

# **SPRINT 1: Classification of Arrhythmia by Using Deep Learning With 2-D**

## **ECG Spectral Image Representation**

**Team ID: PNT2022TMID51243**

**Team members: A.Antony Nivi Sneha,L.Kanakavalli,K.Sivaranjini,M.Ajay**

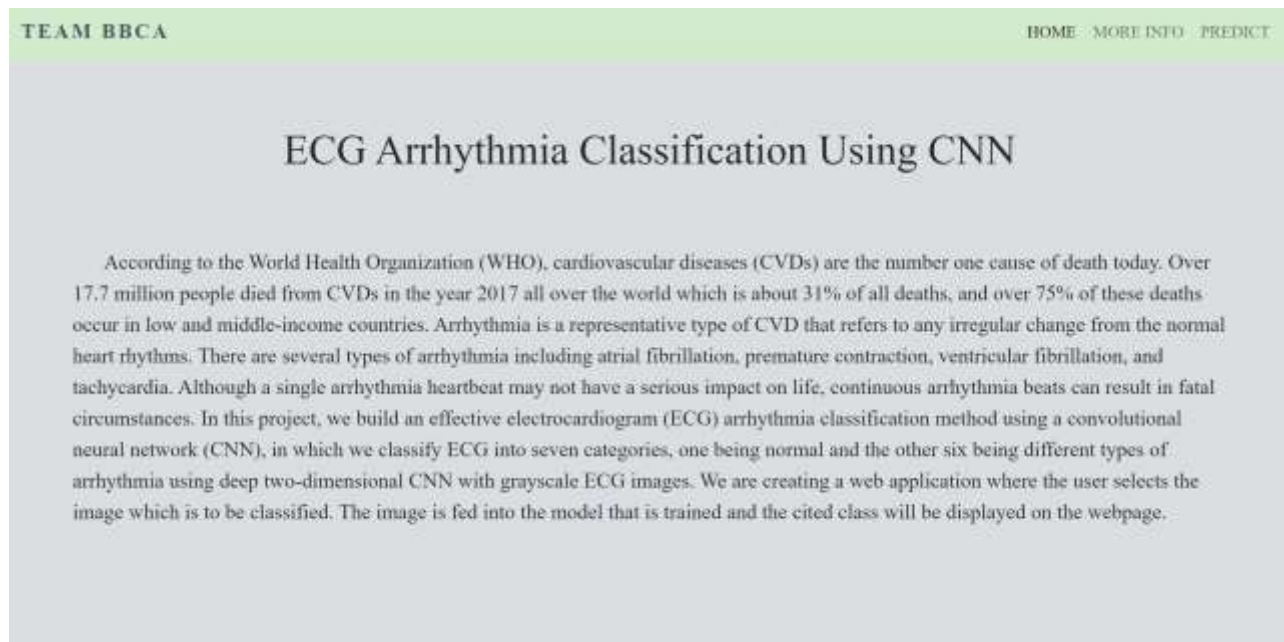
**Code:** Updated in GitHub in the Deliverables section in SprintI folder.

### **Description of USN and Screenshots:**

#### **USN-1:**

As a user, I will get the full idea of ECG Arrhythmia classification using CNN where the details of the webpage will be given and info about different CVDs are provided. The homepage must properly define the Arrhythmia, its causes and effects and understand how the application helps in solving the problem.

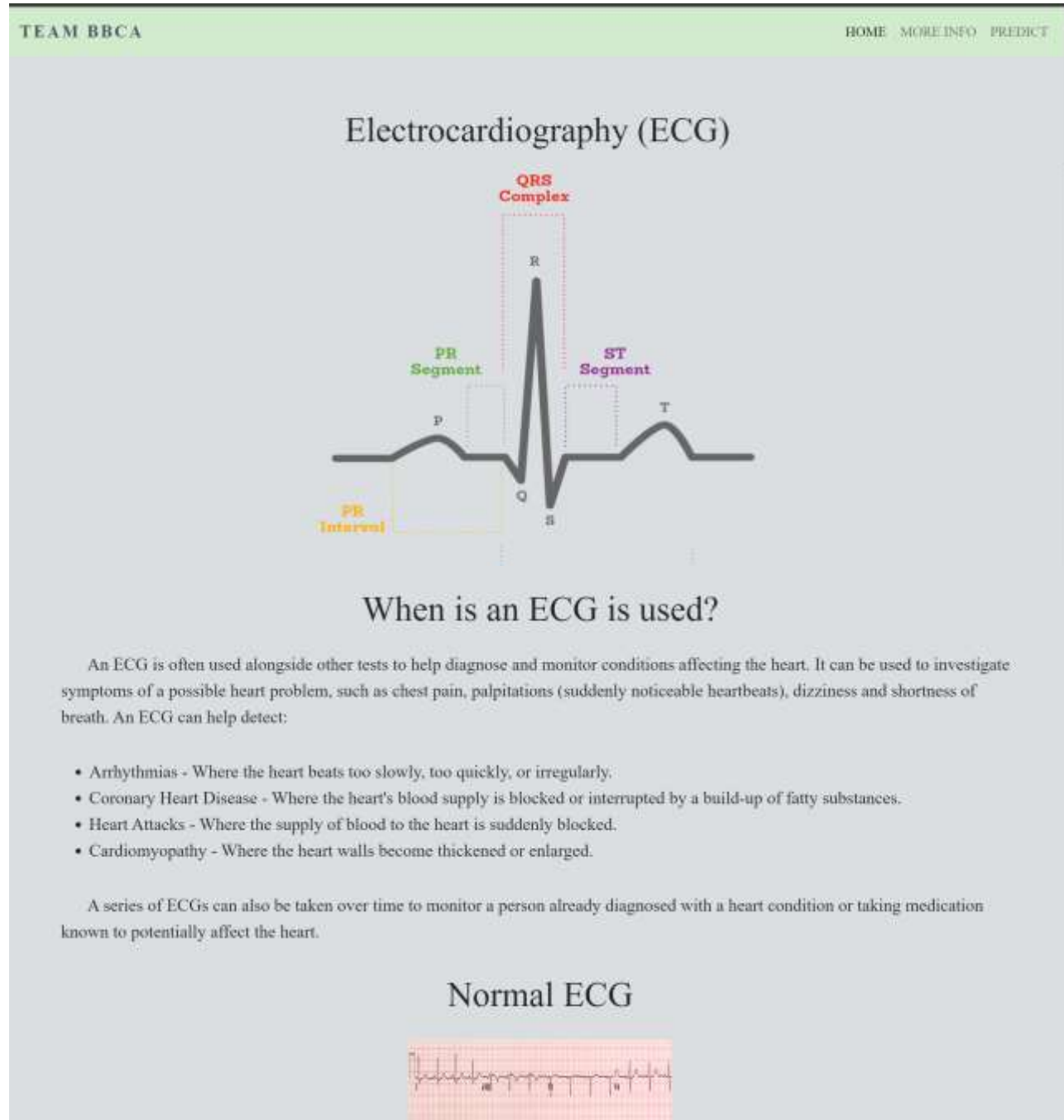
#### **Screenshot:**



## USN-2:

As a user, I can enter the webpage and view the homepage about the information about Electrocardiography (ECG) giving a clear perspective of the signals. I must also be able to comprehend all medical jargon related to Arrhythmia such as ECG, Coronary Heart Disease, Cardiomyopathy and its types.

## Screenshot





A normal ECG is illustrated above. Note that the heart is beating in a regular sinus rhythm between 60 - 100 beats per minute (specifically 82 bpm). All the important intervals on this recording are within normal ranges.

## Abnormal ECG



Electrocardiographic abnormalities include first-degree heart block, right and left bundle branch block, premature atrial and