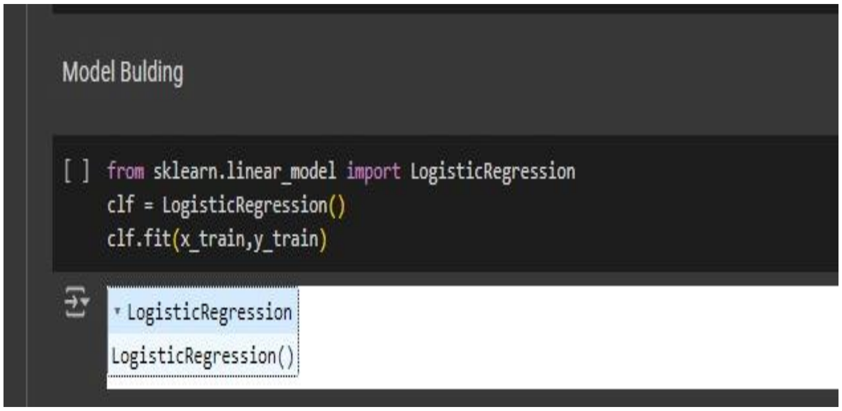
Model Development Phase Template

Date	10 July 2024
Team ID	SWTID1720174640
Project Title	Early Prediction of Chronic Kidney Disease
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.

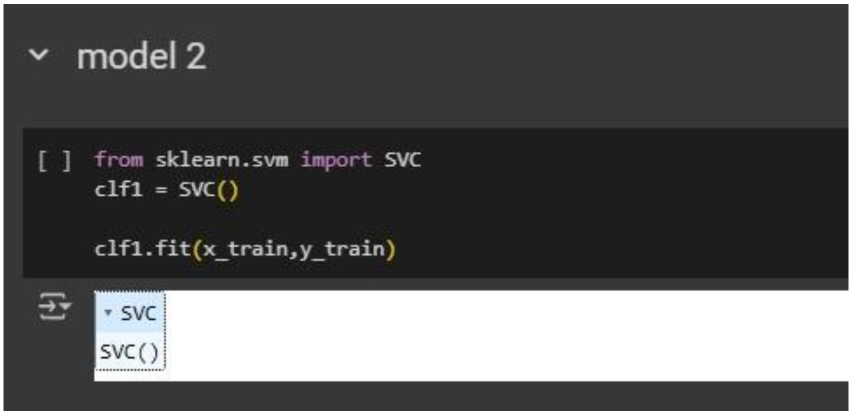
Initial Model Training Code:



Model Bulding

```
[ ] from sklearn.linear_model import LogisticRegression
    clf = LogisticRegression()
    clf.fit(x_train,y_train)
```

```
▾ LogisticRegression
LogisticRegression()
```



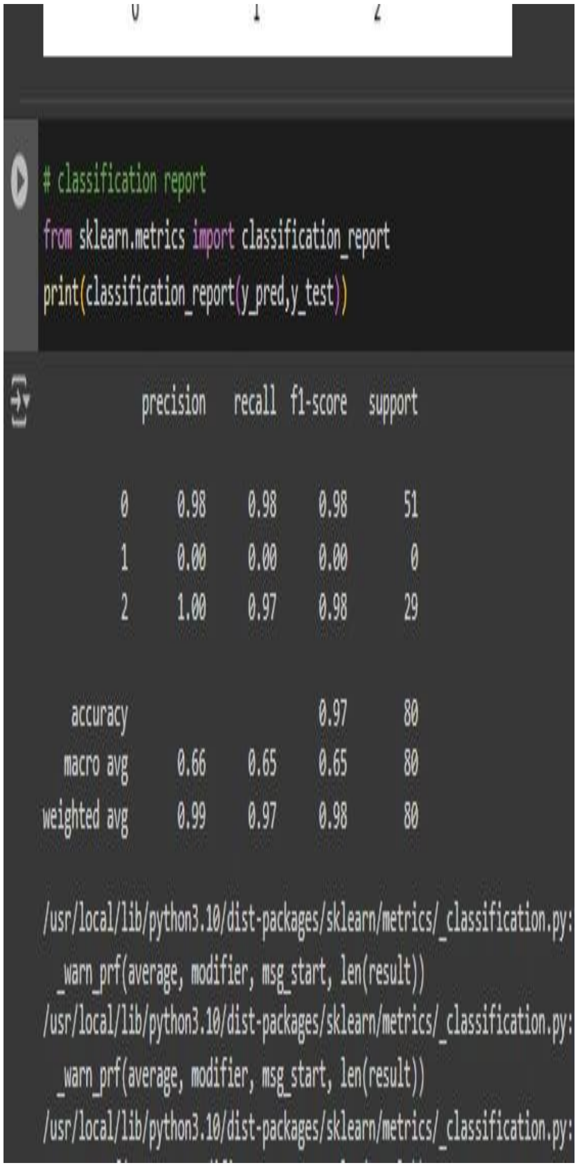
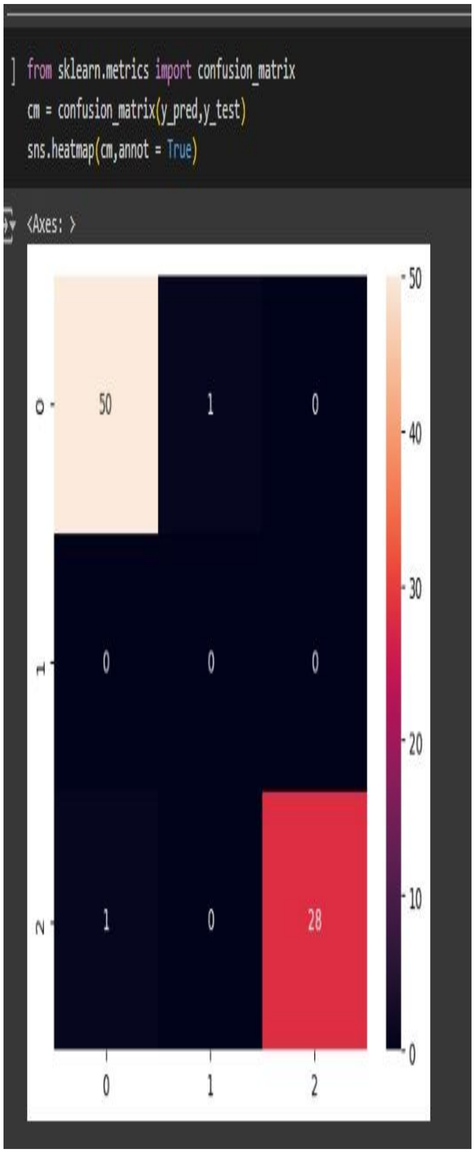
model 2

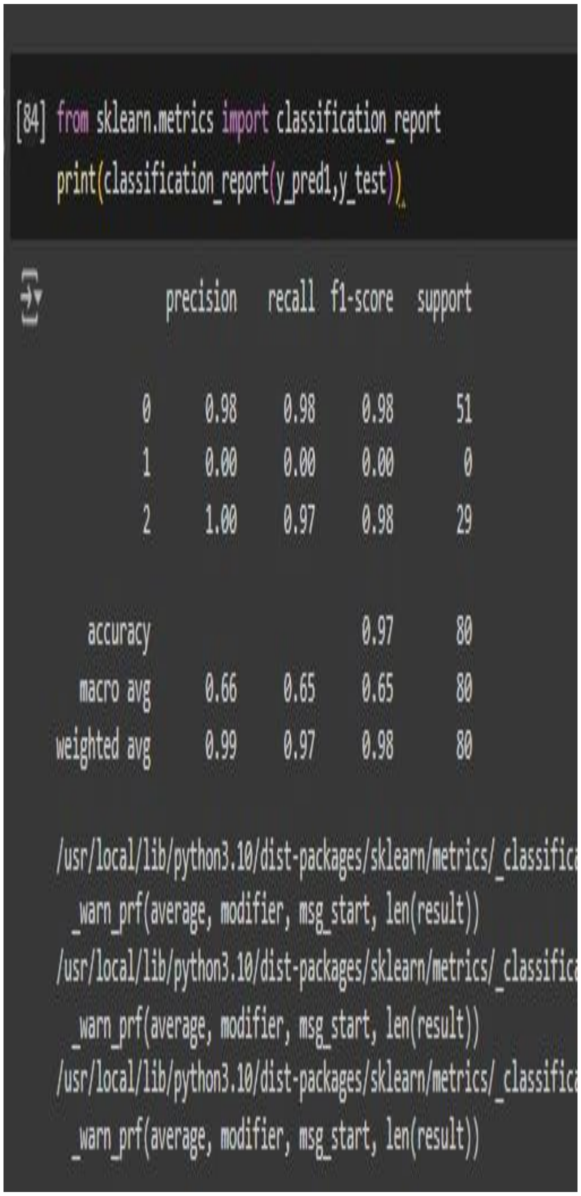
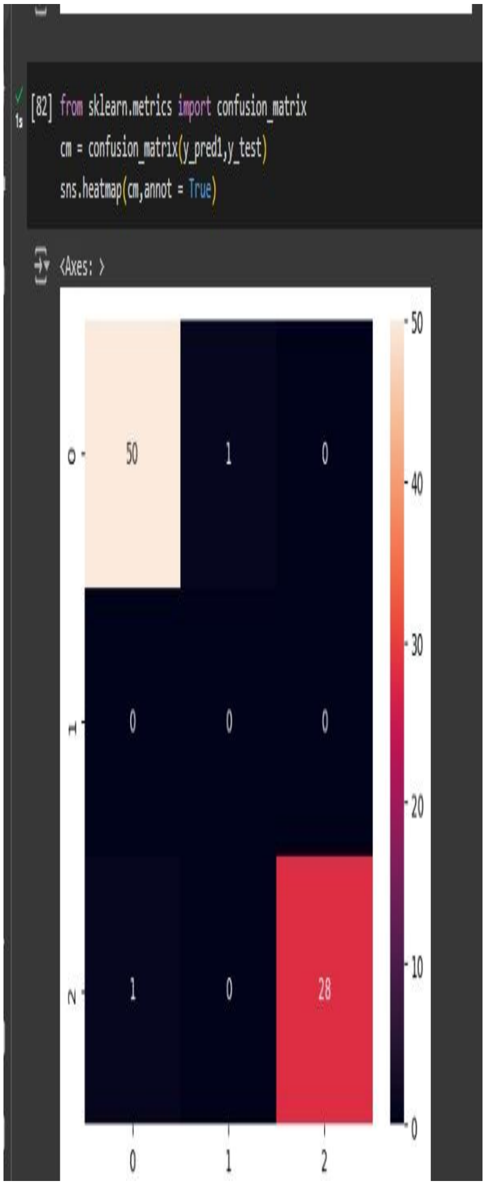
```
[ ] from sklearn.svm import SVC
    clf1 = SVC()

    clf1.fit(x_train,y_train)
```

```
▾ SVC
SVC()
```

Model Validation and Evaluation Report:

Model	Classification Report	Accuracy	Confusion Matrix
Logistic Regression	 # classification report from sklearn.metrics import classification_report print(classification_report(y_pred,y_test)) precision recall f1-score support 0 0.98 0.98 0.98 51 1 0.00 0.00 0.00 0 2 1.00 0.97 0.98 29 accuracy 0.97 80 macro avg 0.66 0.65 0.65 80 weighted avg 0.99 0.97 0.98 80 /usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classification.py: _warn_prf(average, modifier, msg_start, len(result)) /usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classification.py: _warn_prf(average, modifier, msg_start, len(result)) /usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classification.py:	0.975	 from sklearn.metrics import confusion_matrix cm = confusion_matrix(y_pred,y_test) sns.heatmap(cm,annot = True) <Axes: > 50 1 0 0 0 0 1 0 28 0 1 2 0 1 2 50 40 30 20 10 0

Support Vector Classifier (SVC)		0.975	

```
[84] from sklearn.metrics import classification_report
     print(classification_report(y_pred1,y_test))
```

```
              precision    recall  f1-score   support

           0       0.98      0.98      0.98        51
           1       0.00      0.00      0.00         0
           2       1.00      0.97      0.98        29

    accuracy                           0.97        80
   macro avg       0.66      0.65      0.65        80
weighted avg       0.99      0.97      0.98        80

/usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classifica
  _warn_prf(average, modifier, msg_start, len(result))
/usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classifica
  _warn_prf(average, modifier, msg_start, len(result))
/usr/local/lib/python3.10/dist-packages/sklearn/metrics/_classifica
  _warn_prf(average, modifier, msg_start, len(result))
```

```
[82] from sklearn.metrics import confusion_matrix
     cm = confusion_matrix(y_pred1,y_test)
     sns.heatmap(cm,annot = True)
```

```
<Axes: >
```