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# **ML Application Project**

#### By Eleazar Neamat

This project is a Python-based application built with Streamlit that allows users to perform machine learning classification tasks on datasets like Iris or Tips, featuring data preprocessing, model training, evaluation, and prediction with an interactive interface.

#### **Dataset Selection**

Select Dataset

Iris



	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5	3.6	1.4	0.2	setosa
5	5.4	3.9	1.7	0.4	setosa
6	4.6	3.4	1.4	0.3	setosa
7	5	3.4	1.5	0.2	setosa
8	4.4	2.9	1.4	0.2	setosa
9	4.9	3.1	1.5	0.1	setosa

### **Preprocessing**

Encoding categorical variables...

### **Dataset after Encoding:**

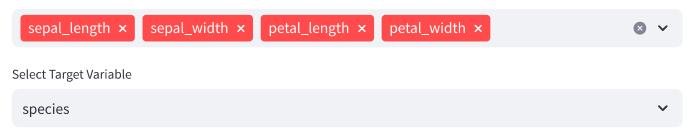
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	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	0
1	4.9	3	1.4	0.2	0
2	4.7	3.2	1.3	0.2	0
3	4.6	3.1	1.5	0.2	0
4	5	3.6	1.4	0.2	0
5	5.4	3.9	1.7	0.4	0
6	4.6	3.4	1.4	0.3	0
7	5	3.4	1.5	0.2	0
8	4.4	2.9	1.4	0.2	0
9	4.9	3.1	1.5	0.1	0

## **Feature and Target Selection**

**Select Features** 



## **Data Splitting**



Training Set Size: 120 rows

Test Set Size: 30 rows

### **Model Selection**

Select Model

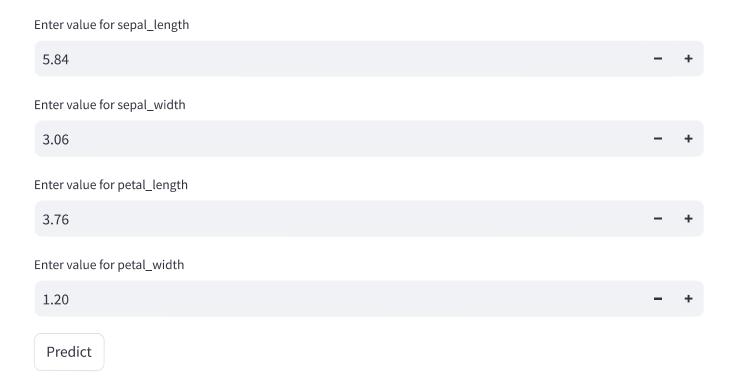
Logistic Regression 🗸

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Train Model

### **Make Predictions**



**Prediction Result: versicolor** 

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