

Model Development Phase

Date	1 August 2025
Skillwallet ID	SWUID20250194750
Project Title	Anemia Sense: Leveraging Machine Learning For Precise Anemia
Maximum Marks	5 Marks

Feature Selection Report

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Gender	Patient's gender (0 = male, 1 = female)	Yes	Gender may influence anemia risk due to physiological differences (e.g., menstruation, pregnancy).
Hemoglobin	Oxygen-carrying protein in red blood cells	Yes	A direct and critical indicator of anemia.
MCH	Average amount of hemoglobin per red blood cell	Yes	Helps classify the type of anemia and assess severity.
MCHC	Average concentration of hemoglobin in red blood cells	Yes	Important for diagnosing anemia subtypes.
MCV	Average size of red blood cells	Yes	An essential metric in anemia classification (e.g., microcytic, normocytic, macrocytic anemia).

Result	Anemia diagnosis outcome (0 = not anemic, 1 = anemic)	Yes	Target variable for the classification model; crucial for training and evaluation.
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