

Phishing Identification and Decision Support System (PIDSS)

The PIDSS Project:

The Phishing Identification and Decision Support System (PIDSS for short) is a tool developed as part of the Master Workforce Internship 2023. This tool was made to help with identifying Phishing emails by properly scanning for commonly known strategies and has an easy to understand Interface where users can see the "Phishing Percentage" based on how likely it is to be a Phishing attack. We hope to bring an easy to use and viable tool for users to detect, prevent and help identify one of the most common cyber attacks known.

Mentor:

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Developers:

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Python Setup:

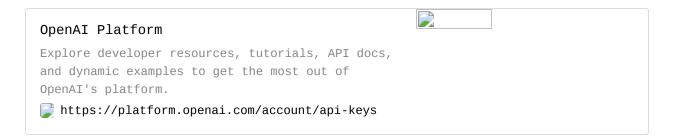
 To get started with the Project we will first need to download the latest version of Python at NOTE: make sure to add Python to path:

Download Python The official home of the Python Programming Language https://www.python.org/downloads/

- After Python is installed, head over to Visual Studio code and make sure to download the "Python" and "Pylance" extensions.
- Once the extensions are Installed, head over to the "Source Control" section at left sidebar, it should be the third icon shown. There we will clone the GitHub repository "PIDSS" which should have all the necessary files to start working on the project.

Chat GPT API and OpenAI package Setup:

- Login to the OpenAI platform using the project credentials:
- To set up the OpenAI Chat GPT API, we need to first sign up for OpenAI and obtain our API key:



Gradio Package setup:

• For a quick test, we need to run the code below which is a "Hello World" using gradio:

```
import gradio as gr

def greet(name):
    return "Hello " + name + "!"

demo = gr.Interface(fn=greet, inputs="text", outputs="text")

demo.launch()
```

 Once gradio is all set up, please read the documentation to further explore the different methods for gradio GUI creation:

Gradio Interface Docs



Interface is Gradio's main high-level class, and allows you to create a web-based GUI / demo around a machine learning model (or any Python function)

https://www.gradio.app/docs/interface

How to get the Development Enviornment set up:

To get started with PIDSS development, make sure to clone the current repository:

https://github.com/nordiel/PIDSS

After the repository is cloned, open the folder inside Visual Studio Code (or the code editor of your choice) and initialize a python virtual enviornment inside the reporitory folder. To initialize a python virtual enviornment, run the following command inside the repository directory:

python3 -m venv .venv

or

python -m venv .venv

Once the virtual enviorment is initialized, to get all the required packages for our project, make sure to have the "requirements.txt" file in the repository folder and run the following command:

```
pip3 install -r requirements.txt

or
pip install -r requirements.txt
```

Make sure your python enviornment is activated correctly. If not, use the command:

```
#Mac
source .venv/bin/activate

#Windows
.venv\Scripts\activate
```

Last but not least, create a .env file where we can define our enviornment variables. In this case, we will be defining our OpenAI API key. Your .env file should follow the correct naming conventions and look like this:

```
API_KEY='your API key here'
```

NOTE: Make sure to create a .gitignore file and include both the .env file and .venv folder as well as any other sensitive information.