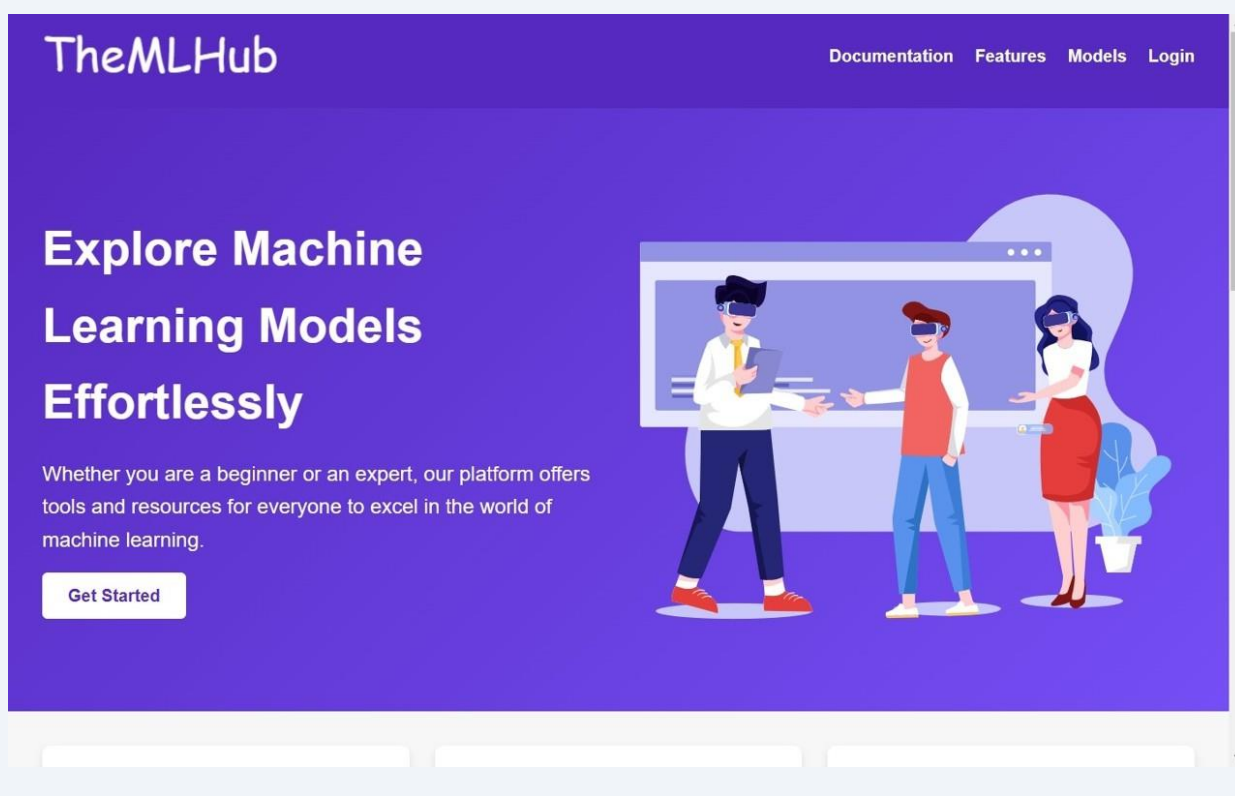


# TheMLHUB

## Documentation D'utilisation

1 Navigate to [/home](#)



2

**Intuitive Interface**  
Designed for users of all levels to navigate and utilize effortlessly.

**Model Library**  
A vast collection of pre-trained and customizable models for your projects.

**Analytics Tools**  
Visualize data and model performance with our powerful tools.

**Easy To Use**  
Engage with the Interface without get lost.

**Available Models**

**Linear Regression**  
A simple regression model to predict continuous outcomes.

**Regression LightGBM**  
Gradient boosting framework for high-performance regression tasks.

**Decision Trees**  
Tree-based model for classification and regression.

**Random Forest**  
Ensemble learning method using multiple decision trees.

**K-Nearest Neighbors**  
A simple, instance-based learning algorithm for classification and regression.

**Support Vector Machines (SVR)**  
Effective for high-dimensional data and regression tasks.

**XGBoost**  
Extreme Gradient Boosting for efficient and accurate predictions.

**Reseau Neuron**  
A neural network model for complex learning tasks.

3 Click "Login"


TheMLHub

Documentation Features Models **Login**

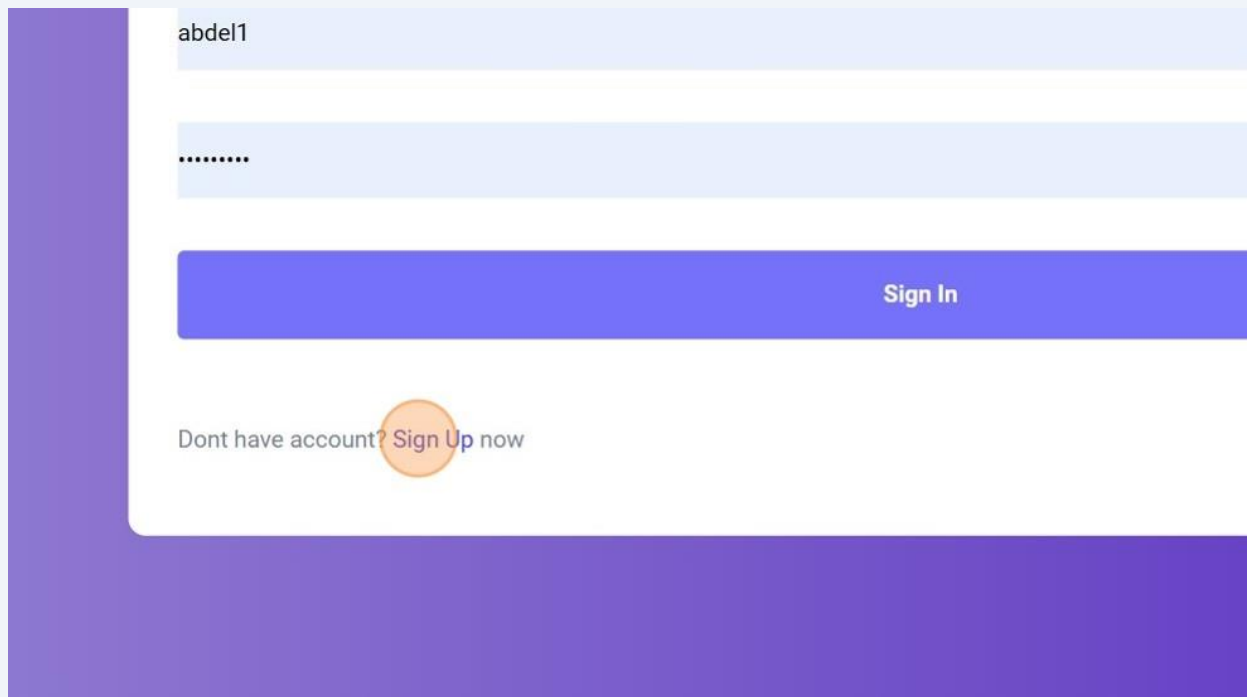
# Explore Machine Learning Models Effortlessly

Whether you are a beginner or an expert, our platform offers tools and resources for everyone to excel in the world of machine learning.

[Get Started](#)

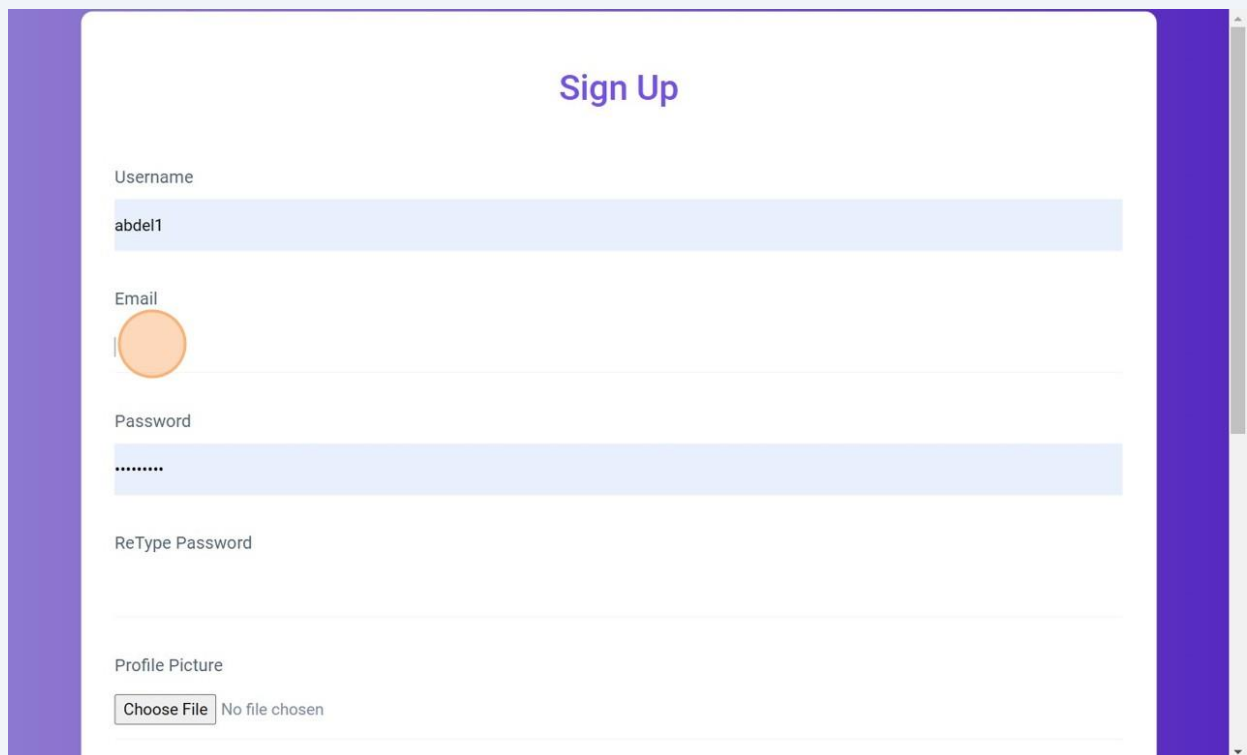


**4** Click "Sign Up"



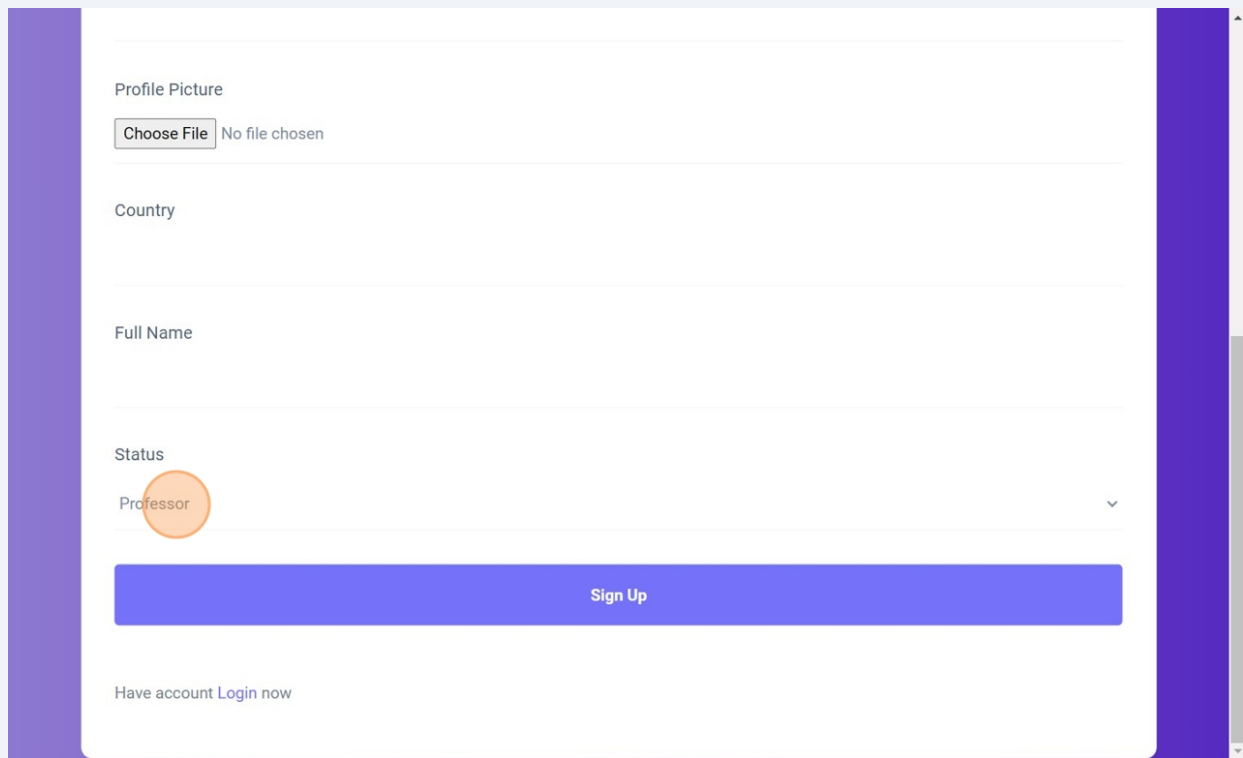
A screenshot of a web form with a purple sidebar on the left. The form contains a text input field with the text 'abdel1', a password input field with masked characters '.....', a blue 'Sign In' button, and a link that says 'Dont have account? Sign Up now'. An orange circle highlights the 'Sign Up' text in the link.

**5** Click this email field.



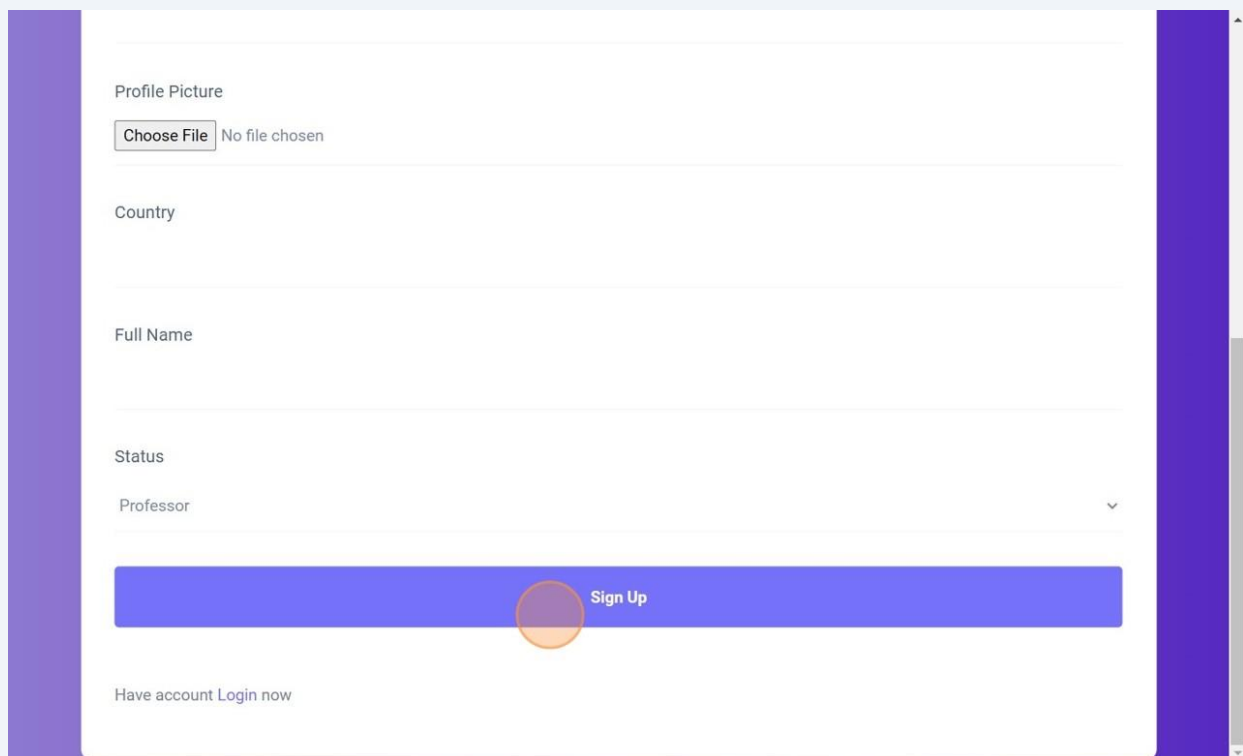
A screenshot of a 'Sign Up' form with a purple sidebar on the left. The form title is 'Sign Up'. It contains several input fields: 'Username' with 'abdel1', 'Email' (highlighted with an orange circle), 'Password' with masked characters '.....', and 'ReType Password'. At the bottom, there is a 'Profile Picture' section with a 'Choose File' button and the text 'No file chosen'.

**6** Select the "Professor" option.



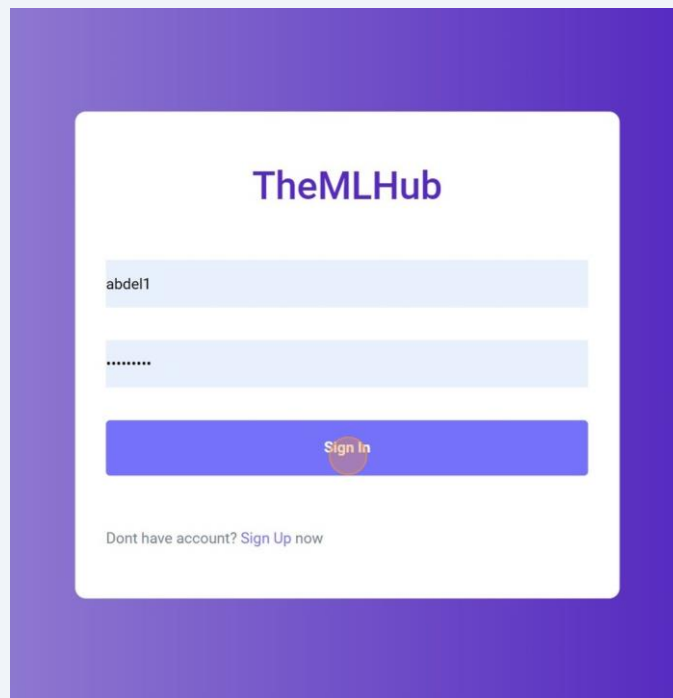
A registration form with the following fields: Profile Picture (with a 'Choose File' button and 'No file chosen' text), Country, Full Name, and Status (a dropdown menu). The 'Status' dropdown is open, and the 'Professor' option is highlighted with an orange circle. Below the form is a blue 'Sign Up' button. At the bottom, there is a link: 'Have account [Login now](#)'.

**7** Click "Sign Up"



The same registration form as in step 6, but now the 'Sign Up' button is highlighted with an orange circle, indicating it should be clicked. The 'Status' dropdown is still open, showing 'Professor' as the selected option. The 'Sign Up' button is a solid blue rectangle.

8 Click "Sign In"



TheMLHub

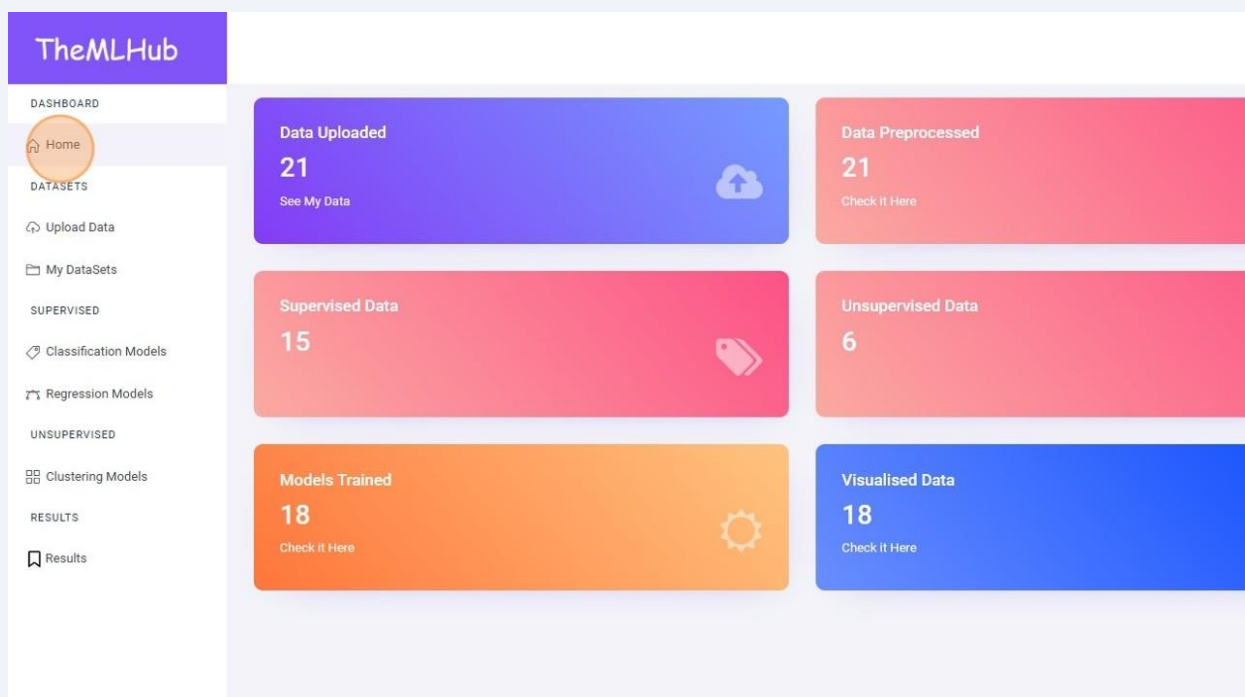
abdel1

\*\*\*\*\*

Sign In

Don't have account? Sign Up now

9 Click "Home"



TheMLHub

DASHBOARD

Home

DATASETS

Upload Data

My DataSets

SUPERVISED

Classification Models

Regression Models

UNSUPERVISED

Clustering Models

RESULTS

Results

Data Uploaded  
21  
See My Data

Data Preprocessed  
21  
Check It Here

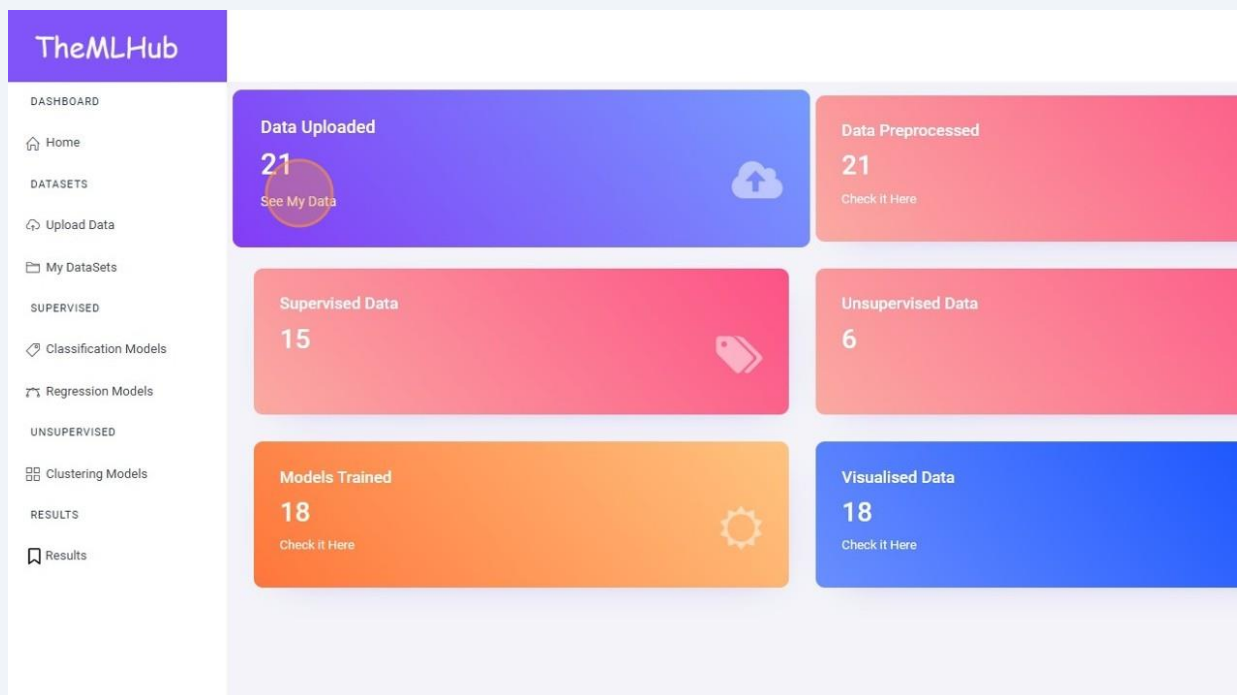
Supervised Data  
15

Unsupervised Data  
6

Models Trained  
18  
Check It Here

Visualised Data  
18  
Check It Here

## 10 Click "See My Data"



TheMLHub

DASHBOARD

- Home
- DATASETS
  - Upload Data
  - My DataSets
- SUPERVISED
  - Classification Models
  - Regression Models
- UNSUPERVISED
  - Clustering Models
- RESULTS
  - Results

Data Uploaded  
21  
See My Data

Data Preprocessed  
21  
Check It Here

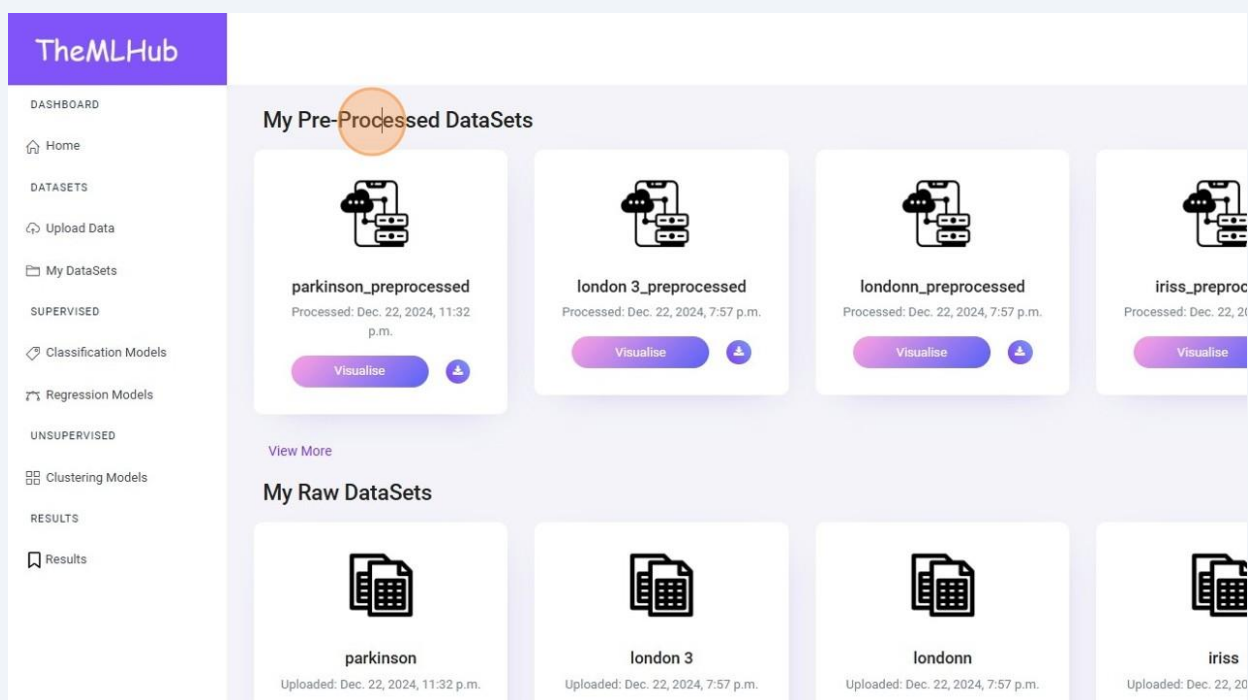
Supervised Data  
15

Unsupervised Data  
6

Models Trained  
18  
Check It Here

Visualised Data  
18  
Check It Here

## 11 Here You Can See All your Preprocessed Data



TheMLHub

DASHBOARD

- Home
- DATASETS
  - Upload Data
  - My DataSets
- SUPERVISED
  - Classification Models
  - Regression Models
- UNSUPERVISED
  - Clustering Models
- RESULTS
  - Results

My Pre-Processed DataSets

parkinson\_preprocessed  
Processed: Dec. 22, 2024, 11:32 p.m.  
Visualise

london 3\_preprocessed  
Processed: Dec. 22, 2024, 7:57 p.m.  
Visualise

londonn\_preprocessed  
Processed: Dec. 22, 2024, 7:57 p.m.  
Visualise

iriss\_preproc  
Processed: Dec. 22, 2024, 7:57 p.m.  
Visualise

View More

My Raw DataSets

parkinson  
Uploaded: Dec. 22, 2024, 11:32 p.m.

london 3  
Uploaded: Dec. 22, 2024, 7:57 p.m.

londonn  
Uploaded: Dec. 22, 2024, 7:57 p.m.

iriss  
Uploaded: Dec. 22, 2024, 7:57 p.m.

## 12 And Here you Find All your Raw Data.

The screenshot displays the 'My Raw DataSets' section of TheMLHub. On the left is a sidebar with a navigation menu. The main content area is divided into two sections: 'My Pre-Processed DataSets' and 'My Raw DataSets'. The 'My Raw DataSets' section is highlighted with an orange circle around its title. It contains four data cards for 'parkinson', 'london 3', 'londonn', and 'iriss', each with a 'Visualise' button and a download icon. The 'parkinson' card shows it was uploaded on Dec. 22, 2024, at 11:32 p.m.

**Navigation Menu:**

- DATASETS
  - Upload Data
  - My DataSets
- SUPERVISED
  - Classification Models
  - Regression Models
- UNSUPERVISED
  - Clustering Models
- RESULTS
  - Results

**My Pre-Processed DataSets:**

- parkinson\_preprocessed**: Processed: Dec. 22, 2024, 11:32 p.m.
- london 3\_preprocessed**: Processed: Dec. 22, 2024, 7:57 p.m.
- londonn\_preprocessed**: Processed: Dec. 22, 2024, 7:57 p.m.
- iriss\_preproc**: Processed: Dec. 22, 2024, 7:57 p.m.

**My Raw DataSets:**

- parkinson**: Uploaded: Dec. 22, 2024, 11:32 p.m.
- london 3**: Uploaded: Dec. 22, 2024, 7:57 p.m.
- londonn**: Uploaded: Dec. 22, 2024, 7:57 p.m.
- iriss**: Uploaded: Dec. 22, 2024, 7:57 p.m.

## 13 Click "Upload Data" to Upload New Data

The screenshot shows the 'TheMLHub' dashboard. The 'Upload Data' button in the left sidebar is highlighted with an orange circle. The main content area shows 'My Pre-Processed DataSets' and 'My Raw DataSets' sections, identical to the previous screenshot.

**TheMLHub Dashboard:**

- DASHBOARD**
- Home**
- DATASETS**
  - Upload Data** (highlighted)
  - My DataSets
- SUPERVISED**
  - Classification Models
  - Regression Models
- UNSUPERVISED**
  - Clustering Models
- RESULTS**
  - Results

**My Pre-Processed DataSets:**

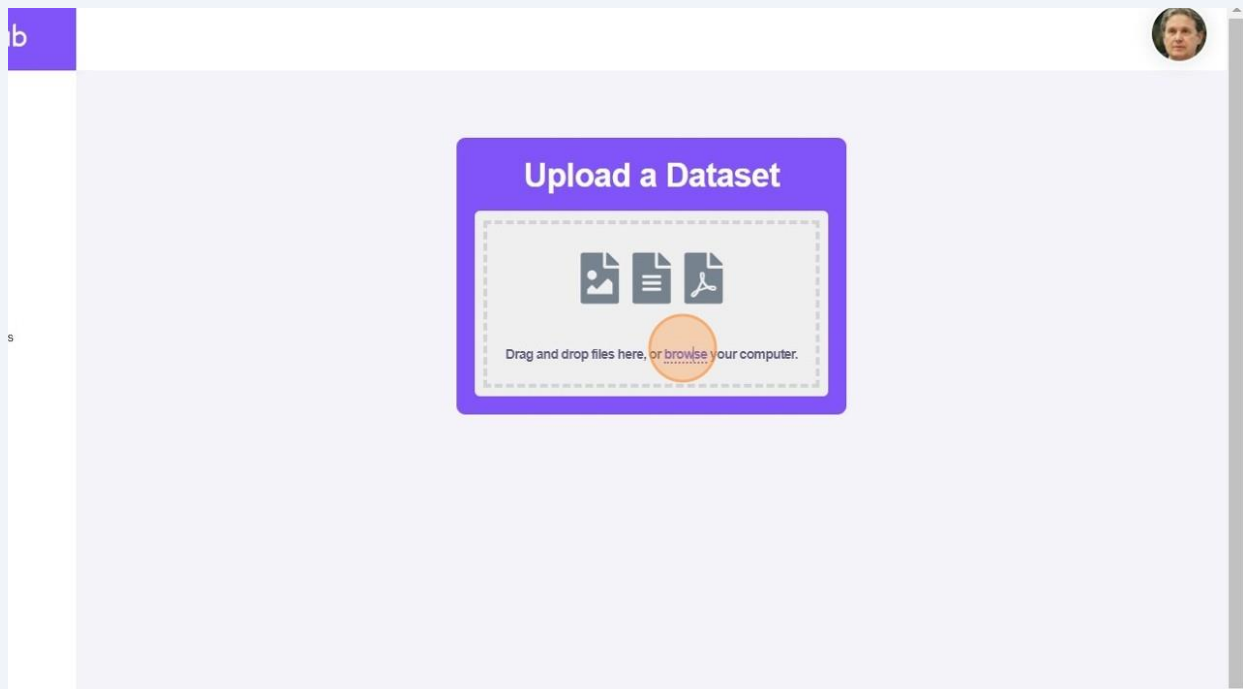
- parkinson\_preprocessed**: Processed: Dec. 22, 2024, 11:32 p.m.
- london 3\_preprocessed**: Processed: Dec. 22, 2024, 7:57 p.m.
- londonn\_preprocessed**: Processed: Dec. 22, 2024, 7:57 p.m.
- iriss\_preproc**: Processed: Dec. 22, 2024, 7:57 p.m.

**My Raw DataSets:**

- parkinson**: Uploaded: Dec. 22, 2024, 11:32 p.m.
- london 3**: Uploaded: Dec. 22, 2024, 7:57 p.m.
- londonn**: Uploaded: Dec. 22, 2024, 7:57 p.m.
- iriss**: Uploaded: Dec. 22, 2024, 7:57 p.m.

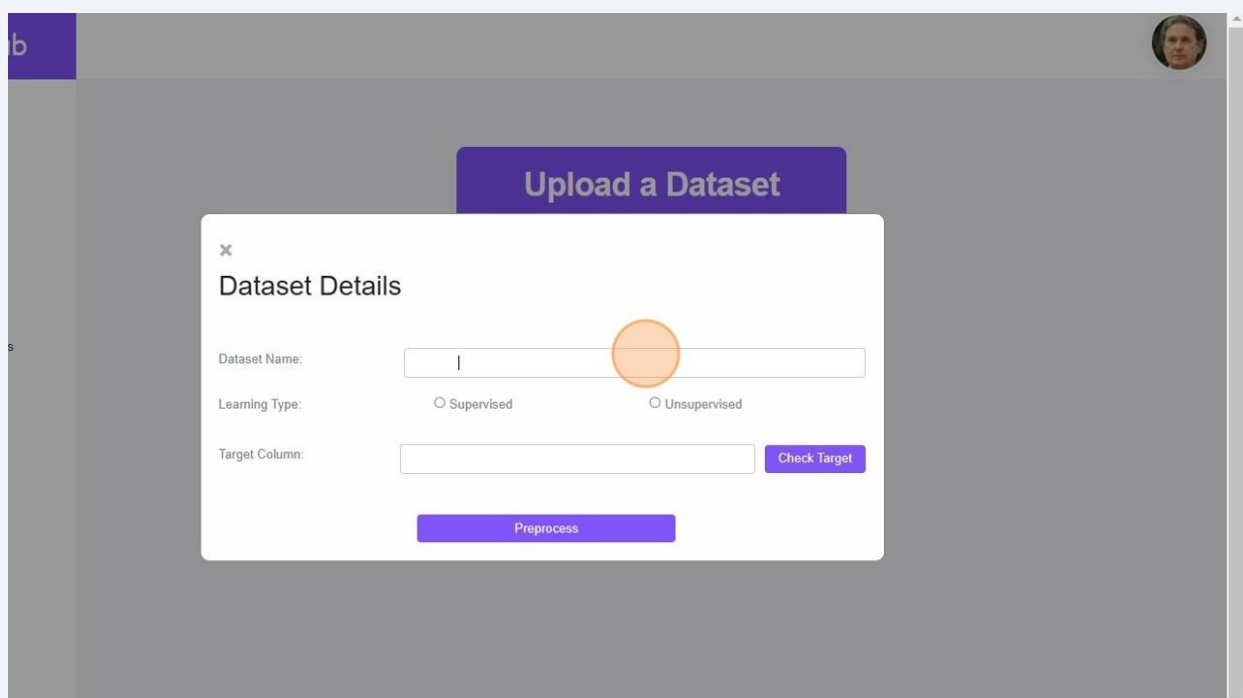
14

Click "browse" to upload A file From Your Computer, "only csv and xlsx files are accepted."



15

Give This Data a Custom Name





**16** Type "iris"

**17** Click "Supervised" if Contain Target Column , Else Chose Unsupervised.

The screenshot shows a web application interface for uploading and processing datasets. On the left is a sidebar menu with categories: DASHBOARD (Home), DATASETS (Upload Data, My DataSets), SUPERVISED (Classification Models, Regression Models), UNSUPERVISED (Clustering Models), and RESULTS (Results). The main area features a purple button labeled 'Upload a Dataset'. Below it, a 'Dataset Details' dialog box is open. The dialog box contains the following fields and controls:

- Dataset Name:** A text input field containing the word 'iris'.
- Learning Type:** Two radio button options: 'Supervised' (which is selected and highlighted with an orange circle) and 'Unsupervised'.
- Target Column:** An empty text input field.
- Check Target:** A purple button located to the right of the 'Target Column' field.
- Preprocess:** A purple button located at the bottom center of the dialog box.

18

Make sure you write the target column correctly and click check. If not read Try it using double Quotes like me.

Home  
DATASETS  
Upload Data  
My DataSets  
SUPERVISED  
Classification Models  
Regression Models  
UNSUPERVISED  
Clustering Models  
RESULTS  
Results

Upload a Dataset

Dataset Details

Dataset Name: iris

Learning Type: ☒ Supervised ☐ Unsupervised

Target Column:

Check Target

Preprocess

19

Click "Check Target"

Upload a Dataset

Dataset Details

Dataset Name: iris

Learning Type: ☒ Supervised ☐ Unsupervised

Target Column: "variety"

Check Target

Preprocess

**20** Click "Preprocess"

TS

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ISED

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RVISED

ering Models

S

Its

**Upload a Dataset**

Get Scribe Pro Dismiss

✕

### Dataset Details

Dataset Name:

Learning Type: ☒ Supervised ☐ Unsupervised

Target Column:  [Check Target](#)

[Preprocess](#)

**21** Wait For Data to get Uploaded And Preprocessed At The same Time.



## 22 Click "View More"

The screenshot shows the TheMLHub dashboard. On the left is a sidebar with navigation links: Home, DATASETS, Upload Data, My DataSets, SUPERVISED (Classification Models, Regression Models), UNSUPERVISED (Clustering Models), RESULTS, and Results. The main content area is divided into two sections: 'My Pre-Processed DataSets' and 'My Raw DataSets'. The 'My Pre-Processed DataSets' section contains four cards for 'iris\_preprocessed', 'parkinson\_preprocessed', 'london 3\_preprocessed', and 'londonn\_preprocessed'. Each card has a 'Visualise' button and a download icon. The 'My Raw DataSets' section contains four cards for 'iris', 'parkinson', 'london 3', and 'londonn'. Each card has a 'Visualise' button and a download icon. An orange circle highlights the 'View More' button in the 'My Raw DataSets' section.

## 23 Click "Visualise"

The screenshot shows the TheMLHub dashboard. On the left is a sidebar with navigation links: DASHBOARD, Home, DATASETS, Upload Data, My DataSets, SUPERVISED (Classification Models, Regression Models), UNSUPERVISED (Clustering Models), RESULTS, and Results. The main content area is divided into two sections: 'My Pre-Processed DataSets' and 'My Raw DataSets'. The 'My Pre-Processed DataSets' section contains four cards for 'iris\_preprocessed', 'parkinson\_preprocessed', 'london 3\_preprocessed', and 'londonn\_preprocessed'. Each card has a 'Visualise' button and a download icon. The 'My Raw DataSets' section contains four cards for 'iriss\_preprocessed', 'london 2\_preprocessed', 'london\_preprocessed', and 'train\_preproc'. Each card has a 'Visualise' button and a download icon. An orange circle highlights the 'Visualise' button in the 'My Pre-Processed DataSets' section.

## 24 Click this image.

Home

DATASETS

Upload Data

My DataSets

SUPERVISED

Classification Models

Regression Models

UNSUPERVISED

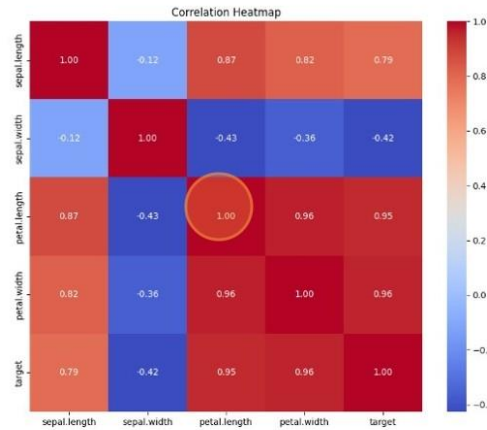
Clustering Models

RESULTS

Results

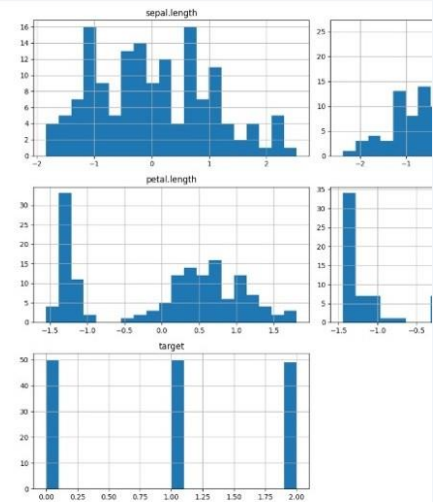
### Correlation Heatmap

Graph Type: Correlation Heatmap



### Histograms

Graph Type: Histograms



## 25 Click "Graph Type: Histograms"

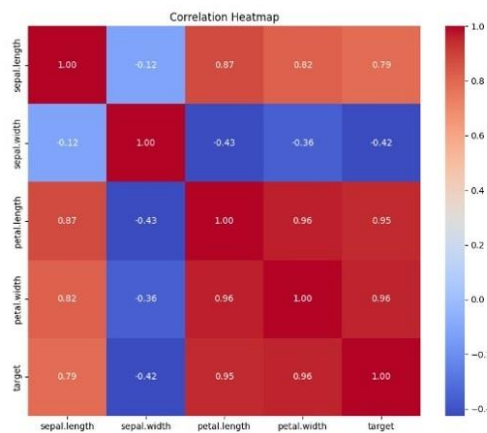
b



### Visualizations for Dataset: iris\_preprocessed

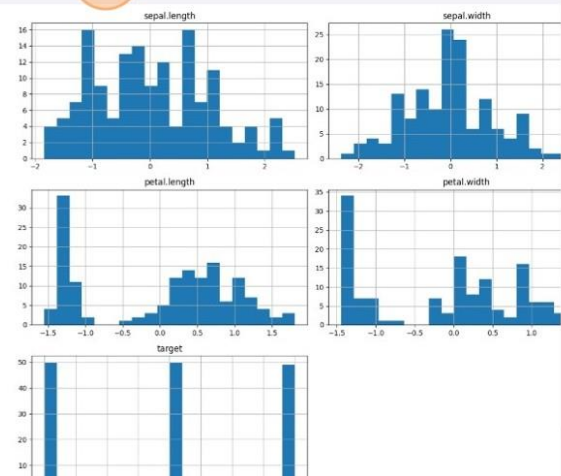
#### Correlation Heatmap

Graph Type: Correlation Heatmap

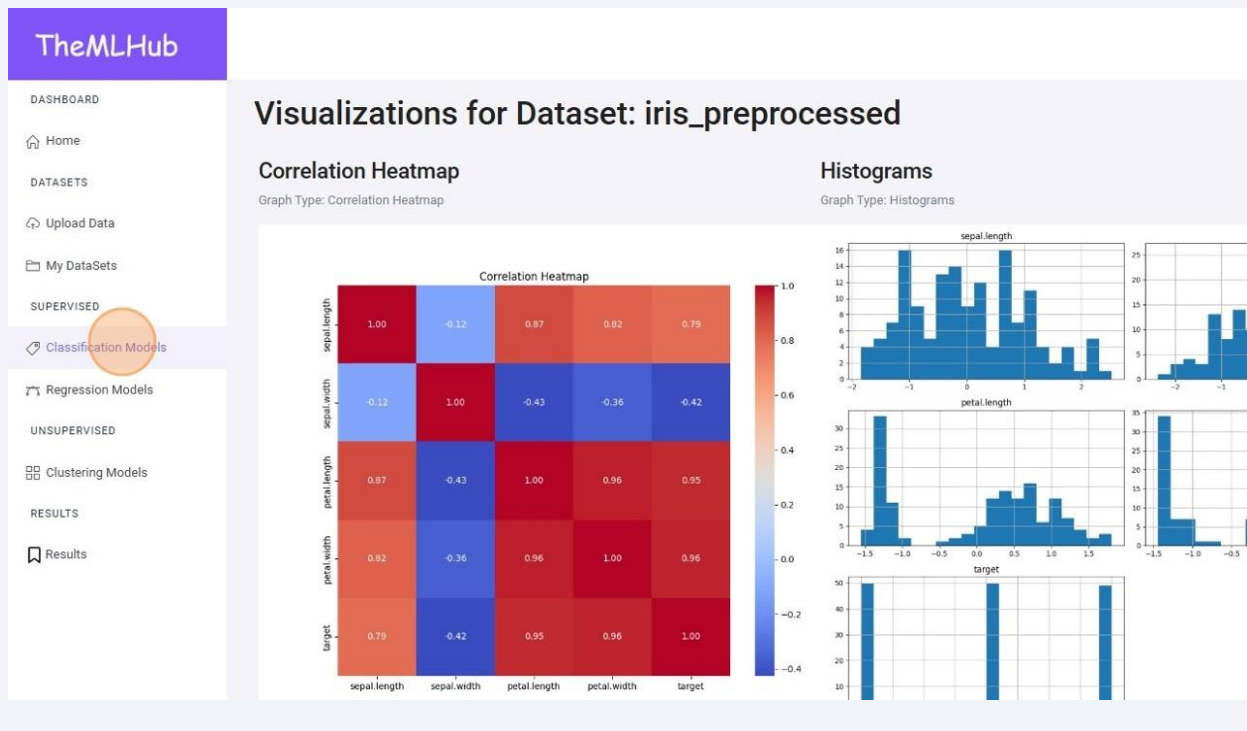


#### Histograms

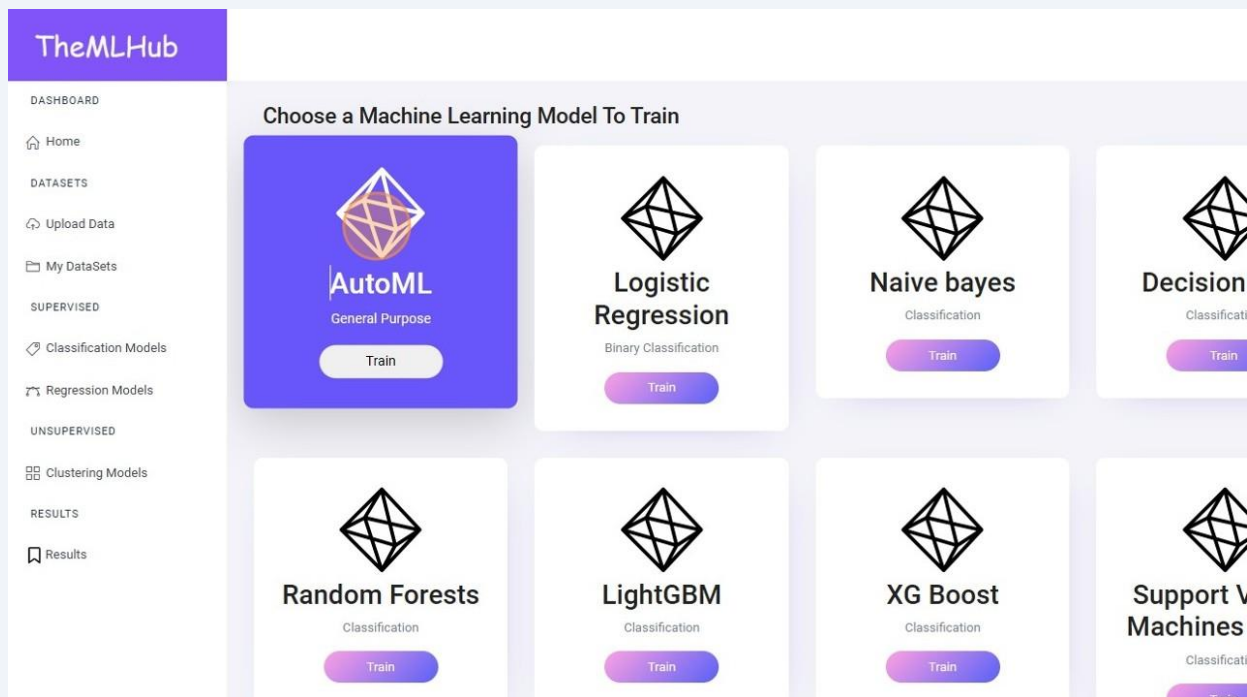
Graph Type: Histograms



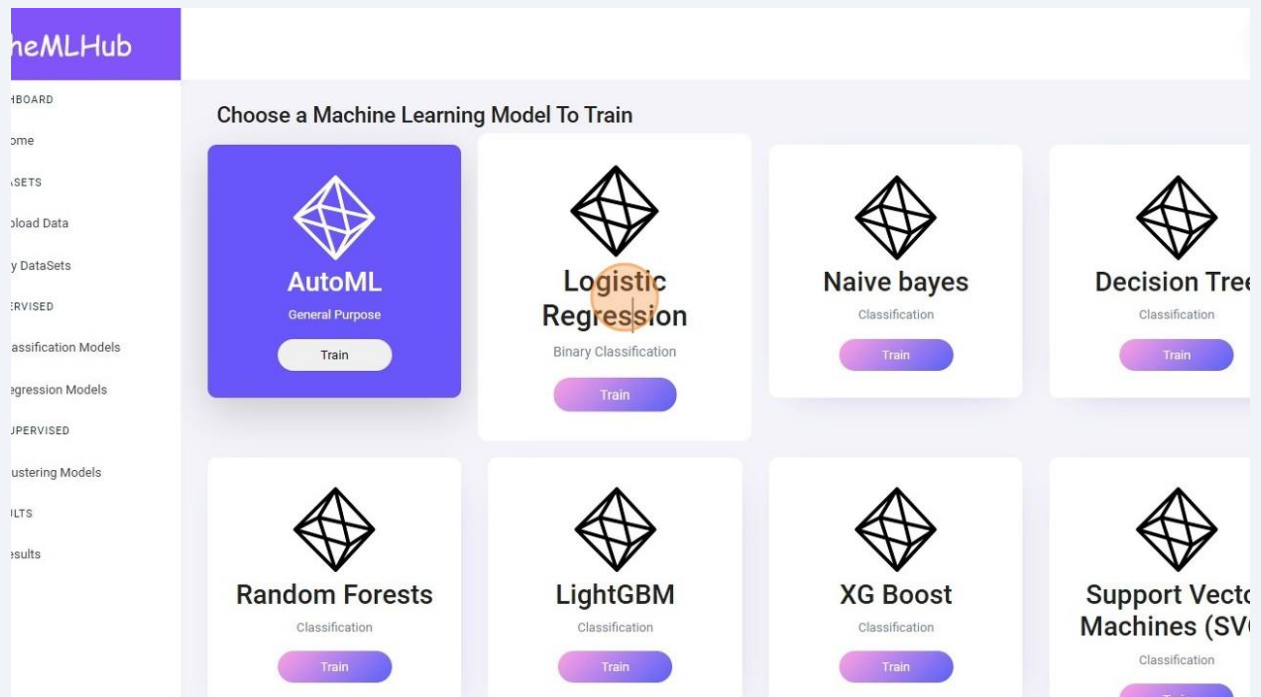
## 26 Click "Classification Models"



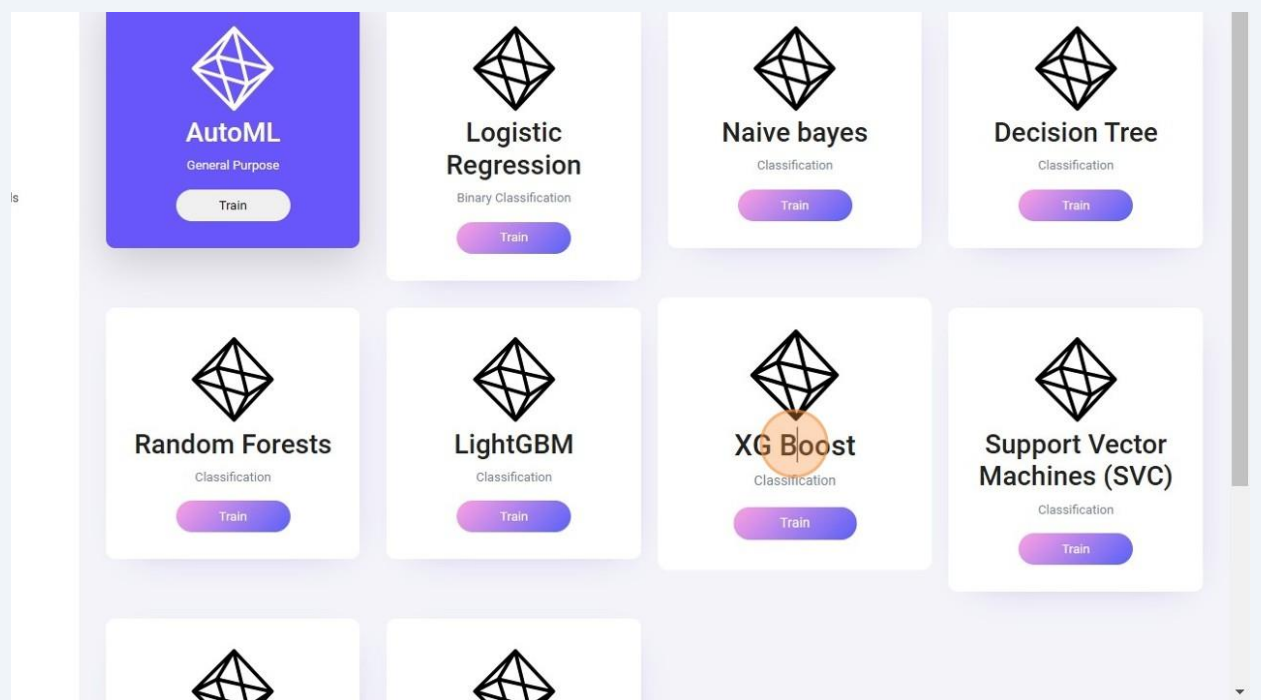
## 27 We Can Chose AutoML If We Don't Really Know What Mode To Choose.



## 28 Click "Logistic Regression"

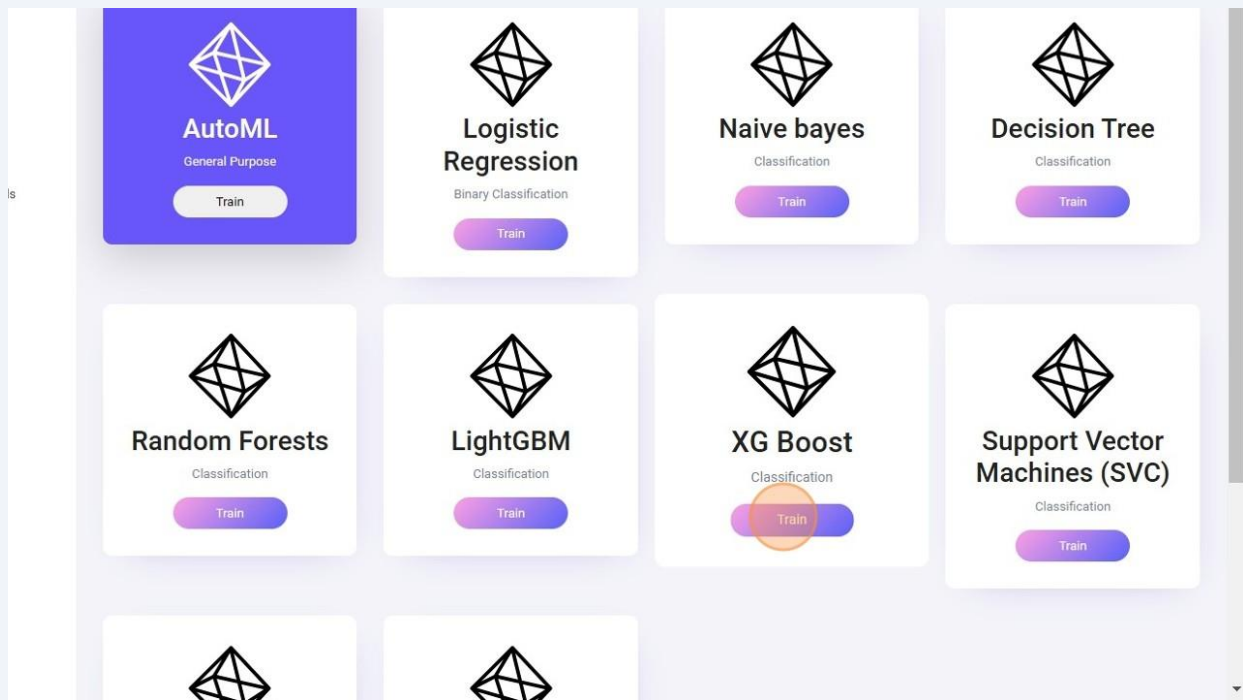


## 29 Lets Choose "XG Boost"

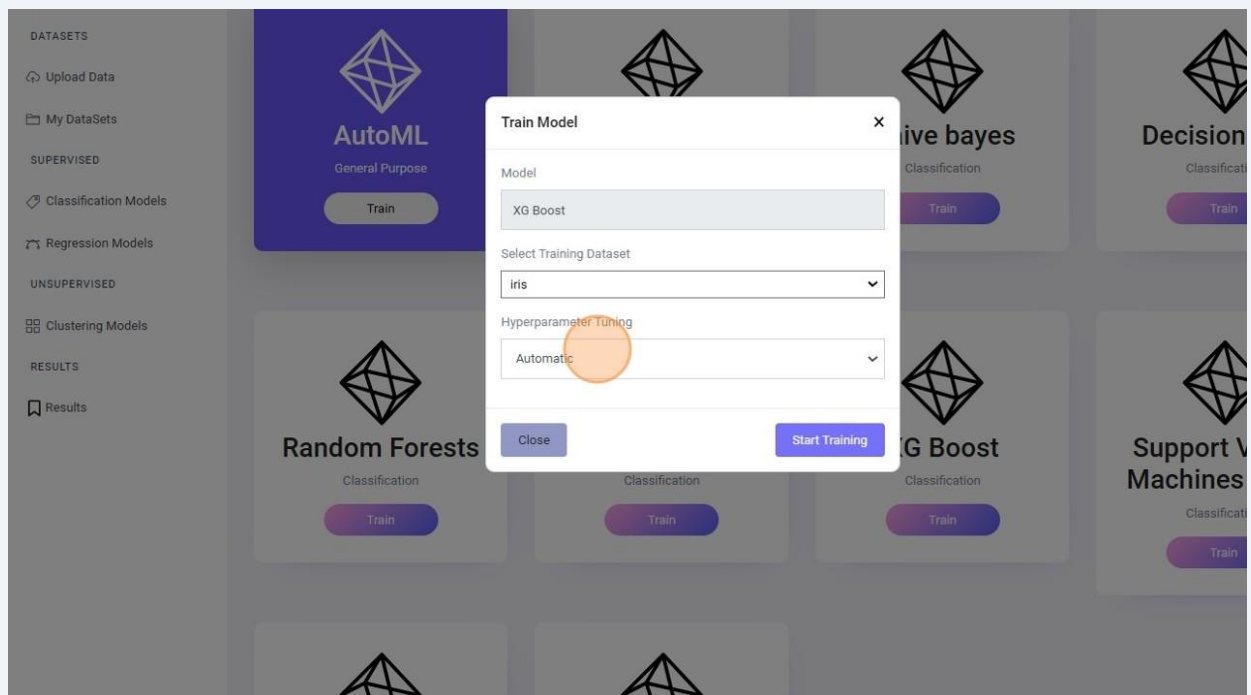




**30** Click "Train"

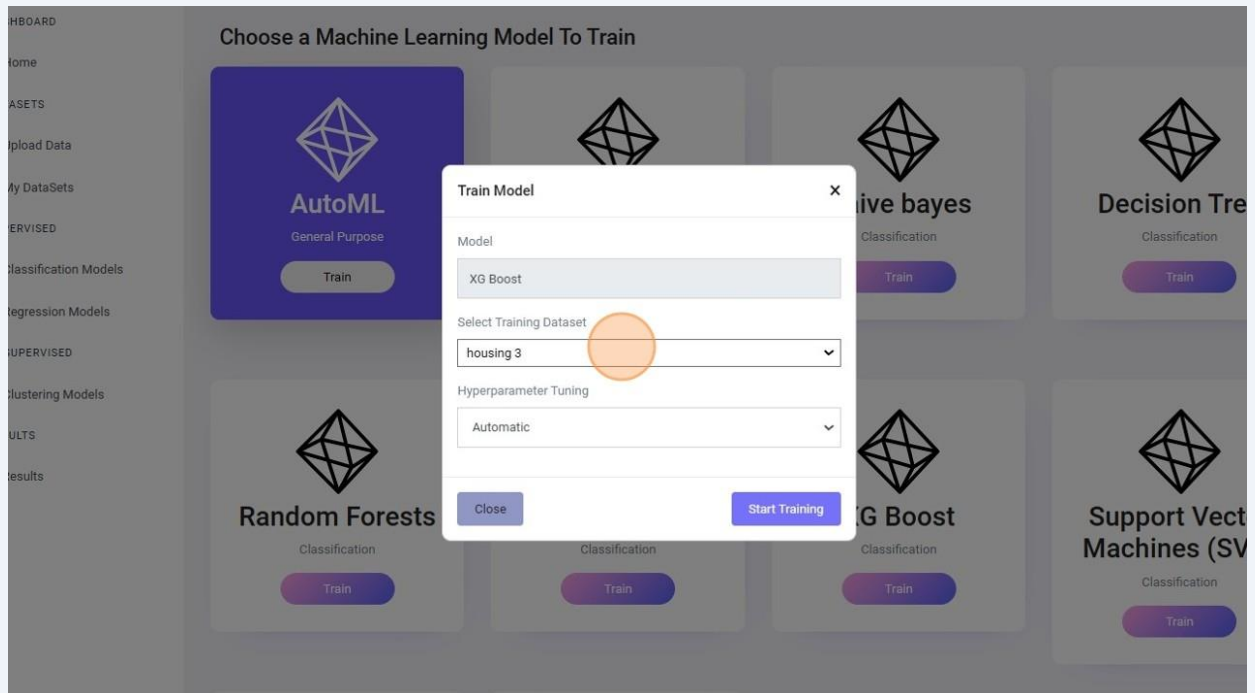


**31** we can let it on automatic for hyper parameter tuning.

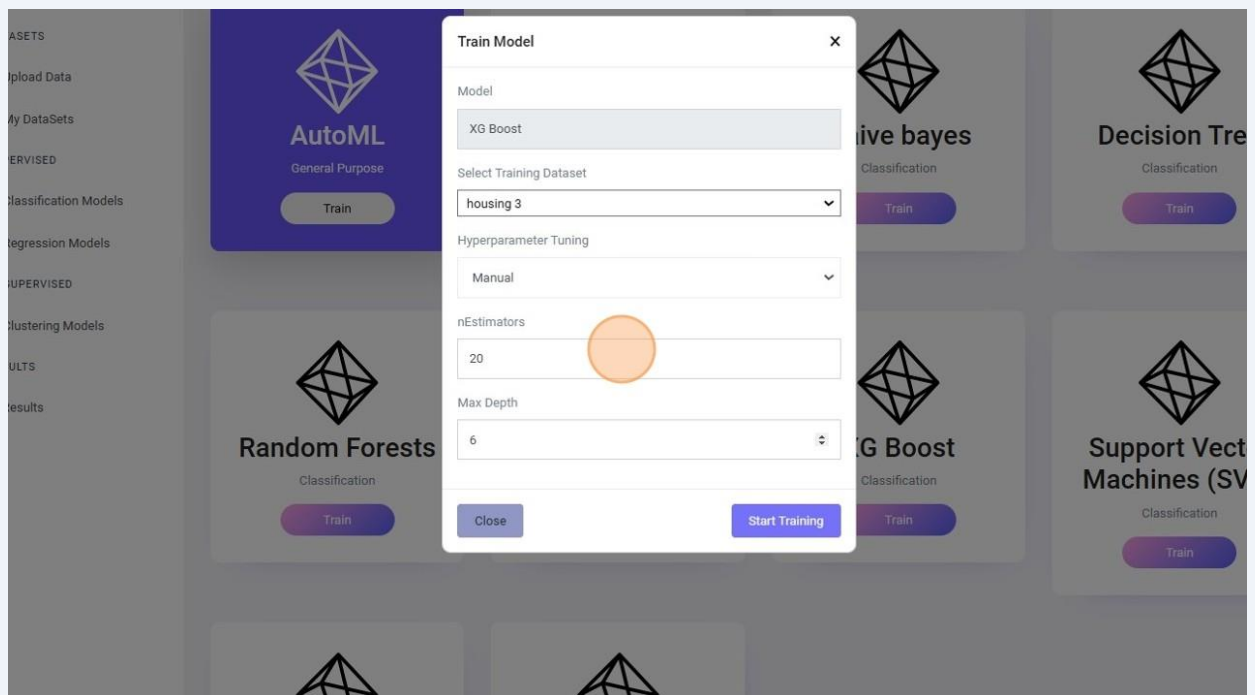




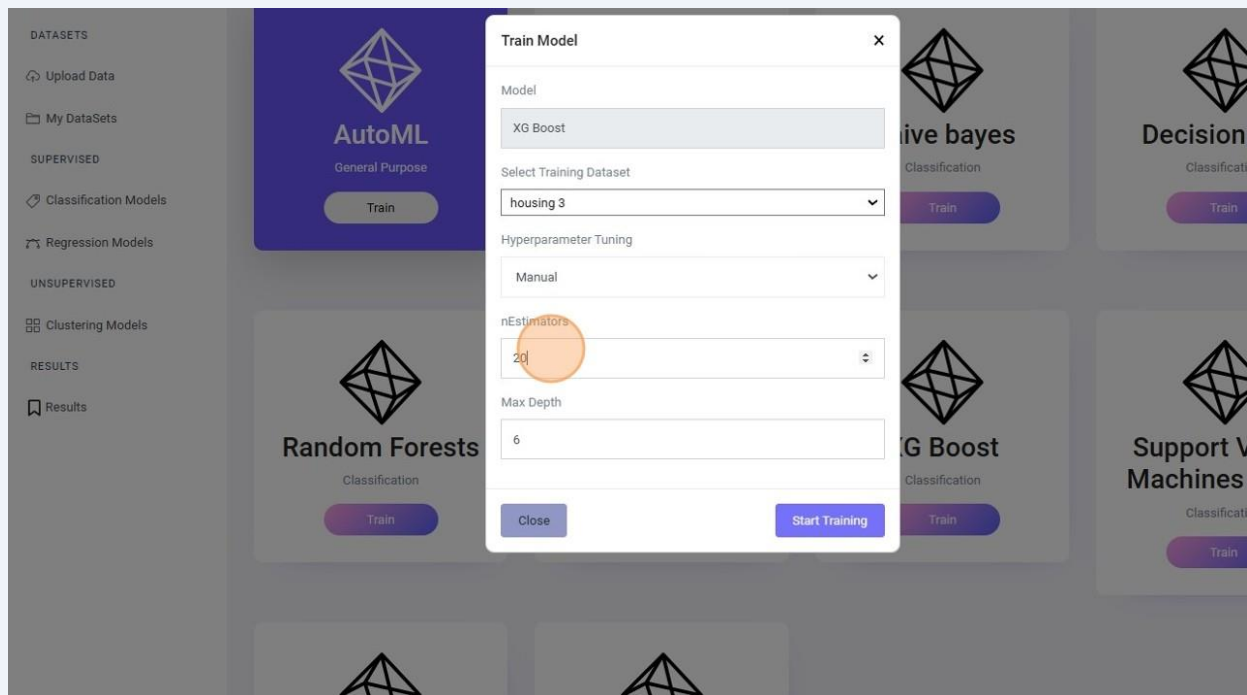
### 32 Select the "housing 3" option.



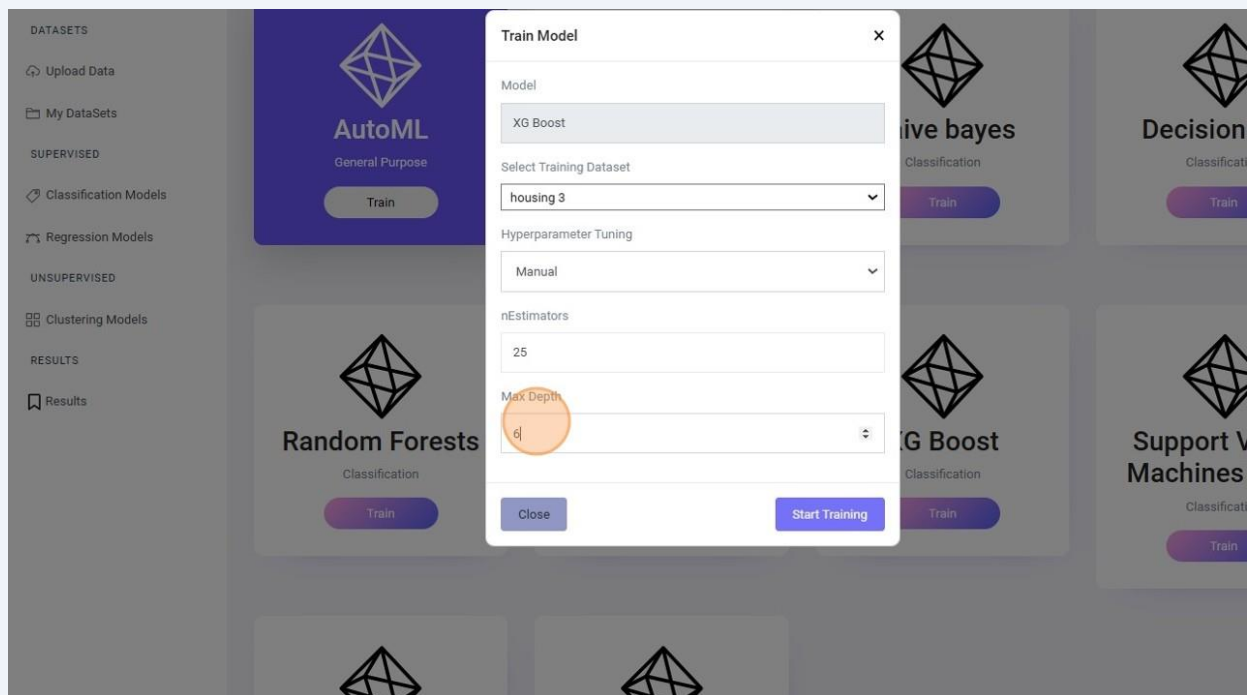
### 33 Or Select the "Manual" option for more control.



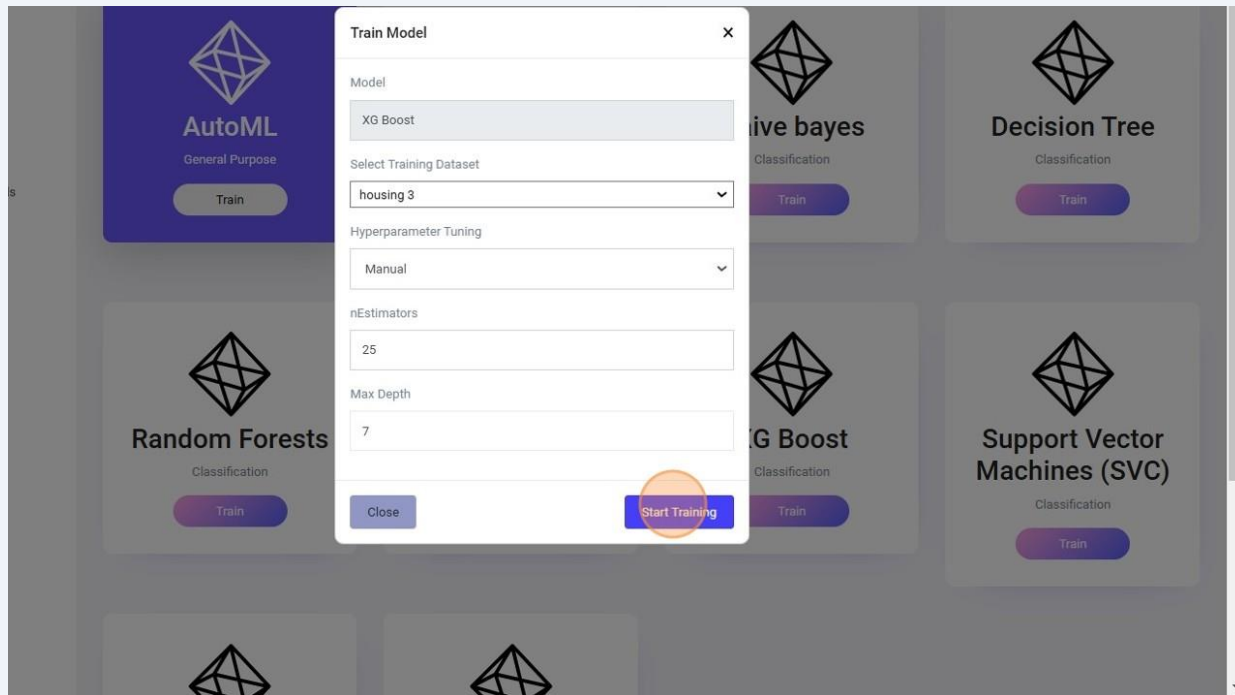
**34** Click the "nEstimators" field.



**35** Click the "Max Depth" field.



**36** Click "Start Training"



**37** Waiting For model to Train on Chosen data.



38

Oups an Error that indicates that target column wasn't as expected, its normal since not every data is perfect for every model.

b



### Training XG Boost using housing 3 Failed



Invalid classes inferred from unique values of 'y'. Expected: [ 0 1 2 ... 3672 3673 3674], got [ 14999. 22500. 25000. .... 499100. 500000. 500001.]

39

lets choose Other Data for Xgboost.

### TheMLHub

DASHBOARD

Home

DATASETS

Upload Data

My DataSets

SUPERVISED

Classification Models

Regression Models

UNSUPERVISED

Clustering Models

RESULTS

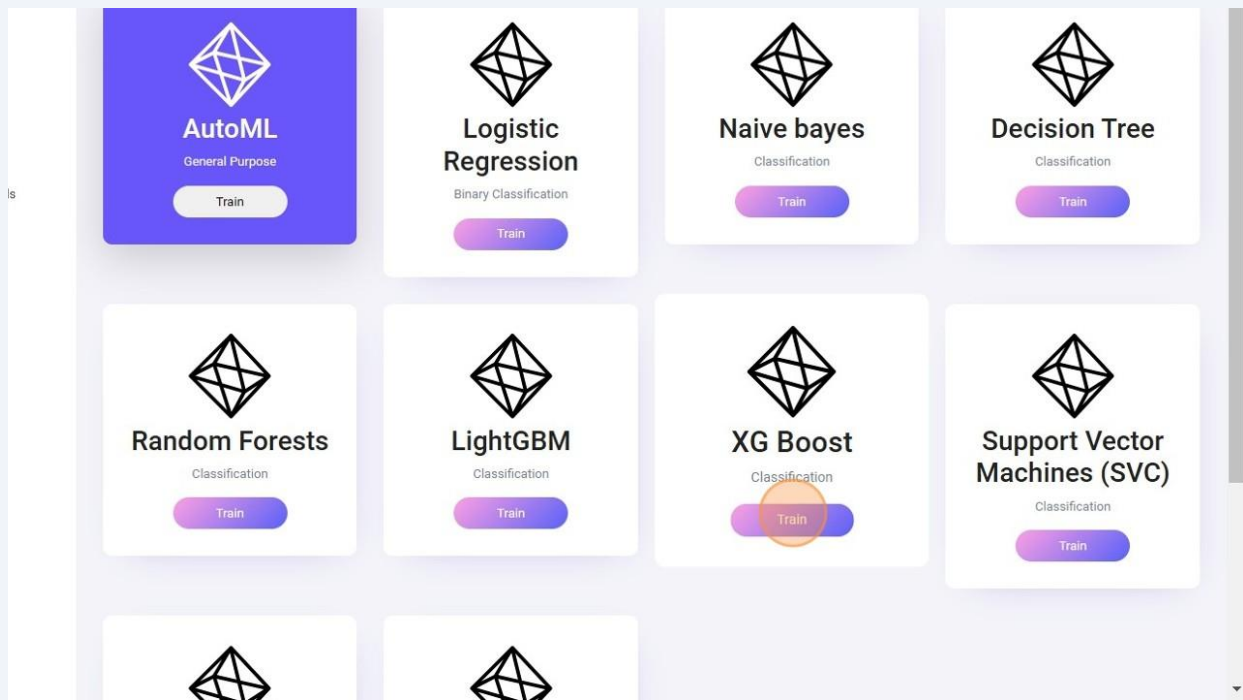
Results

### Training XG Boost using housing 3 Failed

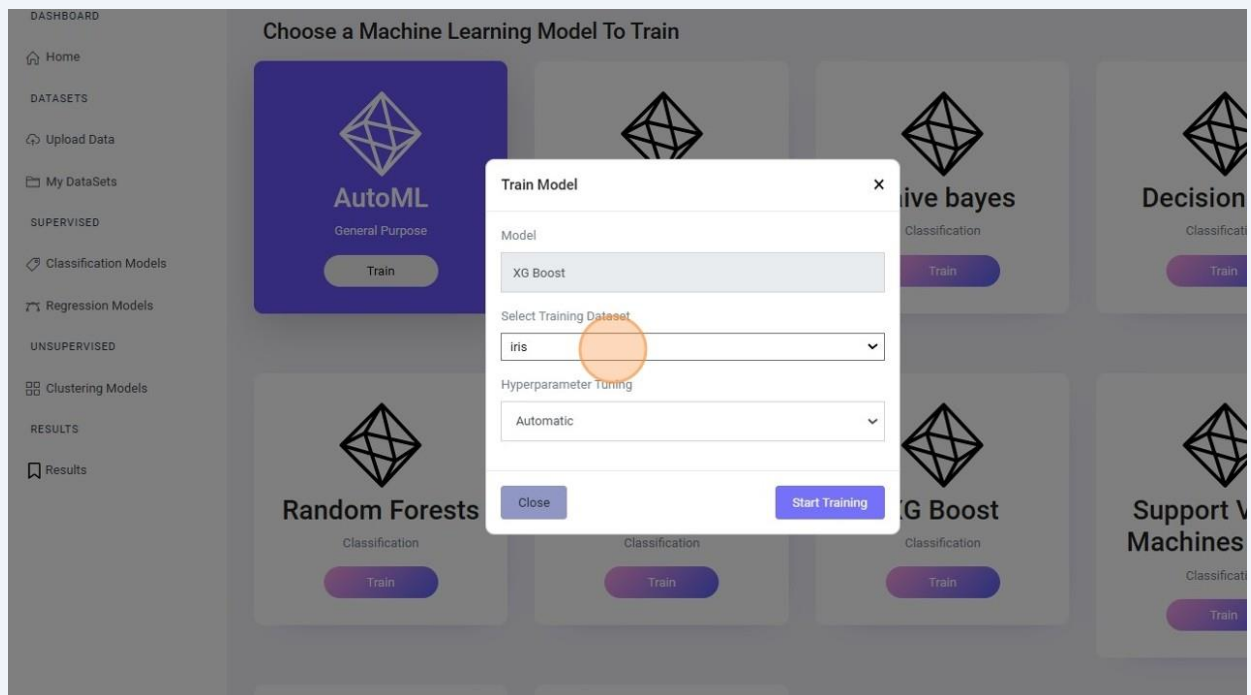


Invalid classes inferred from unique values of 'y'. Expected: [ 0 1 2 ... 3672 3673 3674], got [ 14999. 22500. 25000. .... 499100. 500000. 500001.]

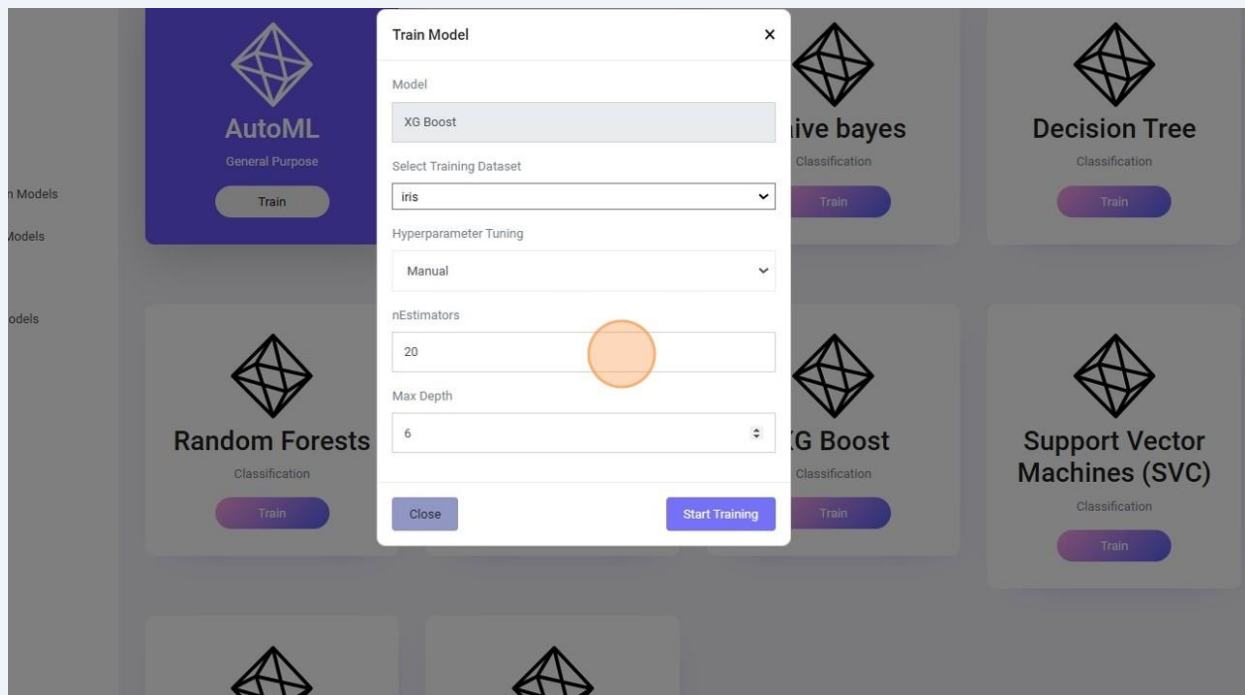
40 Click "Train"



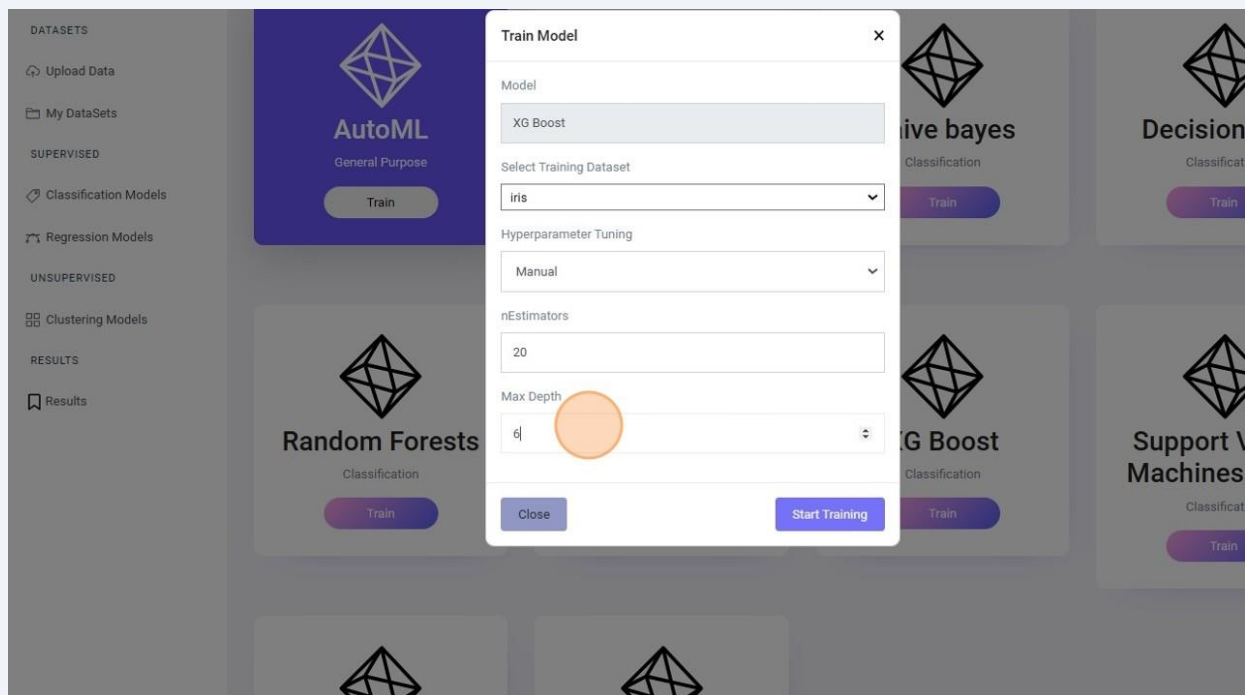
41 Select the "iris" option.



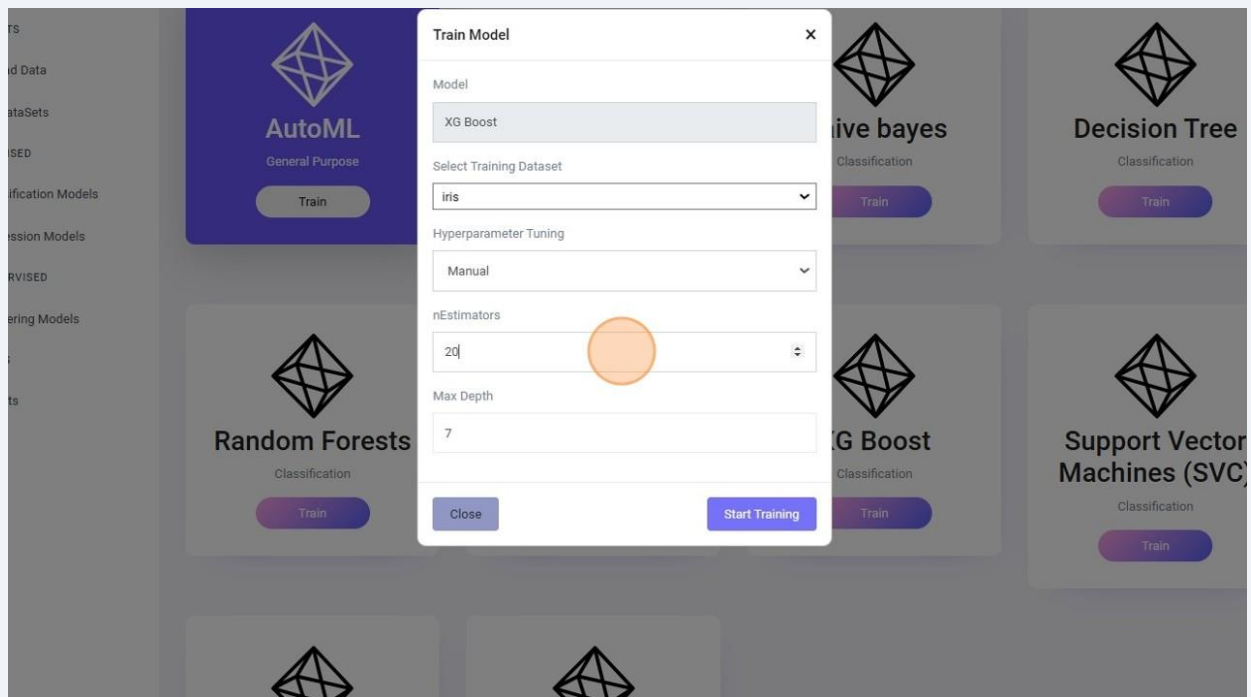
**42** Select the "Manual" option.



**43** Click the "Max Depth" field.



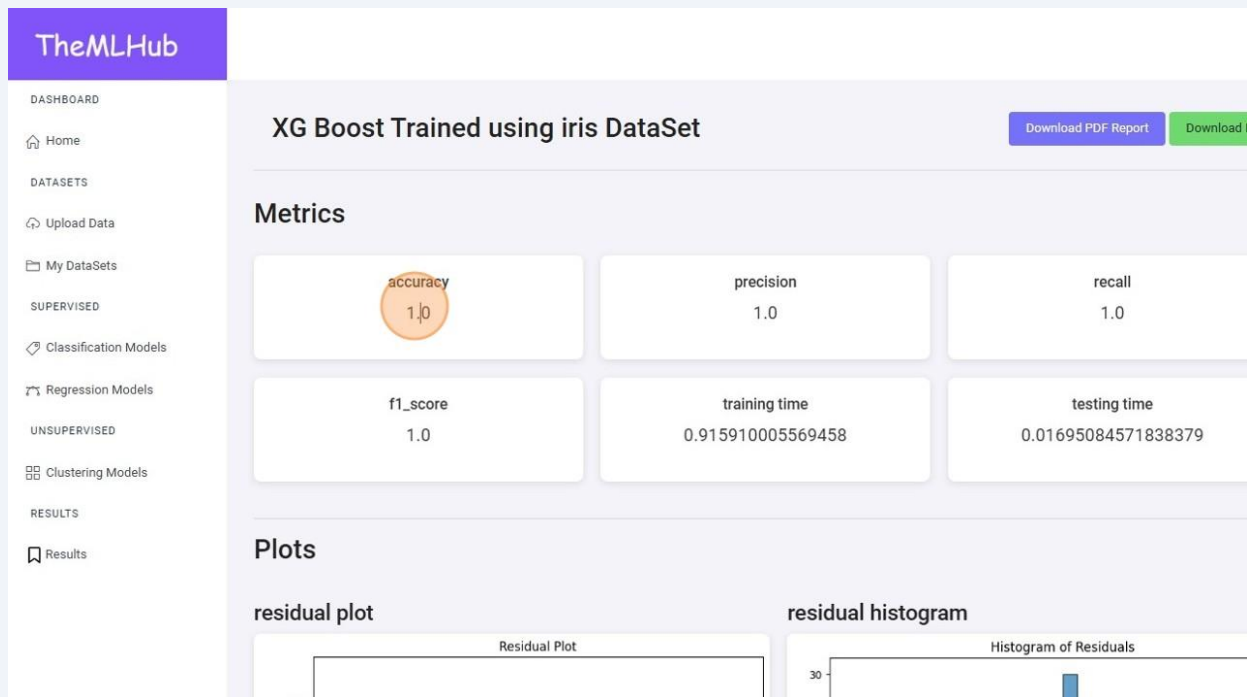
**44** Click the "nEstimators" field.



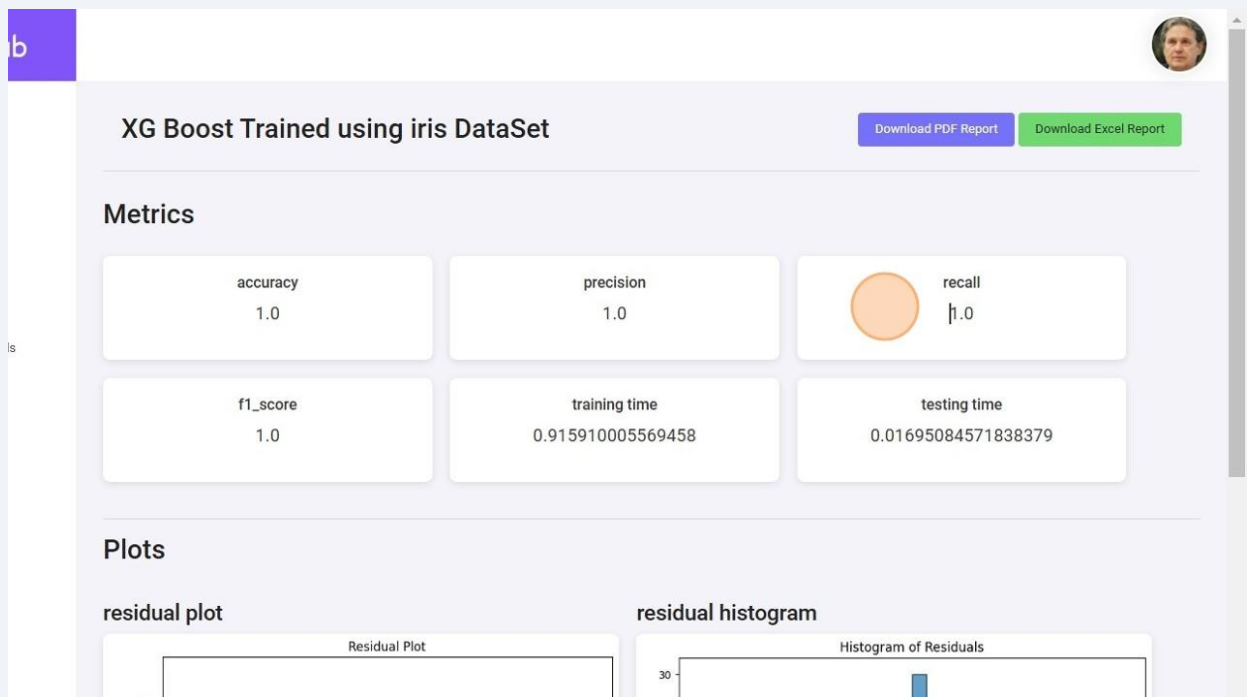
**45** Waiting For Training to End.



## 46 Here we Can See the Classification Metrics.



## 47





## 48 Also Plots

Regression Models

UNSUPERVISED

Clustering Models

RESULTS

Results

f1\_score

1.0

training time

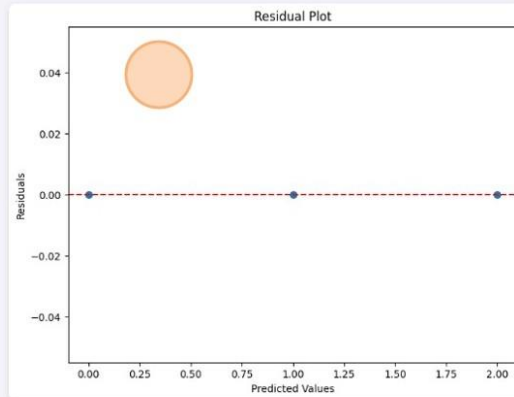
0.915910005569458

testing time

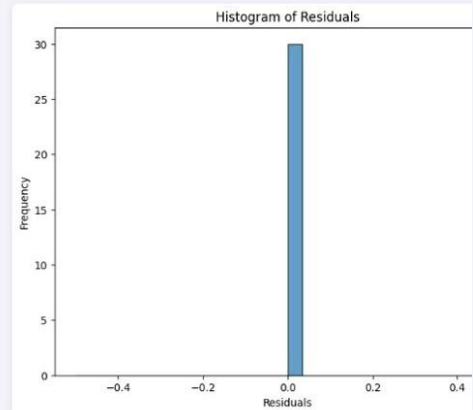
0.01695084571838379

### Plots

residual plot



residual histogram



## 49

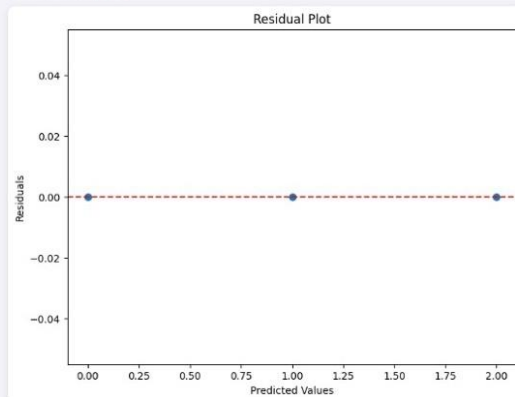
1.0

0.915910005569458

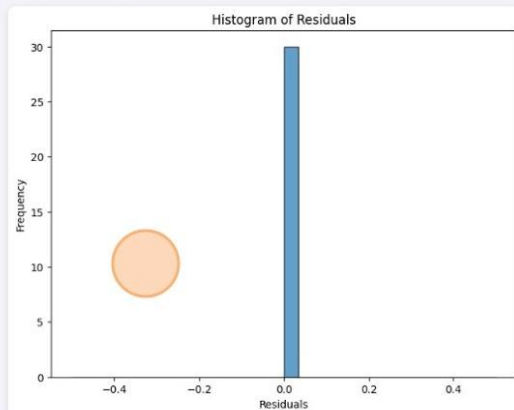
0.01695084571838379

### Plots

residual plot



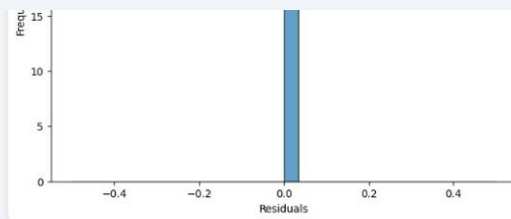
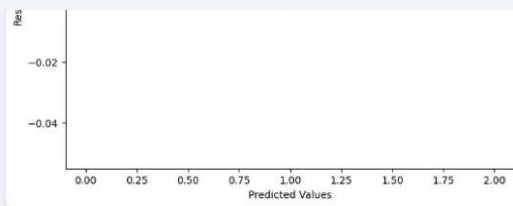
residual histogram



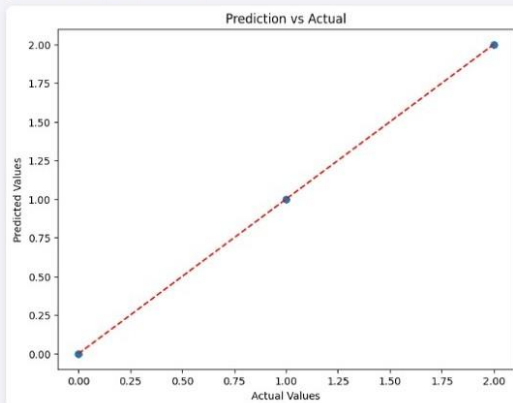
prediction vs actual

confusion matrix

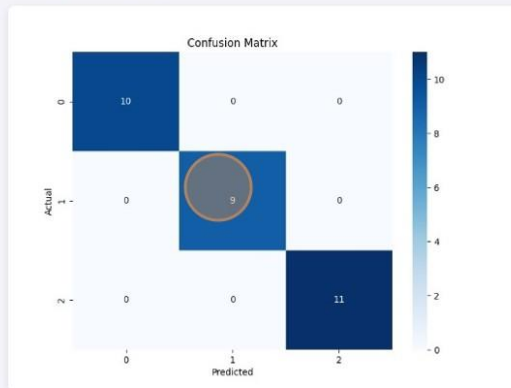
50



prediction vs actual



confusion matrix



51 Click "Results"

DATASETS

- Upload Data
- My DataSets

SUPERVISED

- Classification Models
- Regression Models

UNSUPERVISED

- Clustering Models

RESULTS

- Results

**AutoML**  
General Purpose

Train

**K-Means**  
Clustering

Train

## 52 Here we Find All Training Results.

**My Training Results**

Model	Training Time	Action
iris XG Boost	Dec. 23, 2024, 7:42 p.m.	Visualise
iriss Naive bayes	Dec. 23, 2024, 1:57 a.m.	Visualise
iriss K Nearest Neighbors	Dec. 23, 2024, 1:57 a.m.	Visualise
iriss Support Vector Machines (SVC)	Dec. 23, 2024, 1:56 a.m.	Visualise
iriss XG Boost	Dec. 23, 2024, 1:56 a.m.	Visualise
iriss Classification LightGBM	Dec. 23, 2024, 1:55 a.m.	Visualise
iriss Random Forests	Dec. 23, 2024, 1:48 a.m.	Visualise
iriss Logistic Regression	Dec. 23, 2024, 1:48 a.m.	Visualise

[View More](#)

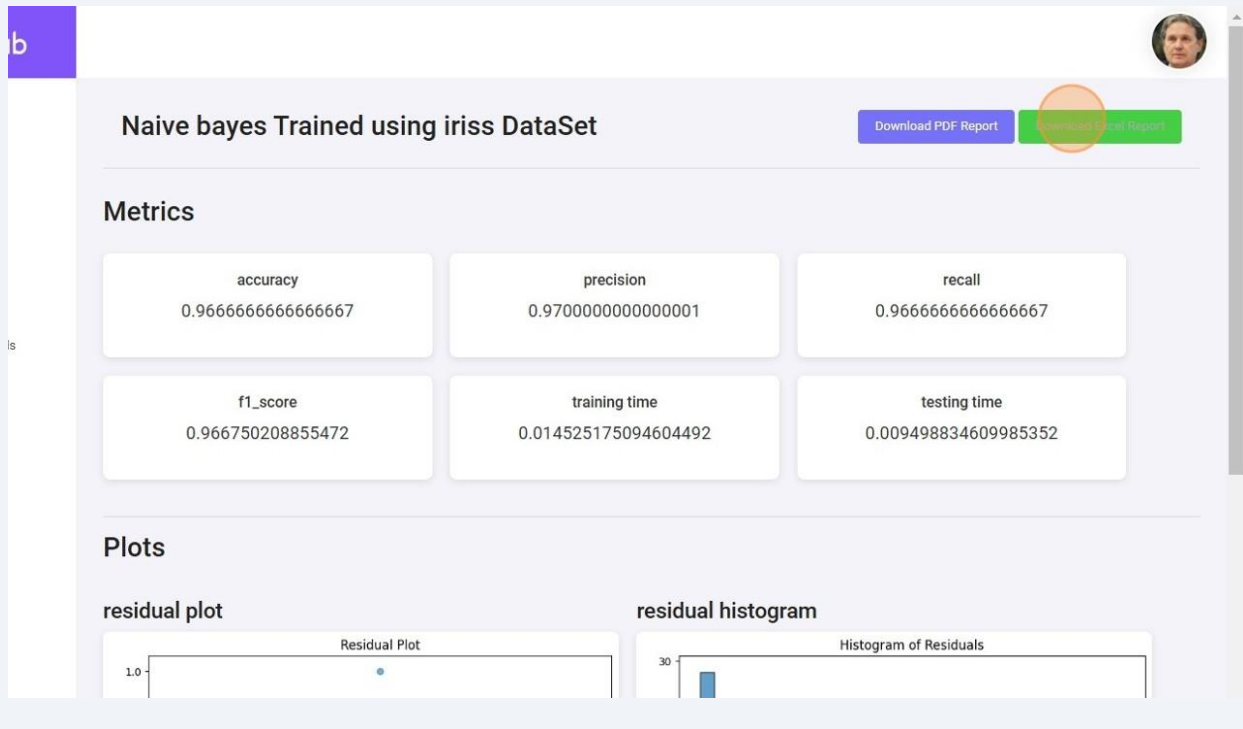
## 53 Click "Visualise"

**My Training Results**

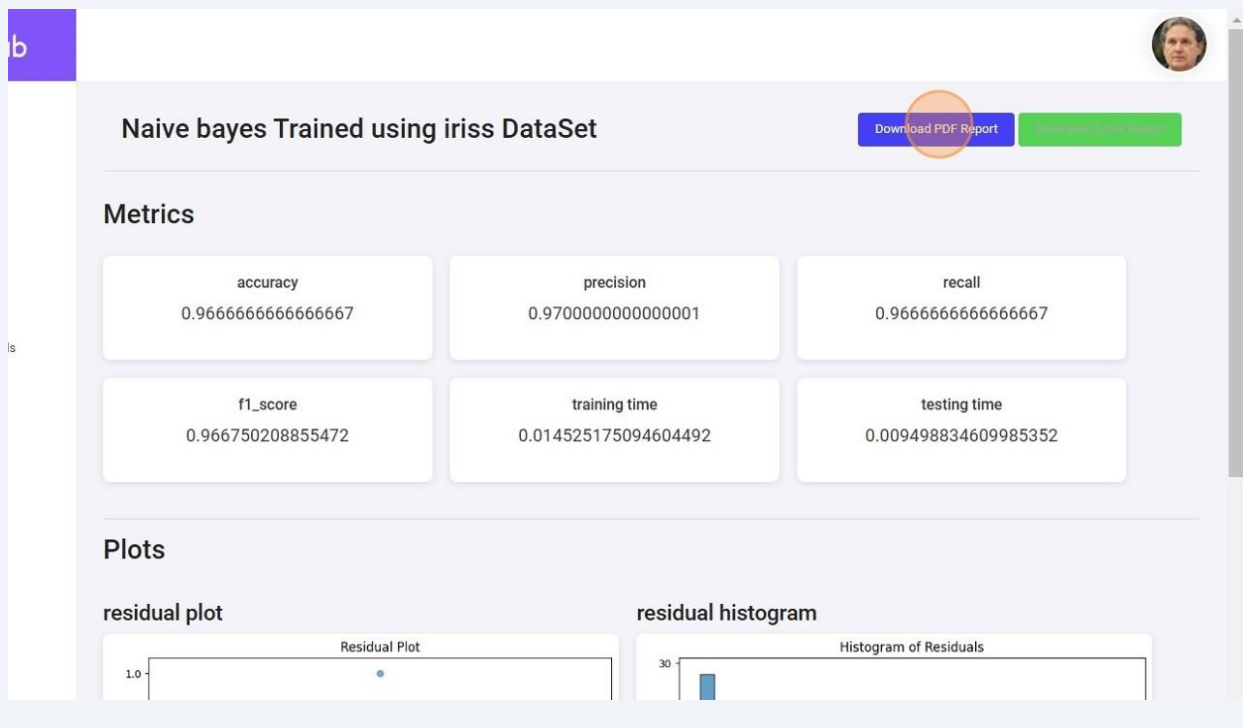
Model	Training Time	Action
iris XG Boost	Dec. 23, 2024, 7:42 p.m.	Visualise
iriss Naive bayes	Dec. 23, 2024, 1:57 a.m.	Visualise
iriss K Nearest Neighbors	Dec. 23, 2024, 1:57 a.m.	Visualise
iriss Support Vector Machines (SVC)	Dec. 23, 2024, 1:56 a.m.	Visualise
iriss XG Boost	Dec. 23, 2024, 1:56 a.m.	Visualise
iriss Classification LightGBM	Dec. 23, 2024, 1:55 a.m.	Visualise
iriss Random Forests	Dec. 23, 2024, 1:48 a.m.	Visualise
iriss Logistic Regression	Dec. 23, 2024, 1:48 a.m.	Visualise

54

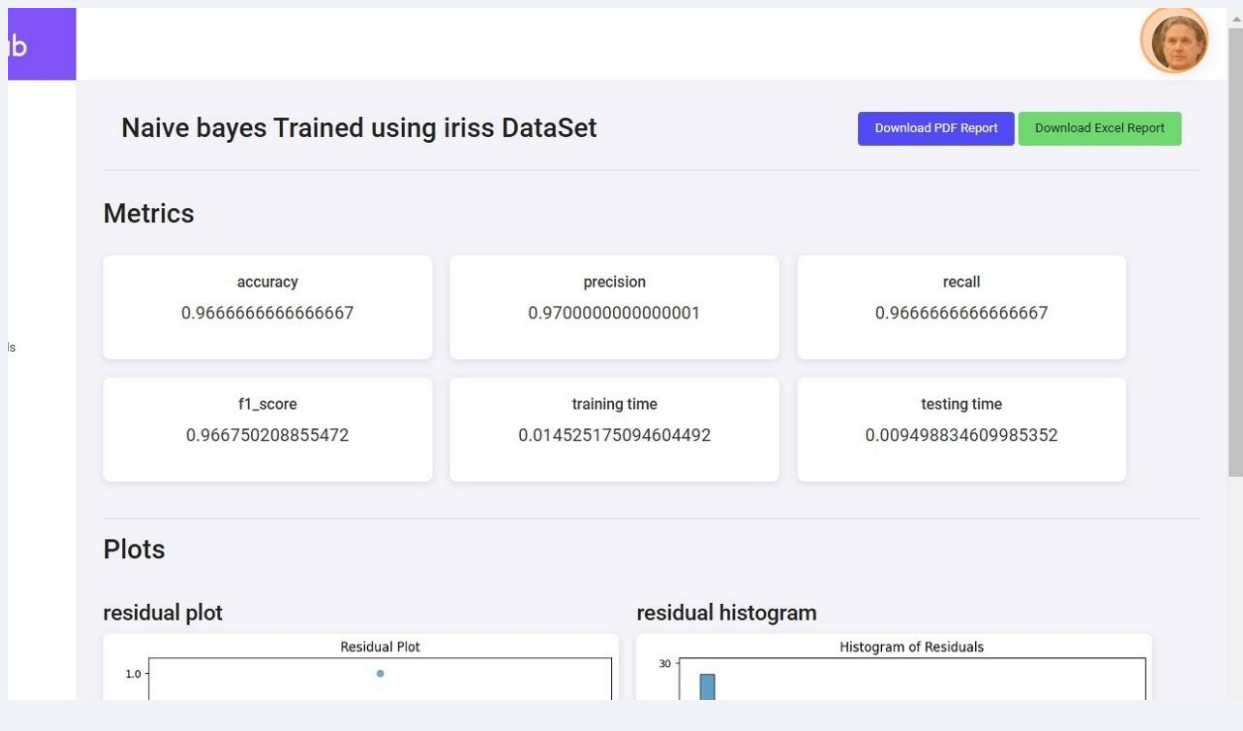
we Can see the Results and Also we can Export AS PDF or Excel Files.



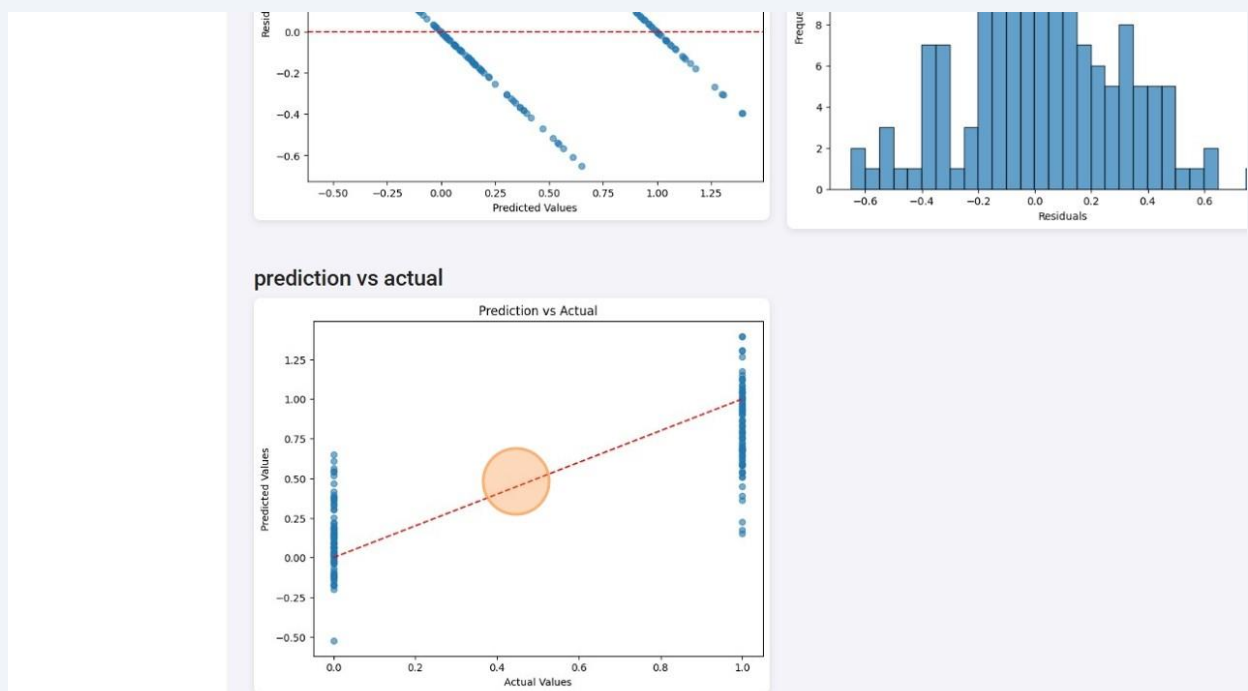
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## 56 Click Profile Picture

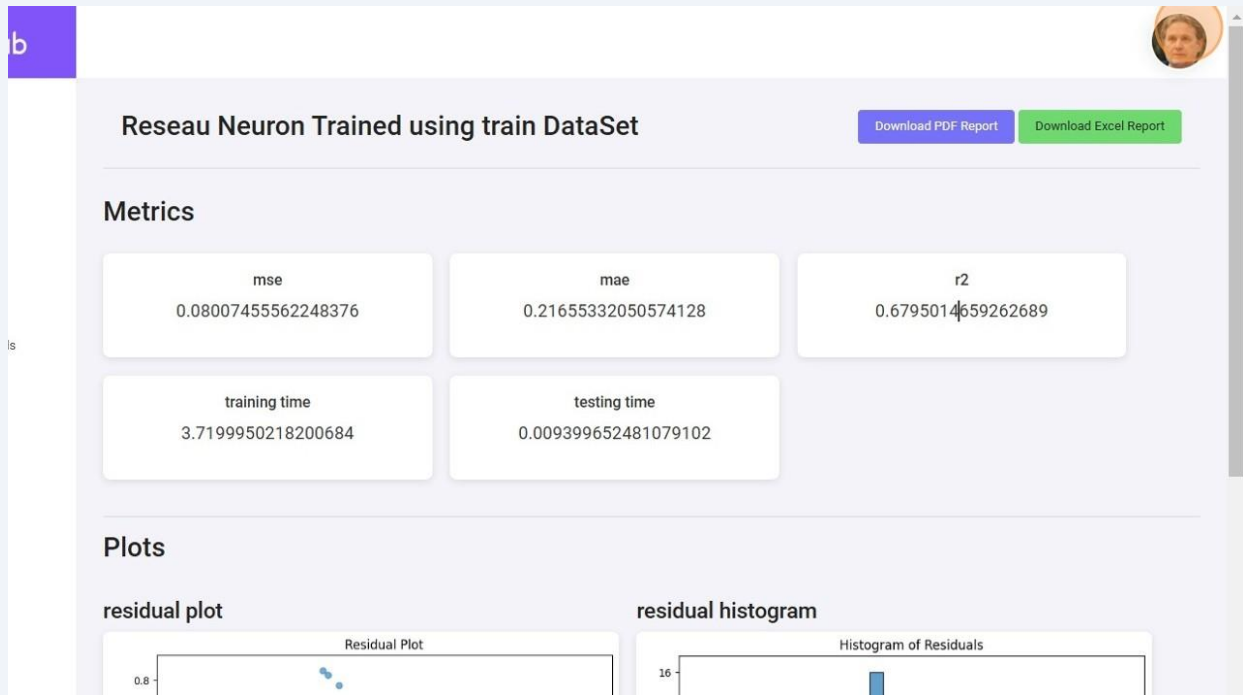


## 57 Click this image.



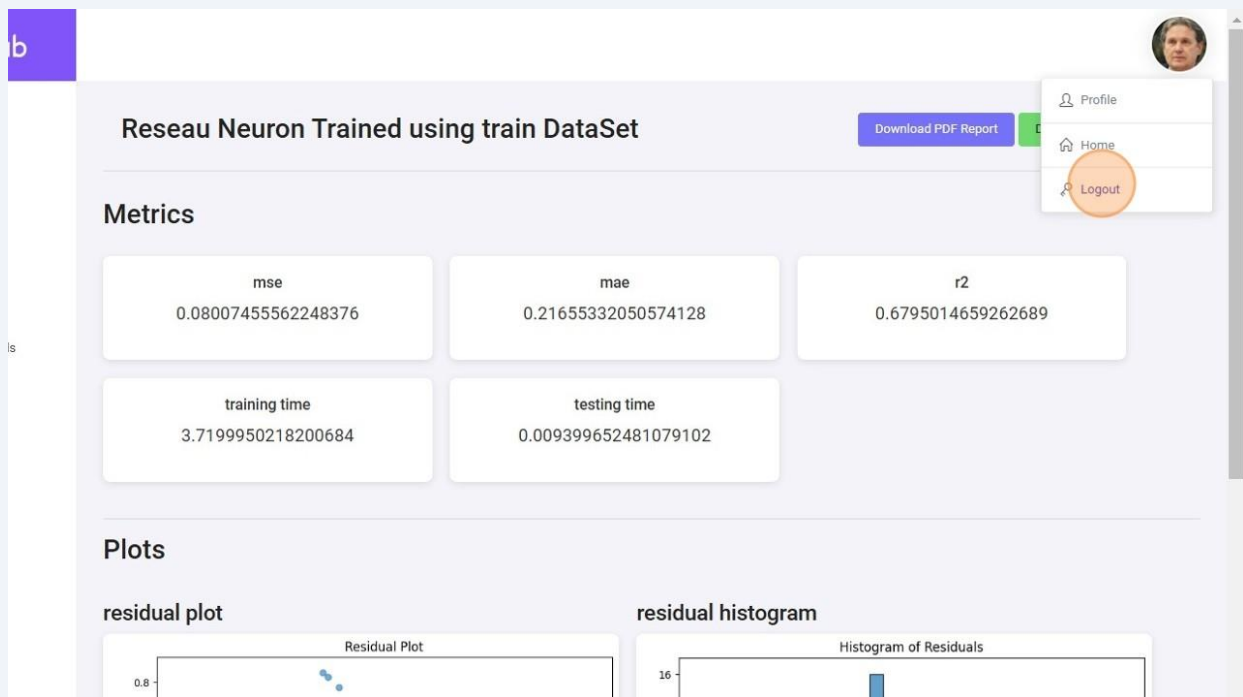
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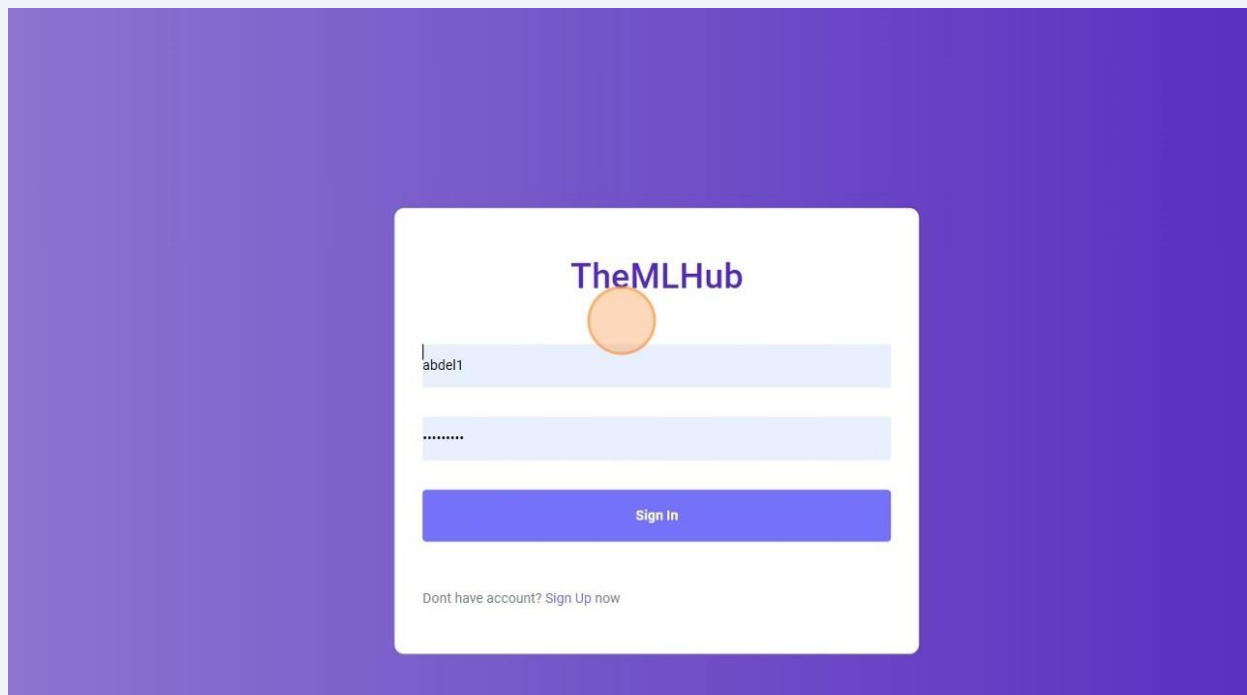


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Click "Logout"



**60** Now We Logged Out .



**61** The end of Documentation, Thank you for following Along.

