## Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID53288
Project Name	Project – Early Detection of Chronic Kidney
	Disease using machine learning
Maximum Marks	10 Marks

## **Model Performance Testing:**

Project team shall fill the following information in model performance testing template.

S.No	Parameter	Values	Screensho	ot			
1.	Metrics	Classification Model:					
		Confusion Matrix and	confusion_matrix	(y_test, model.pred	ict(X_test))		
		Accuracy Score:	array([[23, 0], [ 0, 9]], dt	ype=int64)			
			print(f"Accuracy	is {round(accuracy_	_score(y_test,	model.predict(X_t	test))*100, 2)}%")
			Accuracy is 100.0%				
		Classification Report:		precision	recall	f1-score	support
			0	1.00	1.00	1.00	23
			1	1.00	1.00	1.00	9
			accuracy			1.00	32
			macro avg	1.00	1.00	1.00	32
			weighted avg	1.00	1.00	1.00	32

2.	Tune the		1 192 2 S WAY W MAY				
	Model	Hyperparameter Tuning	<pre>ran_forest = RandomForestClassifier(n_estimators = 20) ran_forest.fit(X_train, y_train)</pre>				
		Validation Method	<pre>from sklearn.model_selection import train_test_split X1, X2, y1, y2 = train_test_split(X, y, random_state=0,</pre>				
			0.9746835443037974				
			<pre>y2_model = model.fit(X1, y1).predict(X2) y1_model = model.fit(X2, y2).predict(X1) accuracy_score(y1, y1_model), accuracy_score(y2, y2_model)</pre>				
			(0.9873417721518988, 0.9873417721518988)				
			<pre>from sklearn.model_selection import cross_val_score cross_val_score(model, X, y, cv=5)</pre>				
			array([0.96875, 1. , 0.96875, 1. , 1. ])				