



# **INTEGRATED DESIGN PROJECT (IDP-II)**

## **CSE~460**

### **SYSTEM DEVELOPMENT REPORT**

**(GROUP ~HOTEL, SEC~A)**

**PREDICTIS**

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## 1. Required Platform

Name	Deacription
<b>Android studio</b> 	<p>Android studio is the integrated development environment for Google's android platform.</p> <p>We used android studio to build our frontend user interface.</p>
<b>Firebase</b> 	<p>It is a free online database to store the dataset used in our project. We used it to build our backend for the android app.</p>
<b>Github</b> 	<p>Git and Github are used for collabortaing the whole project sonthe team can work remotely then merge it centrally.</p>
<b>Arduino</b> 	<p>Arduino is an IDE for microcontrollers. We used nodeMCU as microcontroller and the code is burned in the nodeMCU by this IDE.</p>
<b>Tensorflow</b> 	<p>Tensorflow is an end-to-end open source platform for machine learning. It is used for model building in Google-colab using keras module.</p>
<b>Anaconda</b> 	<p>Anaconda is a distribution of the ppython and R programming languages for scientific computing, that aims to simplify package management and deployment. We are using it for data processing with pandas.Pandas is a common Python tool for data manipulation and analysis.</p>
<b>Jira</b> 	<p>Jira software is built for every member in a software team to plan track and release software.</p>

**Platform used for front~end :**

**Android Studio**



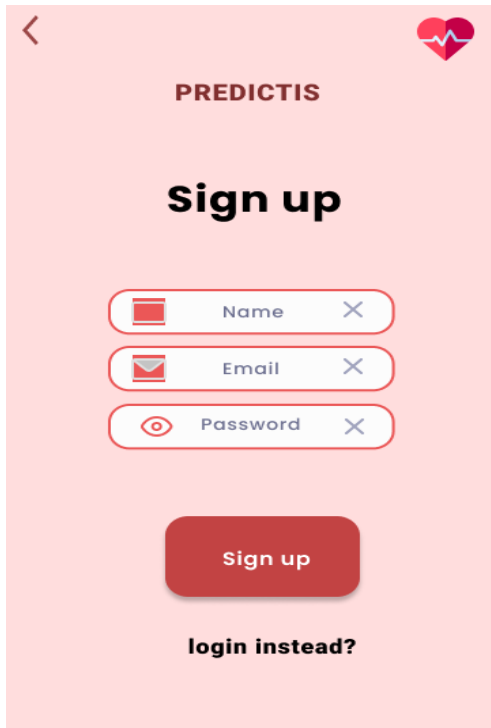
**Platform used for back~end :**

**Firebase**

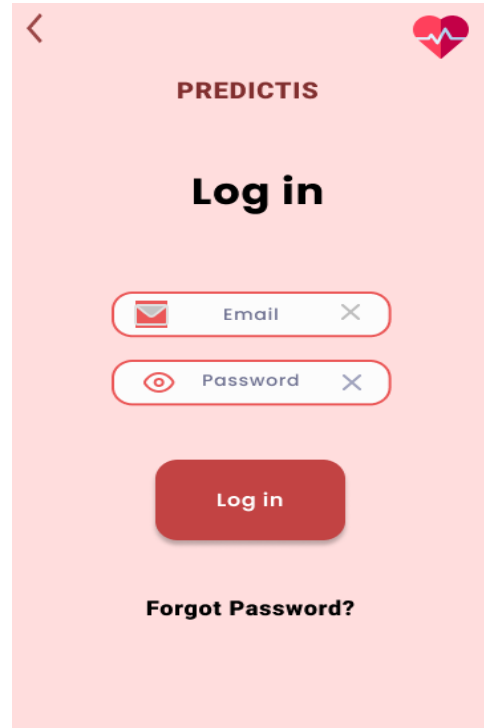


## 2. Snapshot of UI

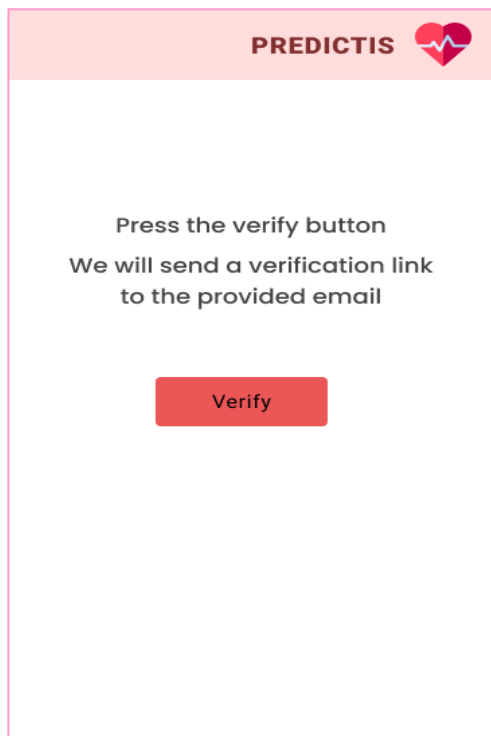
Sign up, log in, authentication and menu:



The 'Sign up' screen features a pink background with a white back arrow and a heart icon with a pulse line in the top right. The title 'PREDICTIS' is centered at the top. Below it, the heading 'Sign up' is displayed. There are three input fields: 'Name' with a red square icon, 'Email' with a red envelope icon, and 'Password' with a red eye icon. Each field has a red 'X' icon on the right. A red 'Sign up' button is centered below the fields. At the bottom, the text 'login instead?' is shown.



The 'Log in' screen has a pink background with a white back arrow and a heart icon with a pulse line in the top right. The title 'PREDICTIS' is centered at the top. Below it, the heading 'Log in' is displayed. There are two input fields: 'Email' with a red envelope icon and 'Password' with a red eye icon. Each field has a red 'X' icon on the right. A red 'Log in' button is centered below the fields. At the bottom, the text 'Forgot Password?' is shown.




The 'Verify' screen has a pink header with the title 'PREDICTIS' and a heart icon with a pulse line. The main content area is white and contains the text 'Press the verify button' and 'We will send a verification link to the provided email'. A red 'Verify' button is centered at the bottom.



The 'Menu' screen has a pink background with a white close button (X) and a heart icon with a pulse line in the top right. A list of menu items is shown in a dark red bar: 'Your Zone', 'Devices', 'Exercise routine', 'Pulse', 'Your Diet', 'Consultation', and 'Your history'. A yellow circular graphic is partially visible on the right. At the bottom right, there is a black icon of a person.

## Profile data and zone classification and pop up notification:

**PREDICTIS** 

**Profile Data:**

Lipid Level

Blood Sugar



Blood Pressure

Smoking

Family History

Emergency contact

NEXT

 **PREDICTIS** 

**Pulse**

**65**

 **PREDICTIS** 



**Zone Classification :**

**Green Zone**

**You are SAFE !!**

 You have to continue working out


 Follow your diet as usual


 **PREDICTIS** 


**Do you want to call ambulance?**

Yes

No

 You have to continue working out



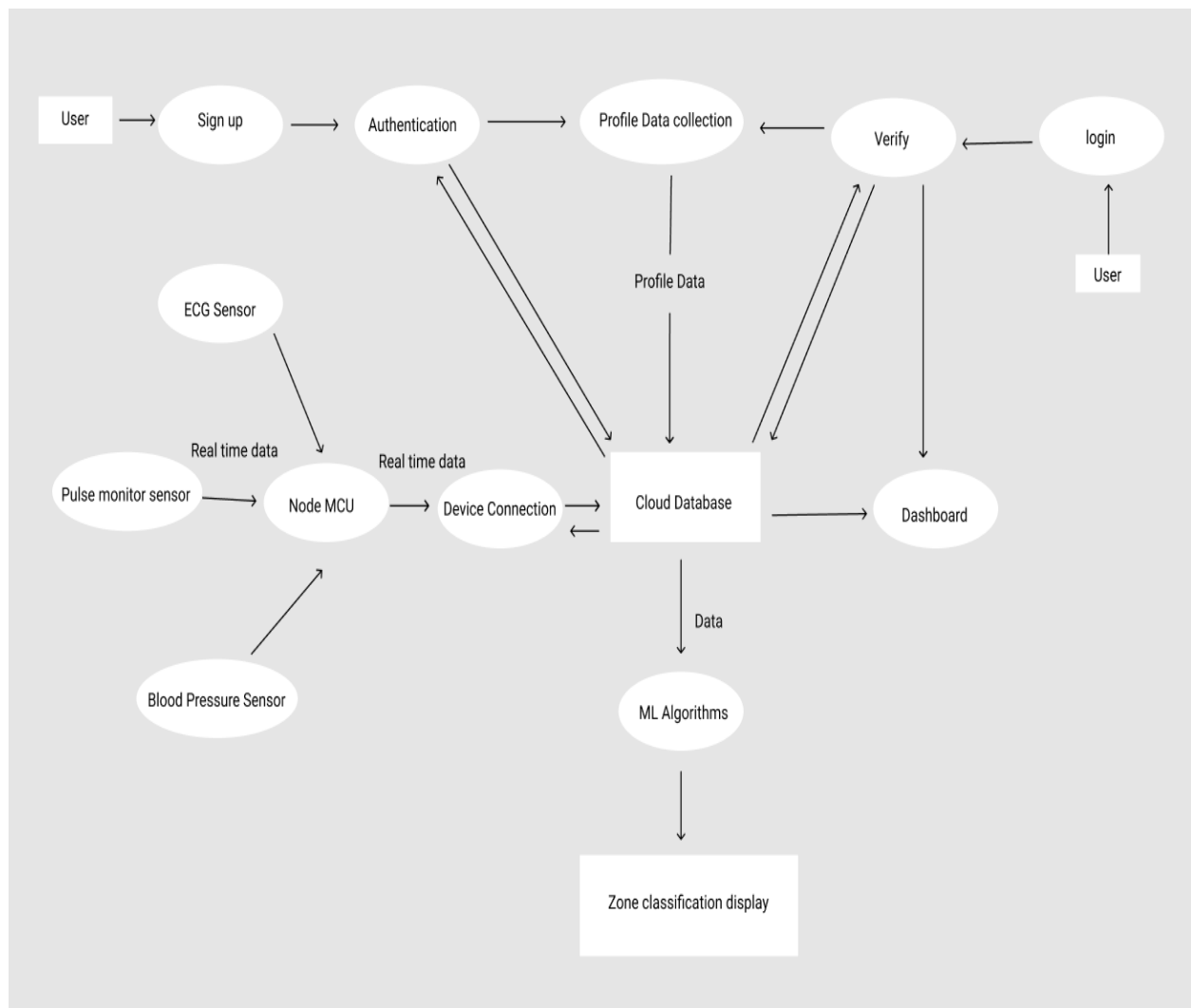


### 3. Senario and DFD

#### Senario 1:

Mr Mannan is a middle aged person. His childhood friend recently had a heart attack and this made him very cautious about his own heart condition. He decided to check if he has any heart risk and also wanted to get it checked. He used the predictis app to do so.

#### DFD 1:



## Senario 2:

Mr X is an existing user of predictis. Recently he has been classified in yellow zone(yellow zone means the user has mild risk of having heart disease). Predictis app guided him with some health consultations following which he could improve his health condition. He was given some doctors' consultation and diet consultation. Also he could do an emergency contact using this app if he needed to.

## DFD 2:

