**Ideation Phase**

**Brainstorm & Idea Prioritization Template**

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| Date | 29 June 2025 |
| Team ID | LTVIP2025TMID59847 |
| Project Name | Hematovision: Advanced Blood Cell Classification using Transfer Learning |
| Maximum Marks | 4 Marks |

**Brainstorm & Idea Prioritization Template:**

Hematovision is an AI-driven system designed to classify blood cells from microscopic images using advanced transfer learning techniques. The project leverages the power of deep convolutional neural networks (CNNs) pre-trained on large datasets (like ImageNet) and fine-tunes them on specialized blood cell image datasets. This approach ensures high accuracy with limited medical data.

The primary goal is to automate and enhance the process of blood smear analysis, which is critical for diagnosing a range of conditions such as leukemia, anemia, infections, and other hematologic disorders.

Using state-of-the-art models like ResNet50, EfficientNet, or InceptionV3, the system can distinguish between different types of white blood cells (e.g., neutrophils, lymphocytes), red blood cells, and platelets, as well as detect abnormal or immature cells like leukemic blasts.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

**Step-1: Team Gathering, Collaboration and Select the Problem Statement**

Graphical user interface, application

Description automatically generated

**Step-2: Brainstorm, Idea Listing and Grouping**

Graphical user interface, treemap chart

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**Step-3: Idea Prioritization**

**Diagram

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