

Model Development Phase Template

Date	20 July 2024
Team ID	SWTID1721319573
Project Title	Blueberry Yield Prediction
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
clonesize	Size of the blueberry clones	Yes	Important for predicting yield based on plant growth
honeybee	Count of honeybees observed in the area	Yes	Honeybees are crucial pollinators affecting yield
bumbles	Count of bumblebees observed in the area	Yes	Bumblebees also contribute significantly to pollination

fruitset	Percentage of flowers that develop into fruits	Yes	Directly impacts yield by measuring reproductive success
fruitmass	Average mass of the fruits	Yes	Fruit size is a direct measure of yield
seeds	Number of seeds per fruit	No	Not a significant predictor of overall yield
flowernumber	Number of flowers per plant	Yes	More flowers can lead to higher potential yield
cropyear	Year of the crop	No	Not necessary if other temporal features are included
fieldsize	Size of the field where blueberries are grown	No	Less impact on individual plant yield
precipitation	Total precipitation during the growing season	Yes	Important for soil moisture and plant health
soilmoisture	Moisture level in the soil	Yes	Directly affects plant growth and yield
ph	pH level of the soil	Yes	Soil pH can influence nutrient availability and plant health
temperature	Average temperature	Yes	Temperature impacts plant growth cycles

	during the growing season		
MinOfUpperTRange	Minimum temperature in the upper temperature range	Yes	Temperature influences plant growth and yield
MaxOfUpperTRange	Maximum temperature in the upper temperature range	Yes	Temperature influences plant growth and yield
RainingDays	Number of days it rained during the growing season	Yes	Rainfall affects soil moisture and plant health
AvgRainingDays	Average number of rainy days per month	Yes	Provides insight into consistent rainfall patterns