ARRHYTHMIA CLASSIFICATION

Team ID	**PNT2022TMID23017**
Project Name	**Project - Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation**
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SCENARIO – Classification of arrhythmia with ECG spectral image using deep learning.

STEPS

Initial Awareness - During the diagnosis of arrhythmia symptoms.

Initial Experience - A message in the dashboard requesting ECG image upload.

Core Moment - Waiting for the algorithm to classify the arrhythmia type.

End Of Process - Display of correct arrhythmia type along with technical details.

After The Process - Result is used by the user to provide patient with the correct treatment or generate a report.

INTERACTIONS	Initial Awareness - The user (doctor) may be prompted to use the application once an ECG scan of the patient has been obtained. Initial Experience - The user interacts with the dashboard to upload the ECG image. Core Moment - The user waits while the algorithm works. End Of Process – User gets the result displayed on the dashboard in the form of a document. After The Process – The user can print the results, download it or mail it as he/she sees fit.
GOALS AND MOTIVATIONS	Initial Awareness – *"I use this application to save me the bother of analyzing ECG scans and classifying arrhythmia types."* Initial Experience – *"I wanted to upload the image so I could have it analyzed by the application."* Core Moment – *"I was waiting for the algorithm to do its job while I was guessing what results it might show."* End Of Process – *"I'm expecting quick and accurate results."* After The Process – *"I wanted a quick way of generating a report for documentation purposes."*
POSITIVE MOMENTS	Initial Awareness – *"Every time I get an ECG scan, I'm reminded of how much time this application saves me."* Initial Experience – *"The dashboard was easy to navigate."*

	Core Moment – *"I didn't have to wait too long for the results."* End Of Process – *"The results had everything I needed."* After The Process – *"It was quick to turn the results into a physical report."*
NEGATIVE MOMENTS	Initial Awareness – *"As an experienced cardiologist, I was reluctant to let machines do my job."* Initial Experience – *"The dashboard although quick to work with wasn't very attractive."* Core Moment – *"I expected less processing time."* End Of Process – *"The results were sometimes wrong."* After The Process – *"Wrong results forced me to redo the process."*
AREAS OF OPPORTUNITIES	Initial Awareness – The advantages of automation must be stated to consumers to help them realize this application's effectiveness. Initial Experience – The dashboard will be made more attractive to look at. Core Moment – Processing time can be minimized by making the entire code more efficient. End Of Process – The accuracy can be increased by training the algorithm with more data. After The Process – The results may be formatted to be easily turned into pdf documents.