

Project Initialization and Planning Phase

Date	24 SEPTEMBER 2024
Team ID	SWTID1727151090
Project Name	Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation
Maximum Marks	3 Marks

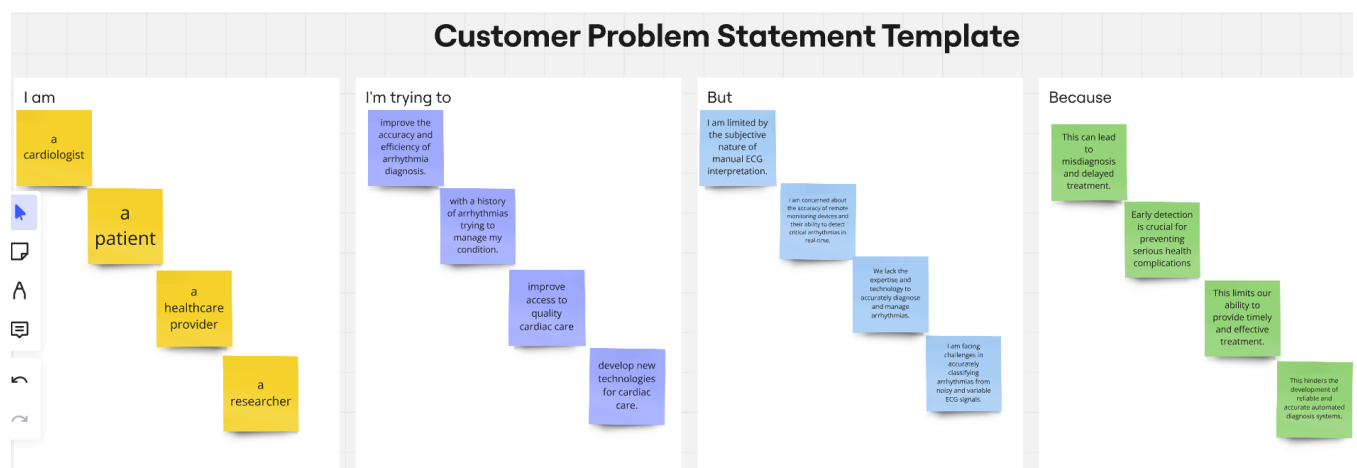
Define Problem Statements (Customer Problem Statement Template):

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love. A well-articulated customer problem statement allows you and your team to find the ideal solution for your customers' challenges. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

I am	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
I'm trying to	List their outcome or "job" the care about - what are they trying to achieve?	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way - what bothers them most?	Describe the problems or barriers that get in the way here
because	Enter the "root cause" of why the problem or barrier exists - what needs to be solved?	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view - how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

Reference: <https://miro.com/templates/customer-problem-statement/>

Example:



Problem Statement (PS)	I am	I'm trying to	But	Because	Which makes me feel
PS-1	A cardiologist	improve the accuracy and efficiency of arrhythmia diagnosis.	I am limited by the subjective nature of manual ECG interpretation.	This can lead to misdiagnosis and delayed treatment.	frustrated and concerned about patient safety
PS-2	A patient	With history of arrhythmia trying to manage my condition.	I am concerned about the accuracy of remote monitoring devices and their ability to detect critical arrhythmias in real-time.	Early detection is crucial for preventing serious health complications	anxious and uncertain about my health.
PS-3	A health provider	improve access to quality cardiac care	We lack the expertise and technology to accurately diagnose and manage arrhythmias.	This limits our ability to provide timely and effective treatment.	overwhelmed and frustrated by the limitations of our current resources.
PS-4	A researcher	developing new technologies for cardiac care.	I am facing challenges in accurately classifying arrhythmias from noisy and variable ECG signals.	This hinders the development of reliable and accurate automated diagnosis systems.	motivated to find innovative solutions to overcome these challenges.