medications so that I know which patient has collected their prescription.

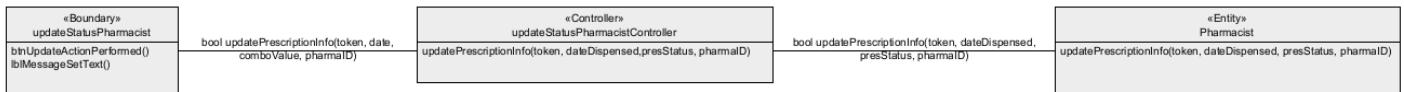
Use Case Diagram



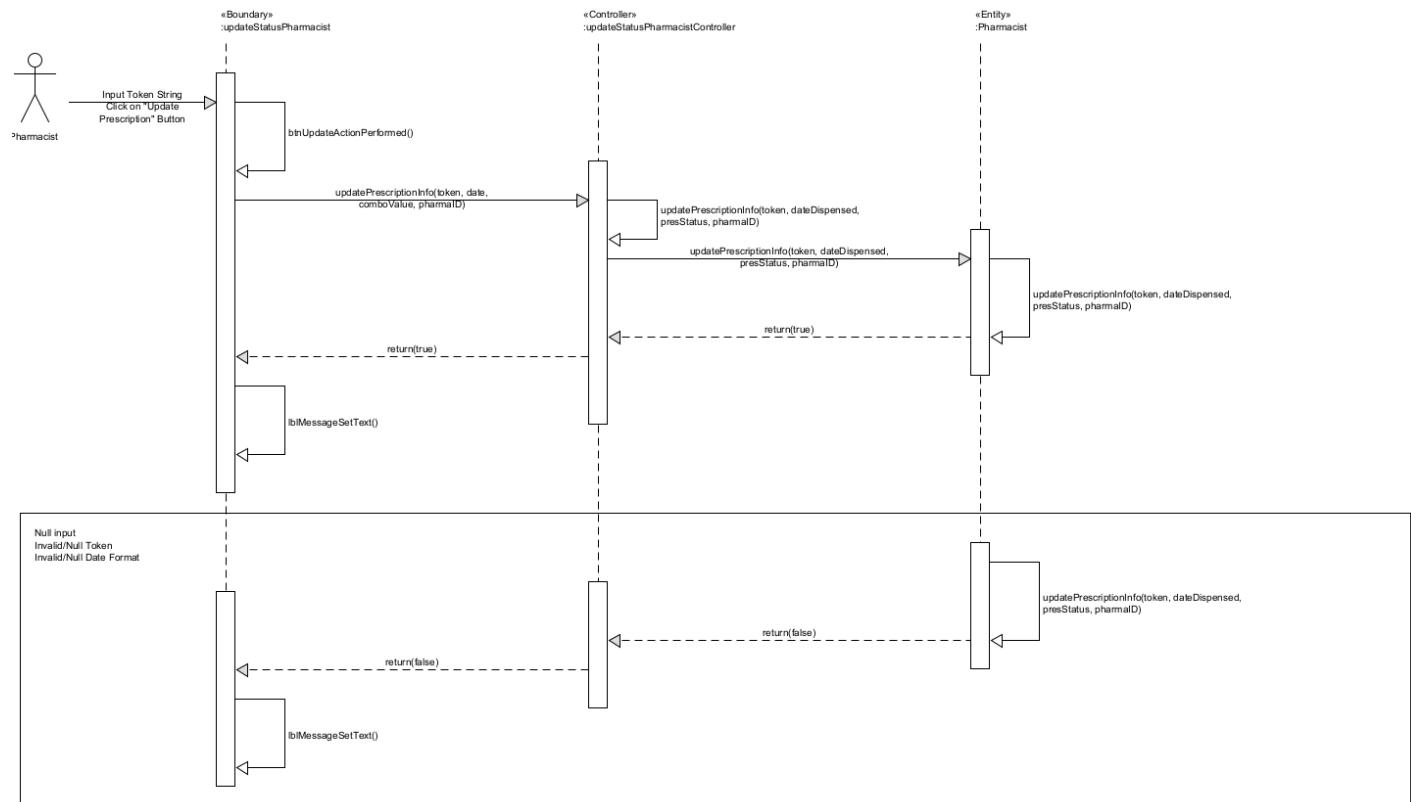
Use Case Description

<b>Name:</b> PharmacistUpdate	<b>ID:</b> 12
<b>Stakeholders and goals:</b> User wants to update prescription status	
<b>Actors:</b> Pharmacist	
<b>Trigger:</b> User click on "Update Prescription" button	
<b>Preconditions:</b> Pharmacist must be logged into their account	
<b>Normal Flow:</b> <ol style="list-style-type: none"><li>1. User will click on "Update Prescription" button</li><li>2. User will be redirected to the update page where it displays Search Token, Date Dispensed, Medication Name, Dosage and Status.</li><li>3. User will input Token ID into Search Token bar</li><li>4. The system will display relevant medication name, dosage and status.</li><li>5. User will click on "Get Today's Date" button to get the date for prescribing medication</li><li>6. User will be able to update prescription status successfully</li><li>7. End</li></ol>	
<b>Sub-Flows:</b> -	
<b>Alternatives/Exceptional Flows:</b> <ol style="list-style-type: none"><li>1a. The system detects that the token input is invalid. The system will display an error message "No such token".</li><li>1b. The system detects that the date input format is invalid. The system will display an error message "Please enter a date in DDMMYYYY format".</li><li>1c. The system detects that the date is null. The system will display an error message "Please enter a date".</li></ol>	

## BCE Diagram



## Sequence Diagram



## Wireframe

The Wireframe shows the graphical user interface for updating prescription information:

- Search Prescription:** Text input field.
- Date Dispensed:** Text input field.
- Medication Name:** Text input field.
- Dosage:** Text input field.
- Status:** Text input field with a dropdown arrow.
- Buttons:**
  - Back**: Blue button.
  - Update**: Blue button.

## GUI

Update Prescription Status

Search Token :

Date Dispensed :

Medication Name :

Dosage :

Status :

Update Prescription Status

Search Token :

Date Dispensed :

Medication Name :

Dosage :

Status :

Successfully Updated

## Test Case

Project Name :	TFanClub Electronic Prescription System
Test CaseID :	TC-4.3
Test Case Description :	Update Status
Created by :	Jimson Wong
Pre-Condition :	Assume all the data are stored in the database userinfo_3
Test Data File :	userinfo_3

Test Step	Test Step Description	Test Data	Expected Results	Actual Result	Pass/Fail	Remarks	Screenshot if fail
TC-4.3.1	Start login page	Nil	A login page appears on screen	A login page appears on screen	Pass		
TC-4.3.2	Press the login text box Enter Username and password Click 'login' button	userID = pharm2 password = 1 Click login button	Successfully login	Successfully login	Pass		
TC-4.3.3	Click on 'Update prescription' button	Click Update Prescription button	Redirect to Update Prescription Page	Redirect to Update Prescription Page	Pass		
TC-4.3.4	Search Token to get the details Click 'Get Today's Date' to get today date Change the status to 'Dispensed'	Token = 1BEFADC804 DateDispensed= 14112021 Status = Dispensed Click Update button	Successfully updated	Successfully updated	Pass		

## 9.2 Evidence of Methodologies

### 9.2.1 Meeting Minutes

# TFanClub

## Meeting Minutes

**5 November, 2021**

**Project Name: Electronic Prescription System**

**Present:** Junior Tantono, Leviandran S/O Selvakumaran, Brandon Wong, Tan Zhen Yi, Jimson Wong Yew Kee, Chng Yia Qing Whitney, Mao Xingyu, Yin Pei Ying

**Meeting Objective:** Begin Sprint 5, Further discussion of application expectations and planning

### Agenda:

- Define deliverables in Sprint 5
- Create Sprint 5 backlog
- Final Report Discussion
- Create Video Demo

S/No	Action Item	Person Responsible	Due Date
1	Discussion and implementation of necessary diagrams for sprint 5	Whitney, Zhen Yi, Pei Ying, Xing Yu	07/11/2021
2	Planning and implementation of application for sprint 5	Junior, Brandon, Leviandran, Jimson	14/11/2021
3	Final Report Discussion	Done By Team	14/11/2021
4	Video Demo	Junior, Brandon, Leviandran, Jimson	14/11/2021

S/No	Notes
1	Do up use case diagrams, descriptions, bce diagram, sequence diagrams
2	Implement functions for sprint 3 and do necessary testing
3	Do up final report documentation
4	Create Video Demonstration of application

Prepared By: Whitney Chng

## 9.2.2 Taiga

USER STORY	>	>	>	CLOSED	<
<p>^ #6 As a Doctor, I want to be able to add prescriptions for patients so that they know what drugs to get from the pharmacy</p> <p>N/E</p> <p>NEW</p>	+ +≡			<p>#207 Create Use Case Diagram for DoctorAdd</p> 	

#207 Create Use Case Diagram for DoctorAdd

#208 Create Use Case Description for DoctorAdd

#217 Create BCE + Sequence Diagram for DoctorAdd

#218 Back-End Development & Code for DoctorAdd

#220 Create UI for DoctorAdd

#219 Front-End Code for DoctorAdd

#222 Test case for DoctorAdd

<p>^ #10 As a Doctor, I want to send electronic tokens to patients, so that they can collect their prescription at the pharmacy.</p> <p>N/E</p>	<p>+ +≡</p> <p>NEW</p>	<p>#255 Create Use Case Diagram for DoctorToken</p>  <p>#256 Create Use Case Description for DoctorToken</p>  <p>#257 Create BCE + Sequence Diagram for DoctorToken</p>  <p>#258 Back-end Development &amp; Code for DoctorToken</p>  <p>#259 Front-end Code for DoctorToken</p>  <p>#260 Create UI for DoctorToken</p>  <p>#261 Create Test Data</p>  <p>#262 Test Case for DoctorToken</p> 
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^ #7 As a Doctor, I want to be able to update prescriptions, so I can prescribe the drugs to the patient.

N/E

NEW

#231 Create Use Case Diagram for DoctorUpdate



#232 Create Use Case Description for DoctorUpdate



#233 Create BCE + Sequence Diagram for DoctorUpdate



#242 Back-End Development & Code for DoctorUpdate



#243 Front-End Code for DoctorUpdate



#244 Create UI for DoctorUpdate



#246 Test case for DoctorUpdate



^ #14 As a Pharmacist, I want to be able to enter the token given to the patient so that I can give the correct prescription to the patient.

N/E

NEW

#199 Create Use Case Diagram for PharmacistToken



#200 Create Use Case Description for PharmacistToken



#201 Create BCE + Sequence Diagram for PharmacistToken



#202 Back-end Development & Code for PharmacistToken



#203 Front-end Code for PharmacistToken



#204 Create UI for PharmacistToken



#205 Create Test Data



#206 Test Case for PharmacistToken



^ #12 As a Pharmacist, I want + +  
to be able to update the  
status of the medications so  
that I know which patient  
has collected their  
prescription

N/E

NEW

#191 Create Use Case Diagram for  
PharmacistView



#192 Create Use Case Description  
for PharmacistView



#193 Create BCE + Sequence  
Diagram for PharmacistView



#194 Back-end Development & Code  
for PharmacistView



#195 Front-end Code for  
PharmacistView



#196 Create UI for PharmacistView



#198 Test Case for PharmacistView



^ #13 As a Pharmacist, I want + +  
to be able to view the  
prescriptions that have been  
prescribed so that I know  
which drugs to give the  
patient.

N/E

NEW

#113 Create Use Case Diagram for  
PharmacistView



#114 Create Use Case Description  
for PharmacistView



#115 Create BCE + Sequence  
Diagram for PharmacistView



#116 Back-end Development & Code  
for PharmacistView



#117 Front-end Code for  
PharmacistView



#118 Create UI for PharmacistView



#184 Create Test Data



#119 Test Case for PharmacistView



^ Storyless tasks + +

#280 Final Report Documentation



Not assigned

#281 Video Demo



Not assigned

### 9.2.3 Sprint Review

#### Status/Progress Report 5

**Project Name:** Electronic Prescription System

**Team Members:** Junior Tantono, Whitney Chng, Brandon Wong, Leviandran S/O Selvakumaran, Tan Zhen Yi, Jimson Wong, Mao Xingyu, Yin Pei Ying

**Date:** 14/10/2021

**Reporting Period:** 05/11/2021 - 14/10/2021

#### **Work completed this reporting period:**

- Discussion of project deliverables for sprint 5
- Update user story and tasks in Taiga
- Completion of tasks required for each user story
- Testing of functions to ensure that they work accordingly

For the last sprint of the project, the team has to come together to finalize all documents needed for submission. The members responsible for coding also ran a final check on the application to ensure that there are no errors. All project and product-related documents are compiled into the final report for submission. A video demo was created to visually demonstrate the design of the prototype and show how the functions work.

#### **What's going well and why:**

The team did not lose focus despite closing into the end of the project, instead everyone was even more focused on completing the project. All necessary work done for submission was all done fast and up to expectations.

#### **What's not going well and why:**

There were many documents that required cross-checking as some data must tally which caused a minor confusion in between.

#### **Suggestions/Issues:**

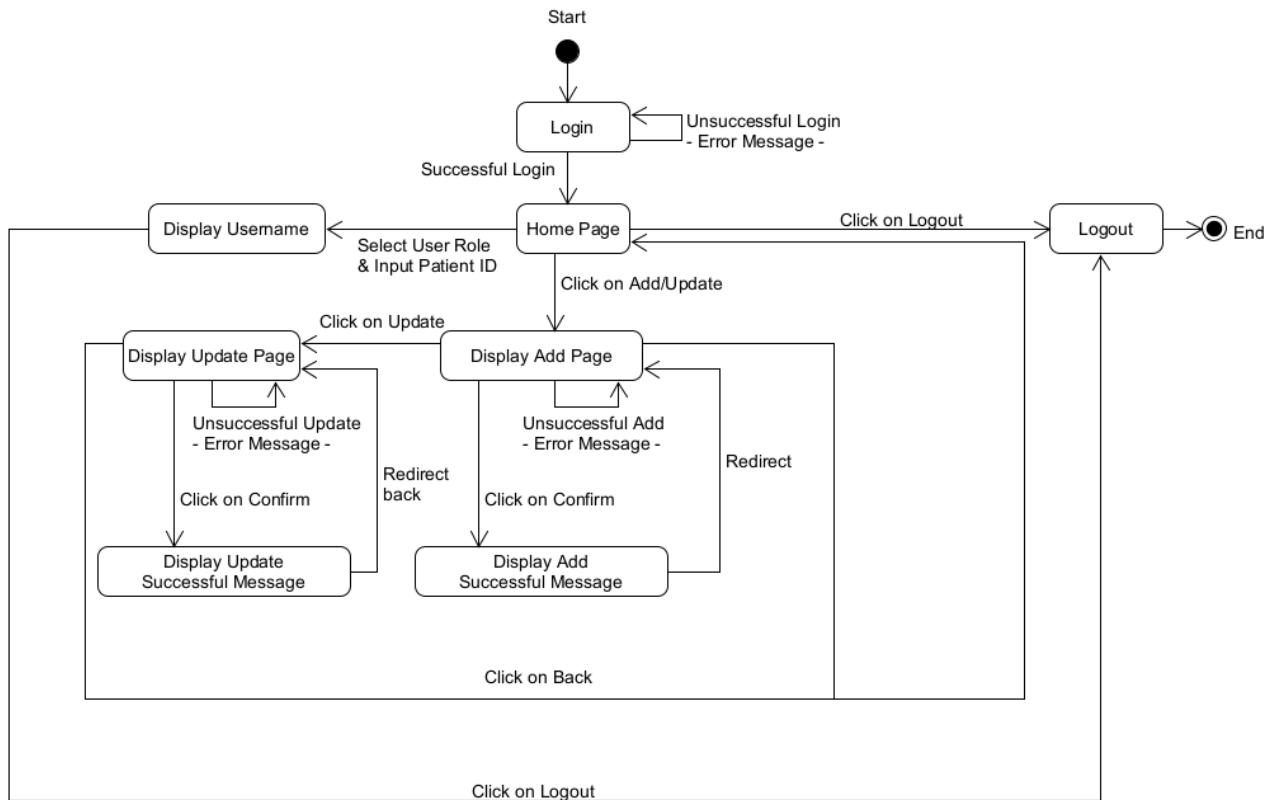
Tackle each document on its own and carefully sort out the data accordingly to prevent any mistakes

Member Contribution

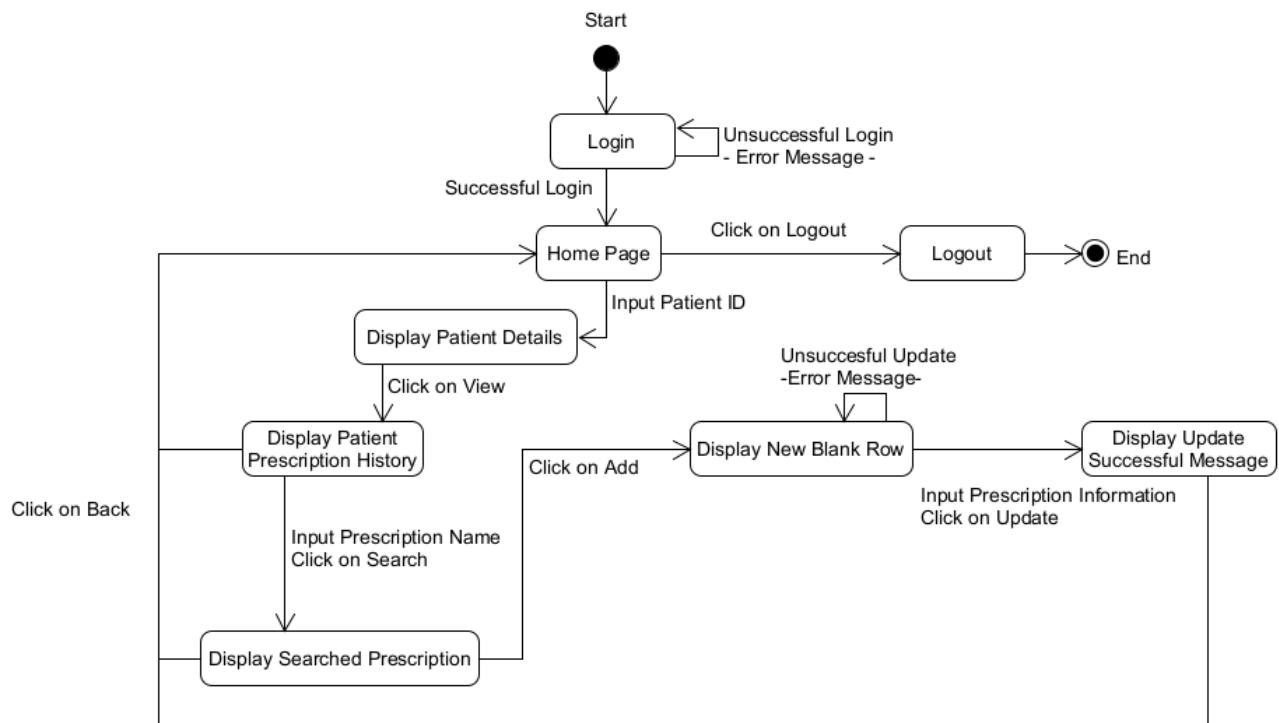
Name	Task(s) Completed
Junior Tantono	Front-End & UI Coding Back-End Development & Coding Testing Video Demo
Brandon Wong	Front-End & UI Coding Back-End Development & Coding Testing Video Demo
Leviandran S/O Selvakumaran	Front-End & UI Coding Back-End Development & Coding Testing Video Demo
Jimson Wong Yew Kee	CI/CD Testing Video Demo
Whitney Chng	Use Case Diagram & Description Class and Sequence Diagram Final Report
Mao Xingyu	Use Case Diagram & Description Class and Sequence Diagram Final Report
Tan Zhen Yi	Use Case Diagram & Description Class and Sequence Diagram Final Report
Yin Pei Ying	Use Case Diagram & Description Class and Sequence Diagram Final Report Wireframe

# 10. State Diagrams

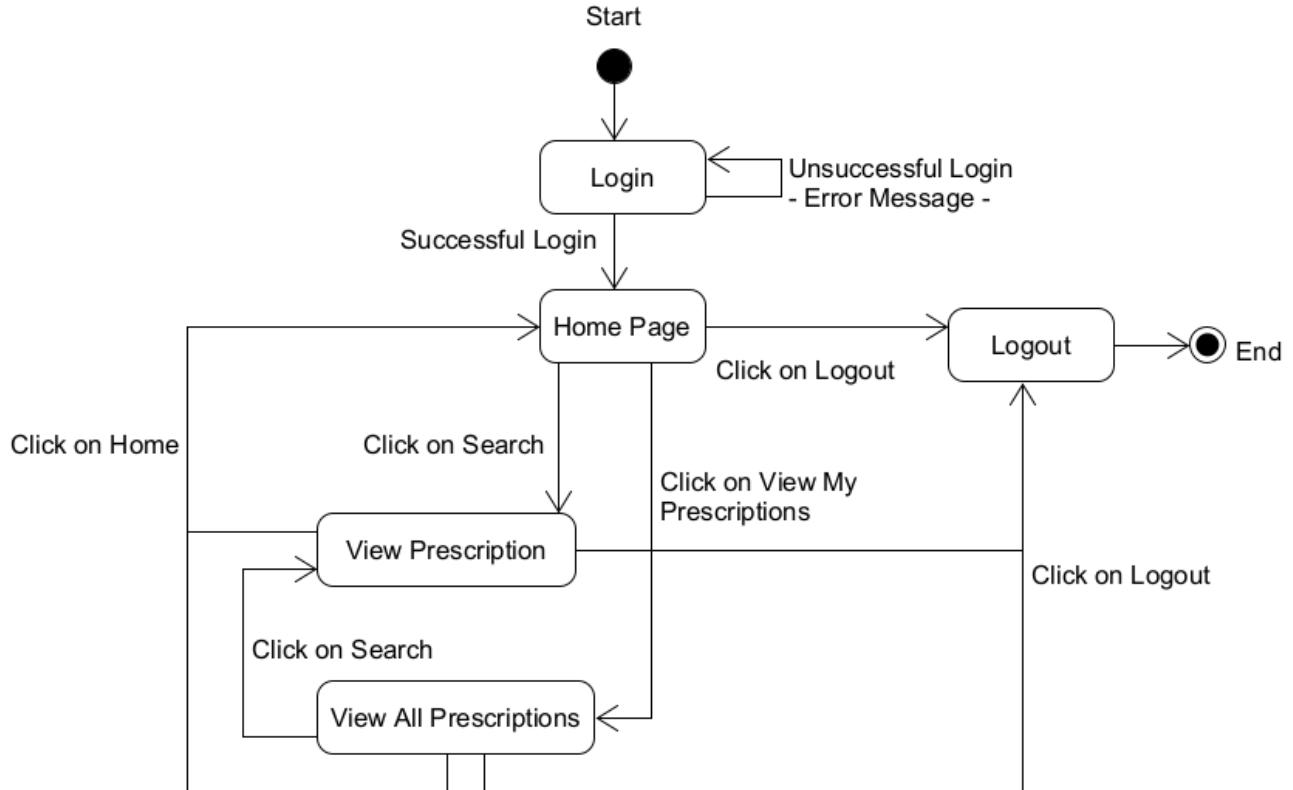
Admin



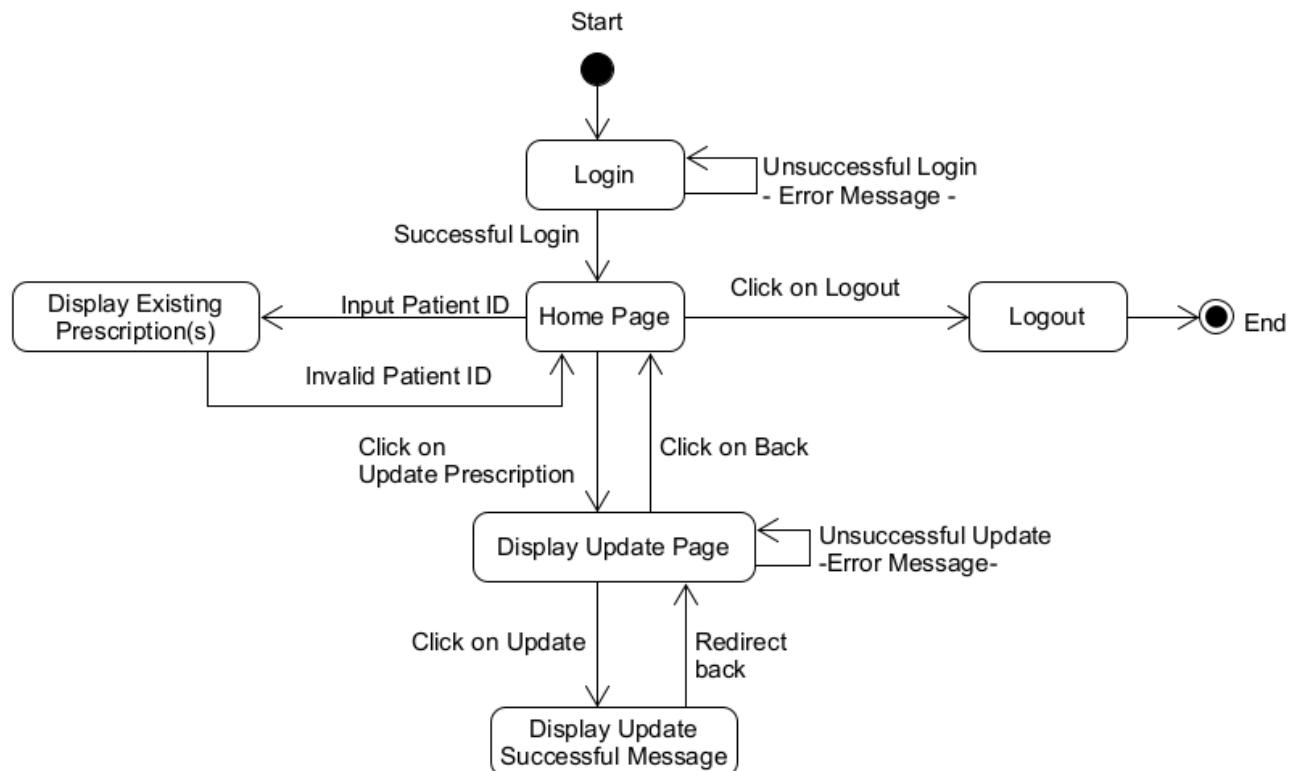
Doctor



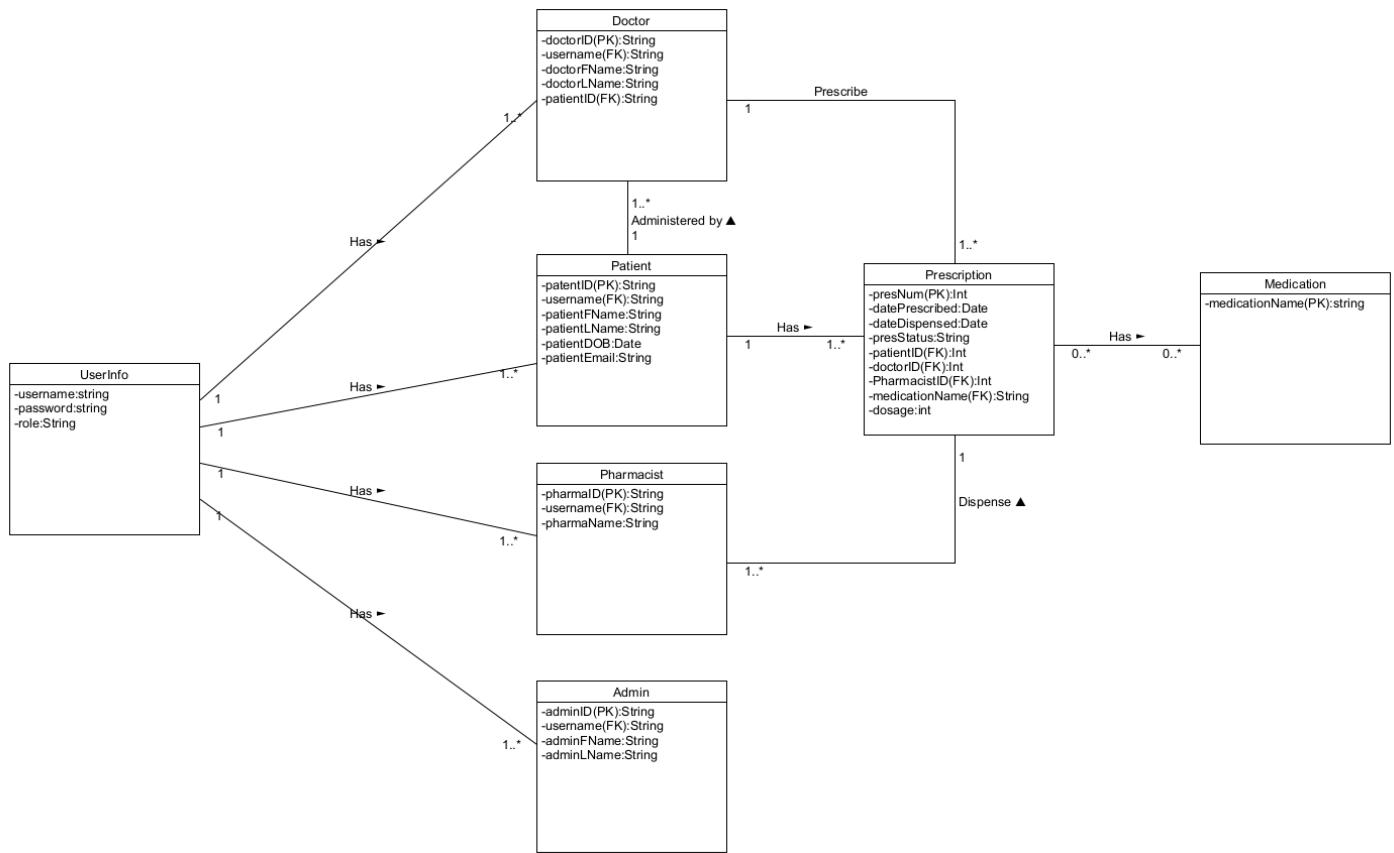
## Patient



## Pharmacist



## 11. Project UML



## 12. Data-Driven Development (DDD)

With a relatively new system put in place, the team is expecting to improve further with this base installed. We are going to utilise machine learning to recognise trends and patterns as more patients and staff interact with the system.

We can apply machine learning to our project to better understand the data stored in our database. For example, our internal database allows us to collect data of medicationName and dosage data in our database to better identify which medicines are more commonly prescribed to patients. Thus, we will be able to help the pharmacy better understand the mostly prescribed drugs and better manage their stocks.

With regards to data labelling and cleaning, it is difficult for the system to identify if medications were prescribed based on false/faked symptoms or if the prescriptions given by the doctor are 100% accurate to the real symptoms provided by the patient. Which in return might affect our initial prediction of commonly prescribed medicines. This will only be successful after our database has collected a sufficient amount of data in order for the system to predict and analyse more accurately.

We can build a predictive model that yields predictive forecasts based on the past prescriptions to allow pharmacies to estimate and plan their restocking schedules. Next, we can make an algorithm that will be fine-tuned to ensure that it generates the desired output.

The next phase would be to analyze and determine if the output is satisfactory. Otherwise, the feature engineering and model training stages must be repeated. If it is up to standards, we can send insight to our pharmacy partners, be it through email or the software itself, to better aid them in their stock management. Finally, we have to regularly check the performance of the algorithm to look out for any errors and see if we might need to restart the feature engineering and model evaluation cycle.

In order to ensure that the system is working as intended, the development of this model will be put through a test that acts as model training. The staff will mimic themselves as patients with symptoms that require different medication while the doctors prescribe medications as needed. This will be done several times and the results will be collected and compared with the predicted medication stocks. Through this training, we expect the system to have accurately predicted the medication stocks which would greatly help the hospital in having better control over their medication inventory stocks.

Lastly, the deployment of the system will still require some supervision and monitoring over it as different diseases and sickness may require different medications during specific phases of the year. The system will be able to predict stock management accurately for common sickness just as fever, headaches, cramps etc. but with other new data that the system is not familiar with, the staff will still have to be aware of the stocks before the system eventually learns enough about it.