Neural Networks 2023-2024



# Task 2 Dry Beans

Prepared by:

Team 15

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# **PRE-PROCESSING**

### 1. Null Handling

Fill nulls with the mean

### 2. Normalize Train Data

Normalize using **Min Max Scaler** 

### 3. Normalize Test Data

Normalize using **Min Max Scaler** 

### 4. Label Encoder

Label the output classes

### 5. Data Splitting

Split the data set into train & test

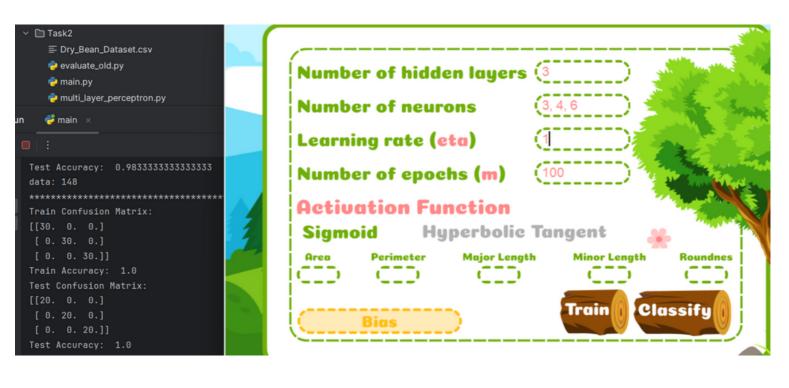
# **BEST ACCURACY**

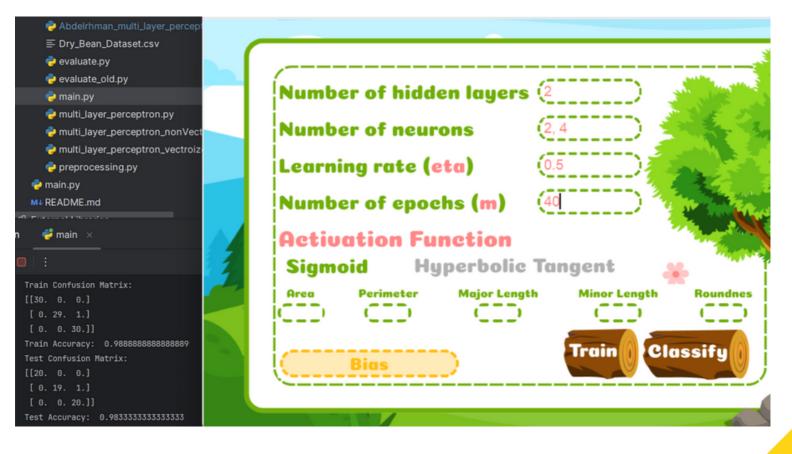
# Results

Activation Function	Sigmoid	Tanh
Train Accuracy	100%	100%
Test Accuracy	100%	100%
LR	1.0	0.1
Epochs	1000	100
#Layers	4	2
#HiddenNodes	3,4,2,2	3,4

# **Training Combinations**

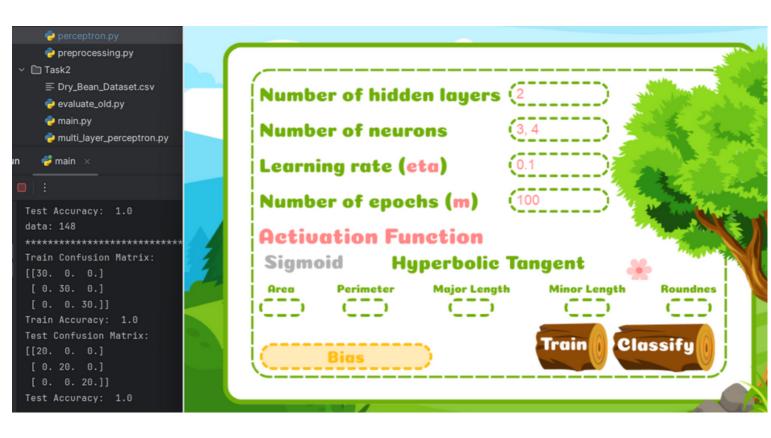
# **Sigmoid Activation Function**

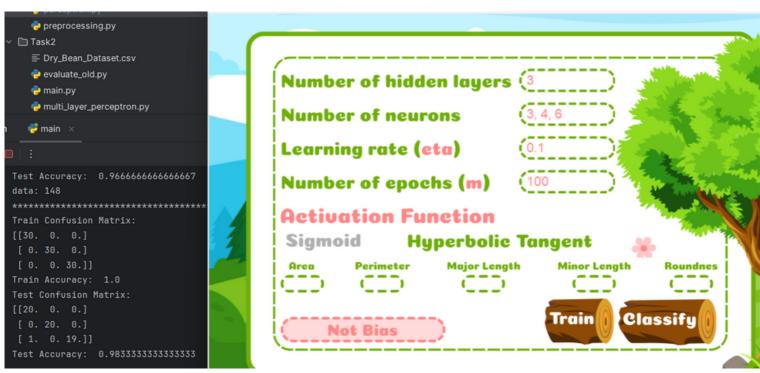




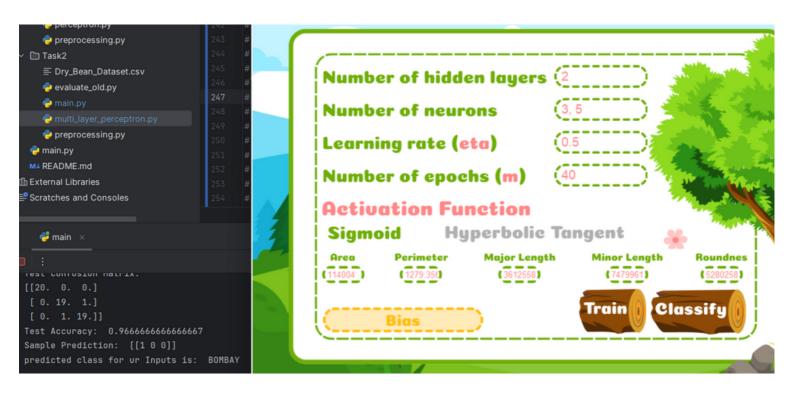
# **Training Combinations**

## **Hyperbolic Tangent Activation Function**





# **User Input Testing**



# THANK YOU