STUDENT PERFORMANCE PREDICTION USING AIML

A Minor Project Report

in partial fulfilment of the degree

Bachelor of Technology

in

Computer Science & Artificial Intelligence

By

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SR
UNIVERSITY

SCHOOL OF COMPUTER SCIENCE & ARTIFICIAL INTELLIGENCE

CERTIFICATE

This is to certify that this project entitled **“STUDENT PERFORMANCE PREDICTION USING AIML** " is the bonafied work carried out by **M. Vaishnavi, P. Arpitha, M. Thanusri, V. Nandhitha** as a Minor Project for the partial fulfilment to award the degree **BACHELOR OF TECHNOLOGY** in **COMPUTER SCIENCE & ARTIFICIAL INTELLIGENCE** during the academic year 2023-2024 under our guidance and Supervision.

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Finally, we express our thanks to all the teaching and non-teaching staff of the department for their suggestions and timely support.

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Abstract

In today’s world, technology has reached the extent that it can be used to do various tasks in day-to-day life easily with less effort and time.

The world today has realized the importance of education in one’s life, which has led to a revolution in the field of education. Universities, colleges, and schools today have loads of tasks to be completed within a given timeline.

In today’s scenario, colleges need to analyse student performance manually, which takes a lot of time and effort by faculties working on it. Hence, in order to simplify this task, a web-based system is introduced that can perform student performance analysis.

The Student Performance Analysis System provides an interface for school maintenance. It can be used by educational institutes or coaching classes to easily analyse student performance.

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1. INTRODUCTION

1.1 EXISTING SYSTEM

In the existing system, all the student information is added manually, and the data is stored in the records. Takes a lot of time and physical effort in searching and adding the information. In the existing system, there is a possibility of losing data and no proper maintenance of data. The use of A linear search in file handling might increase time complexity.

In machine learning, support-vector machines are supervised learning models with associated learning algorithms that analyse data for classification and regression analysis. It uses a technique called the kernel trick to transform your data and then based on these transformations it finds an optimal boundary between the possible outputs. We will use three kernels: Linear, polynomial and gaussian kernel.

1) Linear kernel: Linear Kernel is used when the data is Linearly separable, that is, it can be separated using a single Line. It is one of the most common kernels to be used. It is mostly used when there are a large number of features in a particular Data Set.

2) the polynomial kernel is a kernel function commonly used with support vector machines and other kernelized models, that represents the similarity of vectors in a feature space over polynomials of the original variables, allowing learning of non-linear models.

3) Gaussian RBF (Radial Basis Function) is another popular Kernel method used in SVM models for more. RBF kernel is a function whose value depends on the distance from the origin or from some point. Format using the distance in the original space we calculate the dot product (similarity) of X1 & X2.Note: similarity is the angular distance between two points.

1.2 PROPOSED SYSTEM

The suggested system gives students quick access to precise information regarding assignments and grade percentages. With a single click, students can examine all of the information. This reduces the amount of time and work. All of the data is kept in a database by the suggested system. There is absolutely no possibility of data loss with this system. It is quite simple to add and search the information, and it requires little time or physical effort. The system is divided into three main modules, each of which has three sub-modules:

1. Student:

Register: Students can sign up to receive their credentials.

Login: Students can use their credentials to log in.

The student has the option to fill out his academic details and personal information.

2. Teacher:

Login: By utilizing their credentials, teachers can access the website.

Approve Students: The students may be approved by them.

Add Students' Marks: The academic marks of the students may also be added.

Upload Attendance: Students' attendance can be uploaded.

Add Project Details: Additional project details are also available.

3. HOD:

Login: Using their credentials, HOD can log in.

HOD has the ability to oversee teachers.

Manage Event: Students may be assigned to an event by the HOD.

View Academic Details & Attendance: HOD has access to
attendance records and student academic information.

HOD has the ability to manage the notice.

The account and password for the Student Performance Analysis System are assigned to authorized administrators, exam section personnel, and other faculty members.

2. LITERATURE SURVEY

2.1. RELATED WORK

The current system's features include a user login creator with an interface, a student performance analyser, a student growth card, credit that has been earned, and passing criterion card and intelligent attribute card of student performance. Web-Based Student Data Processing
The current paper records will be replaced by the design and deployment of a comprehensive user interface and student information system. Through a secure online portal integrated into the college website, staff members have instant access to all aspects of a student's academic progress. By using user authentication, the system only shows data that is required for a person to perform their job. Every subsystem also has authentication, which enables information creation and updating by authorized users. On the server, every piece of information is carefully examined and verified before being recorded.

A Systematic Literature Review of Student' Performance Prediction Using Machine Learning Techniquesby Balqis Albreiki 1,2,Nazar Zaki 1,2,*ORCID andHany Alashwal 1,21Department of Computer Science and Software Engineering, College of Information Technology, United Arab Emirates University, Al Ain 15551, United Arab Emirates2Big Data Analytics Center, United Arab Emirates University, Al Ain 15551, United Arab Emirates*Author to whom correspondence should be addressed.
"Predicting Student Performance Using Machine Learning Techniques" by Author A et al. (Year)"Personalized Learning Paths Using AI in Educational Settings" by Author B et al. (Year)"The Role of NLP in Enhancing Student Assessment" by Author C et al. (Year)
A systematic literature review on student performance predictions November 2021International Journal of Advanced Technology and Engineering Exploration 8(84)DOI:10.19101/IJATEE.2021.874521Authors:Hasnah Nawang Universiti Sultan Zainal Abidin | UniSZAMokhairi Makhtar Amir fazamin

2.2 SYSTEM STUDY

This entire chapter covers the various ways that artificial intelligence (AI) can be used to evaluate students' performance and make improvements. Numerous research on "blended learning," or a combination of online and classroom settings, have been carried out recently. "Blended learning" is a novel idea in the field of education, and further research and development are necessary to improve student performance. It is important to note that applications of AI not only help kids do better academically, but they also assist them in developing their whole personalities. This has been explained in the chapter's opening. For example, a number of AI-assisted co-curricular activity solutions have been developed to help students focus (Ng, 2021). have been created that assist a student in focusing on his interests outside the traditional study hours. With the help of these resources, kids can cultivate interests in activities beyond academics, which helps them become more than just bookworms and grow into better people overall. With the aid of these resources, pupils can cultivate admirable traits like responsiveness and social responsibility, among others.

3.DESIGN

3.1. REQUIREMENT SPECIFICATION(S/W & H/W)

There are several of different factors that can influence the way individuals use Artificial Intelligence Markup Language (AIML), including the hardware and software requirements. The ways in which each may affect students' performance are laid down here:

SoftwareRequirements:

AIML Interpreter/Compiler: To create, modify, and run AIML scripts, students require access to a dependable AIML interpreter or compiler. To aim in learning and troubleshooting, this software should be easy to use and provide features like syntax highlighting, error checking, and debugging tools.

Integrated Development Environment (IDE): Students' productivity and educational experience can be greatly improved by using an IDE designed specifically for AIML development. Auto-completion, code snippets, and project management tools are examples of features that can help students concentrate on understanding AIML principles instead of navigating technical complexity by streamlining the development process.

Sumulation And Testing Tools: Software solutions that let students verify and simulate their AIML chatbots in many circumstances are essential for experiential learning. To assist students in monitoring and improving the efficiency and response of their chatbot, these tools ought to include real-time feedback, analytics, and performance metrics.

HardwareRequirements:

Computers Devices: Students must have access to computers that can effectively execute chatbot simulations and AIML development tools. This includes tablets, laptops, and desktop PCs with enough RAM, processing speed, and storage to run AIML

Internet connectivity: Having dependable internet connectivity is necessary to access AIML-related online resources, tutorials, documentation, and collaboration platforms. Remote learning and assistance are made possible by smooth communication and collaboration between students and teachers made possible by a reliable internet connection.

Peripherals: Students may need webcams, microphones, and speakers to incorporate advanced capabilities like speech recognition and natural language processing in their chatbots. This will depend on the particular AIML projects and activities.

TECHNOLOGY DESCRIPTION

PYTHON

It is a high-level, translated, graphical and object-oriented scripting language. It is interpreted, interactive and object-oriented.

TKINTER

Python provides many ways for creating GUI (Graphical User Interface). Out of all the GUI methods, tkinter is the most widely used tool. It is a normal Python interface to the Tk GUI toolkit supplied with Python.

Tkinter offers various widgets to place in our window. Some of the widgets used in our project are explained below:

1. Window:

● The entity that is returned after making a call to tkinter. Tk() is commonly referred to as the Root Window.

● To initialize tkinter, we have to build a Tk root widget, which is a window with a title bar and other decoration given by the window manager. The root widget needs to be generated before all other widgets and there can only be one root widget.

● pack: The pack method tells Tk to match the size of the window to the specified document.

● resizable: The resizable approach is used to enable Tkinter root window to adjust its size according to the users need as well we may prevent resizing of the Tkinter window.

● geometry: This approach is used to set the measurements of the Tkinter window and is used to set the location of the main window on the user’s desktop.

2. Button: To add a button to the window, we use this widget. Some of the parameters of this widget are:

3. Frame: It functions as a container to store the widgets. It&#39;s used to organize and categorize the widgets. Some of the parameters of this widget are:

4. Label: It is the view box where you can place some text or picture which can be changed any time as per the code.

5. Scrollbar: It is the slide controller which will be used to execute specified widgets.

4. IMPLEMENTATION

4.1 MODULES

1. Data Collection and Preprocessing: This module includes collecting pertinent information related to understudy execution, such as statistic data, past scholarly records, participation, and extracurricular exercises. Preprocessing steps may incorporate information cleaning, dealing with lost values, and highlight scaling.

2. Feature Determination and Building: This module centers on selecting the most important highlights that contribute to foreseeing understudy execution. It may include procedures like relationship examination, highlight significance positioning, and making modern highlights determined from existing ones.

3. Model Choice and Preparing: This module includes choosing suitable machine learning calculations for expectation, such as choice trees, irregular timberlands, bolster vector machines (SVM), or neural systems. Models are prepared utilizing verifiable information with highlights related to understudy performance.

4. Model Assessment: After preparing, models require to be assessed to evaluate their execution and generalization capacity. Common assessment measurements incorporate precision, accuracy, review, F1-score, and region beneath the recipient working characteristic bend (AUC-ROC).

5. Hyperparameter Tuning: Numerous machine learning calculations have parameters that require to be tuned for ideal execution. Strategies like framework look or arbitrary look can be utilized to discover the best combination of hyperparameters.

6. Model Arrangement and Integration: Once a palatable demonstrate is prepared and assessed, it needs to be conveyed into generation frameworks. This module centers on coordination the show into the instructive institution's foundation, guaranteeing versatility, proficiency, and real-time forecast capabilities.

7. Monitoring and Upkeep: Ceaseless observing of the conveyed show is basic to guarantee its execution remains steady over time. This module includes checking show measurements, retraining to demonstrate intermittently with upgraded information, and tending to any float or corruption in performance.

8. Interpretability and Explainability: Understanding why a demonstrated makes certain forecasts is vital, particularly in instructive settings where choices affect students' scholarly ways. Methods such as include significance investigation and model-agnostic interpretability strategies can give bits of knowledge into the model's decision-making process.

9.Privacy and Moral Contemplations: Understudy information security and moral contemplations must be taken into account all through the improvement and sending of the AIML framework. This module includes actualizing privacy-preserving strategies and following to pertinent controls such as GDPR or FERPA.

4.2 OVERVIEW TECHNOLOGY

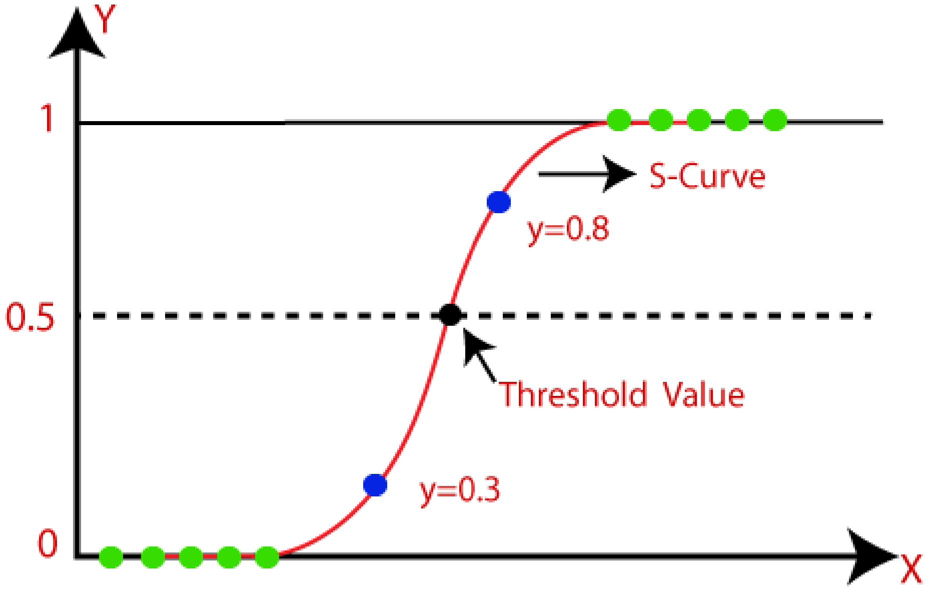
1.Logistic Regression

This algorithm is one kind of linear regression. When the observed dependent attribute y is categorical, then it produces an equation which calculates the class mark&#39;s likelihood as one function for the independent variables. By using the linear regression this algorithm suits the s-shaped curve and then by converting all numeric values into the likelihood with using the following equation, which is also known as the sigmoid function :

In the above equation, is outcome of the regression i.e., addition of variables weighed by the coefficients, exp is an exponential function, () is sigmoid or the logistic function, which is also known as the logistic curve which is a typical &quot;S&quot; shape (sigmoid curve).The main goal of this

algorithm, is to find the most accurate parameters θ, for ([]) = (), in a way that the model accurately predicts each individual’s class instance.

Logistic Regression utilizes various computational optimizers to get parameters, including ‘newton-cg’, ‘lbfgs’, ‘liblinear’, ‘sag’, ‘saga’ solvers. It also supports regularization, which is a process, used to overcome the overfitting issue of machine learning models. C parameter means opposite of regularization intensity and must be a positive curve. Smaller values specify greater regularization.



Advantages:

1. This algorithm is the simplest machine learning algorithm and simple to implement.

2. This ML algorithm enables models for updating easily to change according to the newly obtained data.

3. Along with the classification results, this algorithm also generates the probabilities which are calibrated to perfection.

Disadvantages:

1. This algorithm is a model for statistical analysis model which attempts to find specific probability based outcomes according to independent features.

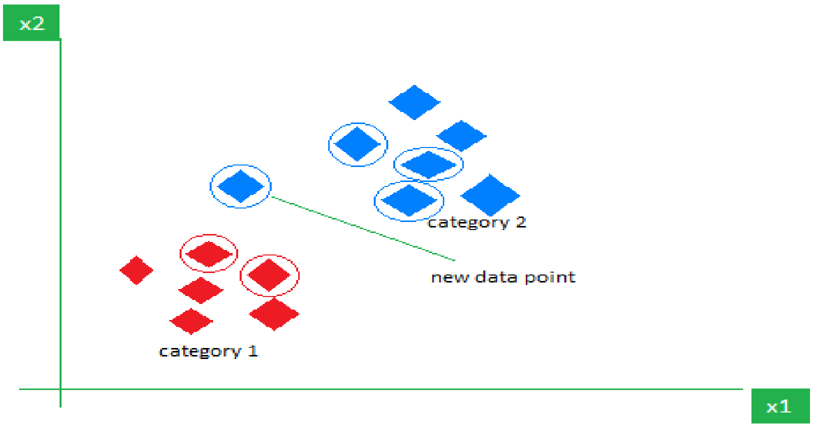
2. We can’t solve nonlinear problems using this algorithm because it works on a linear decision making surface.

2.KNN ALGORITHM

The K-Nearest Neighbours (KNN) calculation is a directed machine learning strategy this utilized to handle classification and relapse issues. Evelyn Settle and Joseph Hodges created calculation in 1951, which was hence extended by Thomas Cover. The article investigates the essentials, workings, and execution of the KNN algorithm.

What is the K-Nearest Neighbours Algorithm?

KNN is one of the most essential however basic classification calculations in machine learning. It has a place to the administered learning space and finds strongly application in design acknowledgment, information mining, and interruption detection.It is broadly expendable in real-life scenarios since it is non-parametric, meaning it does not make any fundamental suspicions almost the conveyance of information (as contradicted to other calculations such as GMM, which accept a Gaussian dispersion of the given information). We are given a few earlier information (too called preparing information), which classifies arranges into bunches recognized by a trait.



Now, given another set of data points (also called testing data), allocate these points to a group by analyzing the training set. Note that the unclassified points are marked as ‘White’.

Why do we require a KNN algorithm?

(K-NN) calculation is a flexible and broadly utilized machine learning calculation that is essentially utilized for its straightforwardness and ease of usage. It does not require any suspicions almost the fundamental information conveyance. It can too handle both numerical and categorical information, making it a adaptable choice for different sorts of datasets in classification and relapse errands. It is a non-parametric strategy that makes expectations based on the similitude of information focuses in a given dataset. K-NN is less delicate to exceptions compared to other algorithms. The K-NN calculation works by finding the K closest neighbors to a given information point based on a remove metric, such as Euclidean remove. The course or esteem of the information point is at that point decided by the larger part vote or normal of the K neighbors. This approach permits the calculation to adjust to diverse designs and make forecasts based on the nearby structure of the data.

Distance Measurements Utilized in KNN Algorithm:

As we know that the KNN calculation makes a difference us recognize the closest focuses or the bunches for a inquiry point. But to decide the closest bunches or the closest focuses for a inquiry point we require a few metric. For this reason, we utilize underneath remove measurements:

Euclidean Distance

This is nothing but the cartesian distance between the two points which are in the plane/hyperplane Euclidean distance can also be visualized as the length of the straight line that joins the two points which are into consideration. This metric helps us calculate the net displacement done between the two states of an object.

$$\text{distance}(x, X_i) = \sqrt{\sum_{j=1}^{d} (x_j - X_{i_j})^2}]$$

5.TESTING

5.1 Implementation of code in python:

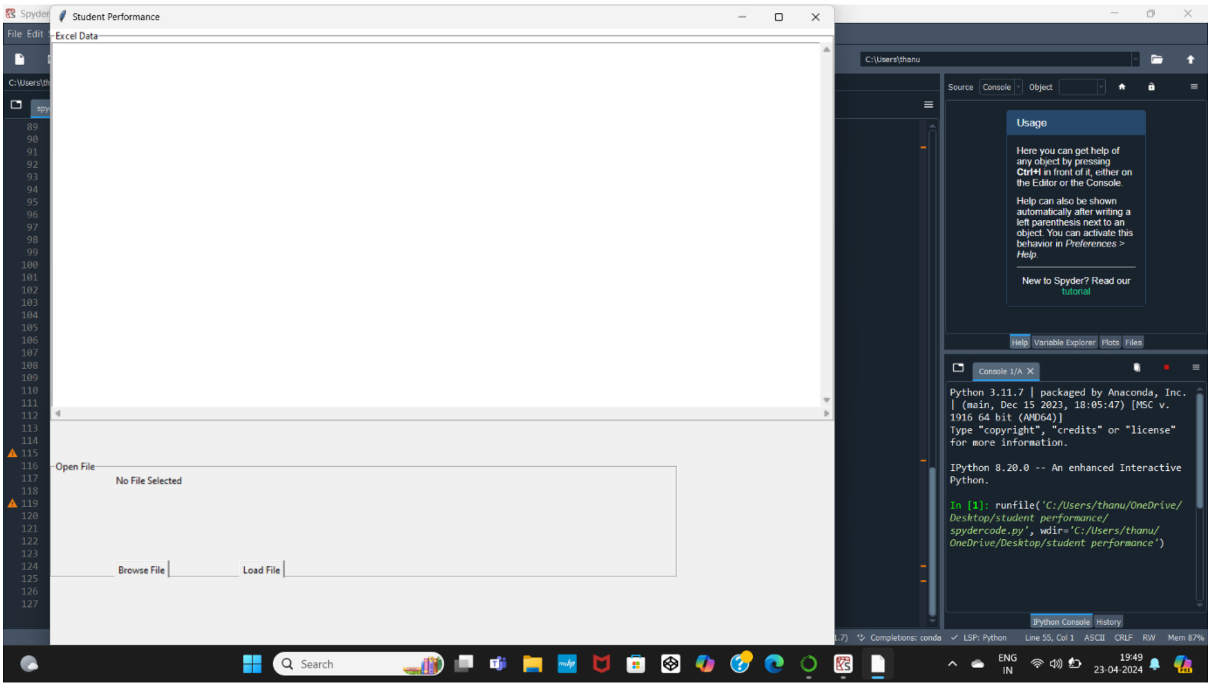
```
import tkinter
import tkinter as tk
from tkinter import filedialog,ttk
from tkinter import *
import numpy as np
import pandas as pd
from sklearn.linear_model import LogisticRegression
from sklearn.neighbors import KNeighborsClassifier
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score, f1_score
import sys
import warnings
if not sys.warnoptions:
    warnings.simplefilter("ignore")
lr = LogisticRegression(C=0.01, solver='liblinear')
root = tkinter.Tk()
root.geometry("1000x1000")
root.title("Student Performance")
root.pack_propagate(False)
root.resizable(2000, 2000)
dis_frame = tk.LabelFrame(root, bg='White', text="Excel Data")
dis_frame.place(height=500, width=1000)
inp_frame = tk.LabelFrame(root, text="Open File")
inp_frame.place(height=150, width=800, rely=0.65, relx=0)
# creating Buttons
butt1 = tk.Button(inp_frame, text="Browse File", command=lambda: File_upload())
butt1.place(rely=0.85, relx=0.10)
butt2 = tk.Button(inp_frame, text="Load File", command=lambda: Load_file())
butt2.place(rely=0.85, relx=0.30)
label= ttk.Label(inp_frame,text="No File Selected")
label.place(rely=0, relx=0.1)
t1 = ttk.Treeview(dis_frame)
```

```
t1.place(relheight=1, relwidth=1) # set the height and width
scrolly = tk.Scrollbar(dis_frame, orient="vertical",command=t1.yview)
scrollx = tk.Scrollbar(dis_frame, orient="horizontal",command=t1.xview)
t1.configure(xscrollcommand=scrollx.set,yscrollcommand=scrolly.set)
scrollx.pack(side="bottom", fill="x")
scrolly.pack(side="right", fill="y")
def File_upload():
    filepath = filedialog.askopenfilename(initialdir="/",title="Select input File",filetype=(("xlsx files",
"*.xlsx"), ("All Files", "*.*")))
    label["text"] = filepath
    return None
def Load_file():
    file_path = label["text"]
    try:
        excel_file = r"{}".format(file_path)
        if  excel_file[-4:] == ".csv":
            dframe = pd.read_csv(excel_file)
        else:
            dframe = pd.read_excel(excel_file)
    except ValueError:
        tk.messagebox.showerror("The file is invalid")
        return None
    except FileNotFoundError:
        tk.messagebox.showerror("File not found")
        return None
    clear_data()
    t1["column"]=list(dframe.columns)
    t1["show"] = "headings"
    for c in t1["columns"]:
        t1.heading(c, text=c) # let the column heading = column name
        df_rows = dframe.to_numpy().tolist() # turns the dataframe into a list of lists
        for r in df_rows:
            t1.insert("", "end",values=r)
    df=dframe
    df['school'] = df['school'].map({'GP': 0, 'MS': 1})
    df['sex'] = df['sex'].map({'M': 0, 'F': 1})
    df['address'] = df['address'].map({'U': 0, 'R': 1})
```

```
df['Facres'] = df['Facres'].map({'Poor': 0, 'Good': 1, 'Average': 2, 'Excellent':3})
df['activities'] = df['activities'].map({'no': 0, 'yes': 1})
df['nursery'] = df['nursery'].map({'no': 0, 'yes': 1})
df['higher'] = df['higher'].map({'no': 0, 'yes': 1})
df['internet'] = df['internet'].map({'no': 0, 'yes': 1})
df['passed'] = df['passed'].map({'no': 0, 'yes': 1})
# reorder dataframe columns :
col = df['passed']
del df['passed']
df['passed'] = col
data = df.to_numpy()
n = data.shape[1]
x = data[:,0:n-1]
y = data[:,n-1]
xtrain, xtest, ytrain, ytest = train_test_split(x, y, test_size=0.3, random_state=4)
lr.fit(xtrain, ytrain)
predictions = lr.predict(xtest)
res = "accuracy of logistic regression is: ", accuracy_score(ytest, predictions) * 100
label_file = tk.Label(inp_frame, text=res, font=("Arial", 15), relief=RAISED)
label_file.configure(bg="yellow", fg="blue")
label_file.place(rely=0.2, relx=0.2)
y=df.passed
target=["passed"]
x = df.drop(target,axis = 1 )
max_iteration = 3
maxF1 = 0
maxAccuracy = 0
optimal_state = 0
for k in range(max_iteration):
    split_state = np.random.randint(1,100000000)-1
    x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.3,random_state=split_state)
    KNN = KNeighborsClassifier()
    KNN.fit(x_train,y_train)
    y_pred=KNN.predict(x_test)
    f1 = f1_score(y_test, y_pred, average='macro')
    accuracy = accuracy_score(y_test, y_pred)*100
```

```
        if (accuracy>maxAccuracy and f1>maxF1):
            maxF1 = f1
            maxAccuracy = accuracy
            optimal_state = split_state
        optimal_state = 71027464
        x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.3,random_state=optimal_state)
        KNN= KNeighborsClassifier()
        KNN.fit(x_train,y_train)
        y_pred=KNN.predict(x_test)
        pred1 = pd.DataFrame(y_pred, columns=['prediction']).to_csv('testprediction.csv')
        f1 = f1_score(y_test, y_pred, average='macro')
        accuracy = accuracy_score(y_test, y_pred)*100
        res = "accuracy of KNN algorithm is: ", accuracy
        label_file1 = tk.Label(inp_frame, text=res, font=("Arial", 15), relief=RAISED)
        label_file1.configure(bg="dark green", fg="light green")
        label_file1.place(rely=0.4, relx=0.2)

def clear_data():
    t1.delete(*t1.get_children())

    return None
root.mainloop()
```

5.2 Results:



Student Performance

Excel Data

Open File

No File Selected

Usage

Here you can get help of any object by pressing **Ctrl+I** in front of it, either on the Editor or the Console.

Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in *Preferences > Help*.

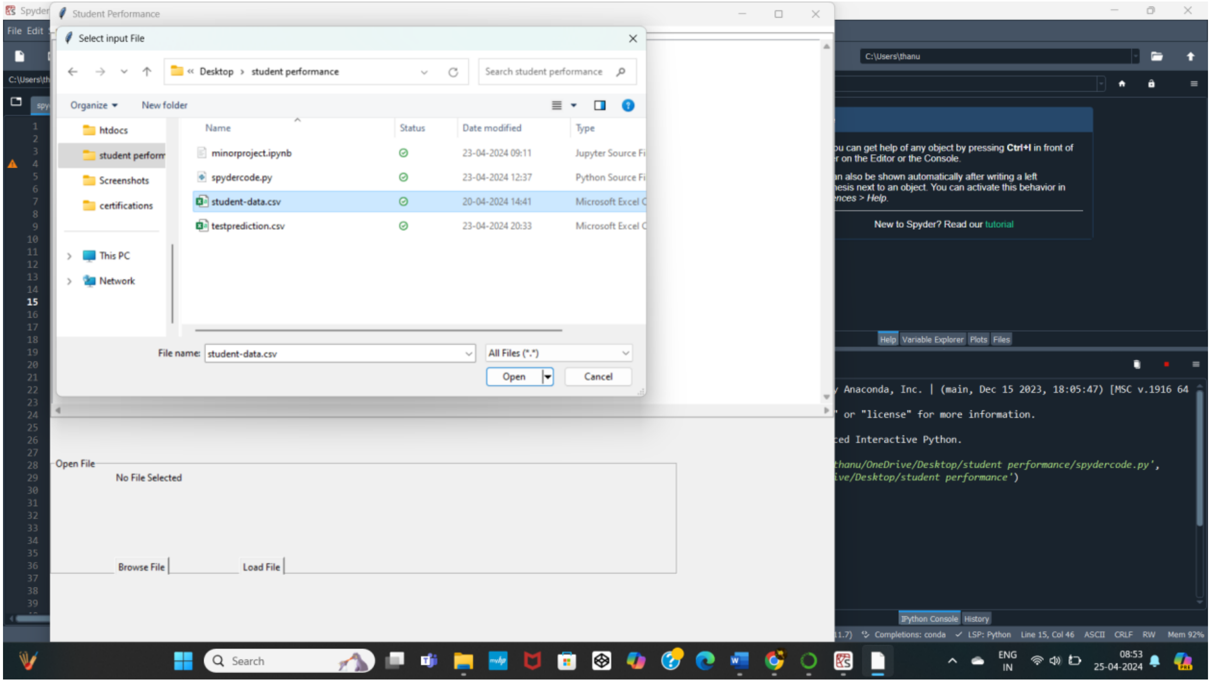
New to Spyder? Read our tutorial

```
Python 3.11.7 | packaged by Anaconda, Inc.
| (main, Dec 15 2023, 18:05:47) [MSC v.
1916 64 bit (AMD64)]
Type "copyright", "credits" or "license"
for more information.

IPython 8.20.0 -- An enhanced Interactive
Python.

In [1]: runfile('C:/Users/thanu/OneDrive/
Desktop/student performance/
spydercode.py', wdir='C:/Users/thanu/
OneDrive/Desktop/student performance')
```

C:\Users\thanu

Completions: conda ✓ LSP: Python Line 55, Col 1 ASCII CRLF RW Mem 87%

ENG IN 19:49 23-04-2024



Student Performance

Select input File

« Desktop › student performance

Name	Status	Date modified	Type
minorproject.ipynb	✓	23-04-2024 09:11	Jupyter Source Fi
spydercode.py	✓	23-04-2024 12:37	Python Source Fi
student-data.csv	✓	20-04-2024 14:41	Microsoft Excel C
testprediction.csv	✓	23-04-2024 20:33	Microsoft Excel C

File name: student-data.csv

All Files (*.*)

Open File

No File Selected

ou can get help of any object by pressing **Ctrl+I** in front of r on the Editor or the Console.

n also be shown automatically after writing a left hesis next to an object. You can activate this behavior in ences > Help.

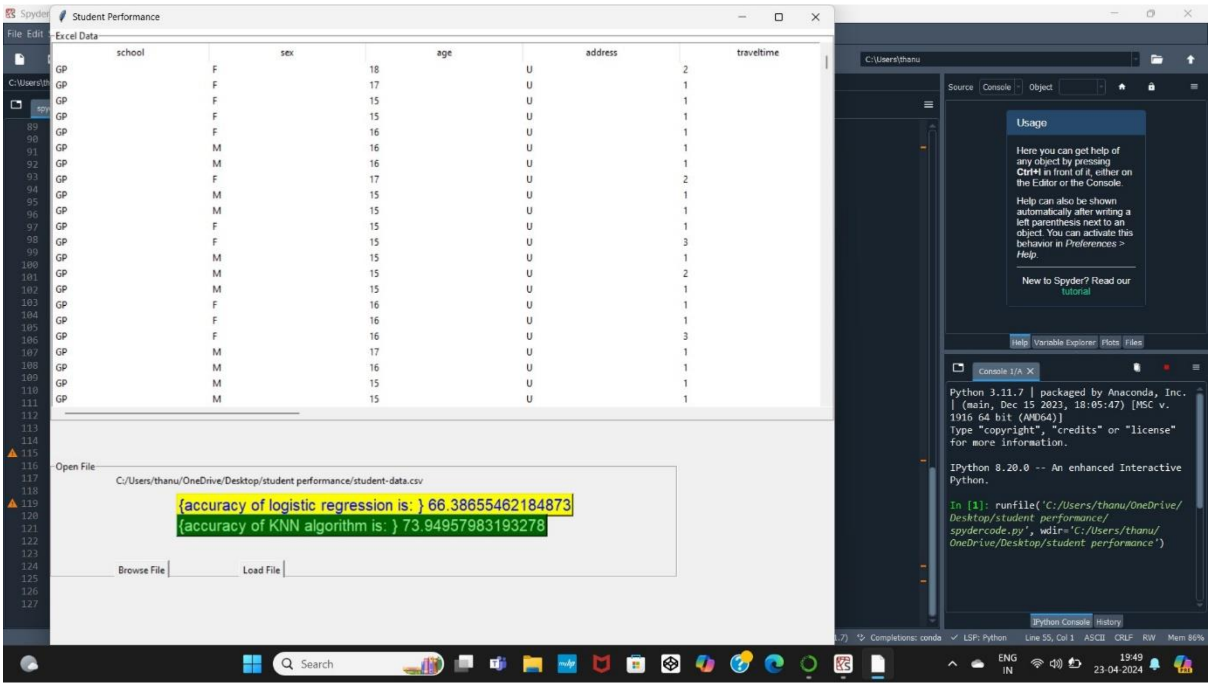
New to Spyder? Read our tutorial

```
Anaconda, Inc. | (main, Dec 15 2023, 18:05:47) [MSC v.1916 64
 or "license" for more information.

ced Interactive Python.

hanu/OneDrive/Desktop/student performance/spydercode.py',
ive/Desktop/student performance')
```

C:\Users\thanu

Completions: conda ✓ LSP: Python Line 15, Col 46 ASCII CRLF RW Mem 92%

ENG IN 08:53 25-04-2024



school	sex	age	address	traveltime
GP	F	18	U	2
GP	F	17	U	1
GP	F	15	U	1
GP	F	15	U	1
GP	F	16	U	1
GP	M	16	U	1
GP	M	16	U	1
GP	F	17	U	2
GP	M	15	U	1
GP	M	15	U	1
GP	F	15	U	1
GP	F	15	U	3
GP	M	15	U	1
GP	M	15	U	2
GP	M	15	U	1
GP	F	16	U	1
GP	F	16	U	1
GP	F	16	U	3
GP	M	17	U	1
GP	M	16	U	1
GP	M	15	U	1
GP	M	15	U	1

C:/Users/thanu/OneDrive/Desktop/student performance/student-data.csv

```
{accuracy of logistic regression is: } 66.38655462184873
{accuracy of KNN algorithm is: } 73.94957983193278
```

Usage

Here you can get help of any object by pressing **Ctrl+I** in front of it, either on the Editor or the Console.

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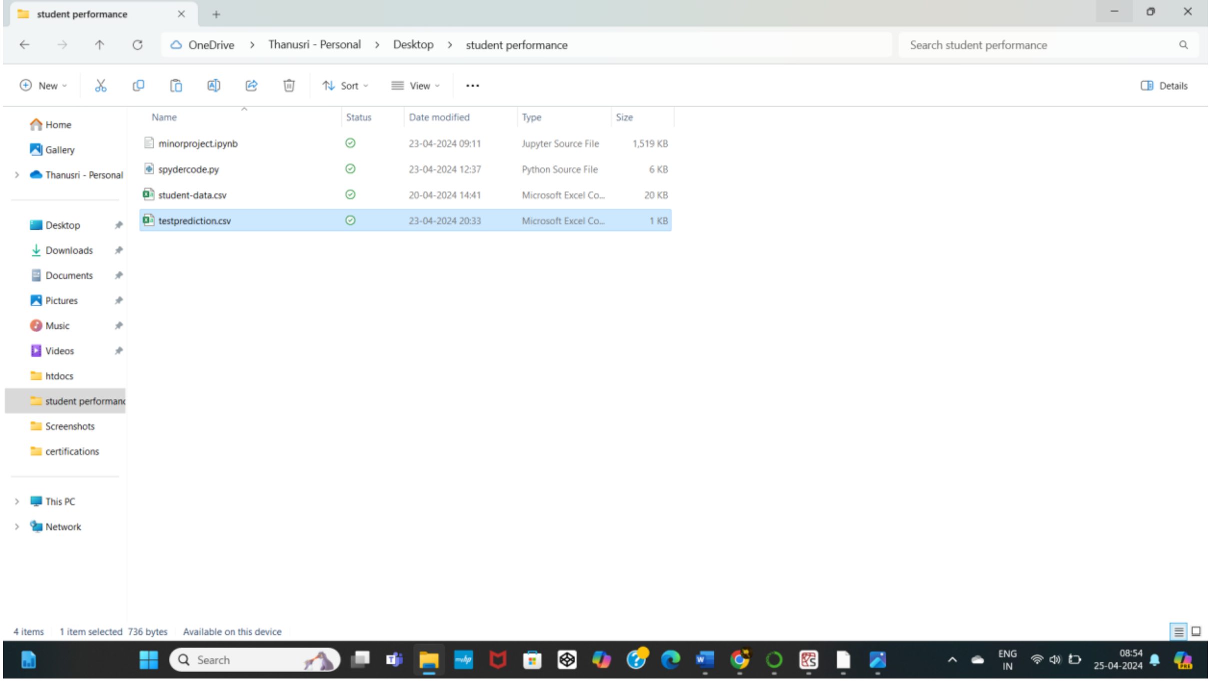
New to Spyder? Read our tutorial

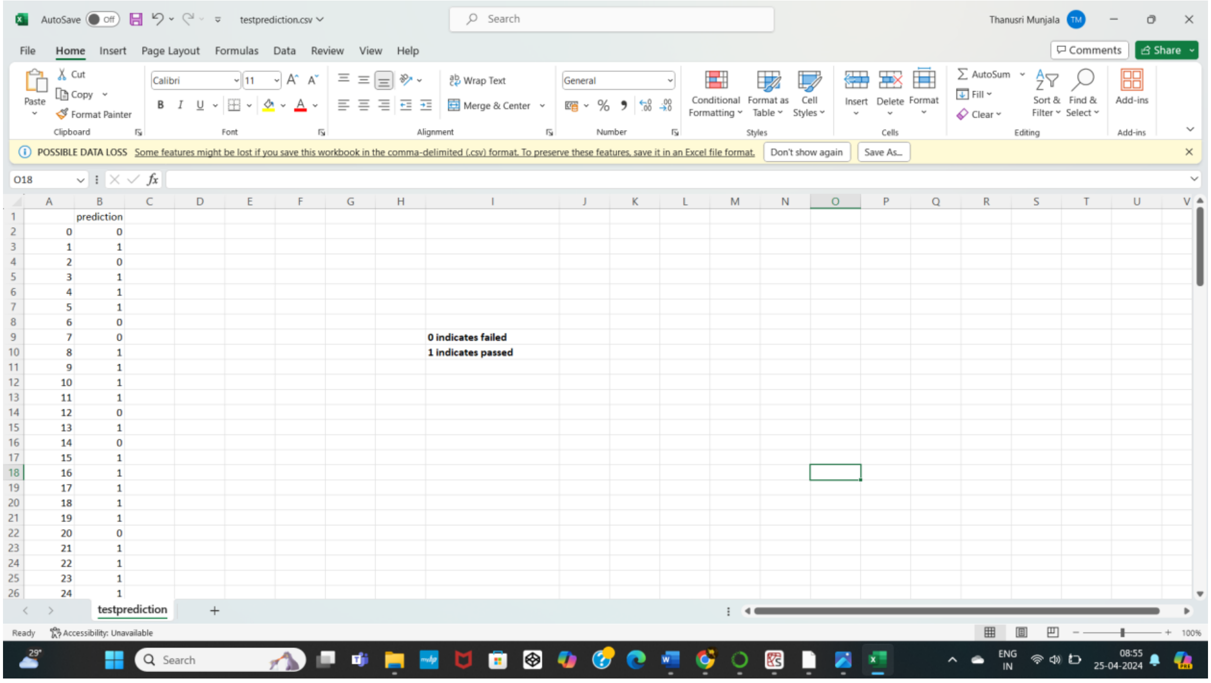
```
Python 3.11.7 | packaged by Anaconda, Inc.
| (main, Dec 15 2023, 18:05:47) [MSC v.
1916 64 bit (AMD64)]
Type "copyright", "credits" or "license"
for more information.

IPython 8.20.0 -- An enhanced Interactive
Python.

In [1]: runfile('C:/Users/thanu/OneDrive/
Desktop/student performance/
spydercode.py', wdir='C:/Users/thanu/
OneDrive/Desktop/student performance')
```

Test cases:



Name	Status	Date modified	Type	Size
minorproject.ipynb	✓	23-04-2024 09:11	Jupyter Source File	1,519 KB
spydercode.py	✓	23-04-2024 12:37	Python Source File	6 KB
student-data.csv	✓	20-04-2024 14:41	Microsoft Excel Co...	20 KB
testprediction.csv	✓	23-04-2024 20:33	Microsoft Excel Co...	1 KB

4 items 1 item selected 736 bytes Available on this device



POSSIBLE DATA LOSS Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format. Don't show again Save As...

	prediction
0	0
1	1
2	0
3	1
4	1
5	1
6	0
7	0
8	1
9	1
10	1
11	1
12	0
13	1
14	0
15	1
16	1
17	1
18	1
19	1
20	0
21	1
22	1
23	1
24	1

0 indicates failed

1 indicates passed

6. CONCLUSION

The purpose of the system is achieved and difficulties are answered. “Student Performance with Graph & Academic Project Work Reporting System ". Python design satisfies all the conditions of scholars in searching the systems and chancing details about his or her attendance and marks. This design also satisfies the demands of admin in adding all the details of the design and he can fluently find the progress of student's attendance and marks.

7. FUTURE SCOPE

In the past, data had to be manually entered in order to analyze the results. However, the project currently allows data extraction from Excel (.xlsx) files.The prospective range is the ability to retrieve and process data in various forms, including doc, csv ,etc. Data can be visually represented in a graphical format through visualization. a variety of representations, including graphs and pie charts.