UML Documentation

for

Virtual Clinic - An Integrated Care System

Version 1.4 approved

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26-02-2018

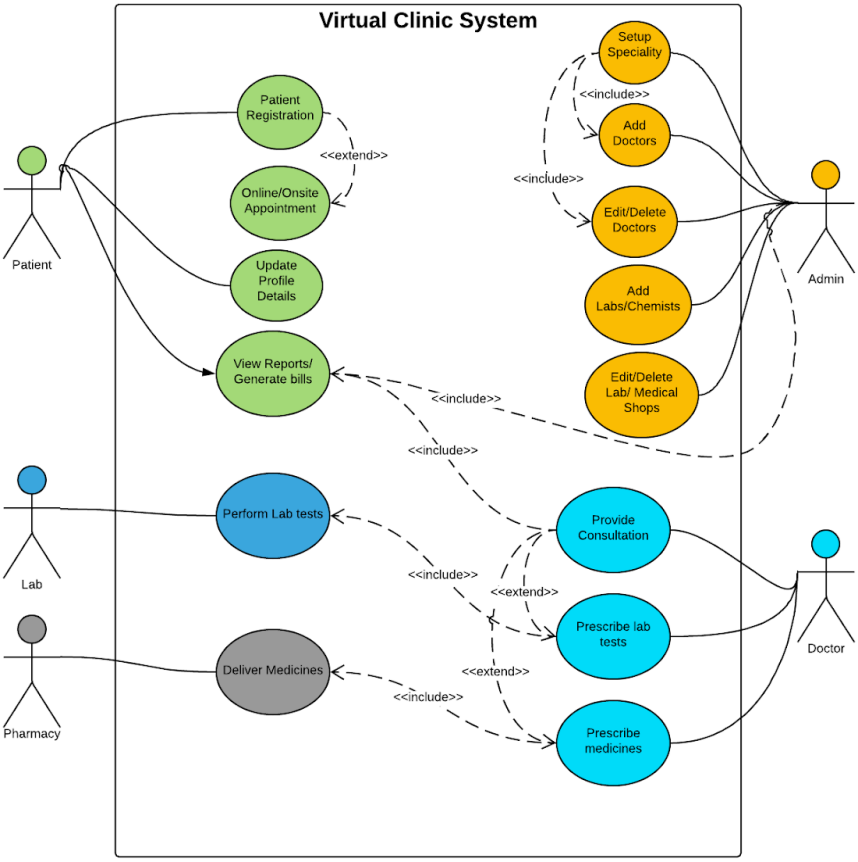
Revision History

Name	Date	Reason For Changes	Version
Virtual Clinic	21/02/18	Initial Creation	1.0
Virtual Clinic	23/02/18	Use Case Diagram, Class Diagram	1.1
Virtual Clinic	24/02/18	Activity Diagram, Sequence Diagram, State Machine Diagram	1.2
Virtual Clinic	25/02/18	Collaboration Diagram, Deployment Diagram	1.3
Virtual Clinic	26/02/18	Revised Sequence Diagram, explained description for activity diagram	1.4

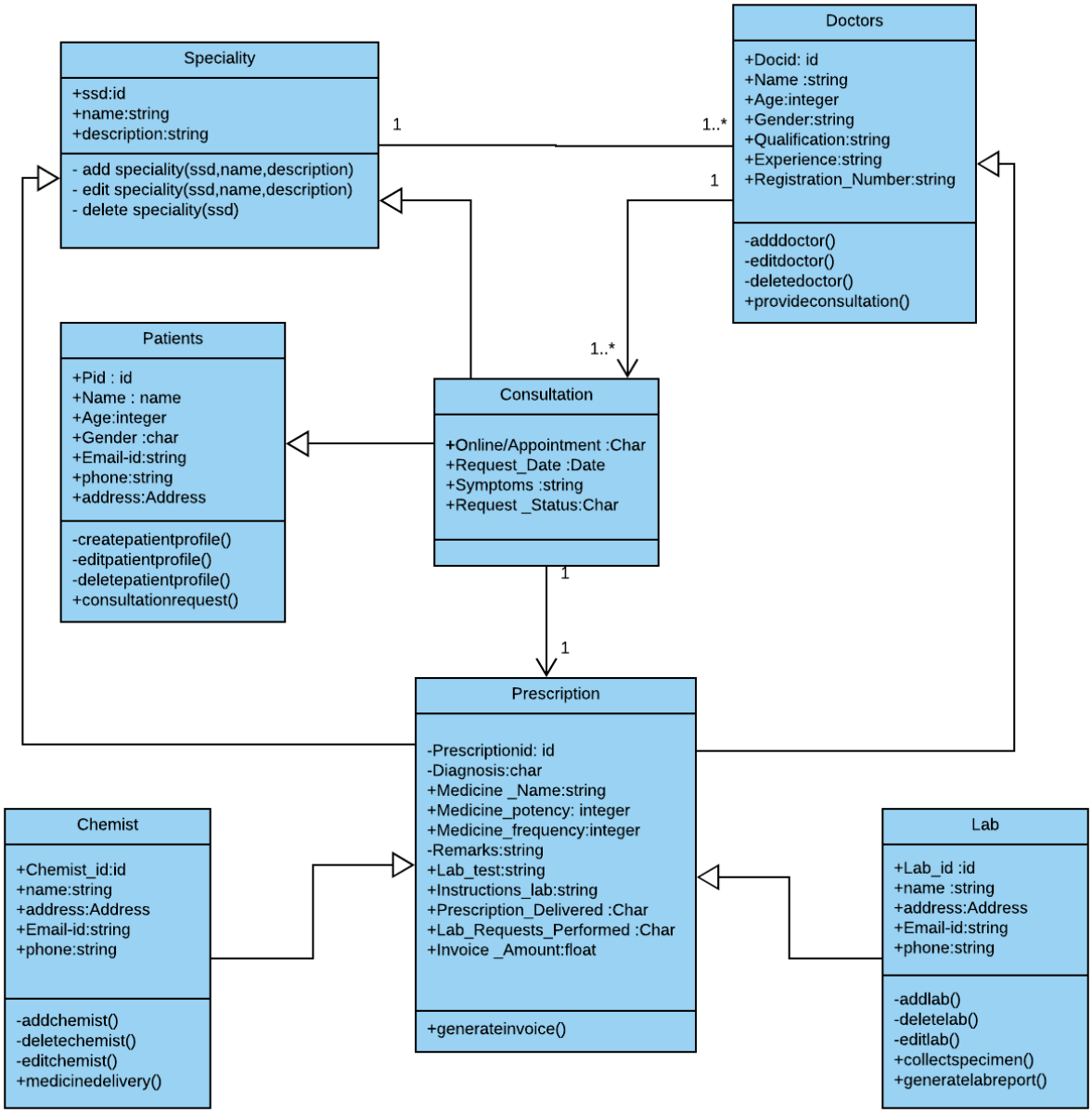
Contents

1. Use Case Diagram
2. Class Diagram
3. Activity Diagram
4. Sequence Diagram
5. Collaboration Diagrams
6. State Machine Diagram
7. Component Diagram
8. Deployment Diagram

1. Use Case Diagram



2. Class Diagram



3. Activity Diagram

Explanation:

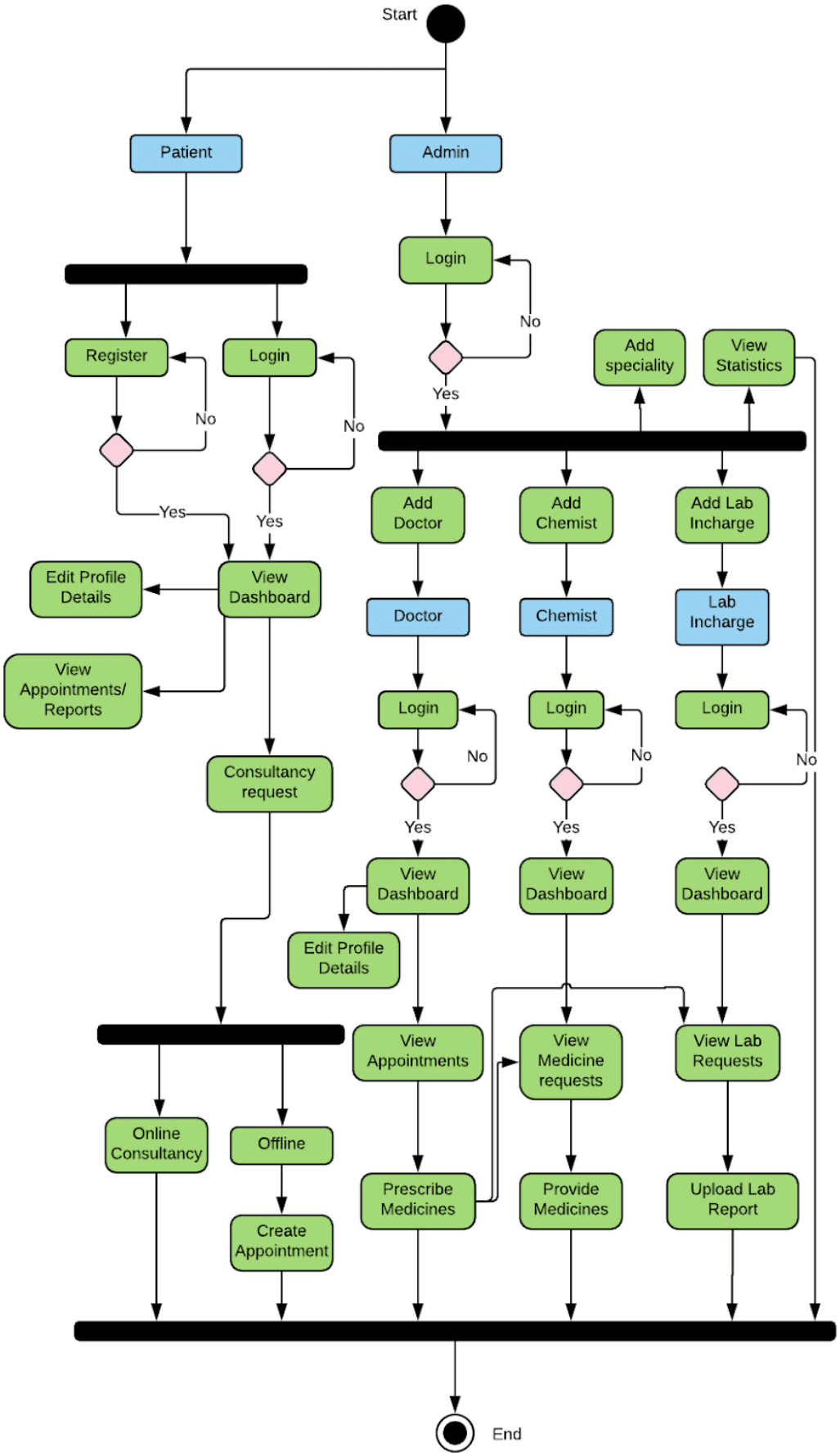
When the system starts, the admin/patient logs into the system,only if they are valid credentials they are lead to the system interface to perform more actions onto the system, else they are again lead back to the login/registration page. Admin has the power to add doctors, chemist, lab. Once their credentials are shared with the corresponding stakeholder, they login to the system. Admin can further also view system statistics, add speciality of doctors to the system.

Patient stakeholder can update his/her profile, view previous appointments/requests done and also make a new appointment.

Doctor stakeholder can also update his/her profile details, view the appointments in his/her dashboard and provide consultation, prescribe medicines/lab test.

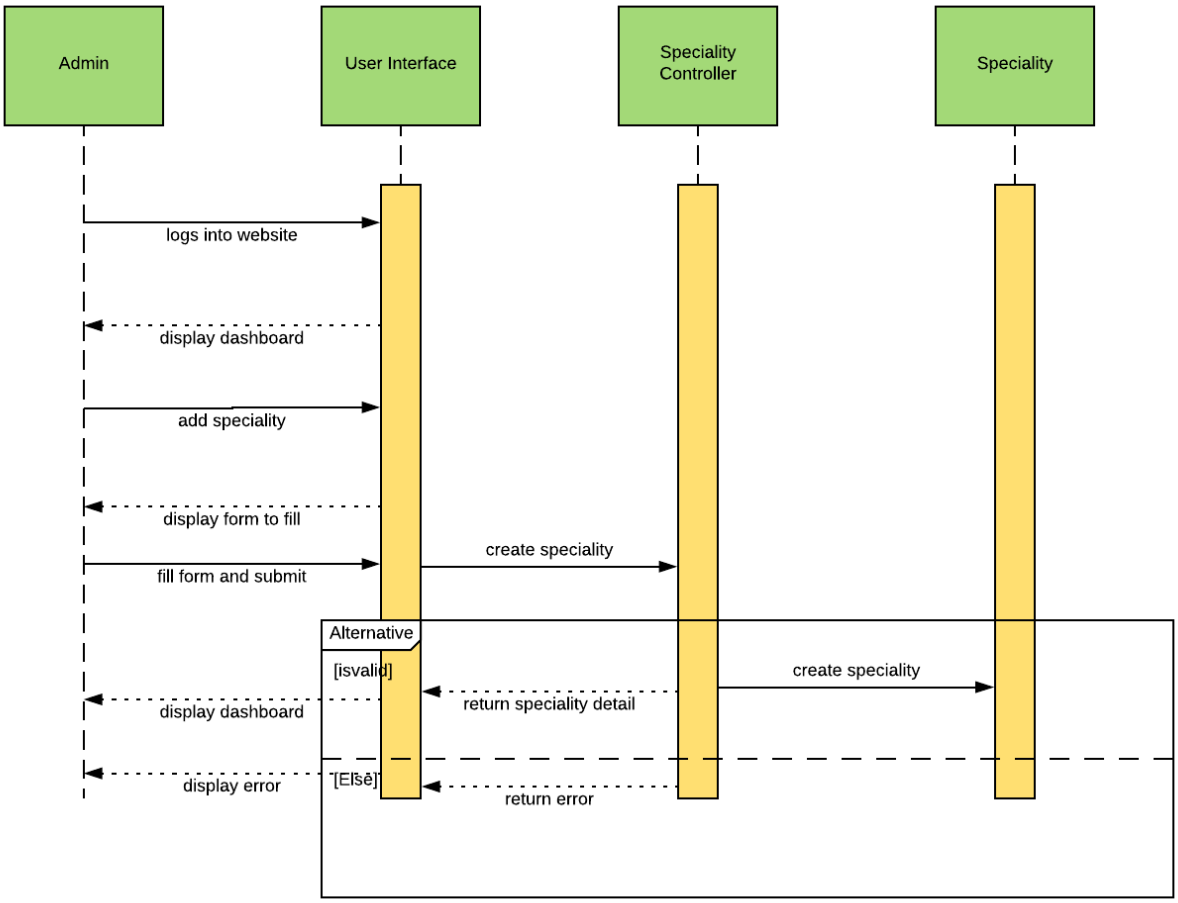
Chemist stakeholder on logging into the system can view the medicines to be delivered to a particular patient and upon delivery update the status of delivery.

Lab incharge stakeholder on logging into the system can view the lab tests to be done for a particular patient and update the reports after test for patient to view.

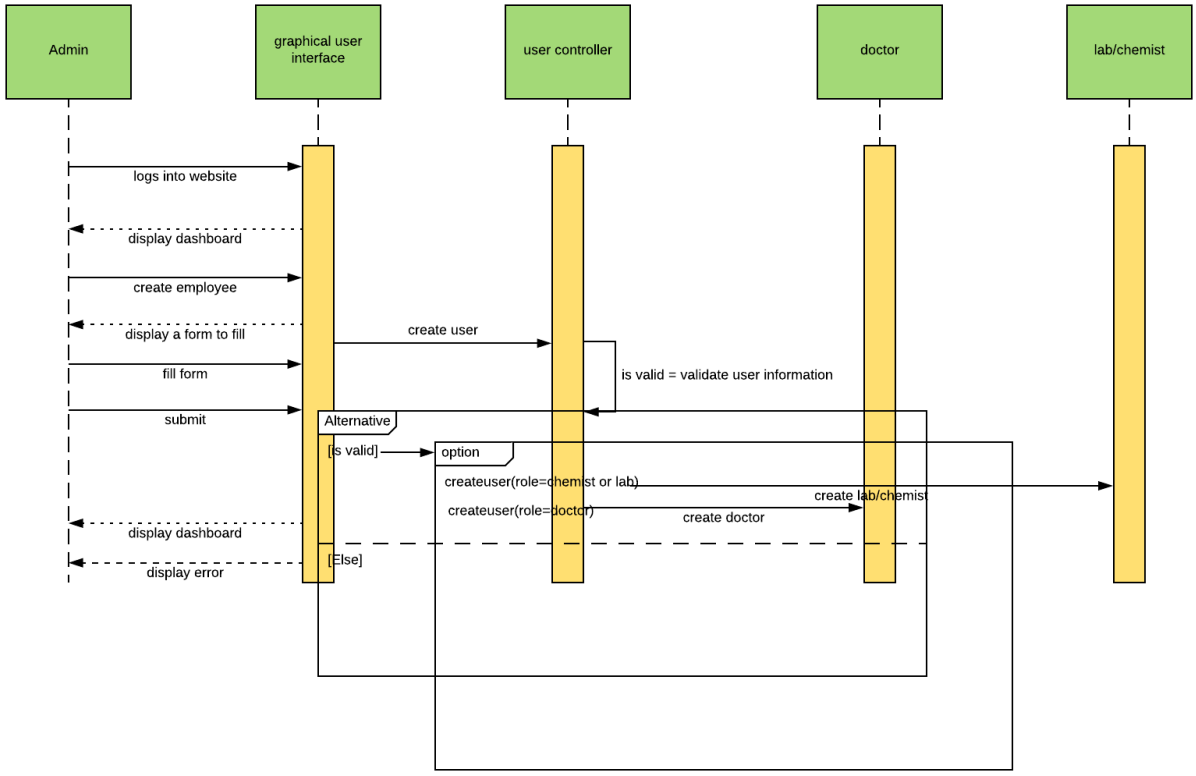

Start
Patient
Admin
Login
No
Yes
Register
Login
No
No
Yes
Yes
Add speciality
View Statistics
Edit Profile Details
View Dashboard
View Appointments/ Reports
Consultancy request
Add Doctor
Add Chemist
Add Lab Incharge
Doctor
Chemist
Lab Incharge
Login
Login
Login
No
No
No
Yes
Yes
Yes
View Dashboard
View Dashboard
View Dashboard
Edit Profile Details
Online Consultancy
Offline
Create Appointment
View Appointments
Prescribe Medicines
View Medicine requests
Provide Medicines
View Lab Requests
Upload Lab Report
End

4. Sequence Diagrams

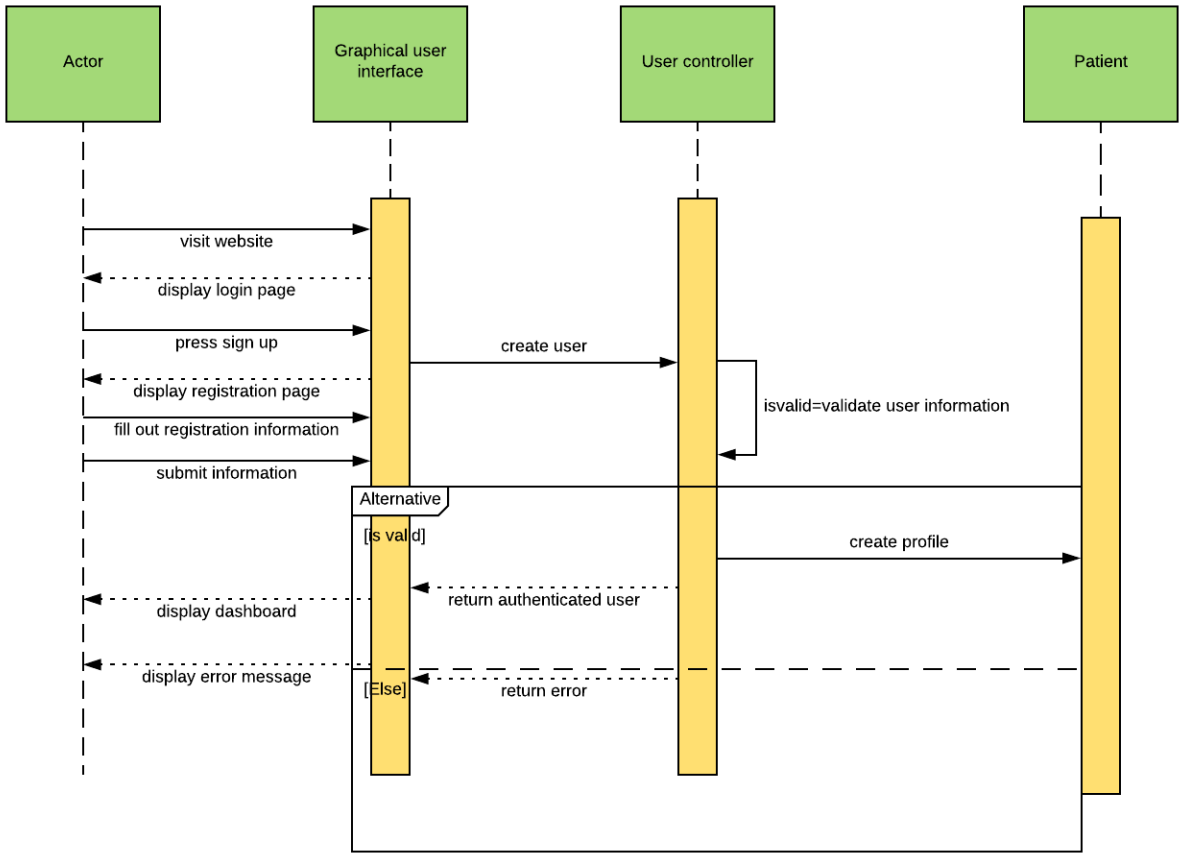
a) Add speciality



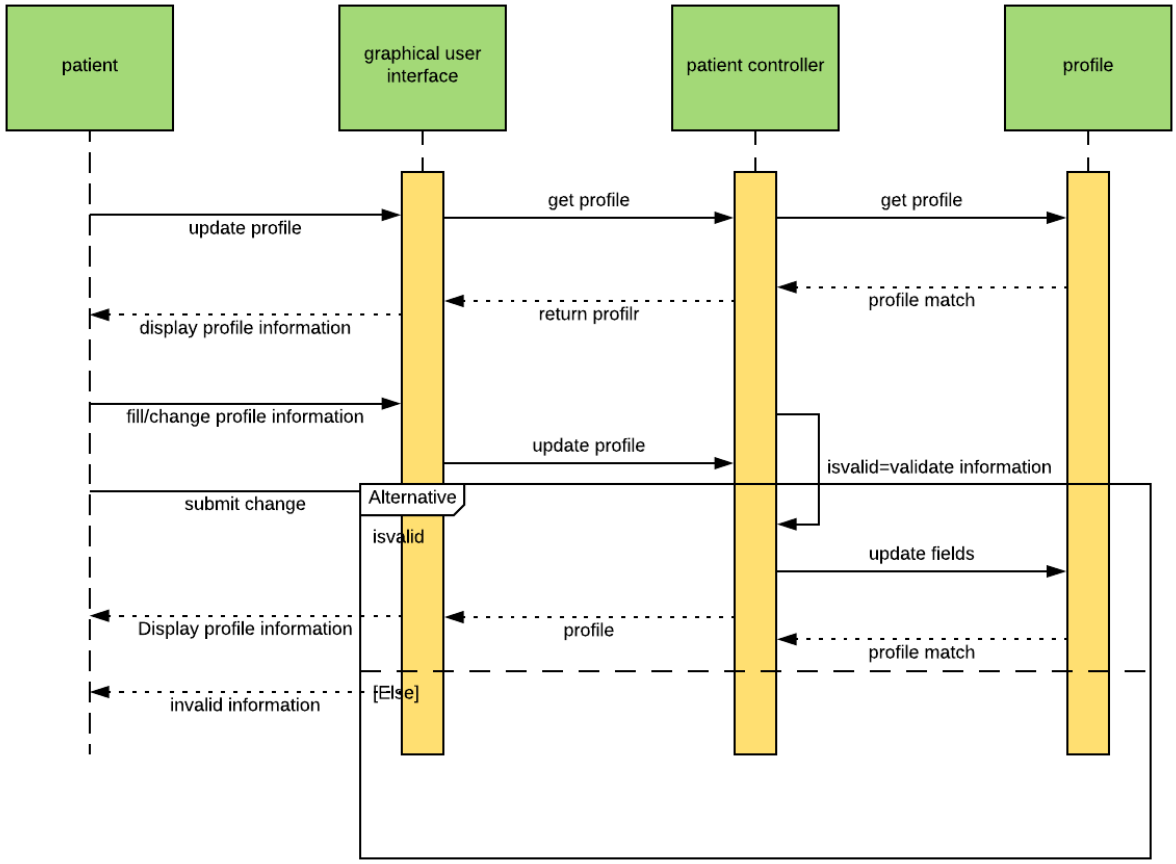
b) Add doctor, chemist, lab



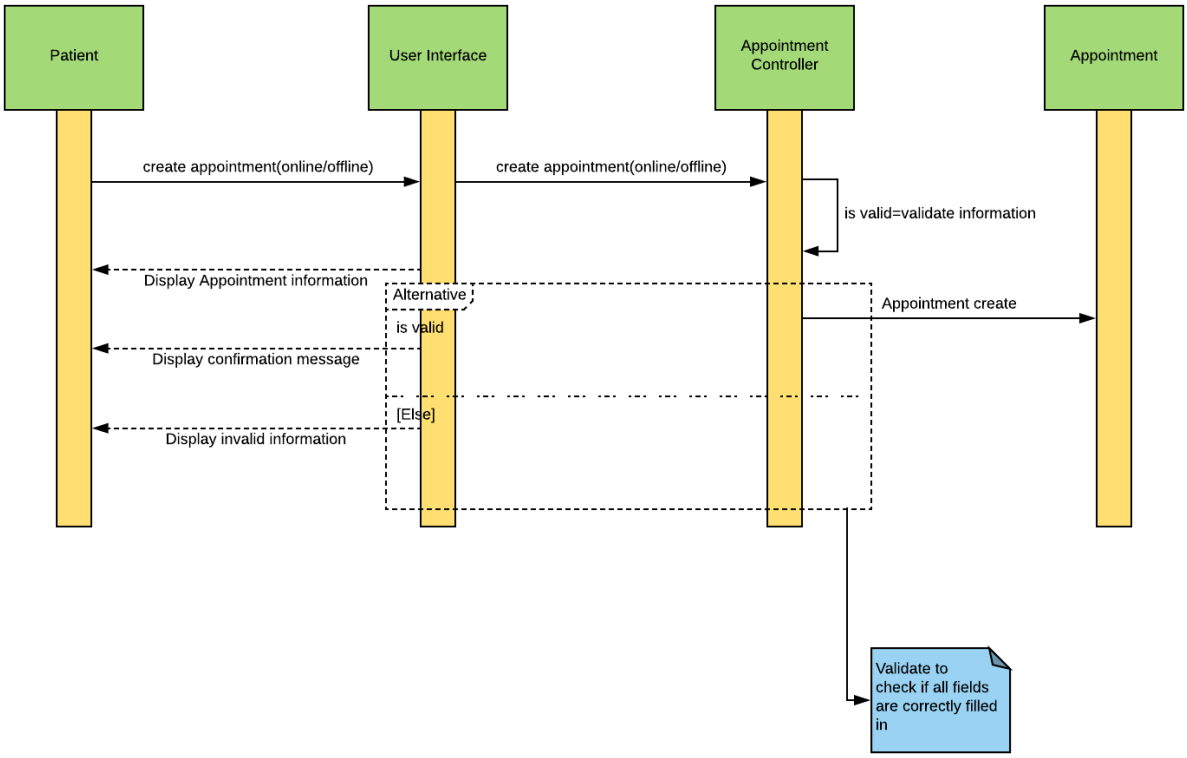
c) Patient Registration



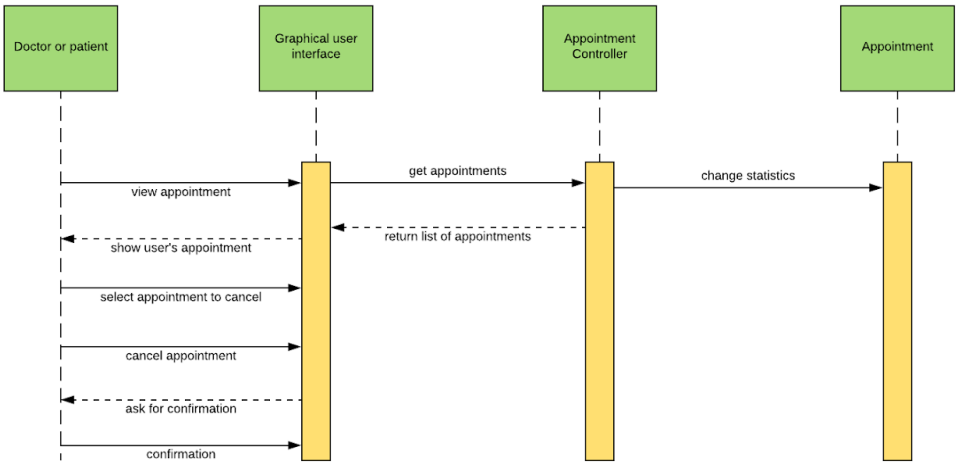
d) Update Patient Profile



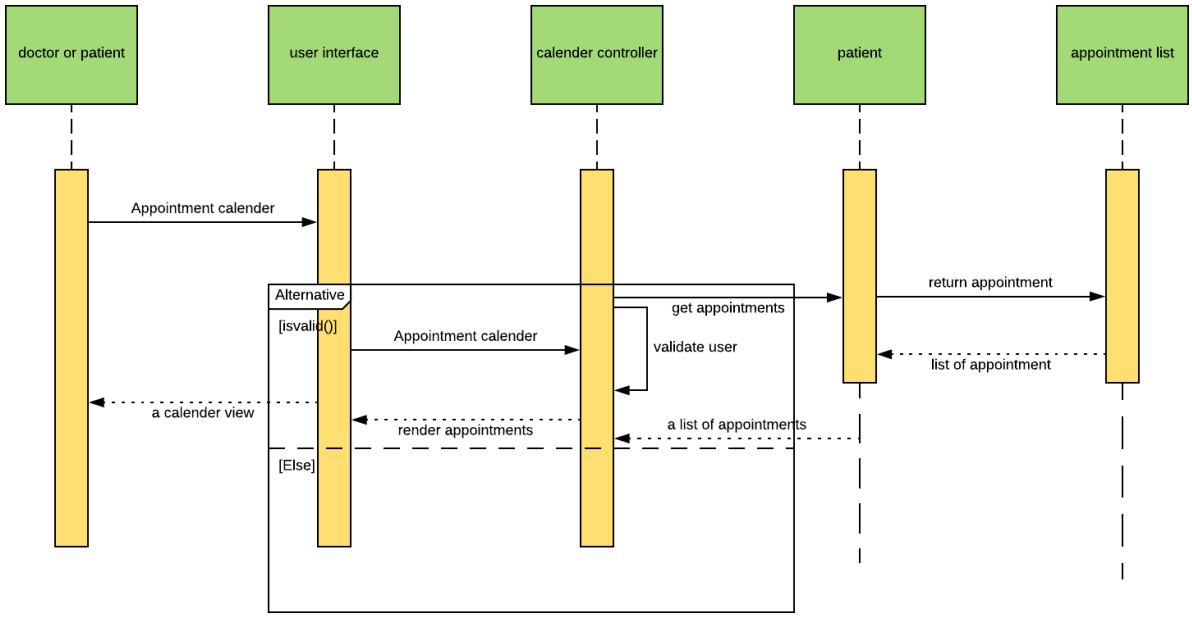
e) Consultation Request



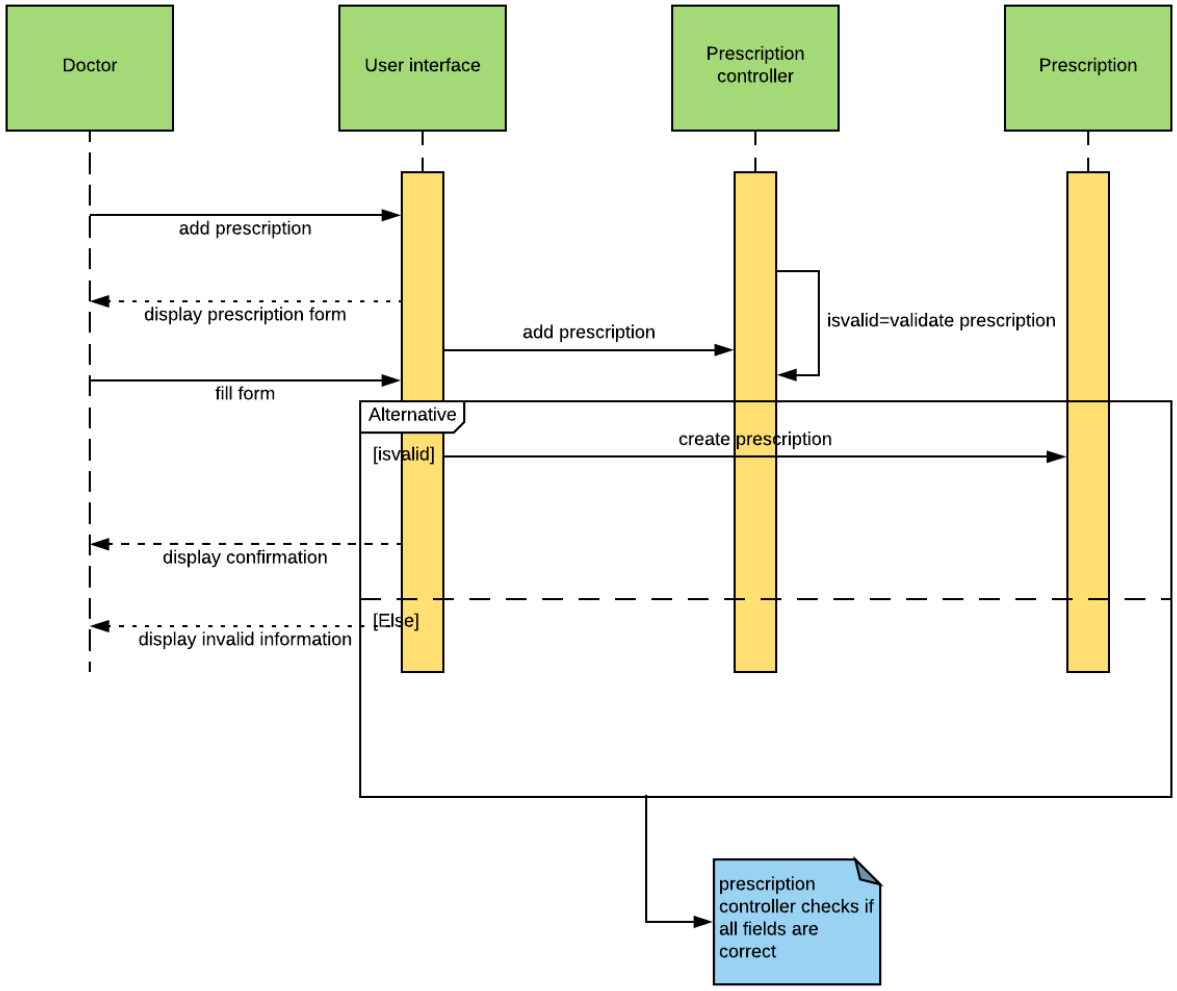
f) Cancel Appointment(offline)



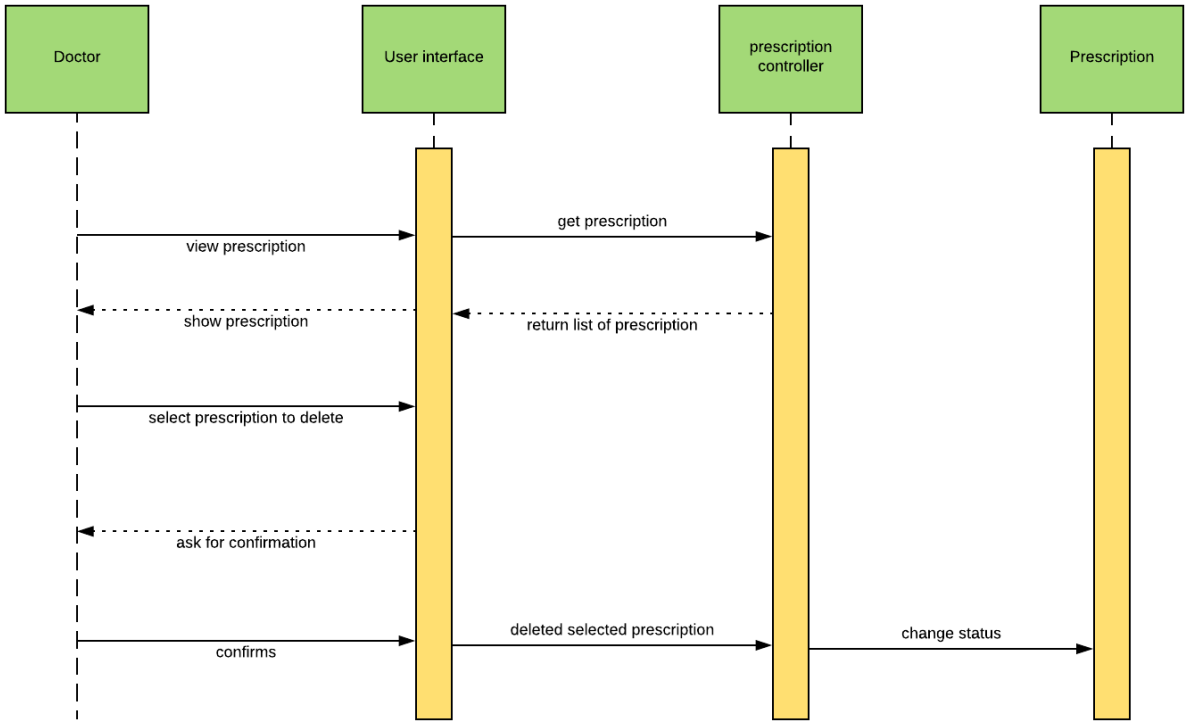
g) Appointment Calendar



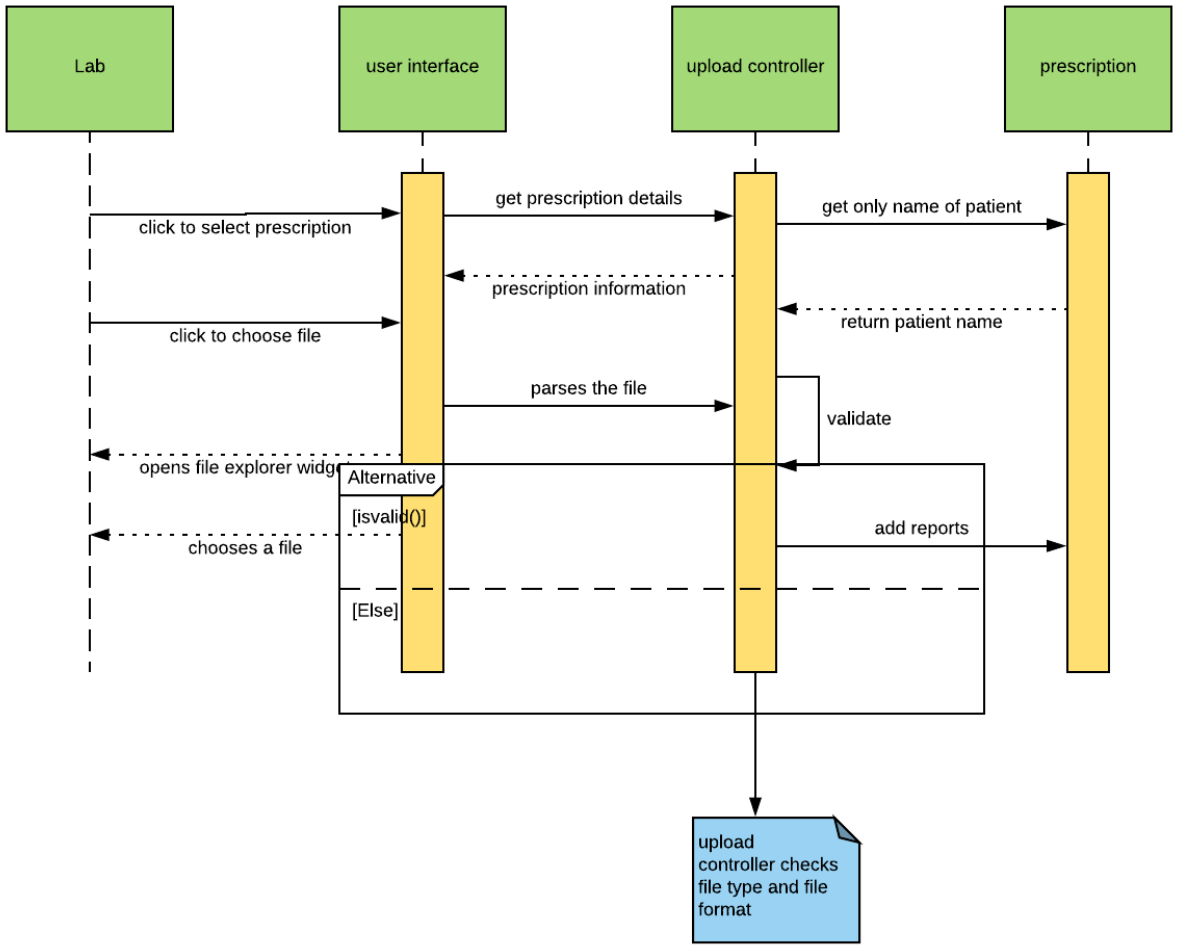
h) Add Prescription (Give Consultation)



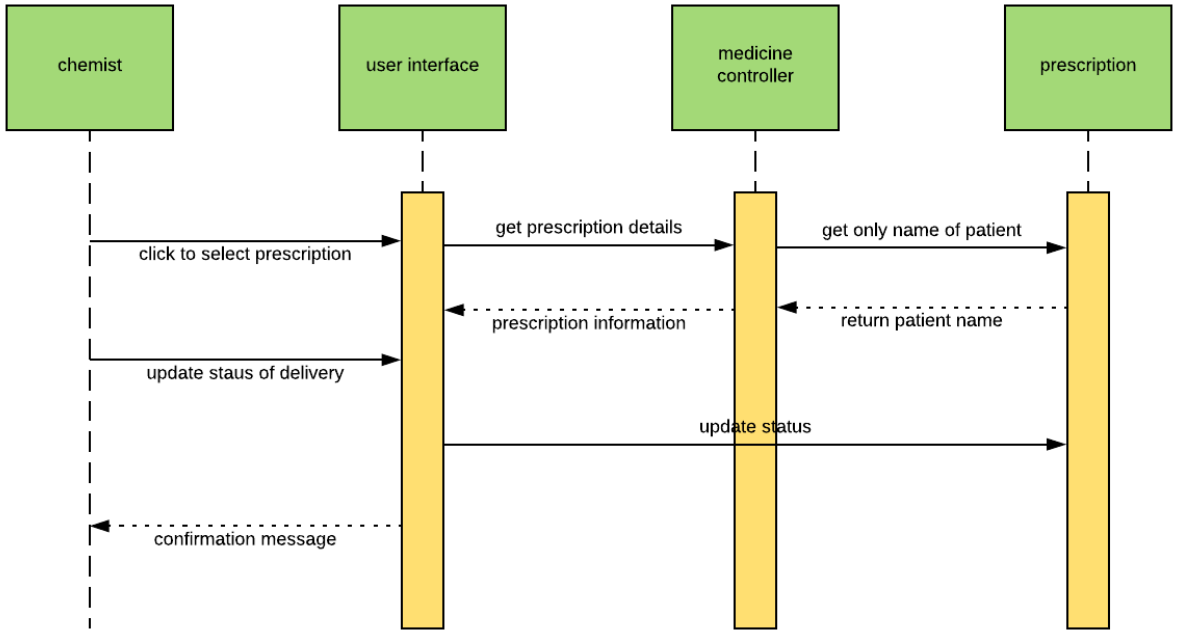
i) Remove Prescription



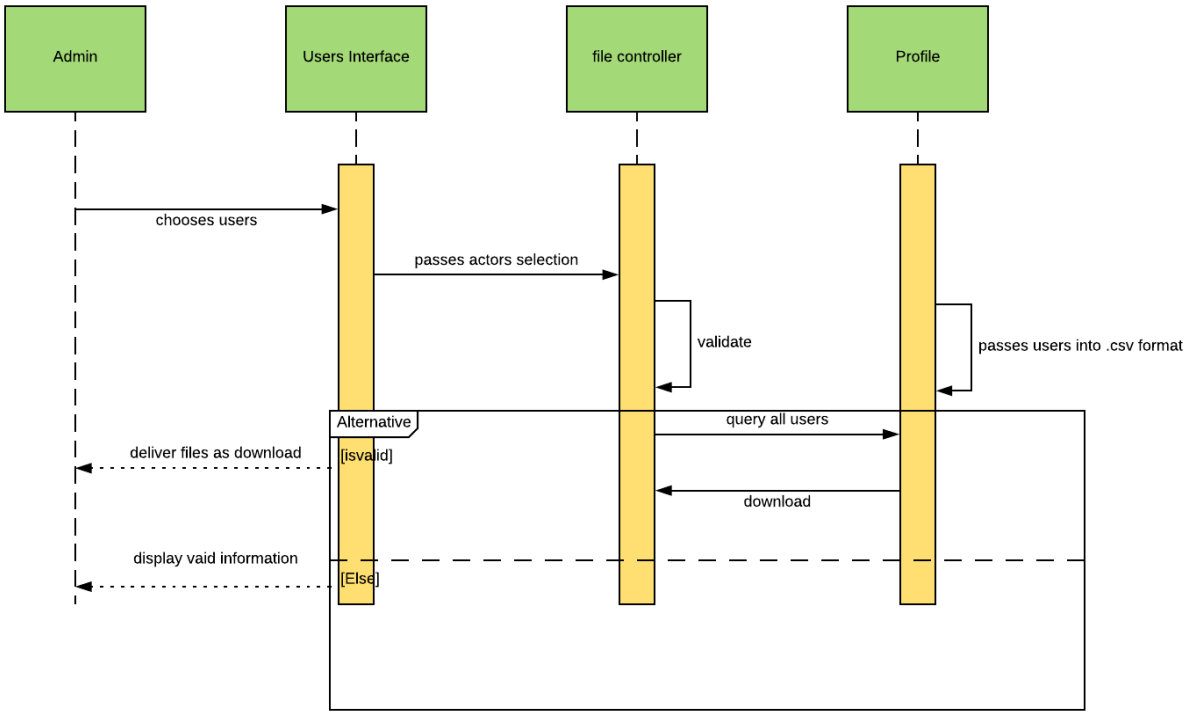
j) Lab Reports



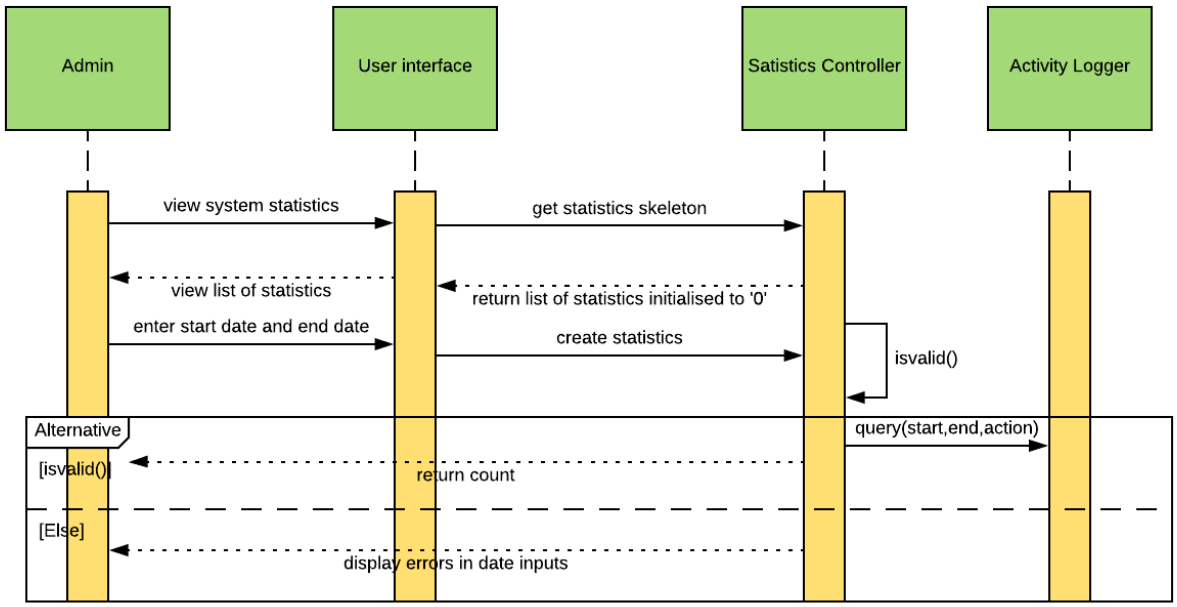
k) Chemist Medicine Delivery



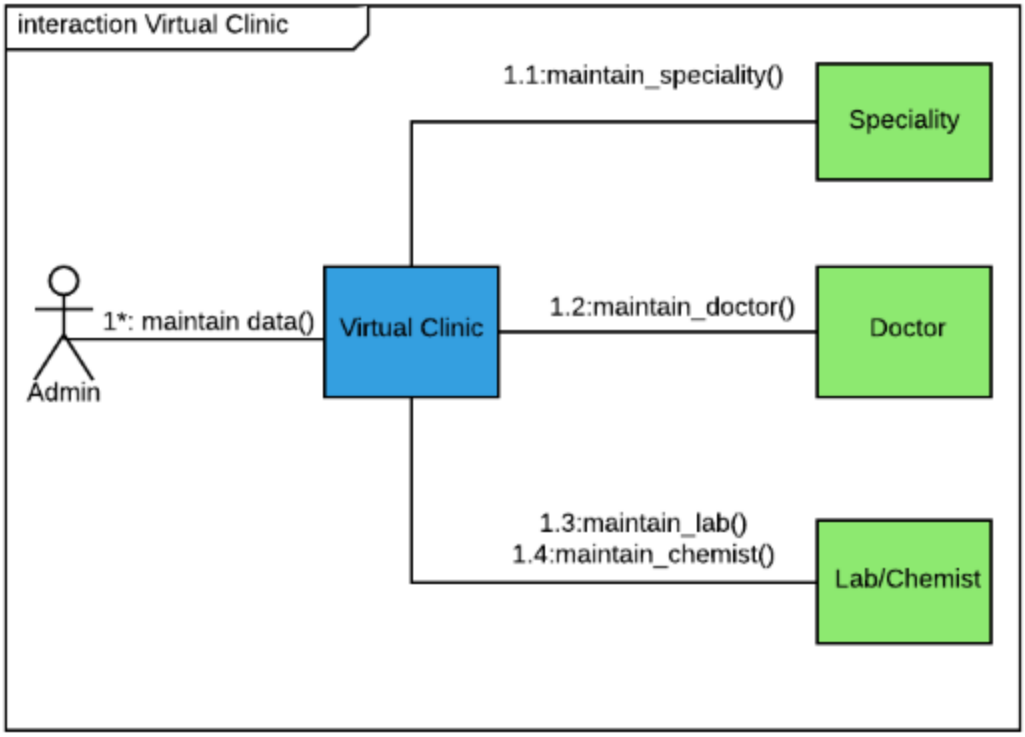
l) File System Management

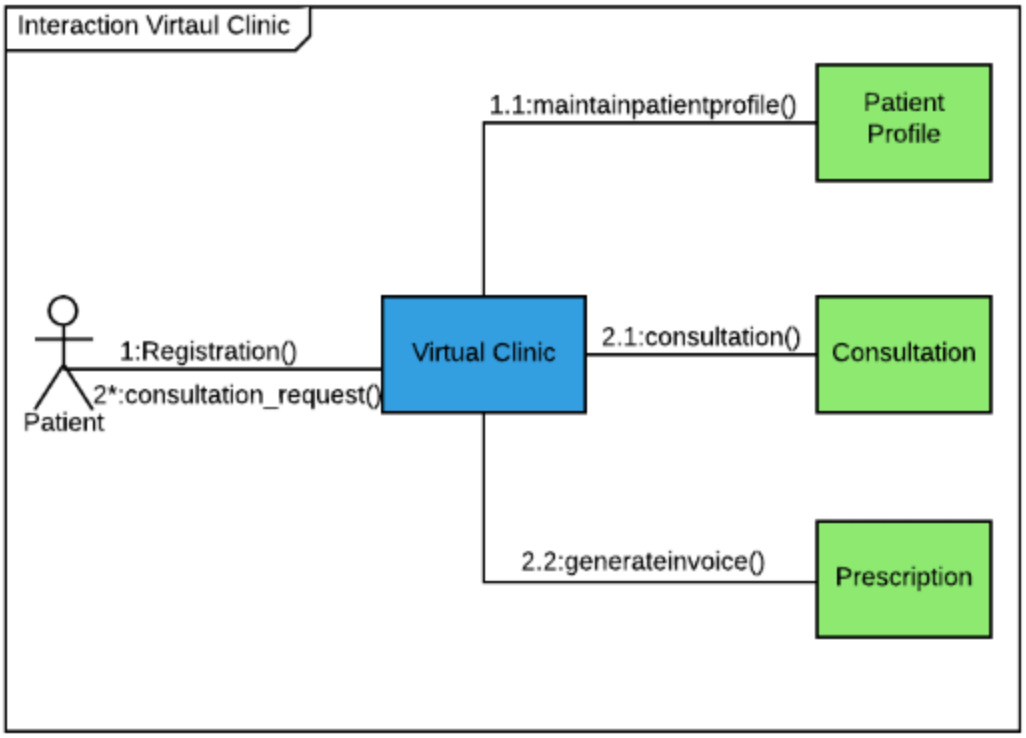


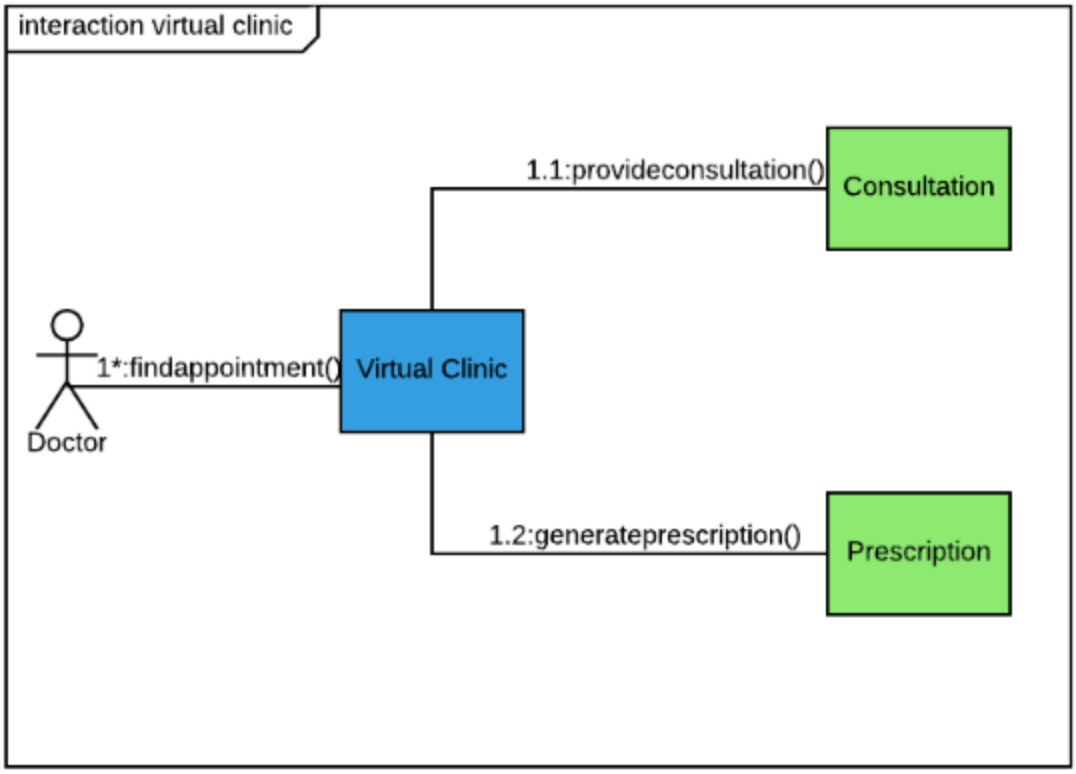
m) View System Statistics

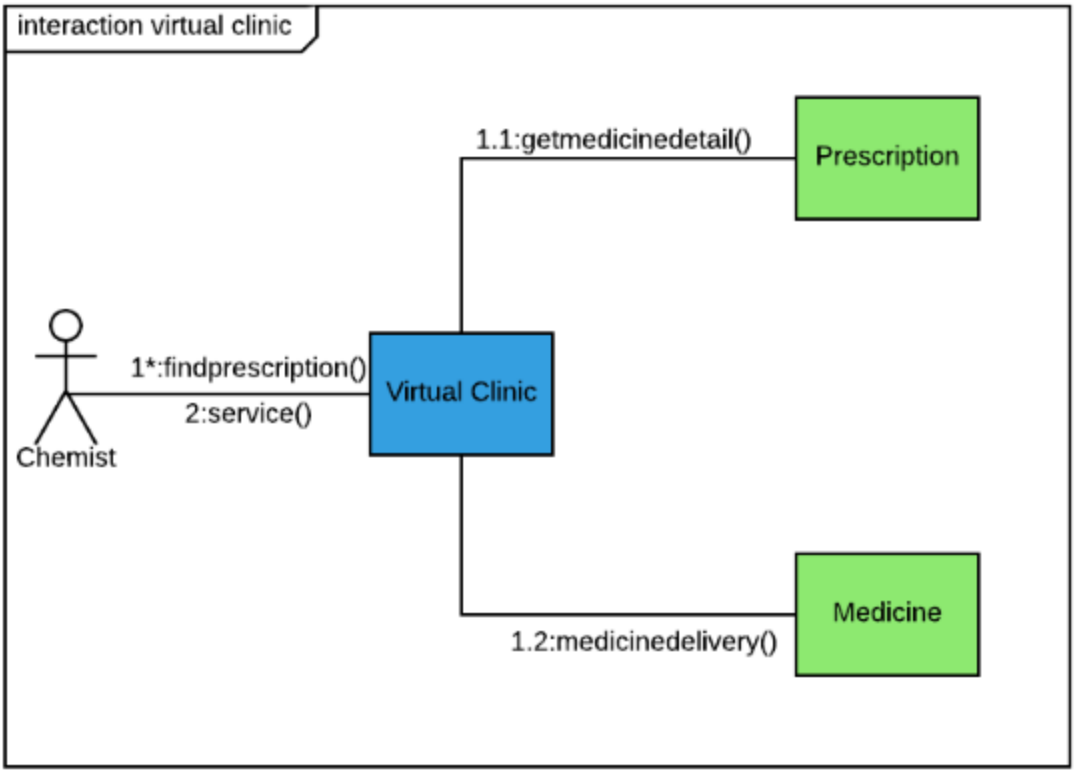


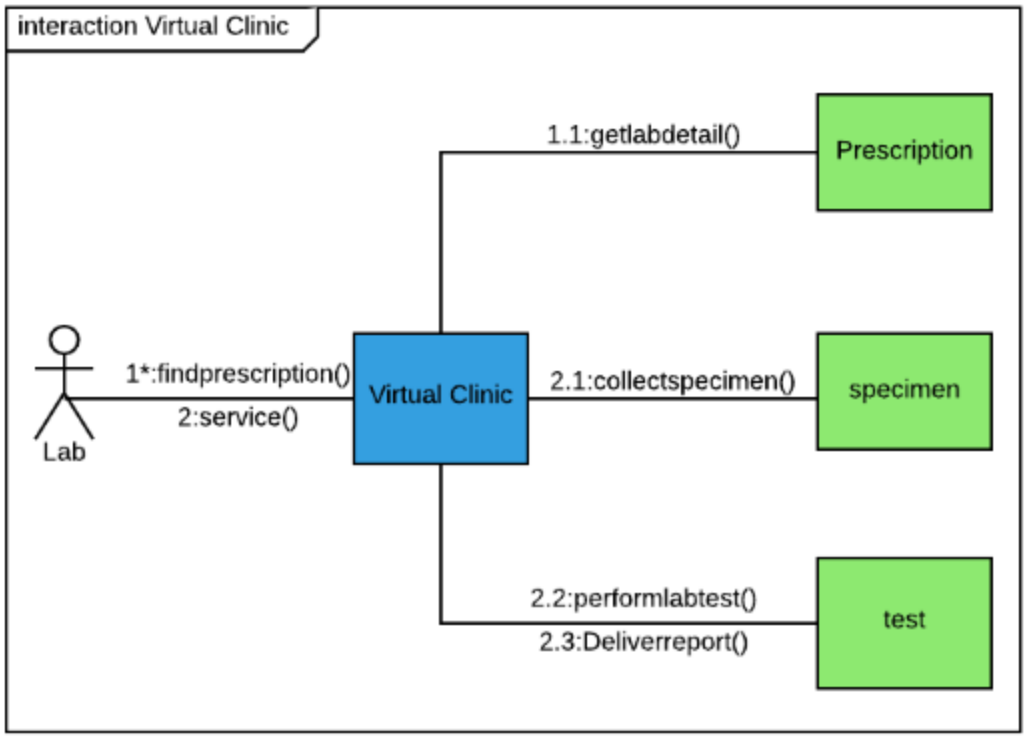
5. Collaboration Diagrams



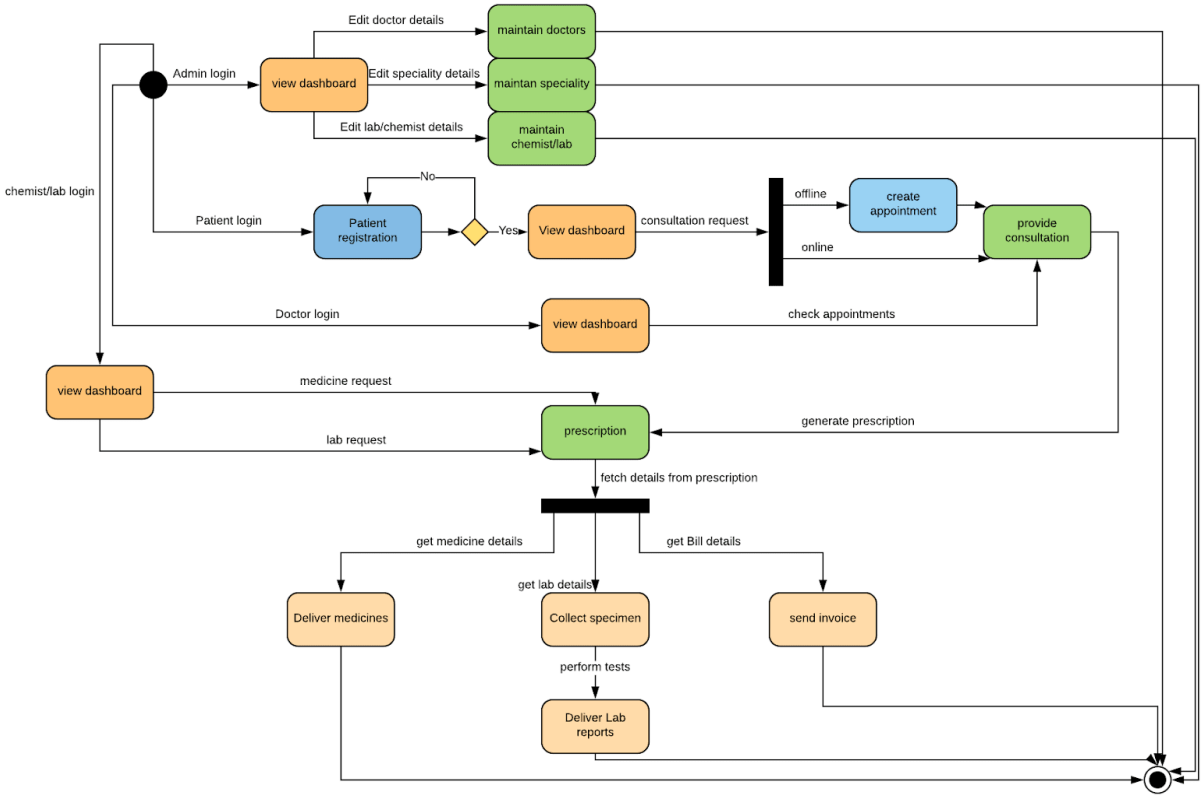

Interaction Virtaul Clinic
1.1:maintainpatientprofile()
Patient Profile
1:Registration()
2*:consultation_request()
Patient
Virtual Clinic
2.1:consultation()
Consultation
2.2:generateinvoice()
Prescription


interaction virtual clinic
1.1:provideconsultation()
Consultation
1*:findappointment()
Virtual Clinic
Doctor
1.2:generateprescription()
Prescription

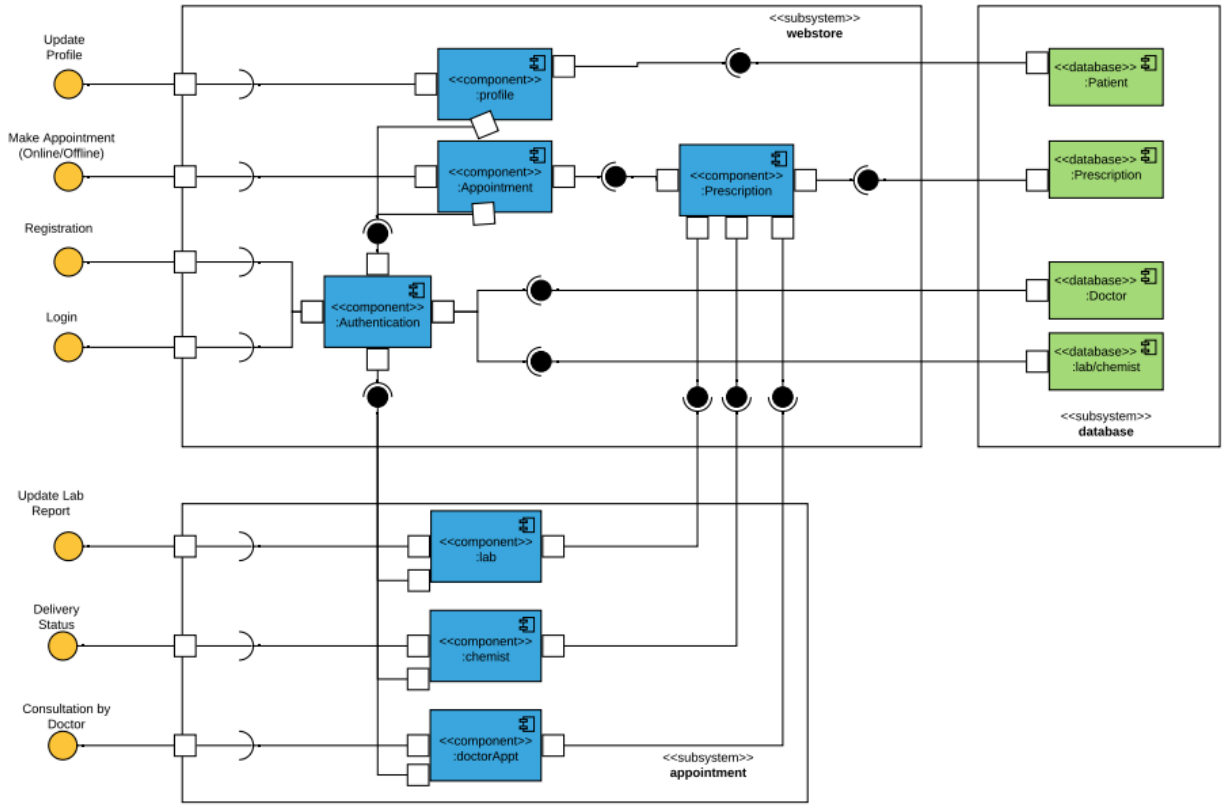
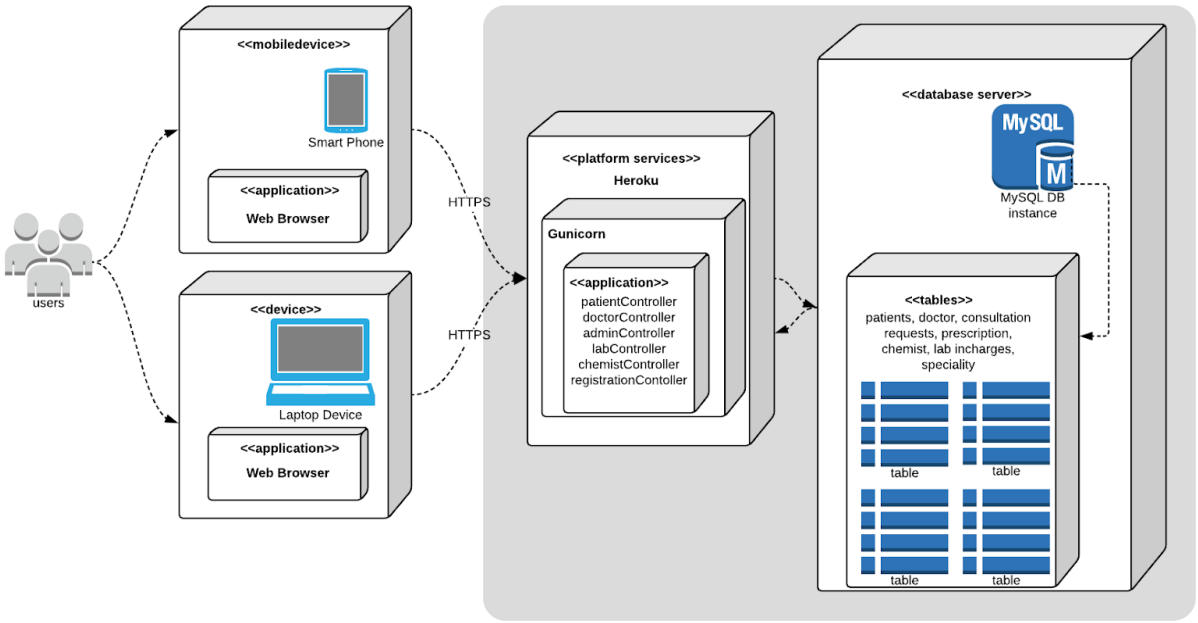

interaction virtual clinic
1.1:getmedicinedetail()
Prescription
1*:findprescription()
2:service()
Virtual Clinic
Chemist
Medicine
1.2:medicinedelivery()


interaction Virtual Clinic
1.1:getlabdetail()
Prescription
Lab
1*:findprescription()
2:service()
Virtual Clinic
2.1:collectspecimen()
specimen
2.2:performlabtest()
2.3:Deliverreport()
test

6. State Machine Diagram



7. Component Diagram



8. Deployment Diagram