Model Development Phase Template

Date	8 July 2024
Team ID	740019
Project Title	3D printer material prediction using machine learning
Maximum Marks	4 Marks

Initial Model Training Code

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.

```
from sklearn.tree import DecisionTreeClassifier
dt=DecisionTreeClassifier(criterion='entropy')
dt.fit(x_train,y_train)
```

```
DecisionTreeClassifier(criterion='entropy')
```

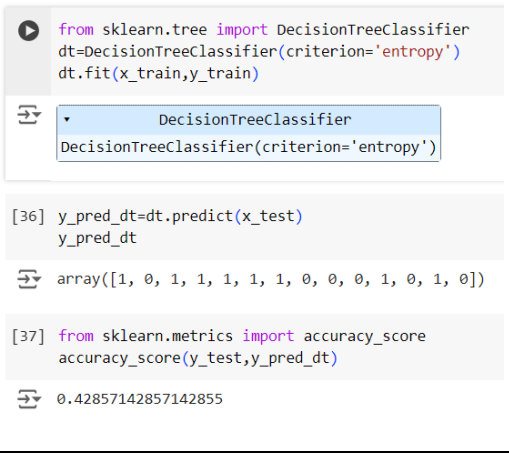
```
[36] y_pred_dt=dt.predict(x_test)
     y_pred_dt
```

```
array([1, 0, 1, 1, 1, 1, 1, 0, 0, 0, 1, 0, 1, 0])
```

```
[37] from sklearn.metrics import accuracy_score
     accuracy_score(y_test,y_pred_dt)
```

```
0.42857142857142855
```

Model Validation and Evaluation Report:

Model	Classification Report	Accuracy
Decision Tree		42%