

Project Design Phase Solution Architecture

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| Date | 15 February 2025 |
| Team ID | LTVIP2026TMIDS76616 |
| Project Name | HematoVision – Advanced Blood Cell Classification Using Transfer Learning |
| Maximum Marks | 4 Marks |

Solution Architecture:

The solution architecture of *HematoVision* defines how the system components interact to provide automated blood cell classification using Artificial Intelligence.

The architecture bridges the gap between the healthcare problem (manual blood cell analysis delays) and a technology-driven AI solution using deep learning.

- Automate blood cell classification using AI.
- Reduce manual workload of lab technicians.
- Provide faster and accurate diagnostic support.
- Ensure scalable and secure web-based deployment.

Example - Solution Architecture Diagram:

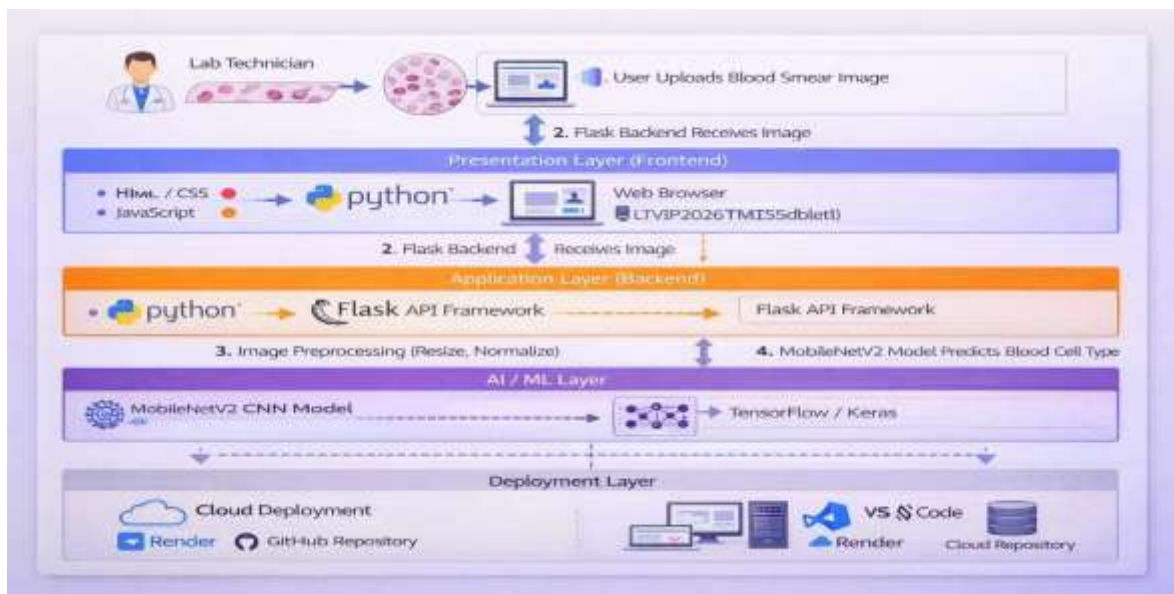


Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>