## Team – Ansh Pandey & Shajal

## Proposed Solution

### Approach

The proposed solution involves using machine learning with a well-structured dataset to identify anemia based on clinical data. The approach includes:

1. Data collection and preprocessing from the Kaggle anemia dataset.

2. Training machine learning models (e.g., Decision Tree, Random Forest, Logistic Regression) on the dataset.

3. Developing a Flask-based web application for user interaction.

4. Integrating the model with the web application to allow users to input data and receive anemia predictions.

### Key Features

- User registration and login functionality.

- Data input and anemia prediction.

- High accuracy anemia detection using machine learning.

- A web-based interface with a simple and intuitive design.

- Detailed reporting on prediction accuracy.

## Resource Requirements

| Resource Type | Description | Specification/Allocation |
|---|---|---|
| Hardware | Computing Resources | CPU/GPU specifications, number of cores: 2 x NVIDIA V100 GPUs |
| Memory | RAM specifications | 16 GB |
| Storage | Disk space for data, models, and logs | 1 TB SSD |

| Resource Type | Description | Specification/Allocation |
|---|---|---|
| Software | Frameworks | Python frameworks: Flask |
| Libraries | Additional libraries | TensorFlow, Keras, scikit-learn |
| Development Environment | IDE, version control | Jupyter Notebook, Git |
| Data | Data Source, size, format | Kaggle anemia dataset, 66.7 MB |