Ideation Phase
Define the Problem Statements

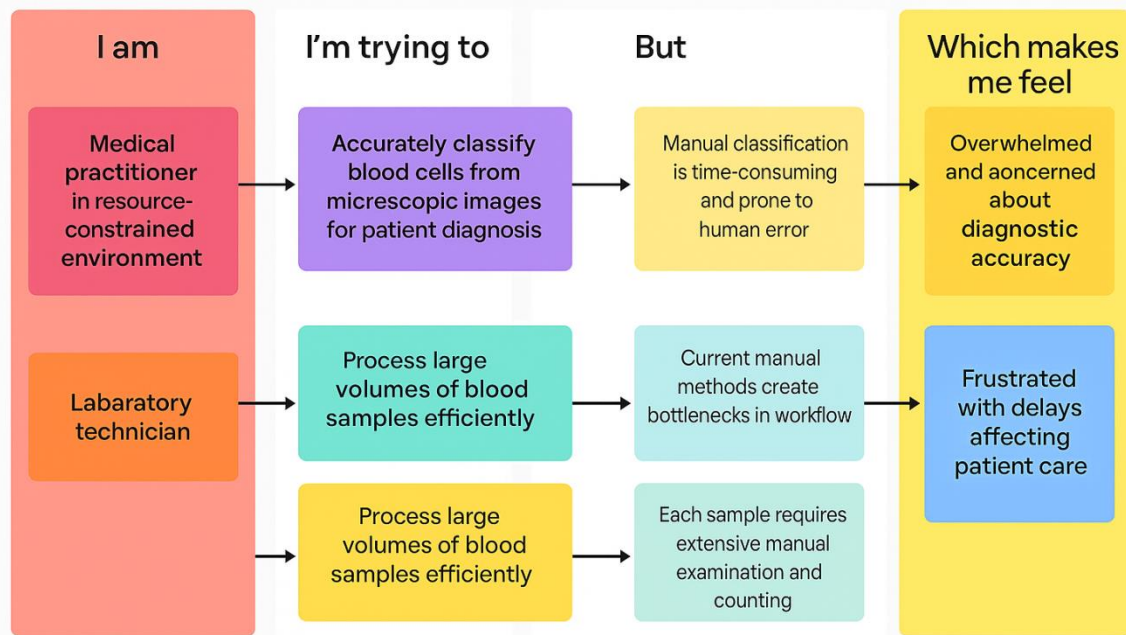| Date	27 June 2025
Team ID	LTVIP2025TMID59868
Project Name	HematoVision: Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	2 Marks

Customer Problem Statement Template:

How might we automate and accelerate the process of classifying the blood cell images with high accuracy using deep learning to assist medical practitioner in resourse contrained resource environment ? . This project uses   transfer learning to build an image - based classification system that accurately identifies types of blood cells from microscopic images. This automation supports medical practitioners by enhancing diagnostic speed and accuracy, especially in resource-constrained environments where expert analysis may be limited.

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/

Customer Problem Statement Template

I am	I'm trying to	But	Which makes me feel
Medical practitioner in resource-constrained environment	Accurately classify blood cells from micrescopic images for patient diagnosis	Manual classification is time-consuming and prone to human error	Overwhelmed and aoncerned about diagnostic accuracy
Laboratory technician	Process large volumes of blood samples efficiently	Current manual methods create bottlenecks in workflow	Frustrated with delays affecting patient care
	Process large volumes of blood samples efficiently	Each sample requires extensive manual examination and counting	

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Pathologist / Lab Technician	classify blood cell images quickly and accurately	the process is manual, slow, and depends on expertise	accurate classification requires trained experts	like I'm overwhelmed
PS-2	Rural Clinic Doctor	diagnose infections using WBC counts from blood smears	there's no access to advanced diagnostic tools	I work in a resource-constrained environment	helpless and unsupported