

# ◆ Project Title: Phishing Email Detector

## 1. Introduction:





Phishing remains one of the most common cyber threats, where attackers impersonate trusted organizations to steal sensitive information such as passwords, banking details, or personal data. This project focuses on building a Phishing Email Detector that analyzes suspicious emails based on keywords and URLs.

## 2. Abstract:

The aim of this project is to design a simple yet effective Python-based phishing detection tool. By analyzing the contents of emails, such as keywords (e.g., “urgent,” “verify,” “account”) and suspicious URLs (e.g., fake login links), the tool determines whether the email is legitimate or phishing.

This enhances user awareness and helps in preventing social engineering attacks.

## 3. Tools Used:

- i.  Python 3
- ii.  Colorama (for colorful CLI output)
- iii.  OS & DateTime modules (for report saving)
- iv.  Kali Linux / Windows 11 (execution environment)

## 4. Steps Involved in Building the Project:

### 1. Environment Setup:

- Created a virtual environment and installed required libraries (colorama, tldextract).



## 2. Email Analysis Logic:

- Implemented functions to scan for phishing keywords.
- Checked for suspicious URLs and domains.

## 3. Report Generation:

- Output displayed in a well-formatted CLI interface.
- Results saved automatically in a folder with date & time as filename.

## 4. Testing:

- Tested with two emails:
-  Safe Email → Marked as Legitimate.
-  Phishing Email → Detected as Phishing with highlighted keywords and URLs.

## 5. Conclusion:

This project demonstrates how a simple AI-assisted tool can effectively help users identify phishing attempts. While not a replacement for enterprise-grade email security, it serves as an excellent awareness tool for interns, students, and individuals.

By combining automation, keyword analysis, and URL verification, this project highlights the importance of cybersecurity awareness in day-to-day email usage.

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