



Model Development Phase Template

Date	16 June 2024
Team ID	SWTID1720112707
Project Title	Anemia Sense: Leveraging Machine Learning For Precise Anemia Recognitions
Maximum Marks	4 Marks

Initial Model Training Code, Model Validation and Evaluation Report

The initial model training code will be showcased in the future through a screenshot. The model validation and evaluation report will include classification reports, accuracy, and confusion matrices for multiple models, presented through respective screenshots.

Initial Model Training Code:

Paste the screenshot of the model training code





${\bf Model\ Validation\ and\ Evaluation\ Report:}$

Model	C	lassifica	tion Ro	eport		Accuracy	Confusion Matrix			
Logistic Regressio n Model	Classification 0 1 accuracy macro avg weighted avg Cross-valida	1.00 0.99 1.00 1.00	0.99 1.00 1.00 1.00 s: [0.97		113 135 248 248 248 248	0.99	Actual 0	112 0	nfusion Matrix 1 Predicted	
Random Forest Model	Classification 0 1 accuracy macro avg weighted avg Cross-validation	1.00 1.00 1.00	1.00 1.00 1.00	f1-score 1.00 1.00 1.00 1.00 1.00 1.1.00	support 113 135 248 248 248	1.00	Actual 0	113 0	nfusion Matrix 0 Predicted	





							T				
									Confusion Matrix		
	Classification	•									
1		precision	recall	f1-score	support						
							0 -	113		0	
ъ	0	1.00	1.00	1.00	113						
Decision	1	1.00	1.00	1.00	135		_				
Tree						1.00	Actual				
Model	accuracy			1.00	248						
	macro avg	1.00	1.00	1.00	248						
	weighted avg	1.00	1.00	1.00	248		- n				
	Cross-validatio	n Scores: [[1. 1. 1.	1. 1.]							
								Ö	Predicted	1	
									riedicted		
	Classification	•							Confusion Matrix		
		precision	recall	f1-score	support						
	0	0.99	0.96	0.98	113			100			
	1	0.99		0.98			0 -	109		4	
Naïve	1	0.97	0.99	0.90	135						
Bayes	accuracy			0.98	248	0.98	Actual				
Model	macro avg	0.98	0.98	0.98	248	0.38	Act				
Model	weighted avg	0.98	0.98	0.98	248						
	weighted dvg	0.50	0.50	0.50	240						
	Cross-validat	tion Score	s: [0.92	964824 0.	96482412						
	0.9040404	0.929	29293	0.9343	34343]			Ö	Predicted	í	
	Classification								Confusion Matrix		
		precision	recall	f1-score	support						
	_										
	0	1.00	0.98	0.99	113		0 -	111		2	
C	1	0.99	1.00	0.99	135						
Support				0.00	0.40	0.55	- a				
Vector	accuracy	0.00	0.00	0.99	248	0.99	Actual				
Machine	macro avg	0.99	0.99	0.99	248						
	weighted avg	0.99	0.99	0.99	248		H -				
	Cross-validat	ion Score	s: [0.96	984925 0.	97487437						
	0.074747	7 0 07	070700	0.000	040403						
	0.9747474	1/ 0.97	9/9/98	0.984	84848]			Ö	Predicted	i	
							1				





						Confusion Matrix			
	Classification	Report: precision	recall	f1-score	support				
Gradient Boost	0 1	1.00	1.00 1.00	1.00 1.00	113 135		al	113	o
Classifier Model	accuracy macro avg weighted avg Cross-validati	1.00 1.00 on Scores:	1.00 1.00	1.00 1.00 1.00	248 248 248	1.00	Actual 1		
								0	redicted