# **Patients-History Taking App**

#### **Problem Statement:**

In this modern and digital era, it has been observed that the healthcare professionals like doctors and students who are still in the *MBBS* years or doing *House Job* are still carrying notepads or using papers to take the history of patients. And there are a lot of problems that are being faced by the doctors like some times the paper gets damaged or the notepad might get lost. It also creates a hassle of documentation for them. So, we have an amazing idea of solving this problem for them.

# **Proposed Solution:**

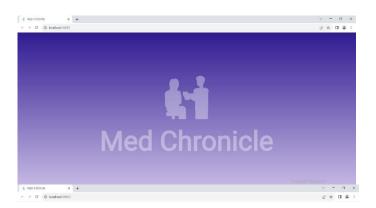
So, keeping in mind the problem Statement, we have provided the solution to it by creating an app named as Patient-History Taking App for doctors. It will solve all the problems of doctors and besides the basic functionality it will provide additional features that will help them to take the history of patients in an easier way. The following key features will overcome the challenges they have been facing:

- 1. **Individual Patient Profiles:** The individual patient profiles will allow healthcare professionals to create and maintain detailed records of each patient, including personal information, medical history, and previous treatment plans.
- 2. **History Templates:** The history templates feature will provide pre-defined templates for different medical cases, saving time and ensuring accuracy in recording patient histories.

- 3. **Default Headings for History:** There will be default headings in the app of taking the history, the doctors will only write the history under that particular heading, they don't need to write same headings again and again for different patients.
- 4. **User Friendly Interface:** Our user interface is created in such a way that the users can use it without any difficulty. They will save the histories of patients and after writing in all section, they can go to only one section to find all the details they have uploaded.
- 5. **Secure Data Storage:** The data storage feature will ensure that the patient information is securely stored and easily accessible when needed.

# **UI of History Taking App:** On Google Chrome(WEB)

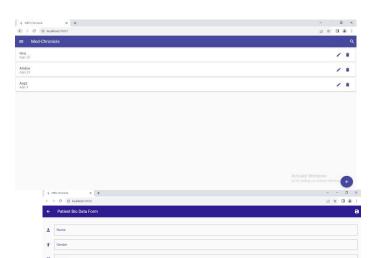
**And Android Mobile** 

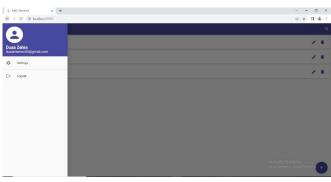


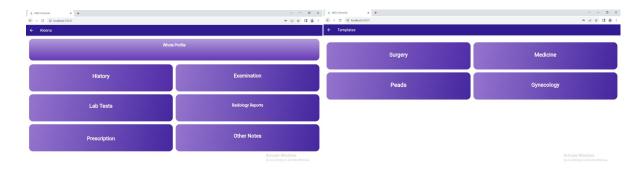


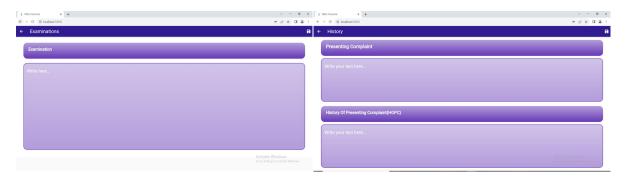


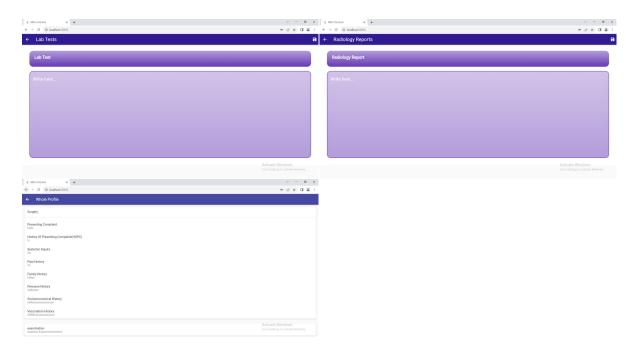




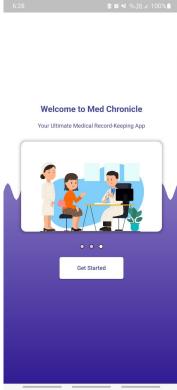


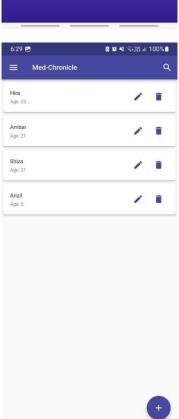




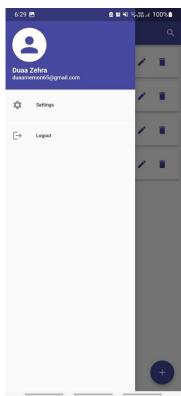




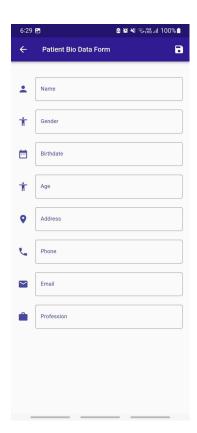


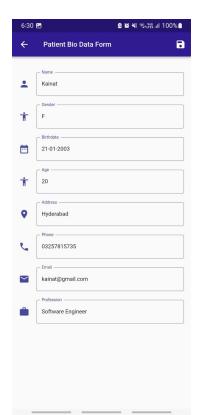




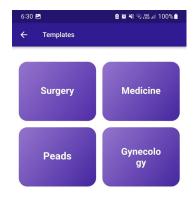




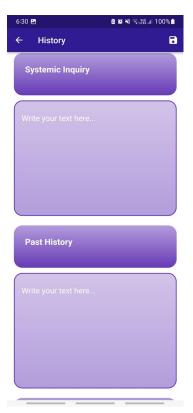


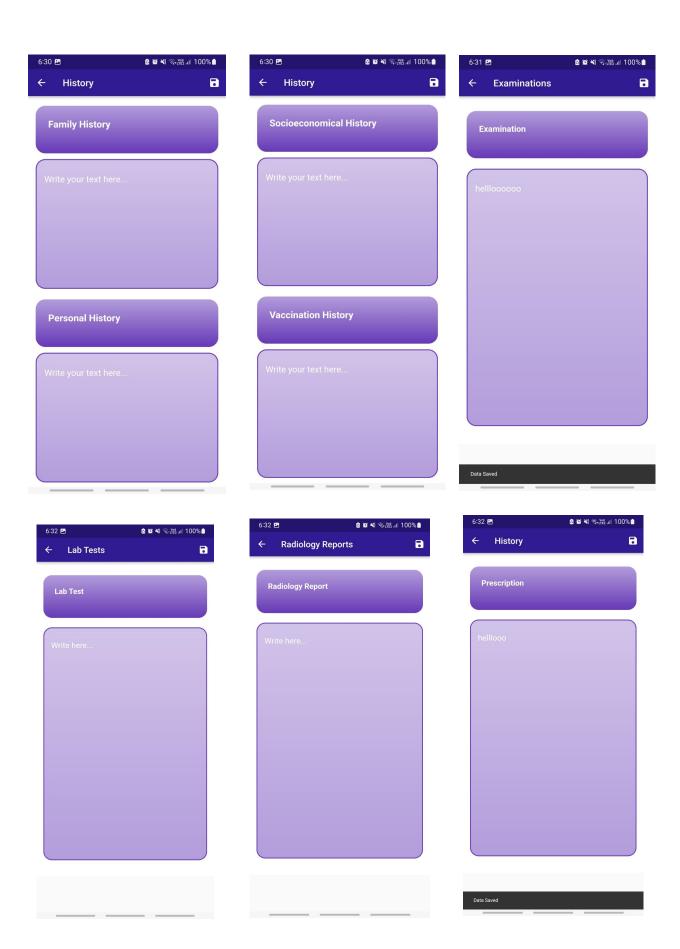




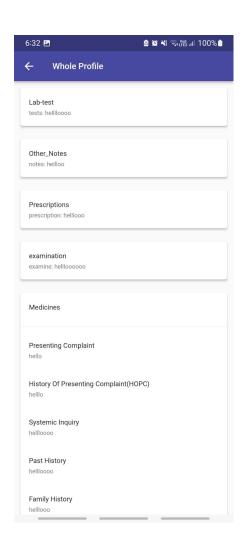






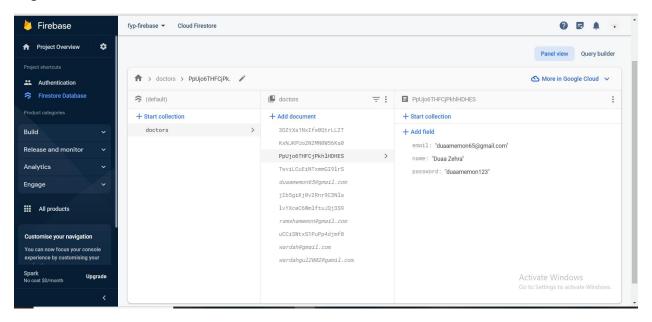






## **Database Storage:**

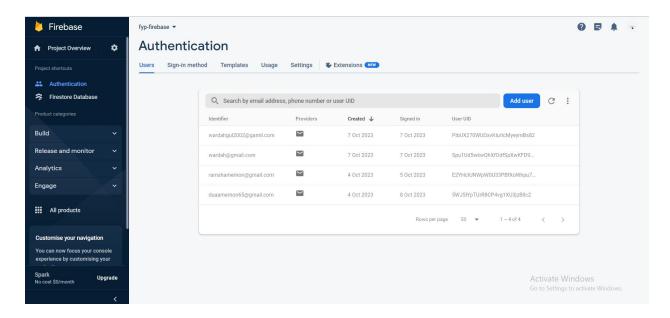
**Real-time Database:** Firebase offers a real-time database, which is well-suited for applications where multiple users need instant access to the same data. In the context of our seat booking app, this real-time capability ensures that seat availability information is always up to date, providing a seamless booking experience for students.



**Scalability:** Firebase is highly scalable, capable of handling a large number of concurrent users and data updates. This is essential for our app, as it needs to accommodate numerous students booking seats simultaneously during peak travel times.

**Offline Support:** Firebase provides robust offline support, allowing students to make seat reservations even when they have a poor or no internet connection. The app syncs data automatically once the internet connection is restored, ensuring that students can book seats reliably.

**Authentication Integration:** Firebase seamlessly integrates with Firebase Authentication, simplifying user authentication and ensuring secure access to the app. This integration enhances the overall security of student data and bookings.



**Ease of Development:** Firebase's SDKs and APIs are developer-friendly, making it easier to implement real-time features and maintain the app's performance. This reduces development time and effort, allowing us to focus on delivering a great user experience.

## **Bugs Encountered:**

**Null Pointer Exceptions:** These error occur when I try to access a variable or object that is null. You can prevent this by using null-aware operators like ?. and ??.

Type Mismatch Errors: Using the correct data types in your code.

**Widget Tree Errors:** Flutter's UI is built as a tree of widgets. if the widget tree is not properly constructed, leading to issues like missing or misplaced widgets.

**State Management Issues:** Incorrect state management can lead to bugs like widgets not updating when they should or updating when they shouldn't.

**Bottom Overflow Errors:** It can happen due to a combination of factors, such as the size of widgets, the content they contain, and the constraints provided by parent widgets. Wrap Content in SingleChildScrollView: If you have a long list or content that exceeds the screen height, wrap it in a SingleChildScrollView to enable scrolling.