REPORT

PROJECT TITLE: EHR

GROUP CODE: G

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Contents

1. Introduction

This app is an electronic health record (EHR) maintenance software named "**myEHR**" which helps to digitalize the medical system with the active participation of patients and doctors and ensures facile medical care.

This report mainly covers some sections, such as: Problem Statement, Problem Solution, Features, Used Architecture Pattern, Diagram, Snapshots of our system, Limitations of our system, Future work for our system and Conclusion.

2. Problem Statement

In this era of technological revolution, the deficiency of the tech approach in the medical care of our country is very conspicuous. Also, a huge number of patients against a few doctors make this condition shabby.

Taking an appointment, meeting with the doctors, issuing the prescription, communicating between doctors and patients etc. causing a huge waste of time and labor in the conventional medical care system. Here, the sufferers are both doctors and patients. Besides, Most of the time doctors can't fulfill the actual needs of the patients because of the lacking interaction and communication facility of our traditional system.

To overcome these limitations of the existing system, we would like to propose a system.

3. Problem Solution

The ability to exchange health information electronically can help us provide higher quality and safer care for patients. Also, giving patients access to their clinical information empowers them to increase patient engagement and to improve health outcomes.

We propose software that will be used to securely document, store, retrieve, share, and analyze information about individual patient care.

4. Features of the App

Features of our app include:

1. User friendly and simple interface
2. Easy registration and login
3. Graphical representation of vital patient data
4. Patient's Progress Notes
5. E-prescribing Capabilities
6. Maintaining Appointments and Patient's Lab results
7. Managing Data using Real-time Database

5. Used Architectural Pattern

In our system, we used 3 tier architecture pattern. First layer is called **Presentation Layer**, which user use to make interaction with the system. With this, we insert data and also show the data/results of data. The second layer is called the **Business Logic Layer**, where the system performs all the arithmetical and logical operations. We are using the **Data Container** to store the data for further procedures.

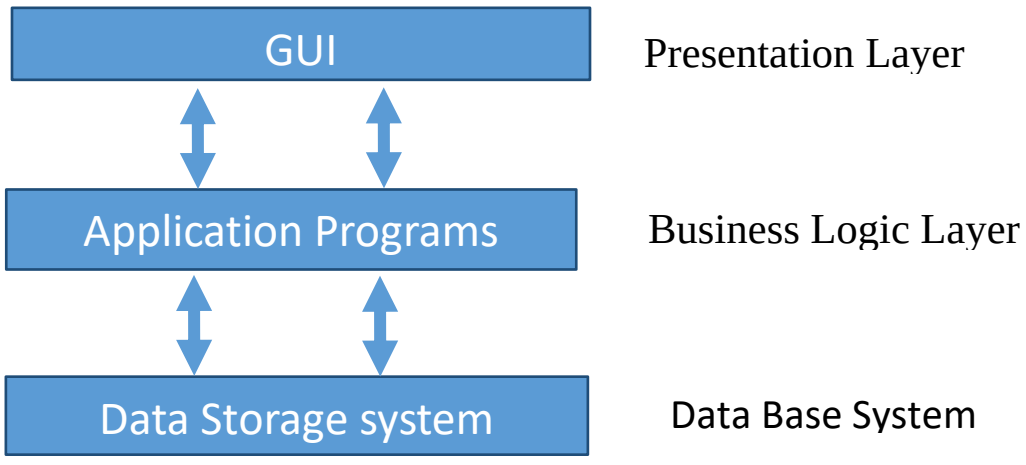


Figure 1:-Block diagram of 3-tier architectural

6. Use Case Diagram

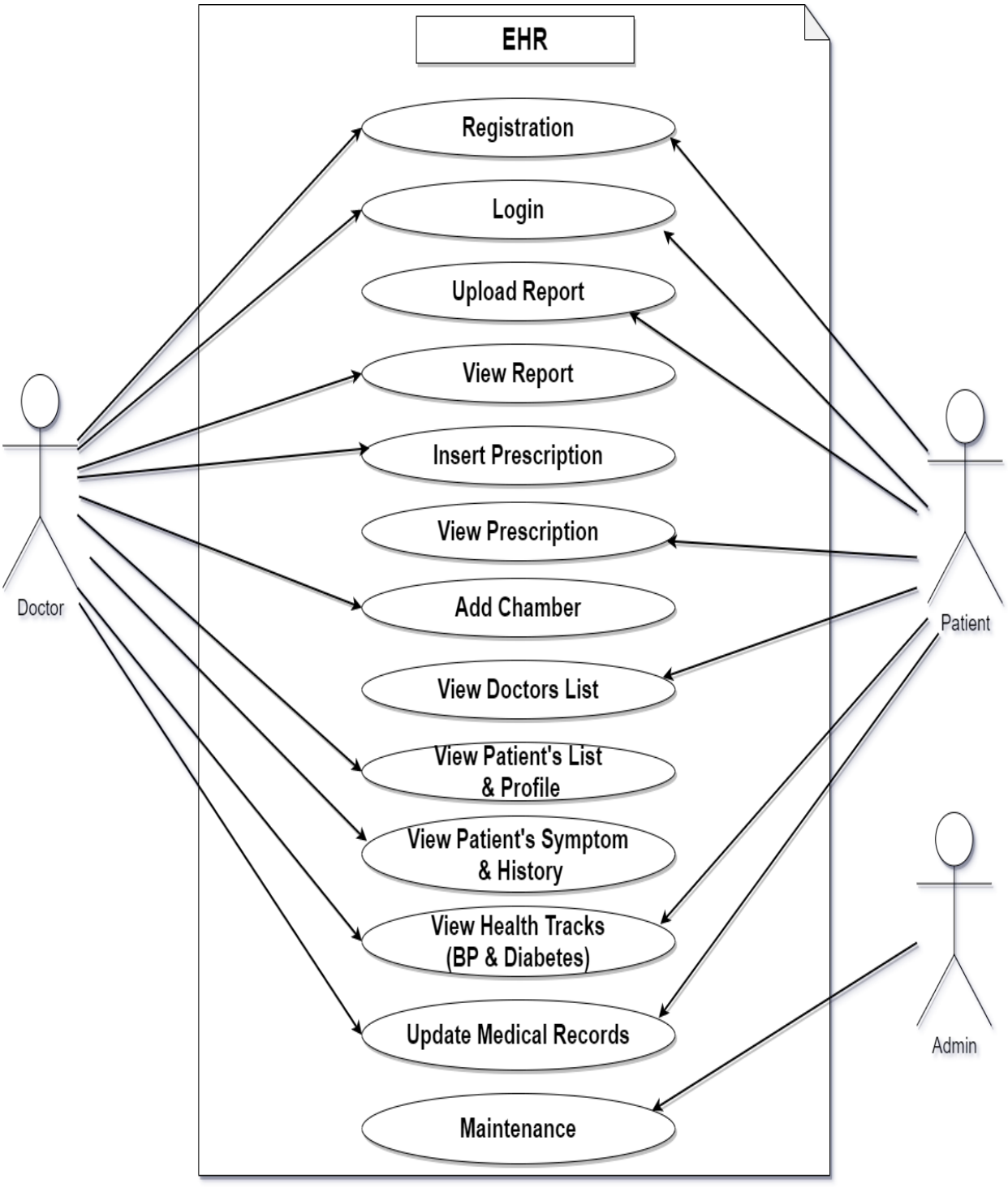


Figure: Use Case Diagram of Our App

7. Activity Diagram

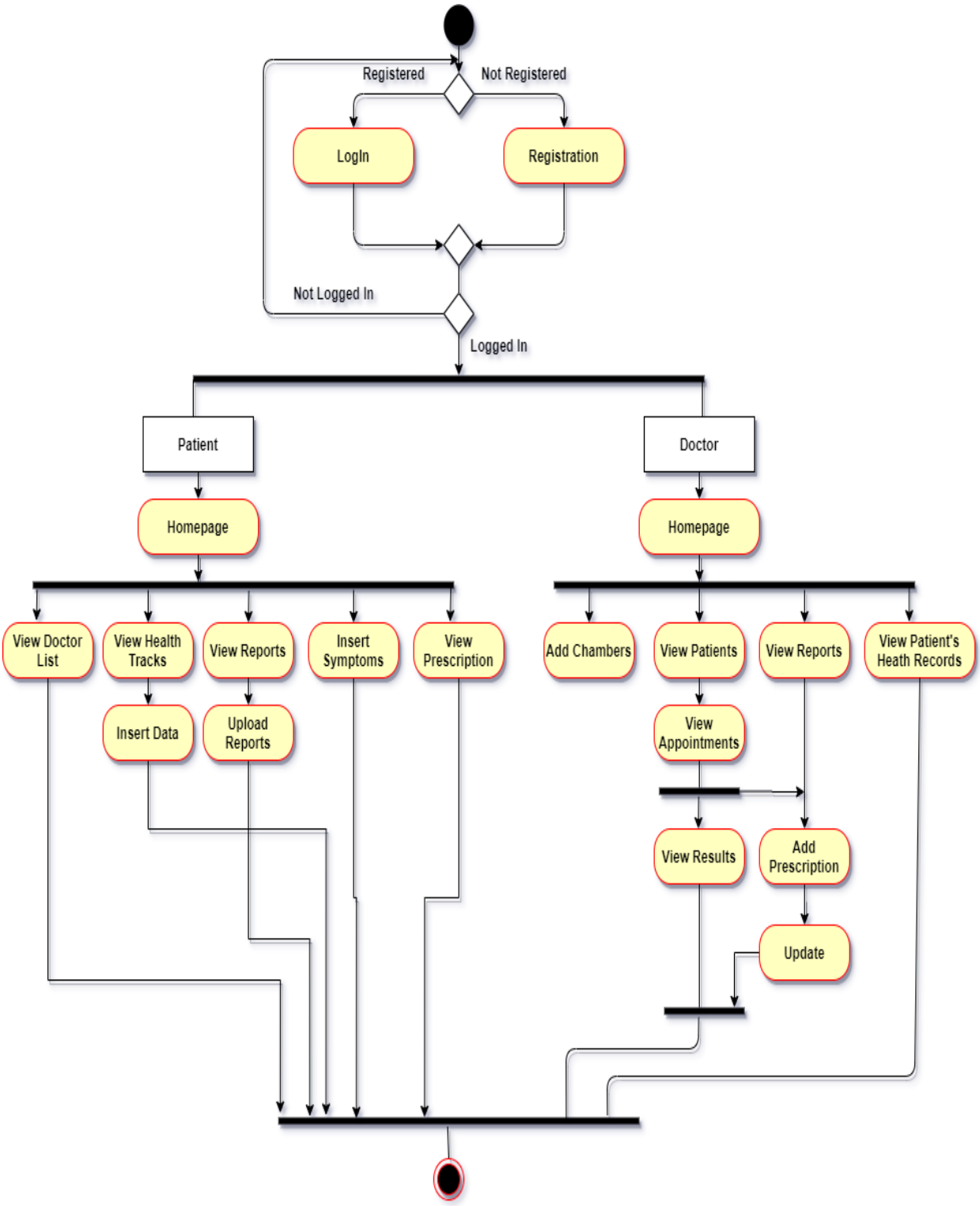


Figure: Activity Diagram of Our App

8. Class Diagram

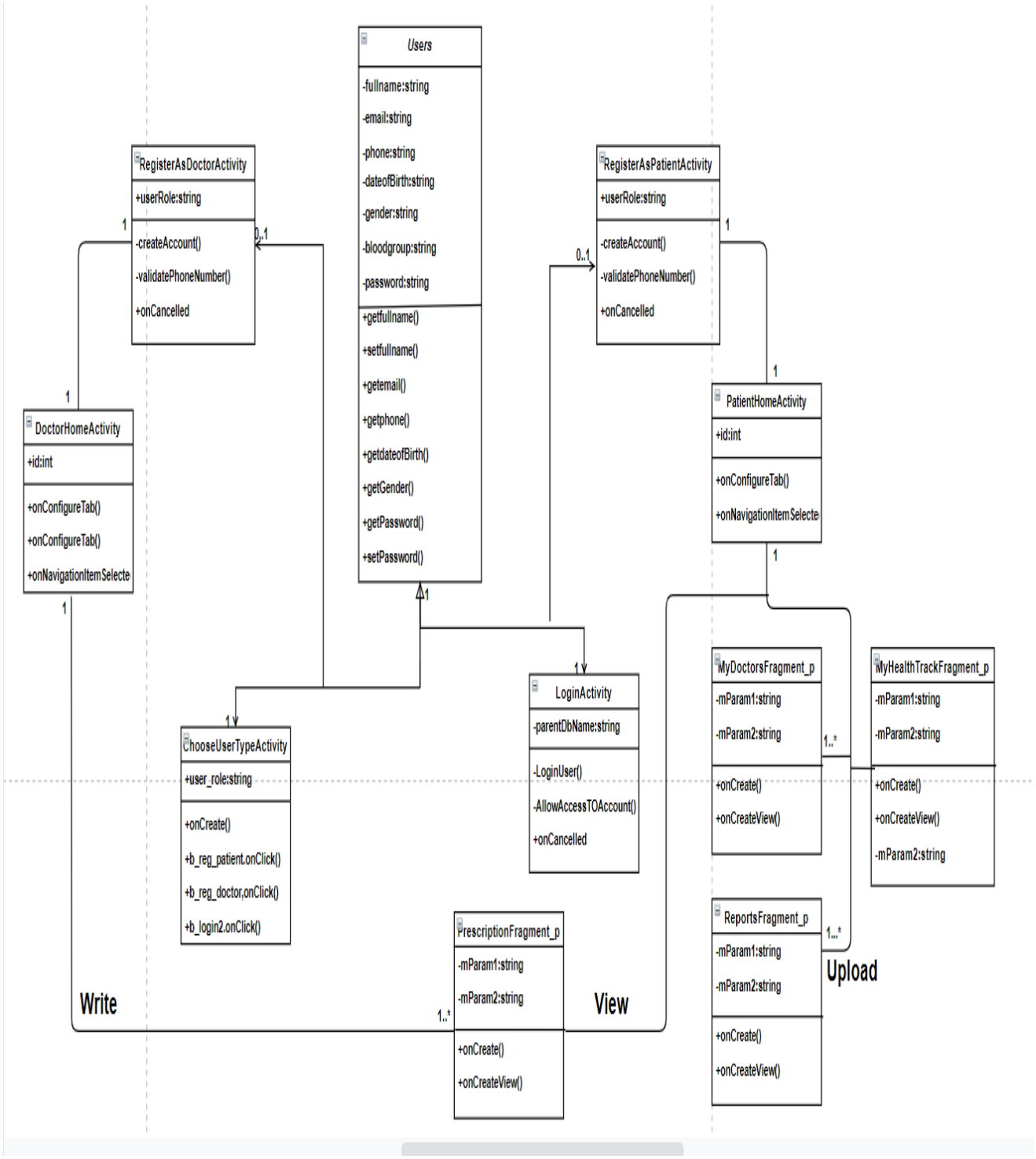


Figure: Activity Diagram of Our App

9. Sequence Diagram

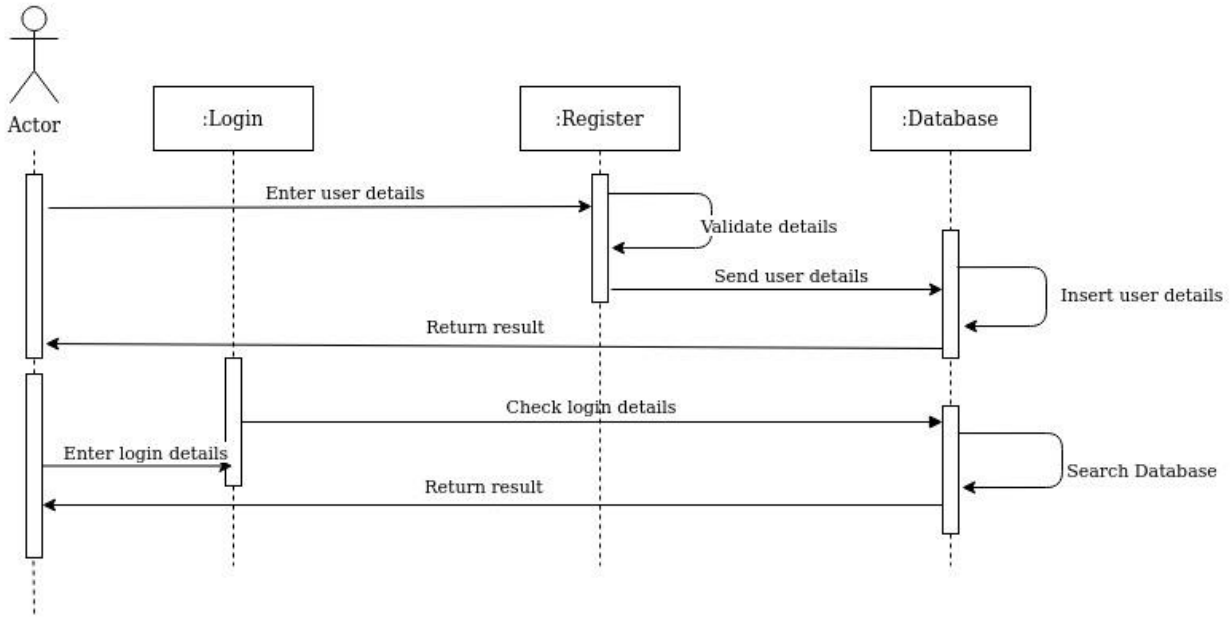


Figure: Login and Register Sequence Diagram of Our App

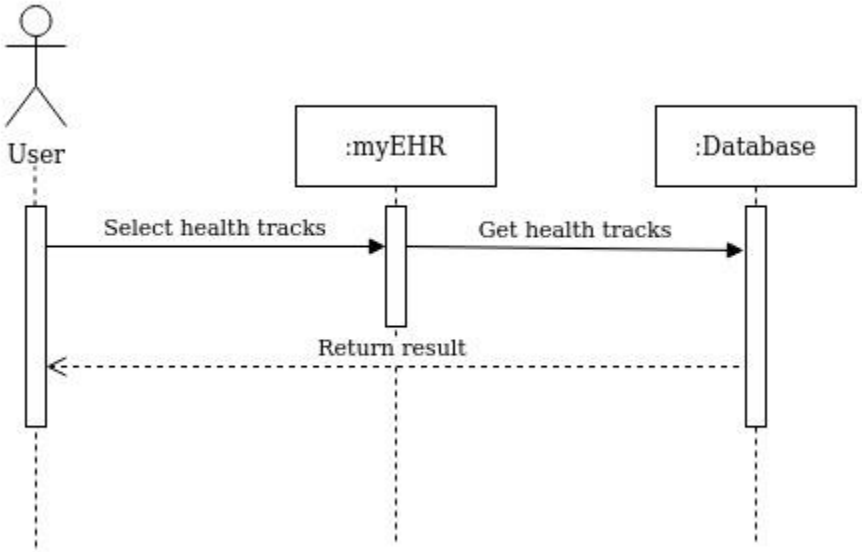


Figure: Health Track Sequence Diagram of Our App

Sequence Diagram (Continued)

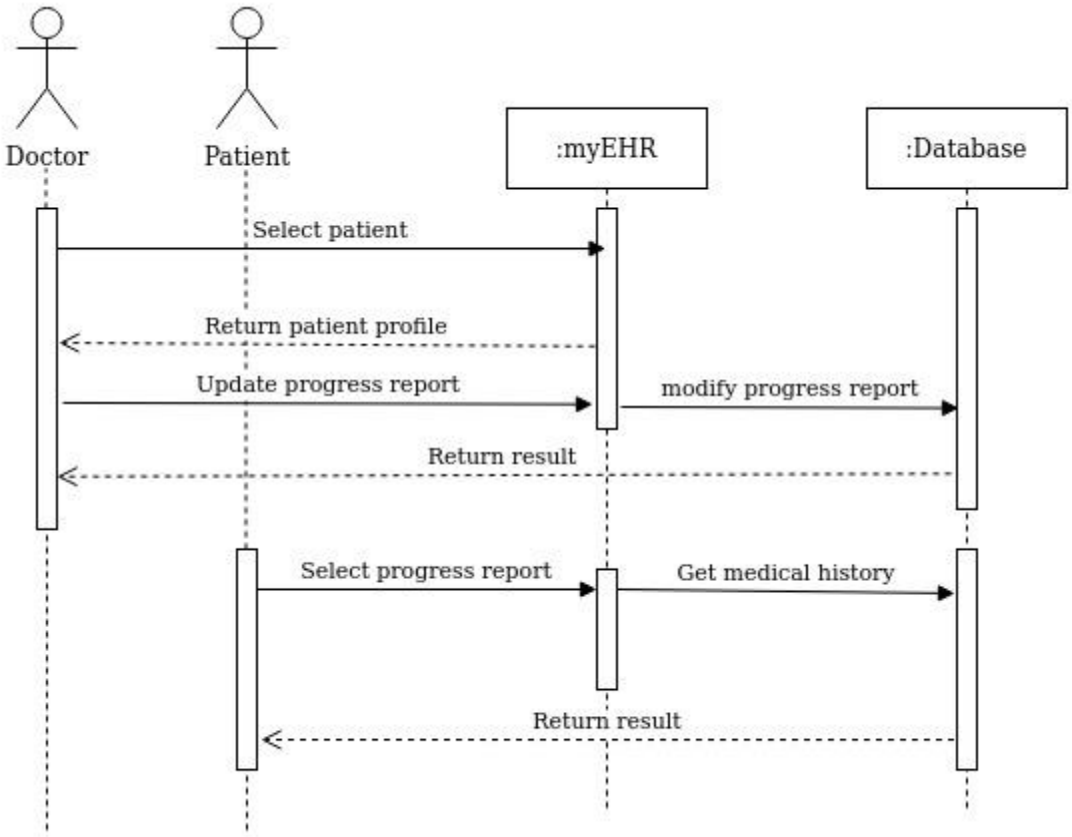


Figure: Progress Report Sequence Diagram of Our App

Sequence Diagram (Continued)

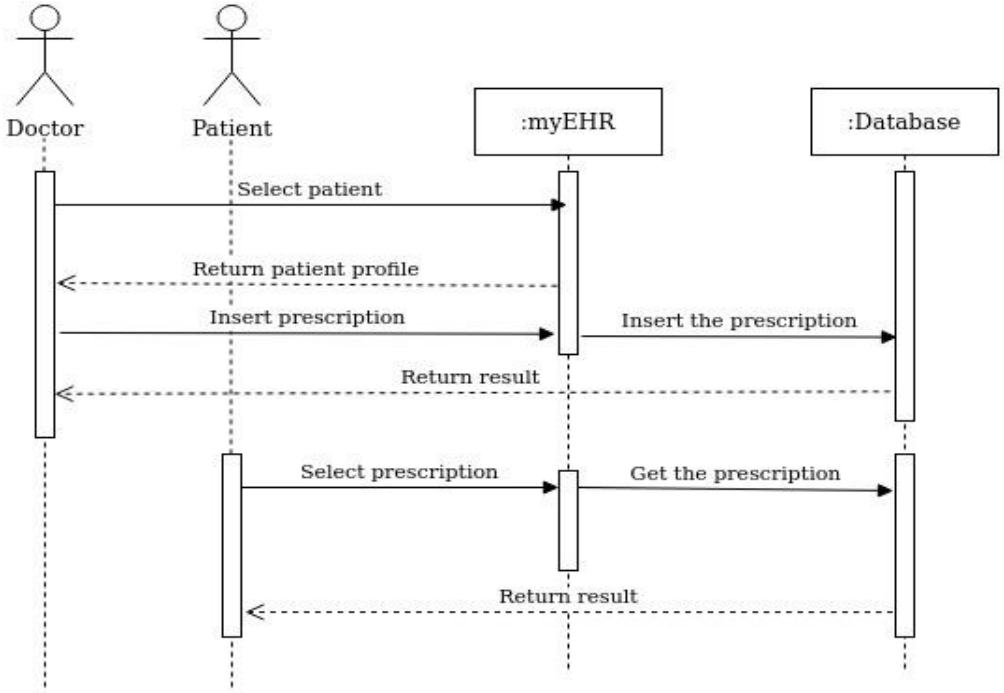


Figure: Prescription Sequence Diagram of Our App

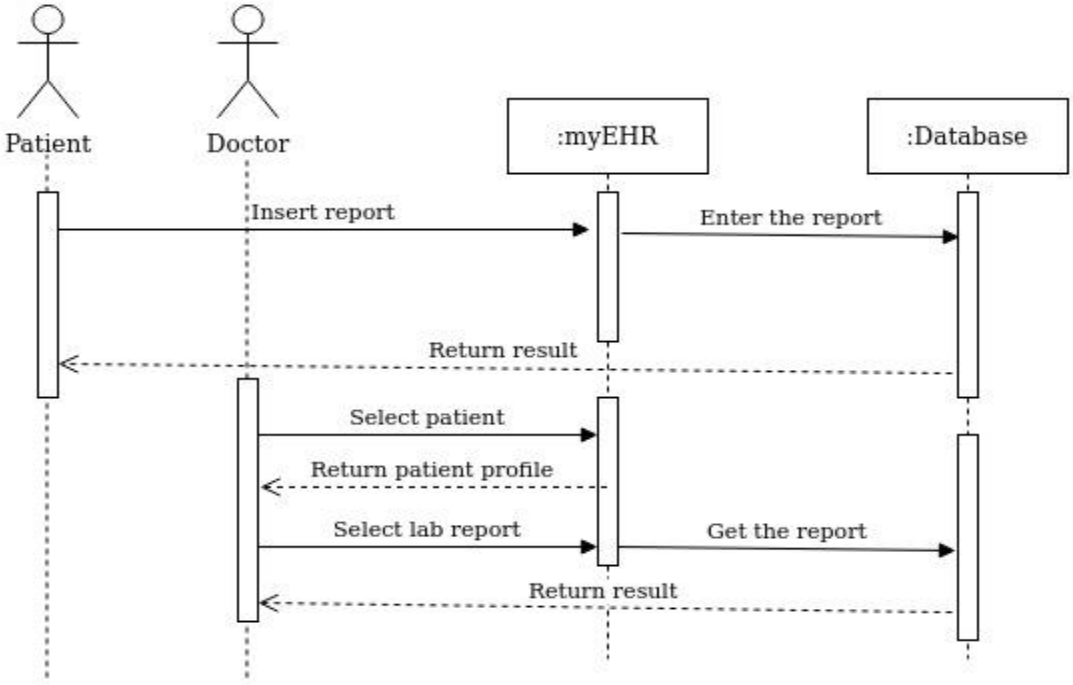
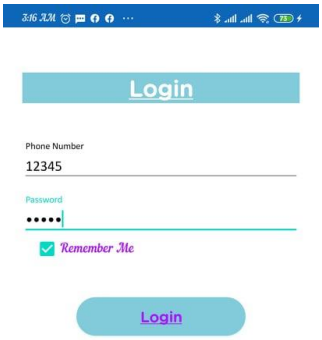
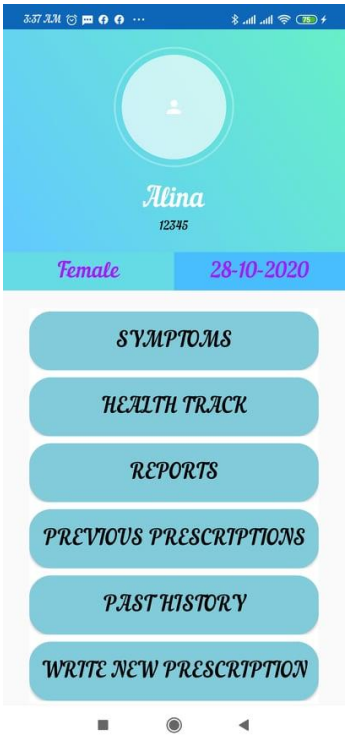


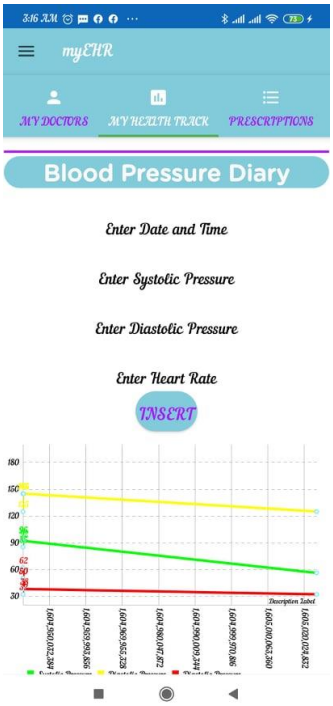
Figure: Prescription Sequence Diagram of Our App

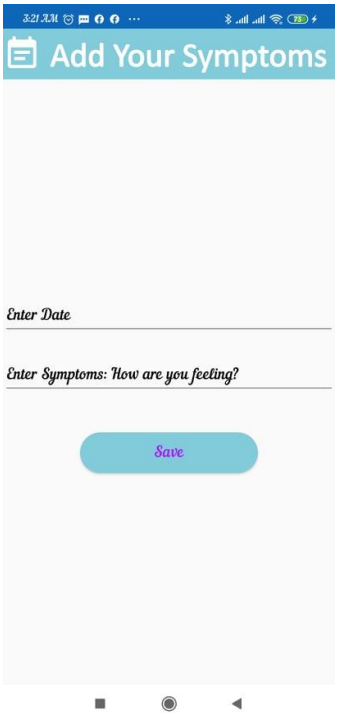
10. Some Screenshots of our Project





Screenshots(continued)





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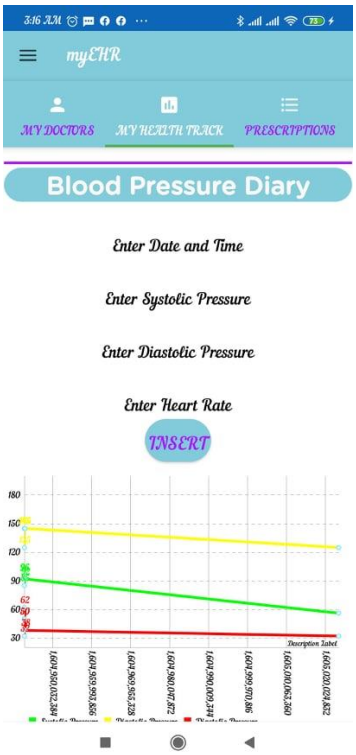

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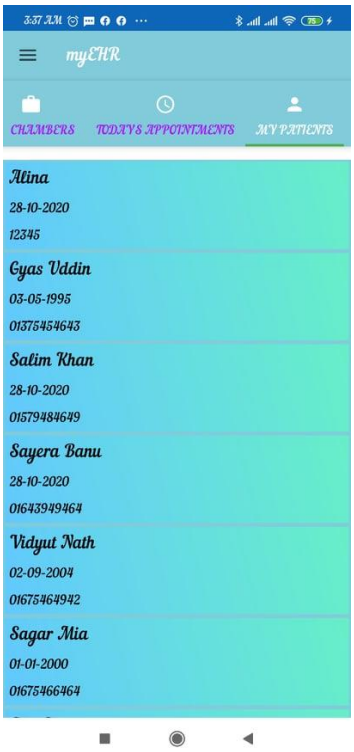

11. Limitations

The main limitation of the project is that - in our system, we haven't enabled demographic tracking feature. Another limitation of the app is, it only runs in android based operating system, it does not run in iOS, PC or Mac Platforms.

12. Future Work

We have tried our best to provide the best solution with our capability and patience. In this solution, there are some limitations. But we will try to overcome the limitations in future version of this app. We will try to add a smart user interface for making the app's authentication service more user friendly. We are also working to add more functions so that it creates more values to the customers and users.

13. Conclusion

This report has provided all the information about the whole project including all essential diagram and Architectural pattern. This report helped us to build our app more efficiently.

Although we have some drawbacks, we are looking forward to solve all the issues in future updated version.