

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 1.	<div></div> <div>0% complete 0 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 1.	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	
Project Increment 3 📅 Due by April 7, 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 2.	<div></div> <div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>	

“CS5551 - Advanced Software Engineering”

The screenshot shows a web browser with multiple tabs open, including 'i38) - harmeet', 'Mail - Singh, Harmeet', and 'Milestones - Harmeet0005'. The address bar shows the URL 'https://github.com/Harmeet0005/ASE-Project/milestones?state=closed'. The repository page for 'Harmeet0005 / ASE-Project' is displayed, with the 'Milestones' tab selected. The milestone 'Project Proposal' is shown as 100% complete, with 0 open and 1 closed issue. The page footer includes copyright information for GitHub, Inc. and links to Terms, Privacy, Security, Status, and Help.

© 2017 GitHub, Inc. [Terms](#) [Privacy](#) [Security](#) [Status](#) [Help](#)

2) Burn down Chart

"CS5551 - Advanced Software Engineering"



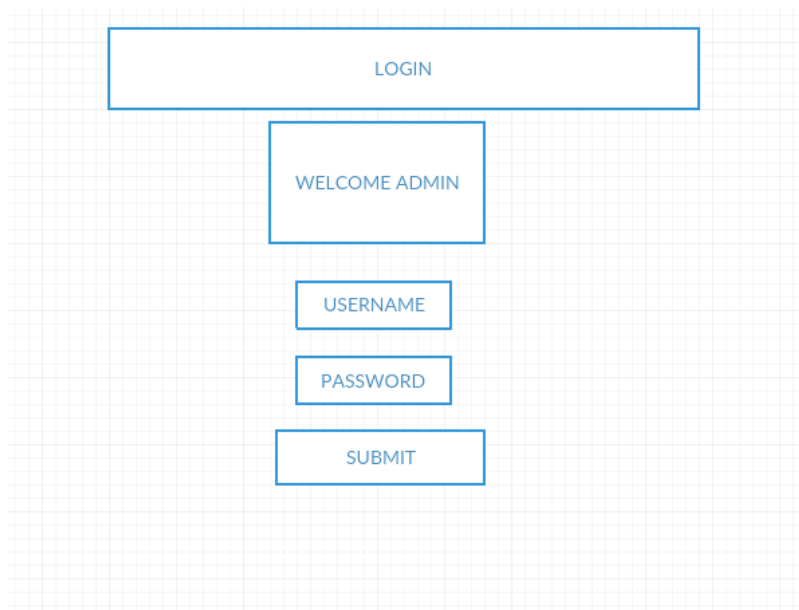
"First Increment Report"

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)”

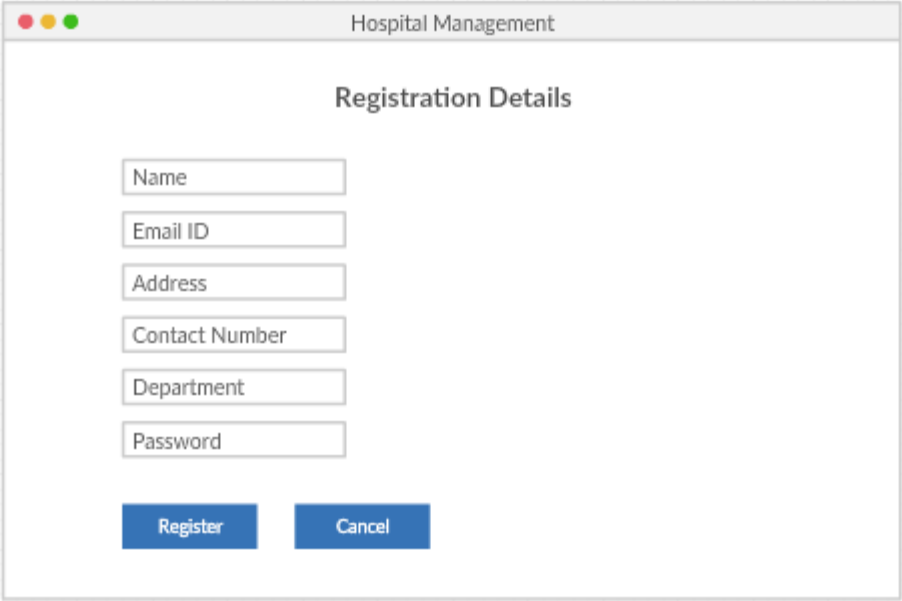
- Using wireframes



Admin Page



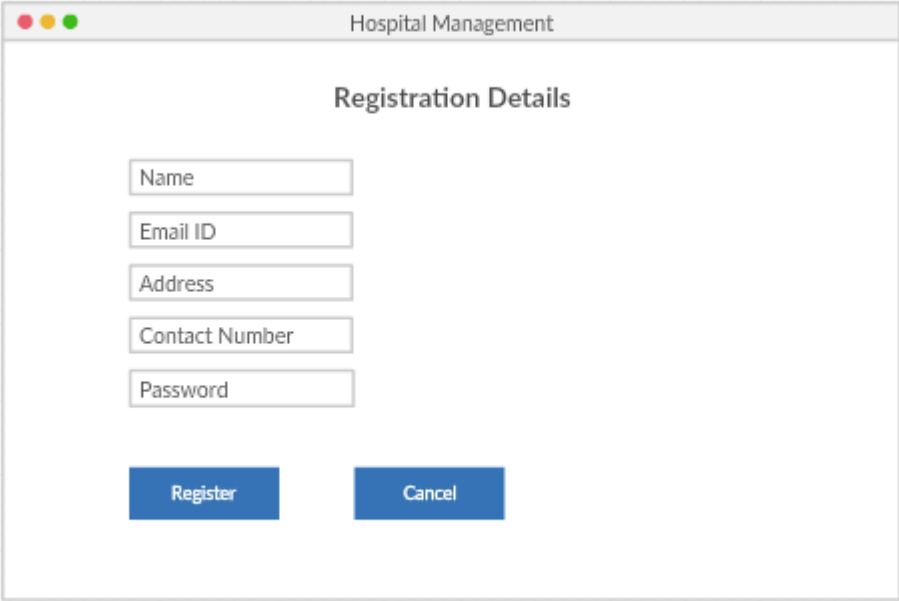
Admin Dashboard



A screenshot of a web application window titled "Hospital Management". The window contains a form titled "Registration Details". The form has six text input fields stacked vertically: "Name", "Email ID", "Address", "Contact Number", "Department", and "Password". Below the input 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 on the left.

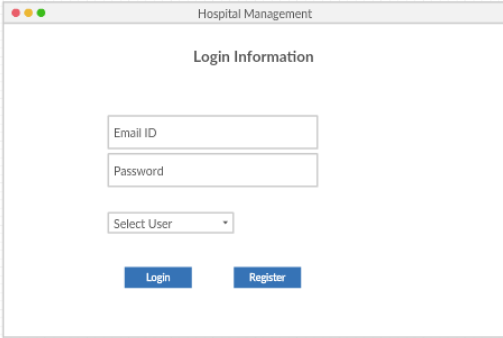
Registration Details	
Name	
Email ID	
Address	
Contact Number	
Department	
Password	
Register	Cancel

Doctor Registration



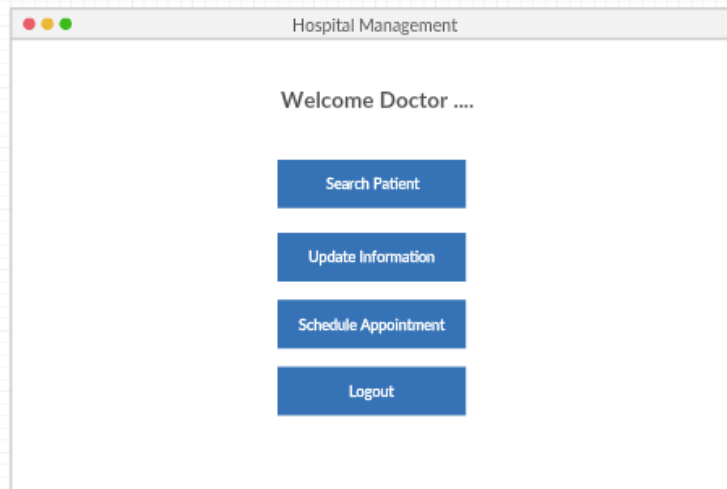
A screenshot of a web application window titled "Hospital Management". The window displays a "Registration Details" form. The form contains five text input fields stacked vertically: "Name", "Email ID", "Address", "Contact Number", and "Password". Below these fields are two blue buttons: "Register" and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

Patient Registration

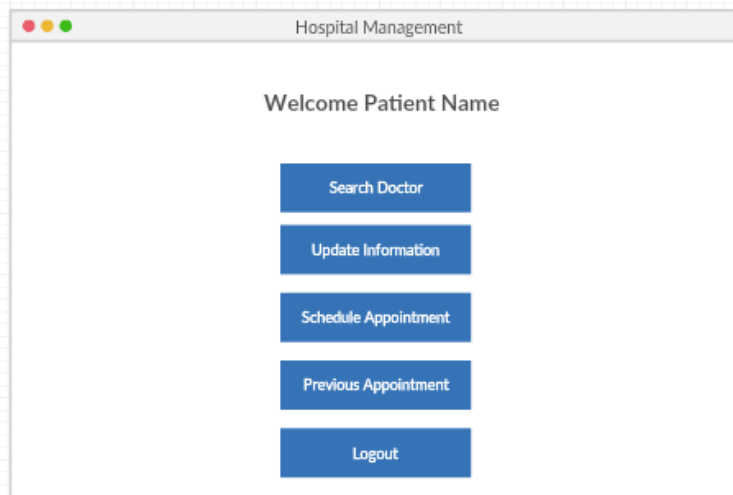


A screenshot of a web application window titled "Hospital Management". The window displays a "Login Information" form. The form contains three input fields: "Email ID" and "Password" are text inputs, and "Select User" is a dropdown menu. Below these fields are two blue buttons: "Login" and "Register".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

Login Page

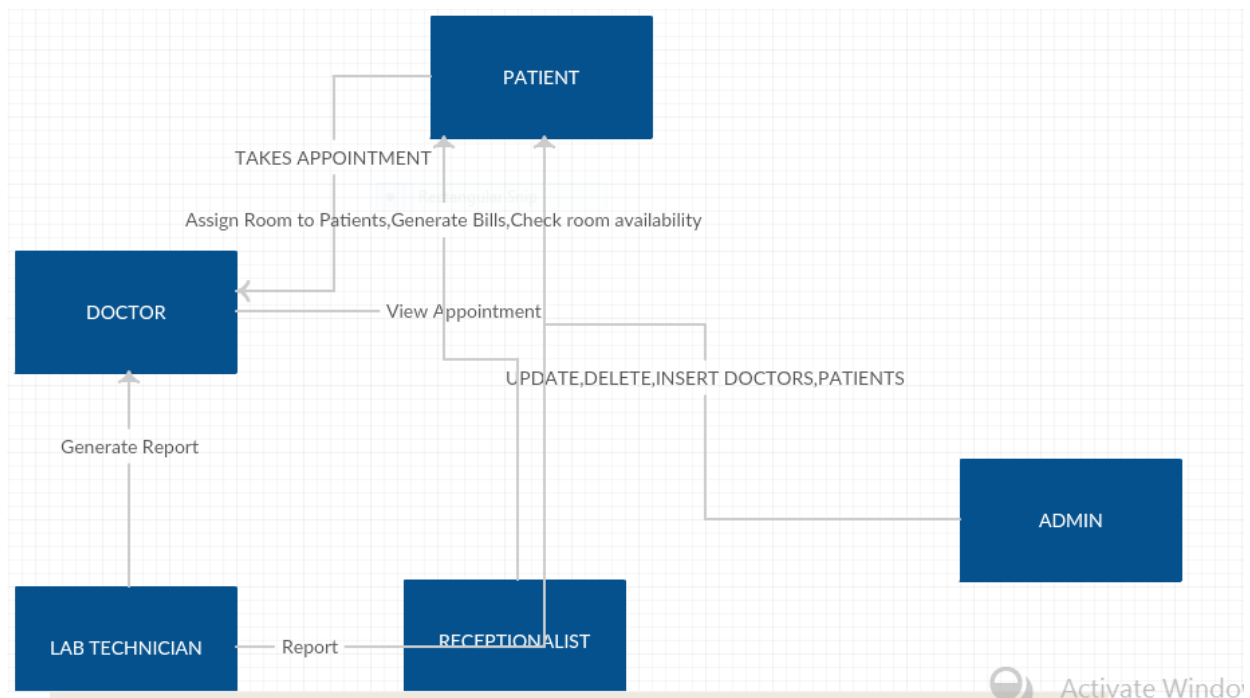


Doctor Dashboard

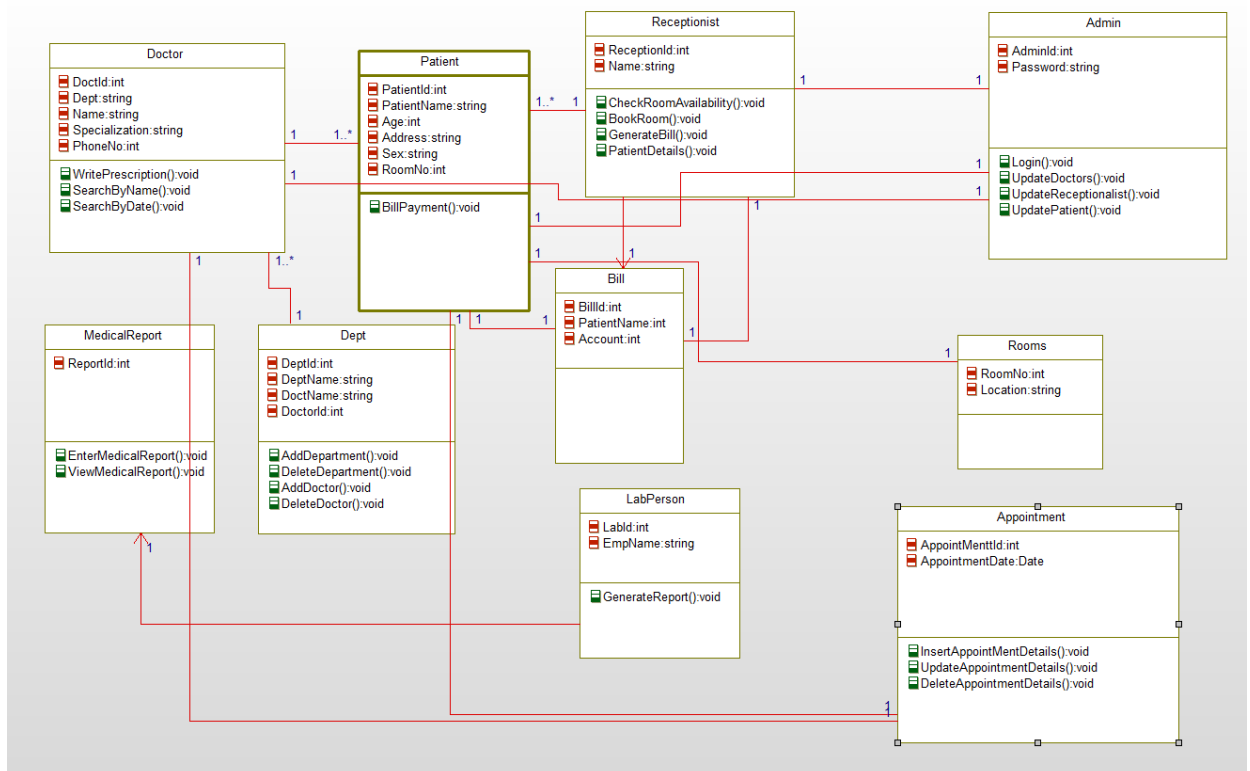


Patient Dashboard

● Architecture Diagram



● Class diagram

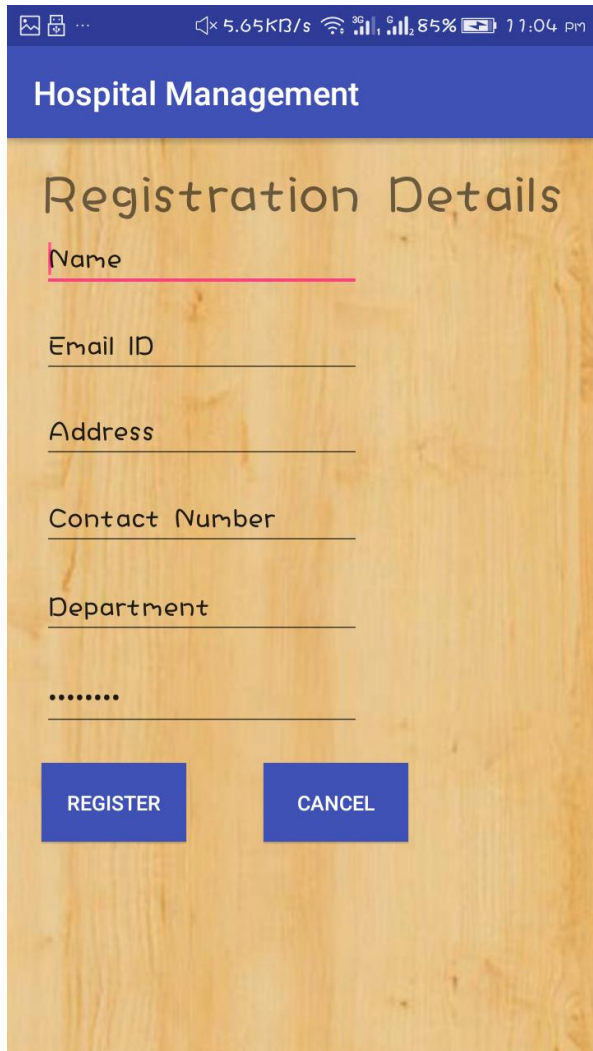


"Implementation and Deployment"

You can find the source code of the Patient Monitoring System on the following link :

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

Screenshots 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. Below this, there are several input fields with labels: "Name", "Email ID", "Address", "Contact Number", "Department", and a password field indicated by ".....". Each label is followed by a horizontal line for text entry. At the bottom of the form, there are two blue buttons with white text: "REGISTER" and "CANCEL". The top of the screen shows a status bar with various icons and the time "11:04 PM".

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 are labeled with the following text: "sovan", "sovan@gmail.com", "kansas city.missouri", "9635254587", and a password field represented by five dots. Below the input fields, there are two blue buttons: "REGISTER" and "CENCEL". The status bar at the top of the screen shows various icons including a signal strength indicator, a Wi-Fi icon, a battery level indicator at 85%, and the time 9:09 pm.

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 "Hospital Management". The title "Registration Details" is displayed in a large, dark font. Below the title, there are five input fields with the following text: "sovan", "sovan. gmail. com", "kansas city", "9658741258", and ".....". The email field "sovan. gmail. com" is highlighted with a red underline. At the bottom, there are two blue buttons labeled "REGISTER" and "CANCEL". A dark gray error message box with rounded corners is positioned below the "REGISTER" button, containing the text "Invalid email address". The status bar at the top of the screen shows various icons, including signal strength, Wi-Fi, and battery level (79%), along with the time 7:56 AM.

Hospital Management

Registration Details

sovan

sovan. gmail. com

kansas city

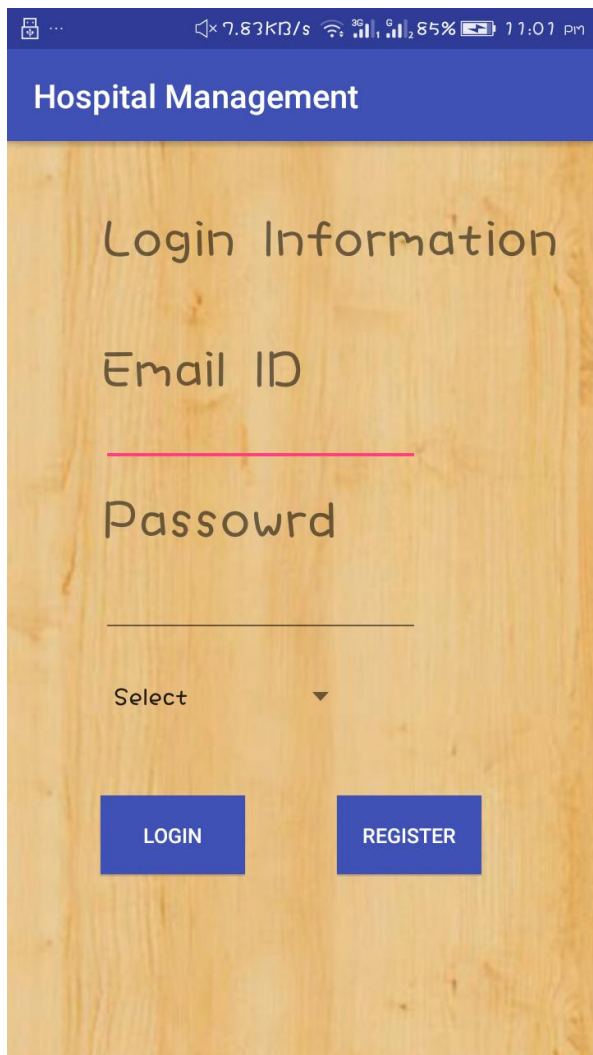
9658741258

.....

REGISTER CANCEL

Invalid email address

Email Validation



The image shows a mobile application interface for 'Hospital Management'. The app has a blue header bar with the title 'Hospital Management'. The main background is a light wood texture. The login section is titled 'Login Information' and includes two input fields: 'Email ID' with a pink underline and 'Passowrd' (misspelled) with a black underline. Below these fields is a dropdown menu labeled 'Select' with a downward arrow. At the bottom, there 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

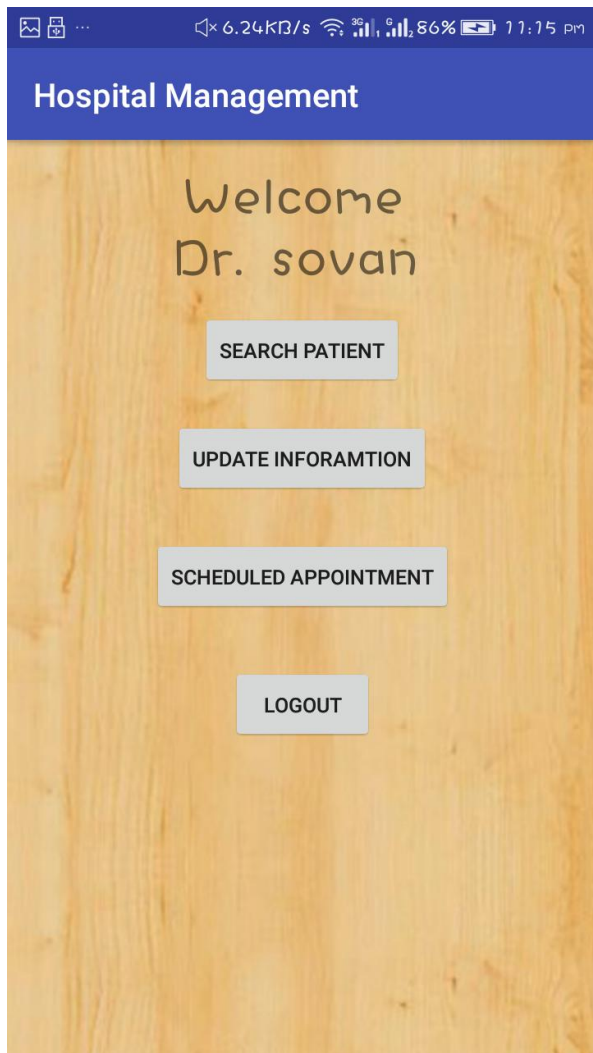
Login selection for doctor or patient

The screenshot shows a mobile application interface for 'Hospital Management'. The app has a blue header bar with the title 'Hospital Management'. Below the header, the background is a light wood texture. The main content area is titled 'Login Information'. It contains two input fields: 'Email ID' with the value 'sovan@gmail.com' and 'Passowrd' (misspelled) with a masked password '.....'. 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'. Below these buttons is a dark gray rounded rectangle containing the text 'Wrong id or password'.

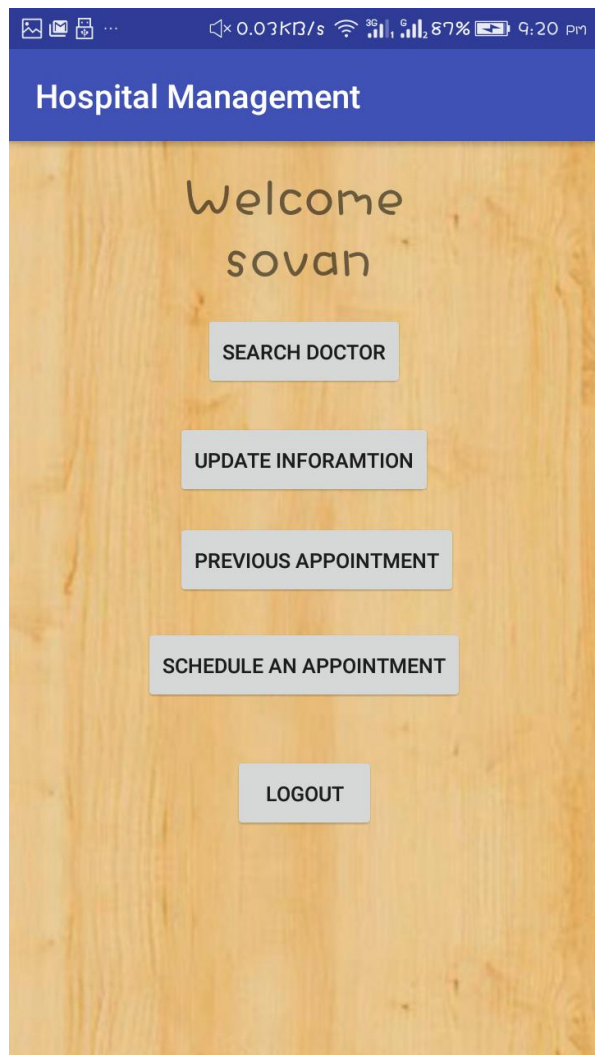
Checking credentials

The screenshot shows a mobile application interface for 'Hospital Management'. The status bar at the top indicates a download speed of 6.73KB/s, 4G LTE signal, 86% battery, and the time 11:10 PM. The app's title bar is blue with the text 'Hospital Management'. The main background is a light wood texture. The title 'Login Information' is centered. Below it, the 'Email ID' field contains 'sovan@gmail.com'. The 'Passowrd' field is masked with five dots. A dropdown menu below the password field is 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	Doctor/Patient has to do registration to create their account	"Registration has to be successful"	"Registration is successful"	Pass
2	Registration	If the email ID is invalid	Error message stating invalid email ID	Error message stated invalid email ID	Pass
3	Registration	Password should also be correct length	Error message showing password length criteria is not met	Error message showed password length criteria is not met	Pass
4	Log in	User has to login with their valid credentials	Login has to be successful	Login is successful	Pass
5	Log in	User has logged in with invalid credentials	Error message stating invalid credentials	Error message 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/>