Project Planning Phase
Project Planning Tools:

Date	5 NOVEMBER 2022
Team ID	PNT2022TMID28062
Project Name	Classification of arrhythmia by using deeplearning with 2-d ECG image spectral representation

We propose to build an effective electrocardiogram (ECG) arrhythmia classification method using a Convolutional Neural Network (CNN), in which we classify ECG into six different categories namely :

• Left Bundle Branch Block

• Normal

• Premature Atrial Contraction

• Premature Ventricular Contractions

• Right Bundle Branch Block

• Ventricular Fibrillation

We intend on creating a web application where the user selects the image which is to be classified. The image is fed into the model that is trained on publicly available datasets of ECG and is accordingly classified into one of the abovementioned classes which will be displayed on the webpage. Technologies needed for development Upon research it was found that we need require a sound knowledge of the following software technologies for the systematic completion of the project :

• HTML/CSS/JavaScript/Bootstrap – Front End Development
• Python
• TensorFlow
• Image Processing Basics
• Flask – Backend Development
• Git & GitHub – Project Management
• IBM Cloud – Hosting
• IBM Watson – Training the Deep Learning Model