

Project Development Phase Model Performance Test

Date	17 November 2022
Team ID	PNT2022TMID30154
Project Name	Project – Early detection of chronic kidney disease
Maximum Marks	10 Marks

Model Performance Testing:

S.No	Parameter	Values
1.	Metrics	<p>Classification Model – Random forest classifier :</p> <p>Confusion Matrix : Performance measure of ML classification. <pre>print(confusion_matrix(y_test,y_pred))</pre> <pre>[[52 , 2]</pre> <pre> [1 , 25]]</pre> True positive - 52 True negative - 2 False positive - 1 False negative – 25</p> <p>Accuracy Score: <pre>accuracy_score(y_test, y_pred)</pre> 0.9625</p> <p>Classification Report : <pre>model.score(x_train,y_train)</pre> 1.0</p>
2.	Tune the Model	<p>Validation Method : Validation done by giving the random input and testing the model.</p> <pre>y_pred1 = model.predict([[12,123,123,0,0,0,0,0,0]])</pre> <pre>print(y_pred1)</pre> <pre>['ckd']</pre>

Screenshots :

Metrics :

```
In [99]: accuracy_score(y_test,y_pred)
```

```
Out[99]: 0.9625
```

```
In [100]: model.score(x_train,y_train)
```

```
Out[100]: 1.0
```

Model Evaluation

```
In [102]: print(confusion_matrix(y_test,y_pred))
```

```
[[52  2]
 [ 1 25]]
```

True positive = 52 True negative = 2 False positive = 1 False negative = 25

Tune the model :

Test the model

```
In [98]: y_pred1=model.predict([[12,123,123,0,0,0,0,0,0]])
         print(y_pred1)
```

```
['ckd']
```

```
C:\Users\HP\anaconda3\New folder\lib\site-packages\sklearn\base.py:450: UserWarning: X does not have valid feature names, but RandomForestClassifier was fitted with feature names
  warnings.warn(
```