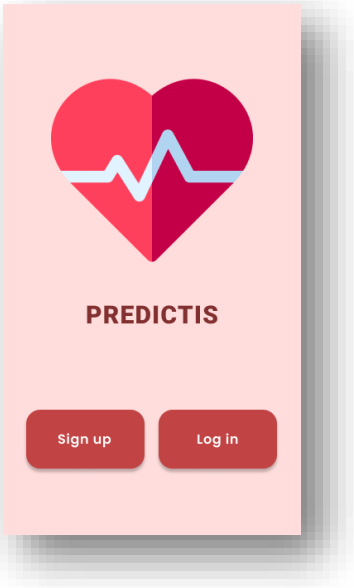
Introduction:

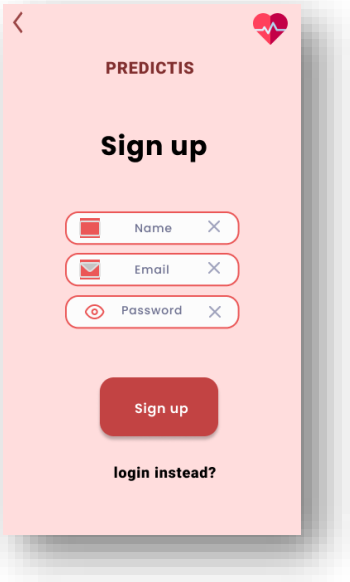
The UI of our system is built on android application-based platform. In this case, we have used XML in front-end, Java in the back-end to connect the app with database. The database is created in cloud storage using FireBase.

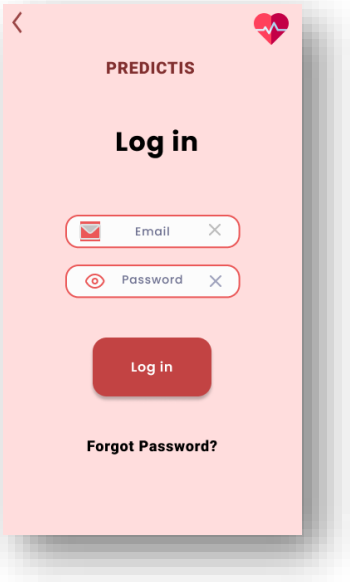
Current UI:

a. The application starts with a landing page. The user selects an option to either signup or login. This mockup page and original pages are same.

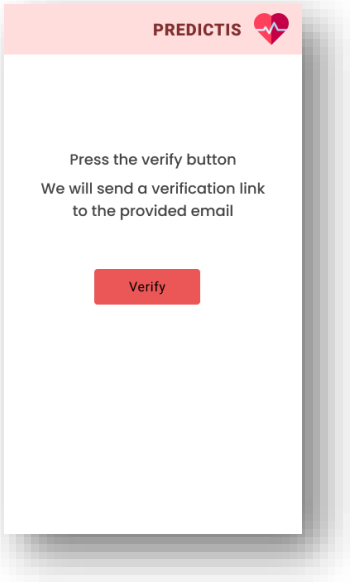


b. The signup and login pages receive email, password. The username and password is stored in the firebase. User can login anytime in the application using these credentials. This mockup page and original pages are same.





c. Authentication is done only once when a user creates a new account.



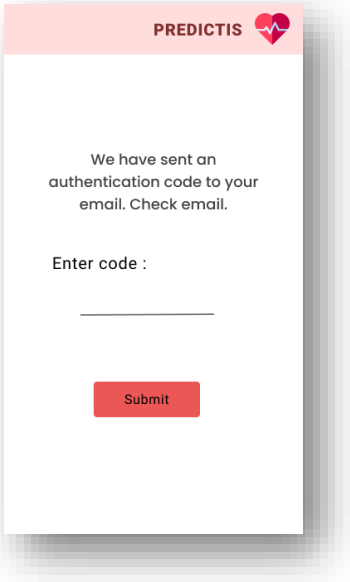


Figure: Original

Figure: Mockup

Deviation:

In the mockup, user had to enter a code from the email. But, actually, we are verifying the account with a link sent to the given email.

Reason:

The mockup process is not user friendly. That is why we are sending a link to keep it simple.

d. After signing up, email is verified and user gives the profile data.

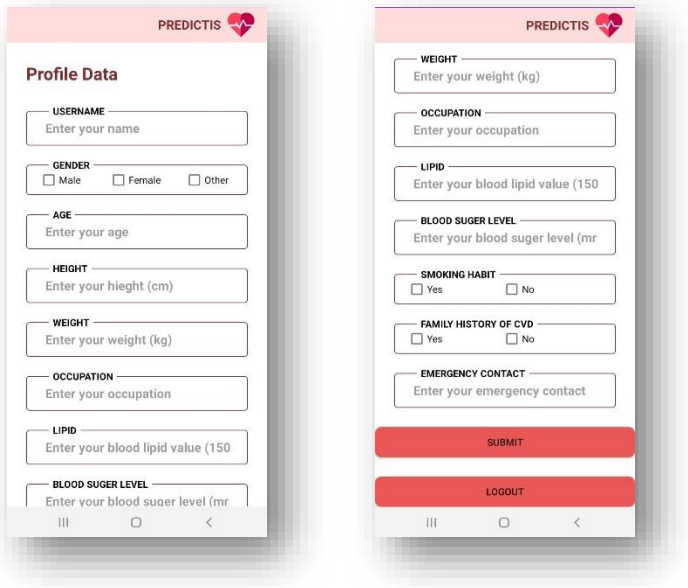


Figure: Original

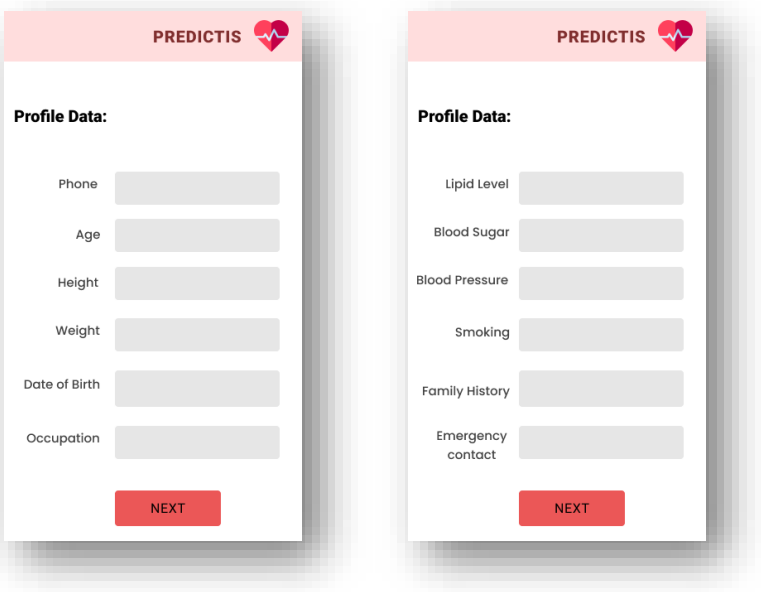


Figure: Mockup

Deviation:

The mockup pages are made in two pages but in the original page it is made in one page using scroll down.

Reason:

The original page's layout is better than the mockup version.

e. Application has a menu bar where user can select where he wants to go.

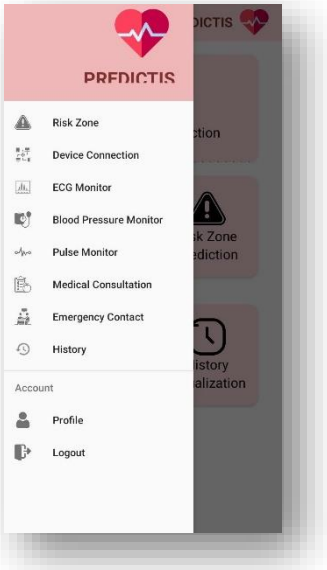


Figure: Original

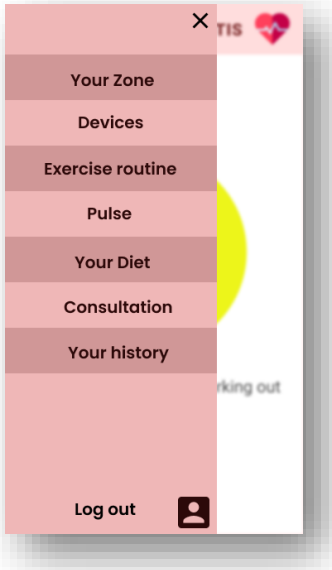


Figure: Mockup

Deviation:

The mockup menu bar was simple looking, the original one has some new features in it.

Reason:

Some features were not included in the mockup page which are included in the original page. Also this has icons which makes the app easier to use.

f. When users go to their zone, they can see predicted result.

Figure: original

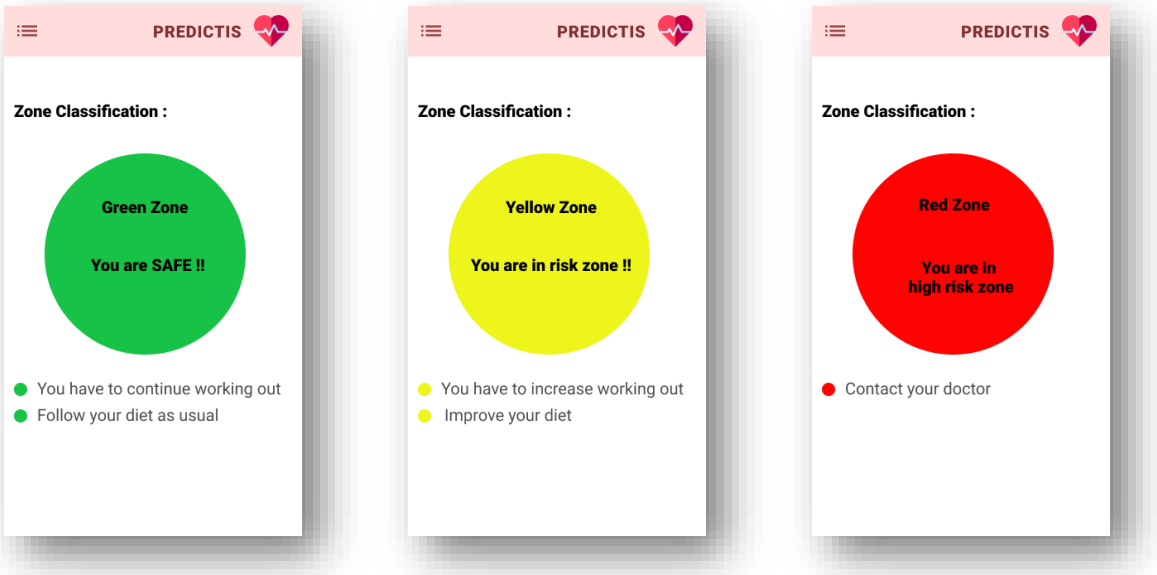


Fig: mockup

Deviation:

The original pages layout is more aligned.

Reason:

It makes the original pages look better.

g. User can connect their device, watch pulse rate and their health history. The attached pages are mockup pages.

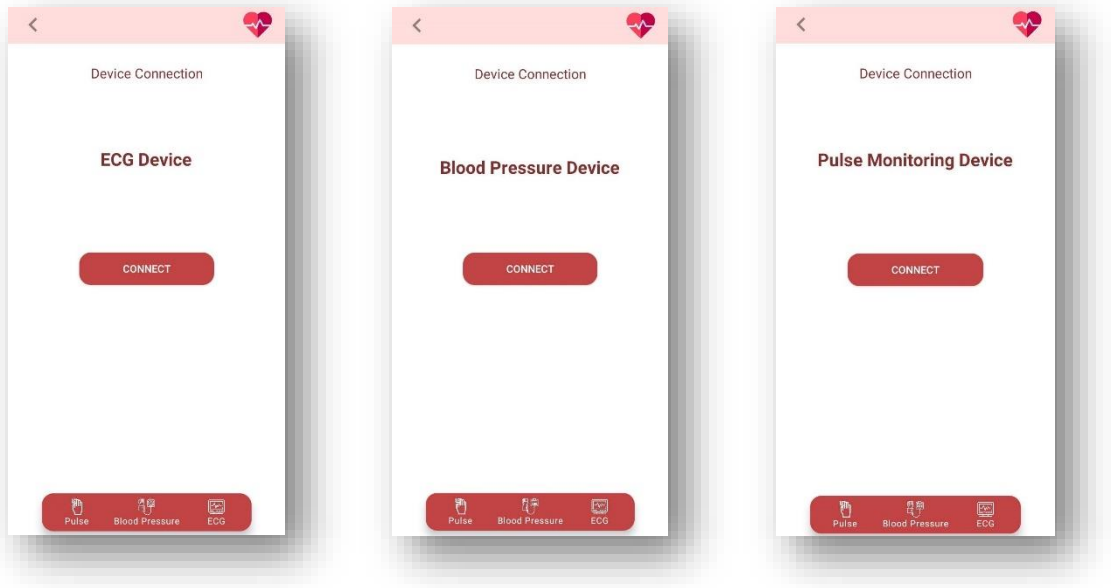


Fig: Original

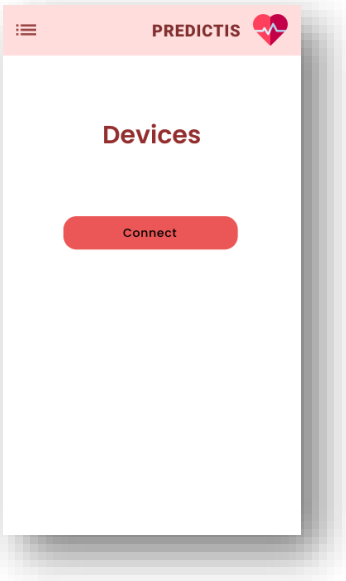


Fig: mockup

Deviation:

The original page has connection option for each of three devices (ECG, BP, pulse)

Reason:

Initially the total number of devices were not selected, now the final product has three devices.

h. User can check their history in the history page.

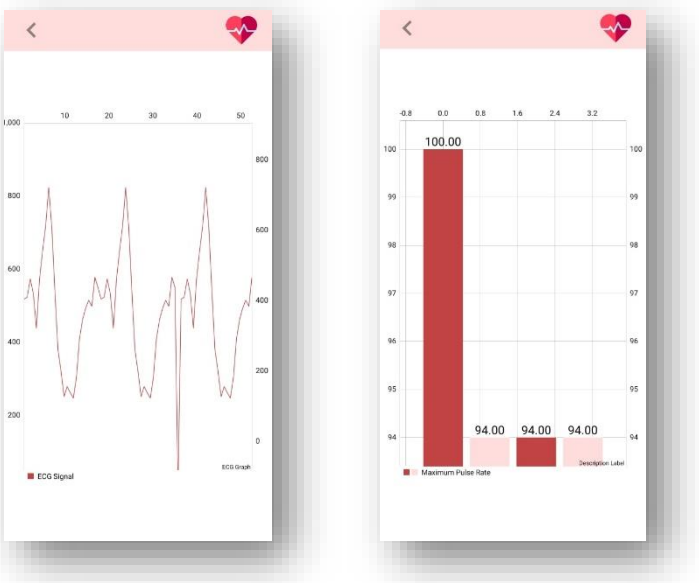


Fig: Original

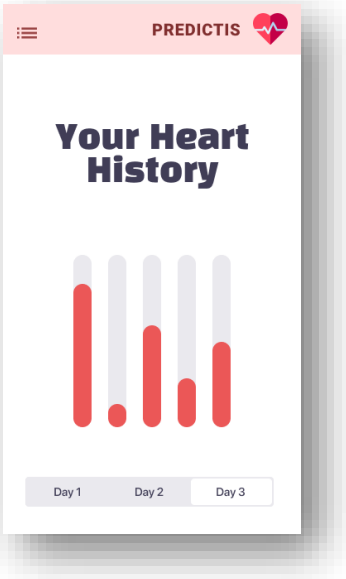


Fig: mockup

Deviation:

Original has a bar chart for thalach from previous pulse history and Graph chart for ECG.

Reason:

History is saved in database and has bigger data than the mockup.

i. User can watch pulse rate through the app. The original page and mockup pages are similar.

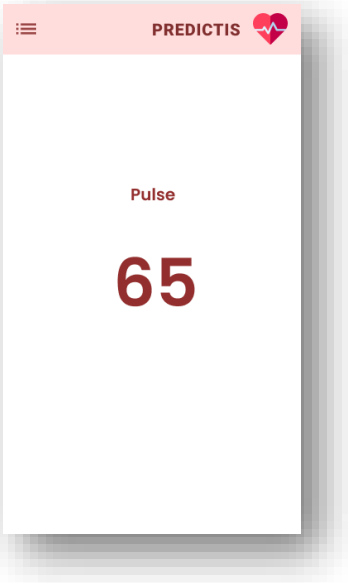
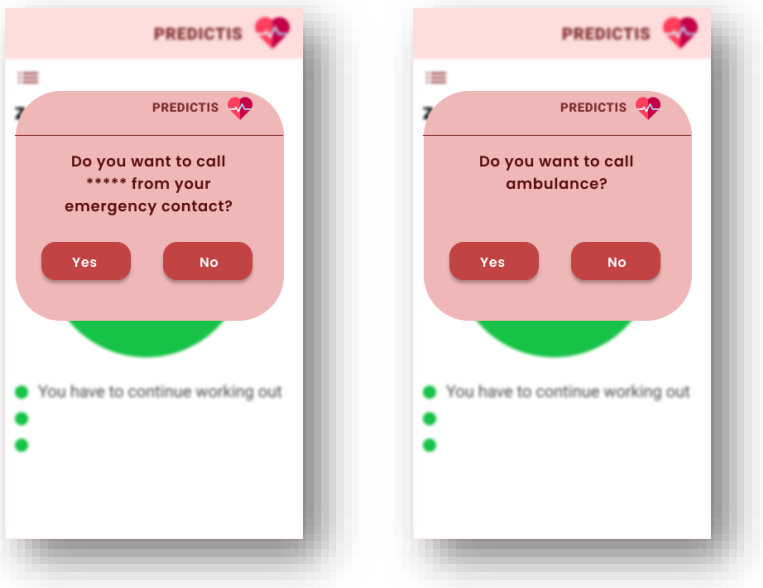


Figure: Original Figure: Mockup

j. User will see pop up messages when any abnormalities are detected and during emergency. Original pages are same as mockup.



k. We added some new features given bellow.

i. Dashboard page comes right after logging in. It contains user's name and previous predicted risk zone.

ii. Medical consultation page contains suggestions for a healthy heart.

iii. The blood Pressure Monitor page contains the systolic and diastolic pressure taken from device and it also contains the pulse which updates in real time.