**Data Collection and Preprocessing Phase**

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| Date | 21 June 2025 |
| Project Title | **Arrhythmia Classification with Deep Learning and 2-D ECG Images** |
| Maximum Marks | 2 Marks |

**Data Collection Plan & Raw Data Sources Identification Report:**

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**

| Section | Description |
| --- | --- |
| Project Overview | The project aims to develop a deep learning-based solution for automated arrhythmia classification from ECG data. Using a proprietary dataset of 2D spectral images derived from ECG signals, the objective is to build a robust model that accurately classifies different types of arrhythmias, supporting clinicians in timely and effective diagnosis. |
| Data Collection Plan | - The ECG data was collected internally as part of ongoing clinical operations and device monitoring. - All data was gathered with proper patient consent and in compliance with relevant data privacy regulations. - The raw data consists of 2D spectral images (PNG/JPG) generated from ECG signals, each labeled with the corresponding arrhythmia class by clinical experts. - Data is organized in class-wise folders for training and testing. - Data is securely stored on the company’s internal servers/cloud. |

**Raw Data Sources Report:**

| **Source Name** | **Description** | **Location/URL/Path** | **Format** | **Size** | **Access Permissions** |
| --- | --- | --- | --- | --- | --- |
| Internal ECG Dataset | Proprietary ECG spectral images labeled by clinical experts | https://drive.google.com/file/d/16EnEXeHJXmV-8qnfswmrVQ6nyHOwi93D/view?usp=sharing | A zip folder containing the images in PNG format | 33.3 MB(zip) | Restricted (internal only) |