**Initial Project Planning Report**

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| Date | 18-06-2025 |
| Project Name | Arrhythmia Classification Using Deep Learning |
| Maximum Marks | 4 Marks |

**Product Backlog, Sprint Schedule, and Estimation**

| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Priority** | **Team Members** | **Sprint Start Date** | **Sprint End Date (Planned)** |
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| Sprint-1 | Data Collection and Preprocessing | ECG-1 | Understanding & loading ECG spectral image data | High | Adyant | 2025/06/17 | 2025/06/17 |
| Sprint-1 | Data Collection and Preprocessing | ECG-2 | Data cleaning and augmentation | High | Adyant | 2025/06/17 | 2025/06/17 |
| Sprint-1 | Data Collection and Preprocessing | ECG-3 | Exploratory Data Analysis (EDA) | Medium | Adyant | 2025/06/17 | 2025/06/17 |
| Sprint-2 | Model Development | ECG-4 | Building deep learning model (CNN or hybrid) | High | Adyant | 2025/06/18 | 2025/06/18 |
| Sprint-2 | Model Development | ECG-5 | Training the model | High | Adyant | 2025/06/18 | 2025/06/18 |
| Sprint-2 | Model Development | ECG-6 | Evaluating the model (accuracy, F1, report) | High | Adyant | 2025/06/19 | 2025/06/19 |
| Sprint-2 | Model Development | ECG-7 | Model tuning (hyperparameters, regularization) | Medium | Adyant | 2025/06/19 | 2025/06/19 |
| Sprint-3 | Web Integration and Deployment | ECG-8 | Building HTML templates for web interface | Medium | Adyant | 2025/06/20 | 2025/06/20 |
| Sprint-3 | Web Integration and Deployment | ECG-9 | Flask backend integration and local deployment | Medium | Adyant | 2025/06/20 | 2025/06/20 |
| Sprint-4 | Project Report | ECG-10 | Writing and submitting project report | Medium | Adyant | 2025/06/21 | 2025/06/21 |