OWN A HEALTHY HEART: PREDICTIS

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ABSTRACT

Cardiovascular disease is the leading cause of mortality in the developed world. It refers to various medical conditions that affect the heart and the blood vessels. Pedictis does prediction of cardiovascular disease, generates risk factors and also provides a heart condition monitoring privilege using different integrated devices with sensors giving real time data such as heart rate, ecg, resting period, limits of cigarette smoking etc. improves patient's diagnosis accuracy with controlled lifestyle.

INTRODUCTION

Coronary heart disease one of the major causes of disease burden and deaths. Careful and efficient methods of cardiac diseases and periodic examination are important. Here we present Predictis, an application which enables its users to foresee their risks of having Cardio-vascular diseases. Using this application user can get acquainted with their heart-condition on time and will be able to improve their heart-conditions both conveniently and efficiently. User can have insights about patient's heart-condition through this Application

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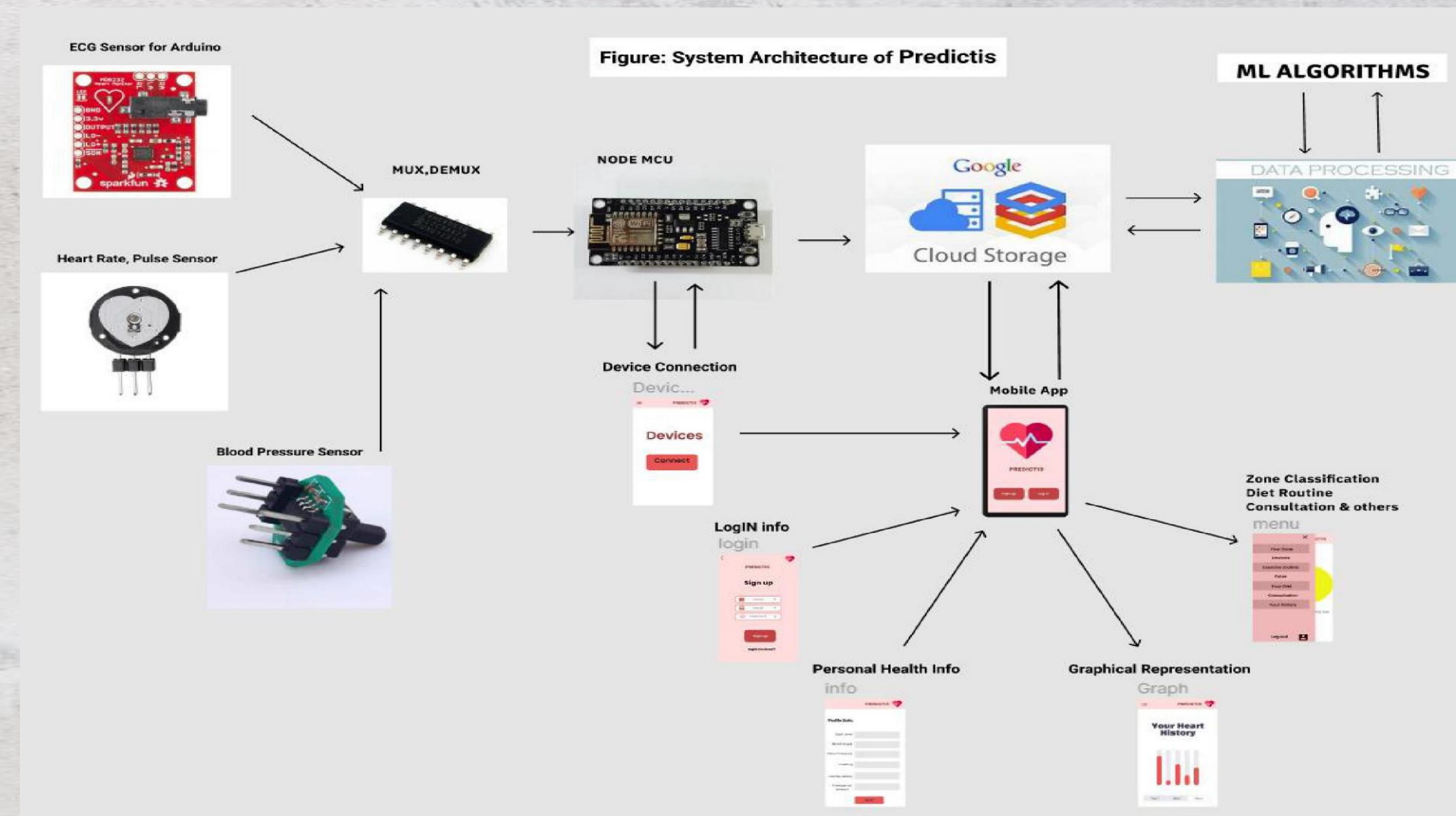PHONE: +8801769024090

OBJECTIVE

- To provide user to take care of the health of their heart
- To decide user's heart condition category (Green for healthy heart, Yellow for people with mild heart problem, Red for people with serious heart problem)
- To give alarm when to go to doctor, to notify a person if user undergoes heart attack or serious angina.
- To collect real time data and regulate daily schedule according to the condition of the heart and lifestyle. To give reminder if not done accordingly.
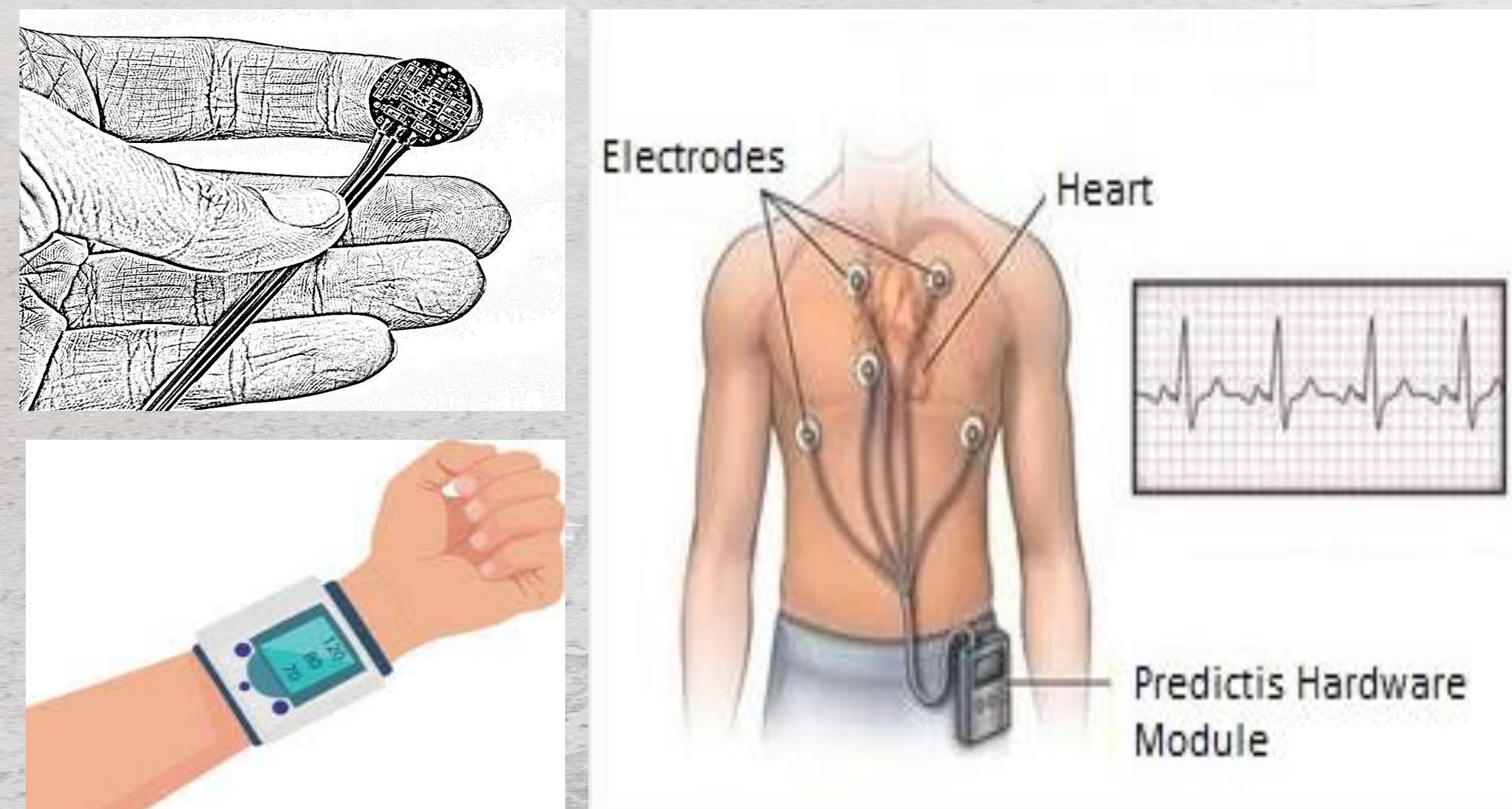
FEATURE

- Predicting Risk zone from Pretrained model with real time data.
- Visualizing real-time data taken from the sensors(e.g. pulse sensor, ECG sensor)
- Providing Emergency contact and ambulance calling alerts
- Keeping previous health history.
- Providing medical consultation e.g. Diet, exercise, sleep time.
- Keeping profile data in the history.
- The device is wearable and easy to use.
- Monitoring The patient to give alarm when abnormality is detected.

SYSTEM ARCHITECTURE

Figure: System Architecture of Predictis

PROTOTYPE

DISCUSSION

Predictis is a very useful app to check your heart condition and also to be aware of any possible heart risk that one may have. This app does not detects heart diseases, it only predicts them. One of the biggest challenges to build this app was to collect heart data. Due to patient privacy and also covid-19 situation, it was hard to collect heart data so datasets collected form the internet was used. Anyways, the app was able to give a good accuracy finding the risk zones. Other features like history, monitoring, graphic visualization, consultation adds more usefulness to the app and helps to maintain a good diet. Collection of real-time data in this system like blood-pressure, ECG, and heart rate data keeps your heart in check.

CONCLUSION

This app is very helpful to predict heart condition. It will help to reduce the rate of accidental death due to heart problems and will enable the user to maintain a healthy lifestyle. It will enable users to have a stress free life with a healthy heart. Our easy to use application with the sensors will let you have the life you will enjoy without any worry about your heart.