

Patient Monitoring System

Project Plan and Increment 1

Team # 12

Team Members:

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Project Goal and Objectives (REVISED)

We intend to design a system for the patients having some chronic disease or any minor health condition. It can help the doctor by monitoring his patients online through the application. Patient can tell their symptoms to the doctor and can also give feedback regarding some medication given by the doctor. In this way the doctor can further recommend some medicines or can cut down some based on the results. The benefit of this kind of system is that it is not necessary for the doctor to meet the patient in person to prescribe him medication. If the condition of the patient is not severe then the doctor can prescribe him online.

It will be a mobile application which can be accessed by the doctor as well as patients once they are registered under that doctor. Both doctor and patient will have access to their own accounts. They can talk to the doctor about their condition and can take advice from the doctor. They can also send their pictures showing improvement in their condition to the doctor. The doctor can also prescribe some test to the patient and the patient can take that test from some lab. The patient can share their reports with the doctor. The doctor can view patient's details as well as can check his history. He can also add prescriptions and certain medical advice for the patient. This is an efficient way of communication and doctor doesn't need to be present in person. The database for this application stores the record for all the patients in the hospital. The doctor may view the data anytime whenever needed.











Significance

- The web application can be used anywhere by the doctor and the patient.
- Paper based work is reduced.
- Doctor can access any patient report whenever he wants.
- Less human intervention.
- Patient data can be maintained easily.
- Flexible and secured system.
- Data of one patient can be transferred easily from one doctor to another.

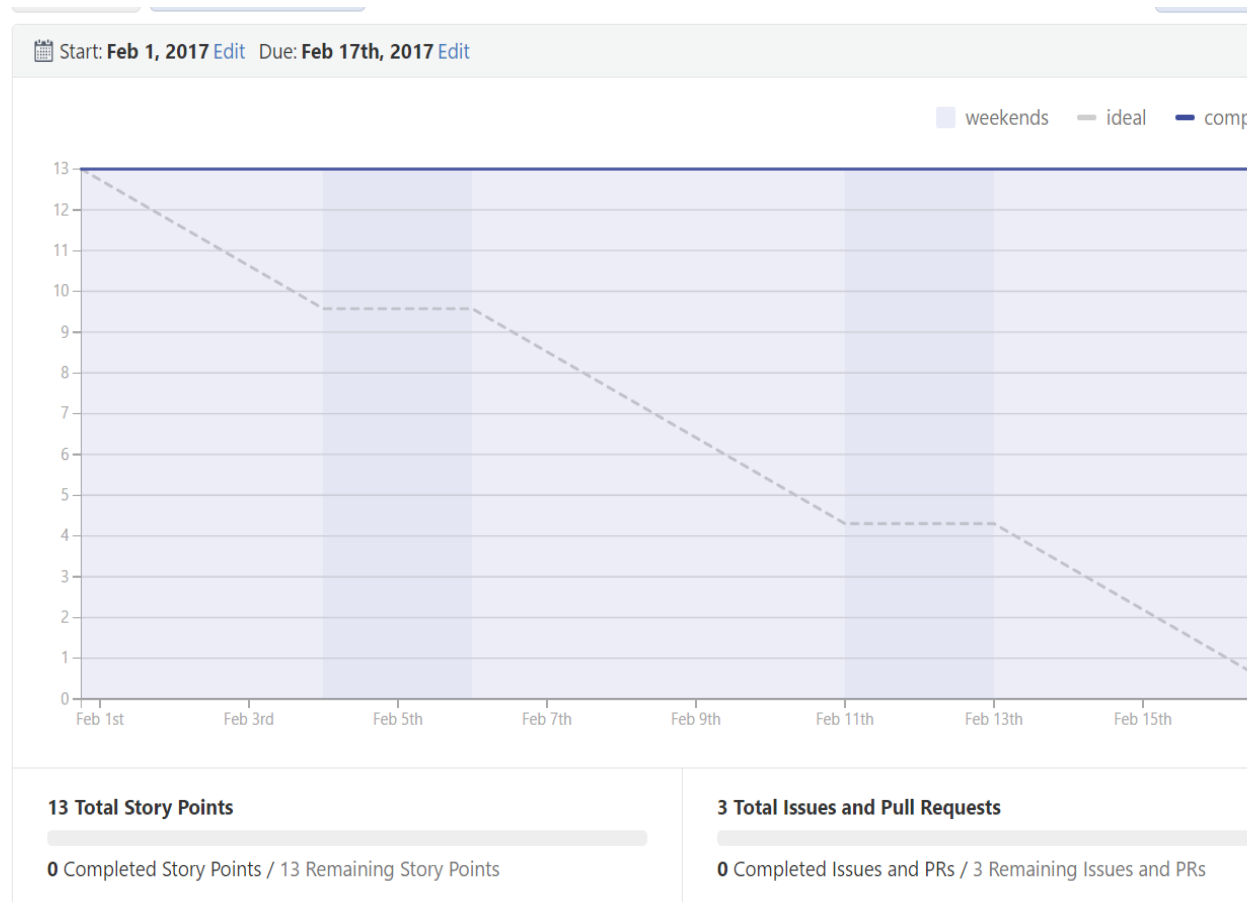
Project Plan (USING ZENHUB TOOL)

1) Milestones and Project Time line

🚩 6 Open ✓ 1 Closed		Sort ▼
Project Increment 1 📅 Due by February 17, 2017 ⌚ Last updated 2 days ago As this project is based on Agile model, so we need to conquer each...(more)	<div></div> <div>0% complete 3 open 0 closed</div> <div>Edit Close Delete</div>	
Final Submission 📅 Due by May 5, 2017 ⌚ Last updated 3 days ago At this point we will be able to completely develop our project usi...(more)	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	
Project Vedio and PPT demonstration 📅 Due by May 1, 2017 ⌚ Last updated 3 days ago In this phase we have to create a live project vedio depicting and ...(more)	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	
Project Increment 4 📅 Due by April 26, 2017 ⌚ Last updated 3 days ago Here we have to again show the 2nd progress report for the project with further extended features as compared to increment 3.	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	
Project Increment 2 📅 Due by March 10, 2017 ⌚ Last updated 3 days ago Here we have to again show the 2nd progress report for the project with further extended features as compared to increment 3.	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	

<h3>Final Submission</h3> <p> Due by May 5, 2017  Last updated 3 days ago</p> <p>At this point we will be able to completely develop our project usi...(more)</p>	<div><div></div></div> <p>0% complete 0 open 0 closed</p> <p>Edit Close Delete</p>
<h3>Project Vedio and PPT demonstration</h3> <p> Due by May 1, 2017  Last updated 3 days ago</p> <p>In this phase we have to create a live project vedio depicting and ...(more)</p>	<div><div></div></div> <p>0% complete 0 open 0 closed</p> <p>Edit Close Delete</p>
<h3>Project Increment 4</h3> <p> Due by April 26, 2017  Last updated 3 days ago</p> <p>Here we have to again show the 2nd progress report for the project with further extended features as compared to increment 3.</p>	<div><div></div></div> <p>0% complete 0 open 0 closed</p> <p>Edit Close Delete</p>
<h3>Project Increment 2</h3> <p> Due by March 10, 2017  Last updated 3 days ago</p> <p>Here we have to again show the 2nd progress report for the project with further extended features as compared to increment 1.</p>	<div><div></div></div> <p>0% complete 0 open 0 closed</p> <p>Edit Close Delete</p>
<h3>Project Increment 3</h3> <p> Due by April 7, 2017  Last updated 3 days ago</p> <p>Here we have to again show the 2nd progress report for the project with further extended features as compared to increment 2.</p>	<div><div></div></div> <p>0% complete 0 open 0 closed</p> <p>Edit Close Delete</p>

2) Burn down Chart



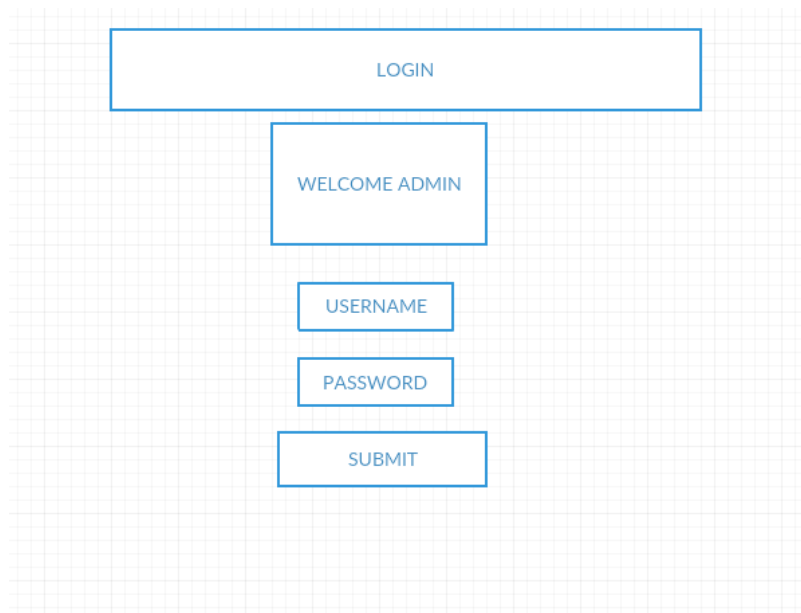
First Increment Report

Modules:

- **Doctor registration:** Doctor can enter his details and make an account on the application.
- **Patient registration:** Patient can enter his details and make an account on the application.
- **Admin dashboard:** Admin can log in to his account and manage overall activities.
- **Doctor Dashboard:** The doctor can log in to his account and manage his appointments and chats.
- **Patient Dashboard:** The patient can log in to his account and schedule appointments or chat with his doctor about prescriptions and medicines.

Detailed Design of Features (Using Tools)

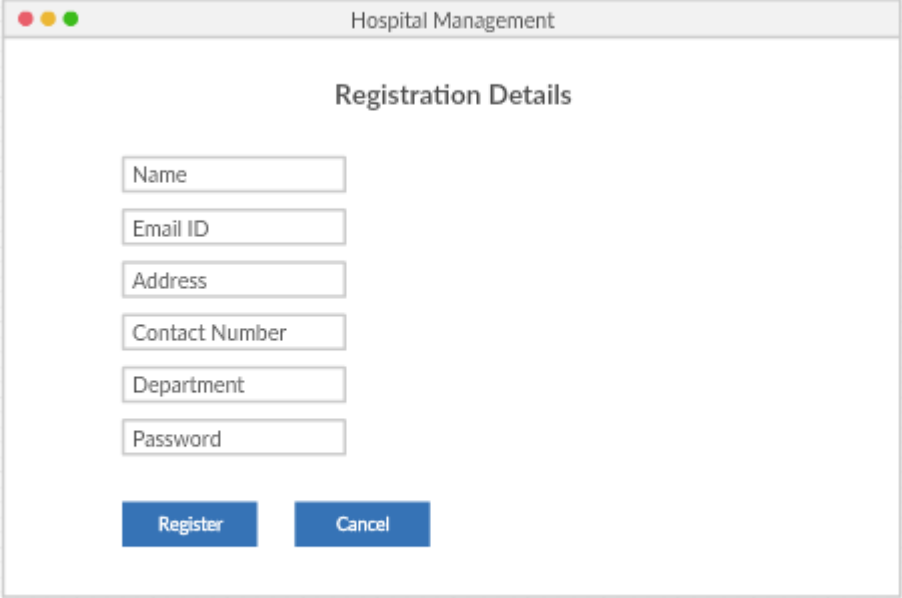
- Using wireframes



Admin Page



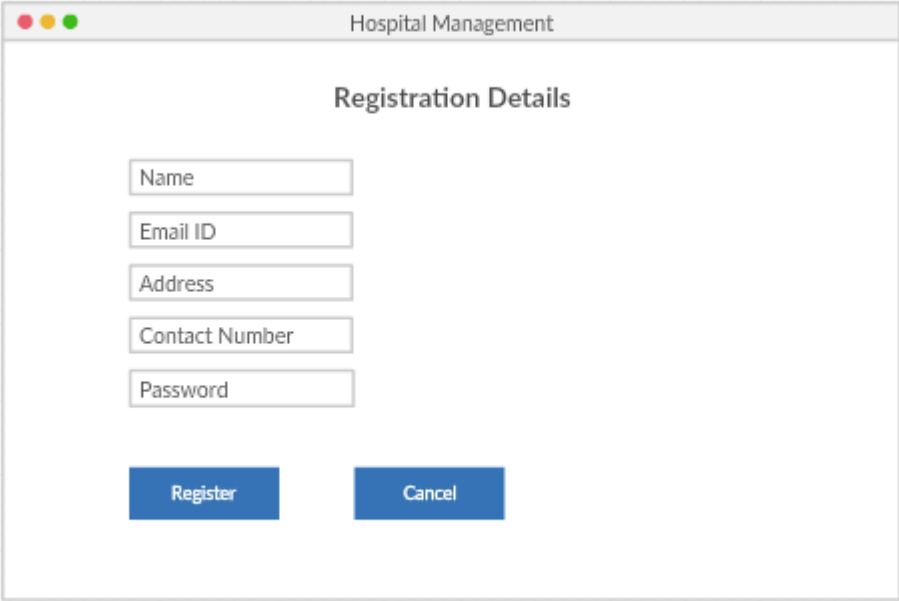
Admin Dashboard



A screenshot of a software application window titled "Hospital Management". The window contains a form titled "Registration Details". The form has seven text input fields stacked vertically: "Name", "Email ID", "Address", "Contact Number", "Department", and "Password". Below the input fields are two buttons: "Register" and "Cancel". The window has a standard macOS-style title bar with red, yellow, and green window control buttons on the left.

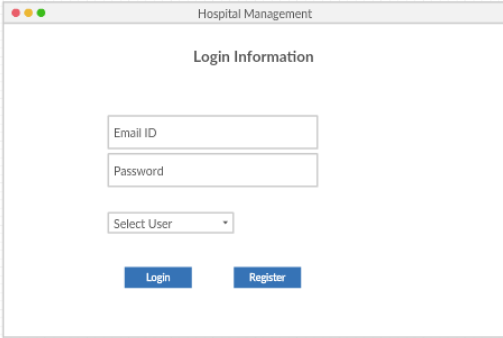
Registration Details	
Name	
Email ID	
Address	
Contact Number	
Department	
Password	
Register	Cancel

Doctor Registration



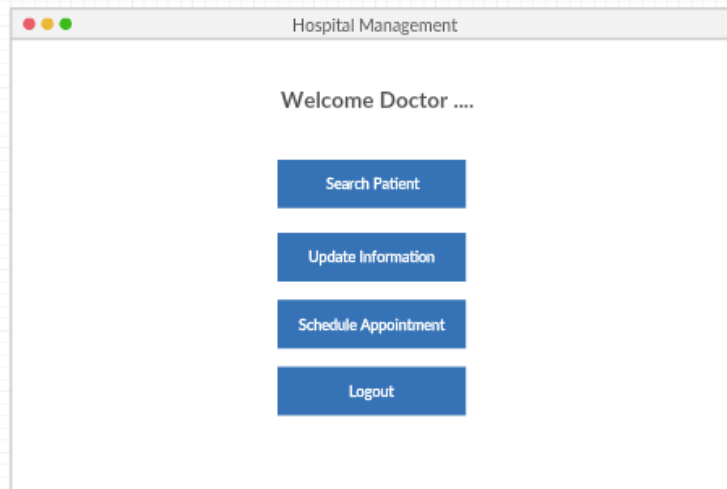
A screenshot of a web application window titled "Hospital Management". The window displays a "Registration Details" form. The form contains five text input fields stacked vertically: "Name", "Email ID", "Address", "Contact Number", and "Password". Below these fields are two blue buttons: "Register" and "Cancel". The window has a standard macOS-style title bar with red, yellow, and green window control buttons.

Patient Registration

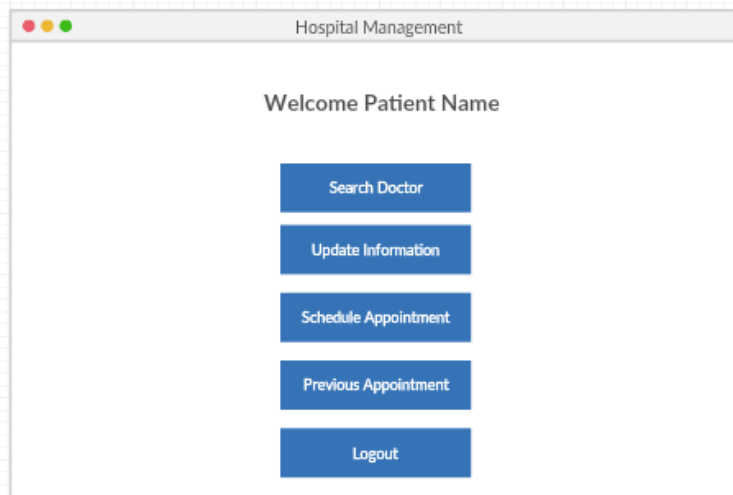


A screenshot of a web application window titled "Hospital Management". The window displays a "Login Information" form. The form contains three input fields: "Email ID", "Password", and a dropdown menu labeled "Select User". Below these fields are two blue buttons: "Login" and "Register". The window has a standard macOS-style title bar with red, yellow, and green window control buttons.

Login Page

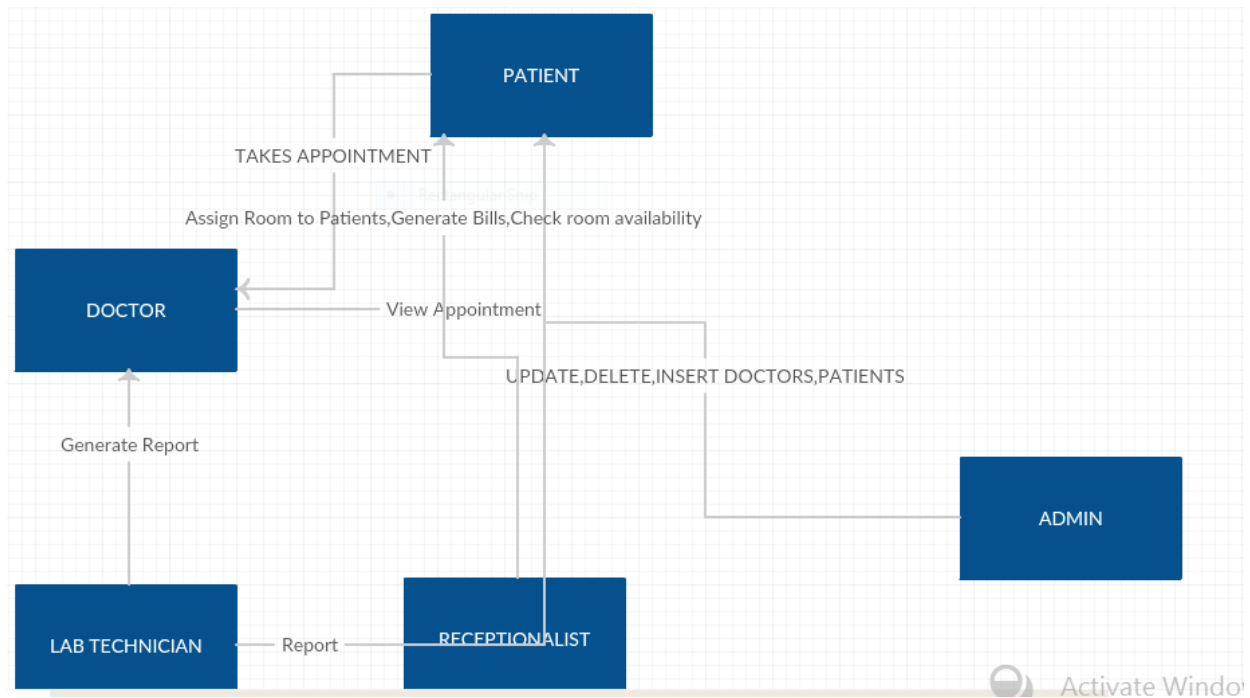


Doctor Dashboard

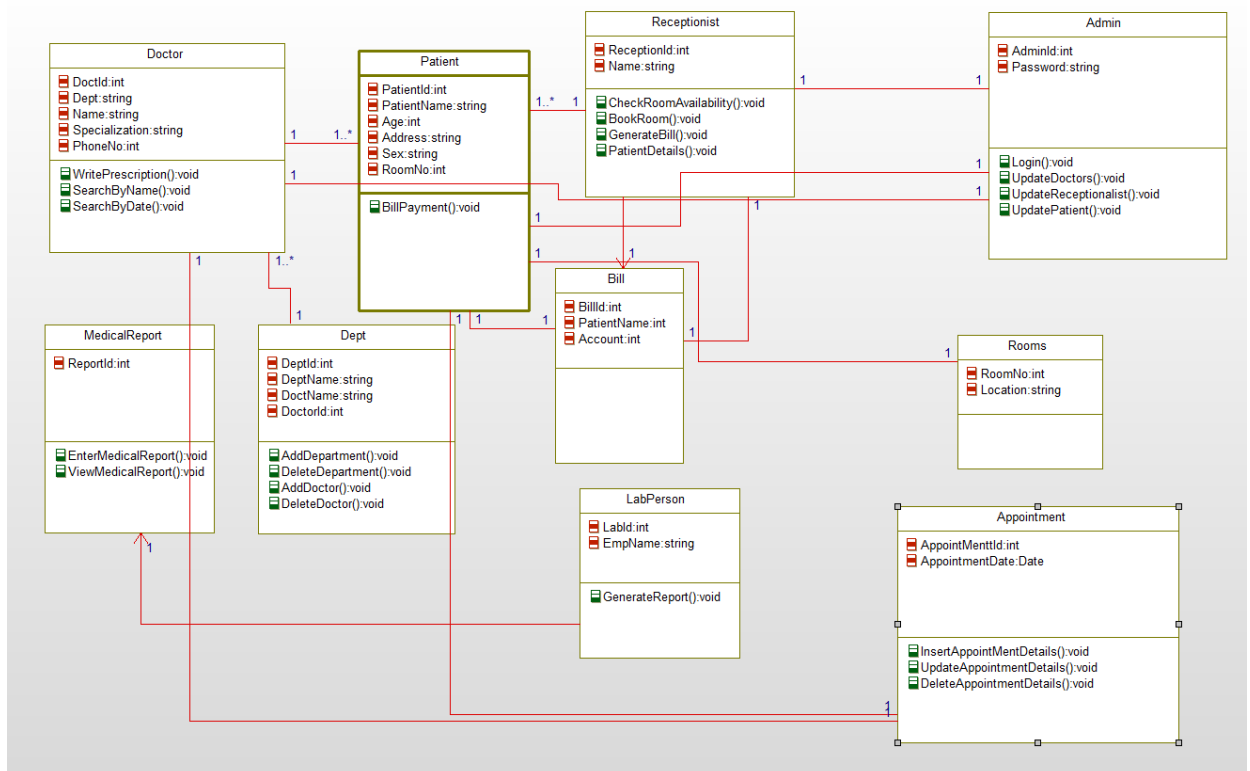


Patient Dashboard

● Architecture Diagram



● Class diagram

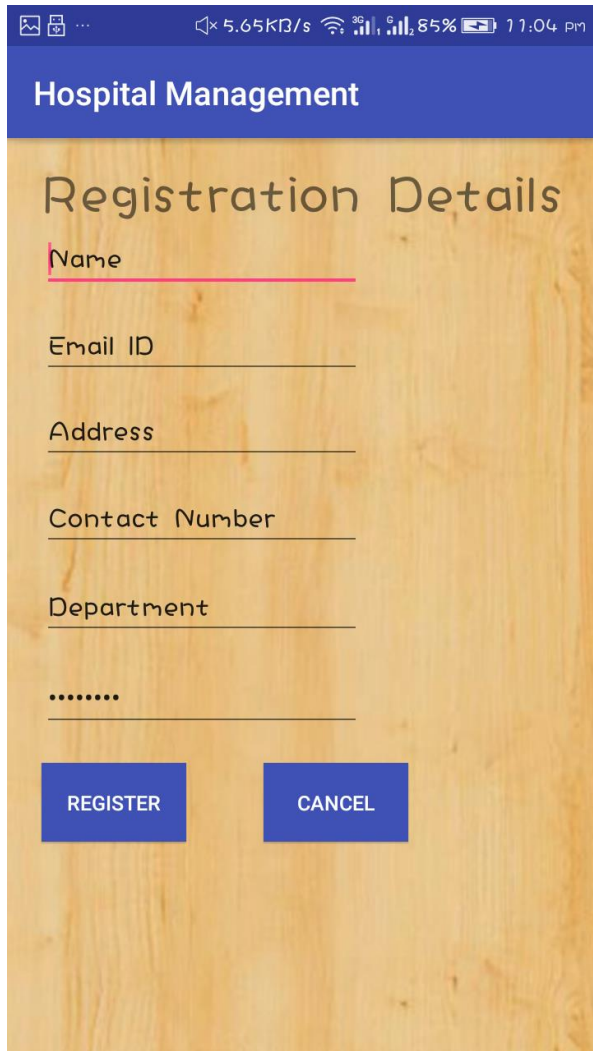


Implementation and Deployment

We can find the source code at GitHub at following URL:

<https://github.com/Harmeet0005/ASE-Project/tree/master/Source>

Snapshots after deployment are :



The screenshot displays a mobile application interface for 'Hospital Management'. The title bar is blue with the text 'Hospital Management' in white. Below the title bar, the background is a light wood texture. The main heading is 'Registration Details' in a large, dark font. The form consists of several input fields with labels: 'Name' (with a red underline), 'Email ID', 'Address', 'Contact Number', 'Department', and a password field represented by a series of dots. At the bottom of the form, there are two blue buttons: 'REGISTER' and 'CANCEL'.

Registration Page for Doctor

The screenshot shows a mobile application interface for a hospital management system. At the top, a blue header bar contains the text "Hospital Management". Below this, the title "Registration Details" is displayed in a large, dark font. The form consists of several input fields with a light wood-grain background. The fields contain the following text: "sovan", "sovan@gmail.com", "kansas city.missouri" (with "kansas" underlined in red), "9635254587", and a password field represented by five dots. At the bottom of the form, there are two blue buttons: "REGISTER" and "CENCEL" (misspelled).

Hospital Management

Registration Details

sovan

sovan@gmail.com

kansas city.missouri

9635254587

.....

REGISTER CENCEL

Registration Page for Patient

The screenshot shows a mobile application interface for a "Hospital Management" system. The title bar is blue with the text "Hospital Management". Below it, the section "Registration Details" is displayed on a light wood-grain background. There are five input fields: "sovan", "sovan. gmail. com", "kansas city", "9658741258", and a password field with six dots. The "sovan. gmail. com" field has a red underline. At the bottom, there are two blue buttons: "REGISTER" and "CANCEL". A dark grey toast message with the text "Invalid email address" is centered over the bottom of the form.

sovan

sovan. gmail. com

kansas city

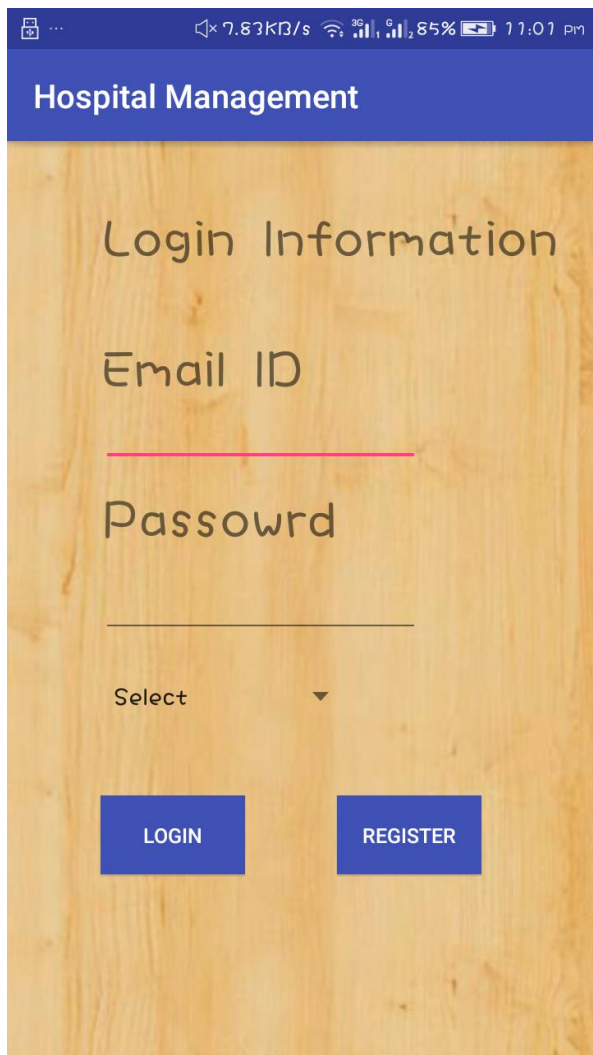
9658741258

.....

REGISTER CANCEL

Invalid email address

Email Validation



The image shows a mobile application interface for 'Hospital Management'. The app is running on an Android device, as indicated by the status bar at the top showing a download speed of 7.83KB/s, 3G network, 85% battery, and the time 11:01 PM. The app's title bar is blue with the text 'Hospital Management' in white. The main background is a light wood texture. The login section is titled 'Login Information' in a large, dark font. Below the title are two input fields: 'Email ID' with a pink underline and 'Passowrd' (misspelled) with a black underline. Below these fields is a dropdown menu with the text 'Select' and a downward arrow. At the bottom of the login section are two blue buttons: 'LOGIN' and 'REGISTER'.

Hospital Management

Login Information

Email ID

Passowrd

Select ▼

LOGIN REGISTER

Login Page

Hospital Management

Login Information

Email ID

Passowrd

Select

Doctor

Patient

REGISTER

Login selection for doctor or patient

The screenshot shows a mobile application interface for a Hospital Management system. At the top, a blue header bar contains the text "Hospital Management". Below this, the background is a light wood-grain texture. The text "Login Information" is centered. There are two input fields: "Email ID" with the value "sovan@gmail.com" and "Passowrd" (misspelled) with masked characters ".....". Below the password field is a dropdown menu labeled "Doctor" with a downward arrow. At the bottom, there are two blue buttons: "LOGIN" and "REGISTER". A dark grey rounded rectangle at the very bottom contains the text "Wrong id or password", indicating an authentication failure.

Hospital Management

Login Information

Email ID

sovan@gmail.com

Passowrd

.....

Doctor ▼

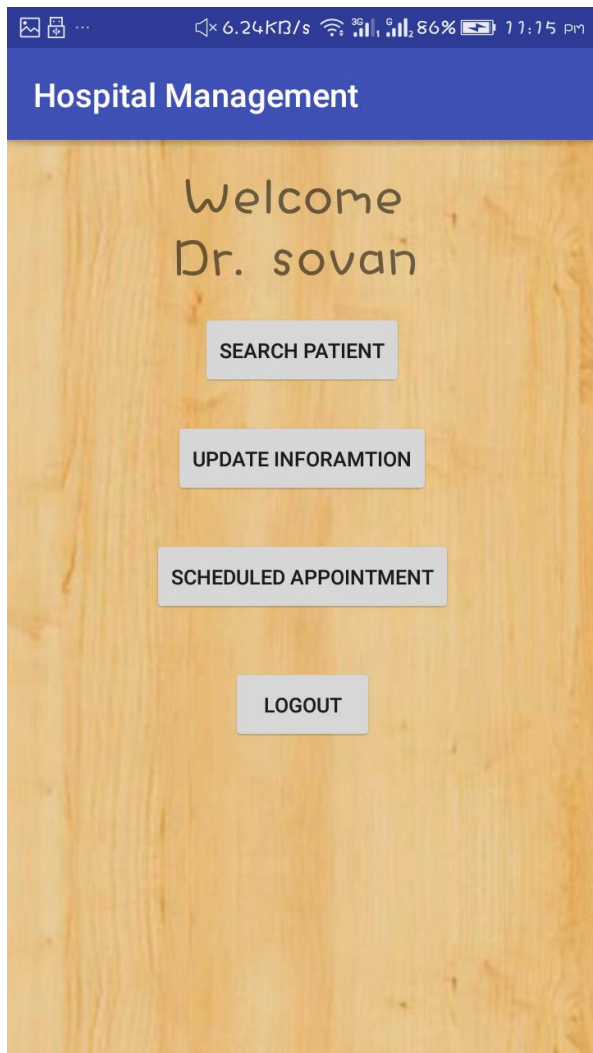
LOGIN REGISTER

Wrong id or password

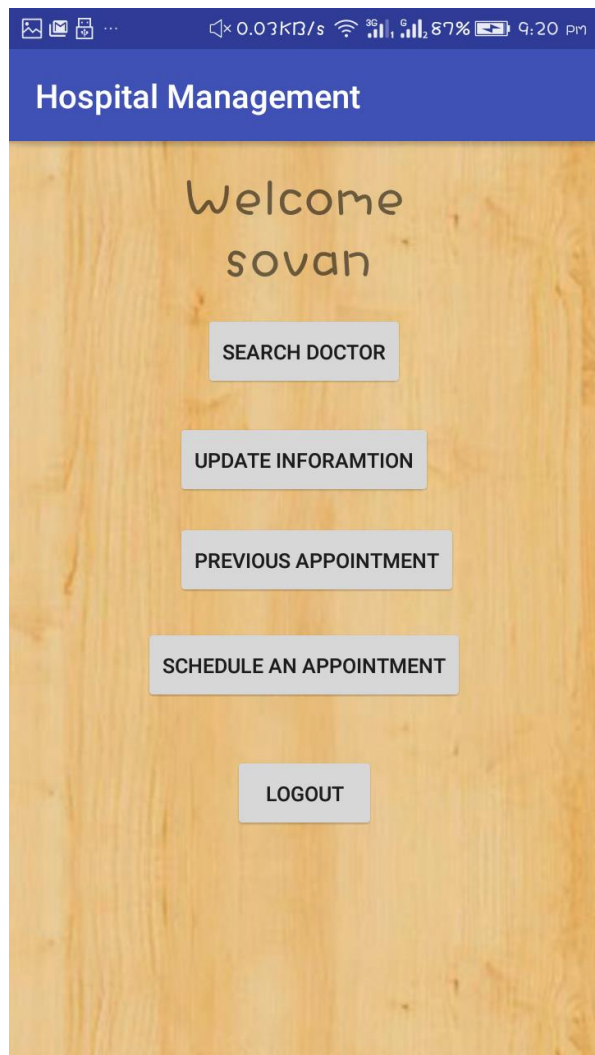
Checking credentials

The screenshot shows a mobile application interface for 'Hospital Management'. The status bar at the top indicates a download speed of 6.73KB/s, 5G connectivity, 86% battery, and the time 11:10 PM. The app's title bar is blue with the text 'Hospital Management'. The main content area has a light wood-grain background. It features a 'Login Information' section with an 'Email ID' field containing 'sovan@gmail.com' and a 'Passowrd' field with masked characters '.....'. Below the password field is a dropdown menu labeled 'Doctor'. At the bottom, there are two blue buttons: 'LOGIN' and 'REGISTER'.

Logging in as Doctor



Doctor Dashboard



Patient Dashboard

Unit Testing

The following are the unit test cases and their results:

S.No	Test case	Description/Process	Expected result	Actual result	Pass/Fail
1	Registration	User has to register in registration page	Registration has to be successful	Registration is successful	Pass
2	Registration	Invalid email ID	Error has to be shown stating invalid email ID	Error has been shown stating invalid email ID	Pass
3	Registration	Password criteria has to be met	Error has to be shown when password length criteria is not met	Error has been shown when password length criteria is not met	Pass
4	Log in	User has to login with valid credentials	Login has to be successful	Login successful	Pass
5	Log in	User has to login with invalid credentials	Error has to be shown stating invalid credentials	Error has been shown stating invalid credentials	Pass

Bibliography

- <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6139641&newsearch=true&queryText=android%20patient>
- <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6291373&newsearch=true&queryText=android%20patient>
- <http://nevonprojects.com/android-patient-tracker/>