Model Development Phase Template

Date	7 JULY 2024
Team ID	685476
Project Title	Slop sense: utilising resort features for regression modelling
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:

```
!pip install scikit-learn
import pandas as pd
from sklearn.linear_model import LinearRegression
from sklearn.impute import SimpleImputer

imputer=SimpleImputer(strategy='mean')
x_train=imputer.fit_transform(x_train)
x_test=imputer.transform(x_test)

LR=LinearRegression()
LR.fit(x_train,y_train)
```

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```

Model Validation and Evaluation Report:

Model	Classification Report	F1 Score	Confusion Matrix

LR& XGB		79%	`cluster_assignments.value_counts()` 0 4685 3 610 4 132 2 33 1 18 Name: count, dtype: int64
KNR		64%	2.4538768184408024