Design and Implementation of a Web-Based Intelligent Scam and Phishing Detection System Using Rule-Driven Risk Scoring

Asiya S. Khan[1], Monika G. Manapure[2], Prof. Rahul Lilhare[3]
Department of Computer Application[1,2,3]
KDK College of Engineering, Nagpur, India
asiyaskhan.mca24f@kdkce.edu.in, monikagmanapure.mca24f@kdkce.edu.in, rahul.lilhare@kdkce.edu.in

Abstract: *The rapid expansion of digital communication platforms has led to a significant increase in scam and phishing attacks. Cybercriminals use deceptive messages, fraudulent links, and social engineering strategies to exploit users and extract sensitive information. This paper presents the design and implementation of a web-based intelligent scam and phishing detection system developed using Python for backend processing and HTML, CSS, and Bootstrap for frontend development. The proposed system employs a rule-driven risk scoring mechanism combined with logical inference techniques to analyze user-input messages and detect potential threats. Suspicious indicators such as sensitive keywords, urgency triggers, and shortened URLs are evaluated to compute a cumulative risk score. Based on this score, the system classifies content as Safe, Suspicious, or Scam. The system also provides reason generation, scam category identification, safety recommendations, encrypted data storage, and historical record management. The implemented solution enhances cybersecurity awareness and assists in proactive fraud prevention.*

Keywords: Scam Detection, Phishing Detection, Risk Scoring System, Rule-Based Detection, Cyber Security, Web Application

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/IJARSCT-31285

608

ISSN
2581-9429
IJARSCT