

Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID36039
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Metrics of different classification models	Values	Screenshot
1.	Gradient Boost Classifier	Confusion Matrix	<pre>Confusion Matrix :- [[40 1] [0 79]]</pre>
		Accuracy Score	<pre>Test Accuracy of Gradient Boosting Classifier is 99.16666666666667</pre>
		Classification Report	<pre>Classification Report :- precision recall f1-score support 0 1.00 0.98 0.99 41 1 0.99 1.00 0.99 79 accuracy 0.99 macro avg 0.99 weighted avg 0.99</pre>

2.	KNN Classifier	Confusion Matrix	<pre>Confusion Matrix :- [[40 1] [3 76]]</pre>
		Accuracy Score	<pre>Test Accuracy of KNN is 96.66666666666667</pre>
		Classification Report	<pre>Classification Report :- precision recall f1-score support 0 0.93 0.98 0.95 41 1 0.99 0.96 0.97 79 accuracy 0.97 0.97 0.97 120 macro avg 0.96 0.97 0.96 120 weighted avg 0.97 0.97 0.97 120</pre>
3.	Decision Tree Classifier	Confusion Matrix	<pre>Confusion Matrix :- [[40 1] [1 78]]</pre>
		Accuracy Score	<pre>Test Accuracy of Decision Tree Classifier is 98.33333333333333</pre>
		Classification Report	<pre>Classification Report :- precision recall f1-score support 0 0.98 0.98 0.98 41 1 0.99 0.99 0.99 79 accuracy 0.98 0.98 0.98 120 macro avg 0.98 0.98 0.98 120 weighted avg 0.98 0.98 0.98 120</pre>

4.	Extra Tree Classifier	Confusion Matrix	<pre>Confusion Matrix :- [[40 1] [0 79]]</pre>
		Accuracy Score	<pre>Test Accuracy of Extra Trees Classifier is 99.16666666666667</pre>
		Classification Report	<pre>Classification Report :- precision recall f1-score support 0 1.00 0.98 0.99 41 1 0.99 1.00 0.99 79 accuracy 0.99 macro avg 0.99 weighted avg 0.99</pre>
5.	Cat Boost Classifier	Confusion Matrix	<pre>Confusion Matrix :- [[40 1] [1 78]]</pre>
		Accuracy Score	<pre>Test Accuracy of Cat Boost Classifier is 98.33333333333333</pre>
		Classification Report	<pre>Classification Report :- precision recall f1-score support 0 0.98 0.98 0.98 41 1 0.99 0.99 0.99 79 accuracy 0.98 macro avg 0.98 weighted avg 0.98</pre>