**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 24 June 2025 |
| Team ID | LTVIP2025TMID35409 |
| Project Name | HematoVision: Advanced Blood Cell Classification Using Transfer Learning |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

**Level 0 DFD – Context Level**

**Database**

**Hemato vision system**

**Patient**

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**User Stories**

Use the below template to list all the user stories for the product.

| **User Type** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Acceptance criteria** | **Priority** | **Release** |
| --- | --- | --- | --- | --- | --- | --- |
| Patient (Mobile/Web) | Registration | USN-1 | As a patient, I can register by entering my name, email, and password. | I can log in to access the diagnosis dashboard. | High | Sprint-1 |
| Patient (Mobile/Web) | Registration | USN-2 | As a patient, I receive a confirmation email upon successful registration. | I can click the confirmation link to activate my account. | High | Sprint-1 |
| Patient (Mobile/Web) | Login | USN-3 | As a patient, I can log in using email and password. | I can access the dashboard. | High | Sprint-1 |
| Patient (Mobile/Web) | Image Upload | USN-4 | As a patient, I can upload a blood cell image for analysis. | I get a confirmation that the image is uploaded successfully. | High | Sprint-1 |
| Patient (Mobile/Web) | Classification Result | USN-5 | As a patient, I can view the classification result and suggested diagnosis. | I can view the cell type and potential condition. | High | Sprint-1 |
| Patient (Mobile/Web) | History | USN-6 | As a patient, I can view past diagnosis results. | I can access a timeline or list of previous image classifications. | Medium | Sprint-3 |
| Admin (Web Only) | Model Management | USN-7 | As an admin, I can upload/update the deep learning model used for classification. | System uses the latest uploaded model. | High | Sprint-1 |
| Admin (Web Only) | Monitoring | USN-8 | As an admin, I can monitor user registrations and activity logs. | I can view logs and analytics of usage. | Medium | Sprint-3 |
| System | Email Service | USN-9 | As a system, I automatically send email confirmations upon registration. | Emails are sent instantly to registered addresses. | High | Sprint-1 |
| ML Service | Image Classification | USN-10 | As a classifier, I preprocess uploaded images and return predicted blood cell type. | I return accurate cell class within acceptable time. | High | Sprint-2 |
| Customer Support | User Query Handling | USN-11 | As a support executive, I can respond to user queries. | I can access the user’s concern and respond via support portal. | Medium | Sprint-3 |