Data Collection and Preprocessing Phase

Date	24 SEPTEMBER 2024
Team ID	SWTID1727151090
Project Title	Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Template

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan Template

Section	Description
Project Overview	This project aims to leverage the power of deep learning to automate the process of arrhythmia detection and classification. By converting ECG signals into 2-D spectral images, we can effectively capture both time-domain and frequency-domain information, enabling the CNN model to learn intricate patterns associated with different arrhythmia types. To develop a robust and accurate deep learning model capable of classifying various types of arrhythmias from electrocardiogram

	(ECG) signals, thereby aiding in early detection and timely intervention.
Data Collection Plan	Dataset is provided by concerned institution(project mentors) through website
Raw Data Sources Identified	The raw data sources can be recorded manually and upon recording various abnormalities seen thus led to the dataset for the project.

Raw Data Sources Template

Source Name	Description	Location/ URL	Format	Size	Access Permissions
ECG-Dataset	The dataset contains test and train elements. These test and train elements each contain data of ➢ Left Bundle Branch Block ➢ Normal ➢ Premature Atrial Contraction ➢ Premature Ventricular Contractions ➢ Right Bundle Branch Block Ventricular Fibrillation	https://drive.google.com/file/d/16EnEXeHJXmV-8qnfswmrVQ6nyHOwi93D/view	ZIP	2.7 GB	Public