

Model Development Phase - Feature Selection Report

Date: 30 July 2025

Project Title: AnemiaSense — Machine Learning Based Anemia Detection

Maximum Marks: 5 Marks

Feature Selection Report

The feature selection process involves identifying the most relevant attributes from the dataset that contribute significantly to predicting the presence of anemia. This step ensures that the model is both efficient and accurate, avoiding unnecessary complexity by eliminating redundant or irrelevant features.

Feature Description	Selected (Yes/No)	Reasoning
Gender	Yes	Gender differences can influence anemia prevalence and risk.
Hemoglobin Value	Yes	Direct clinical indicator of anemia.
MCV	Yes	Measures red blood cell size, important for diagnosing anemia types.
MCH	Yes	Indicates hemoglobin amount per red blood cell, relevant for classification.
MCHC	Yes	Measures hemoglobin concentration, helps classify anemia.
Result	No	Target variable, not used as an input feature.