Project Proposal

Topic: Phishing Detector

A Software that helps identify and prevent phishing attacks. It does this by analyzing and detecting signs that a message or website might be a phishing attempt, such as the presence of a suspicious URL, mismatched domains, or the use of known phishing tactics, and also with the integration of human intuition from the user feedback. This also gives updates about the latest phishing attacks and creates awareness among the people.

Scope: The main objective of this project is to effectively detect and prevent phishing attacks with advanced machine-learning models and AI techniques for accurately identifying and stopping phishing attempts. The scope of phishing detectors in the present world is still significant, despite the limitations of their false negatives. Phishing remains a major threat to individuals and organizations as phishing attacks evolve and become more sophisticated. As such, phishing detectors are an essential tool for protecting against these attacks in the present world. While false negatives can occur, phishing detectors can still effectively reduce the risk of falling for phishing attacks with advanced AI techniques.

It's very easy to use and understand with the proper alerts and warnings which helps to improve the security of users and gives a better understanding of attempts. There is great scope for this software to integrate with email security systems and extensions of browsers for a better understanding of the attempts and lead to a comprehensive solution. We can develop some advanced features to add custom rules and filters or adjust the level of security provided in the software which helps in better user security awareness and leads to better security.

Milestones: (Tentative)

Starting this week

Week 4: Literature review

Week 5: Usability Studies

Week 6: Storyboards, surveys, reviews

Week 7: Improving based on feedback

(Poster presentation)

Week 8: Datasets collection, Analysis of existing tools

Week 9: Preparing required prototypes (LowFi, HiFi) and further literature review upon the requirement

Week 10: Base model implementation

Week 11: Implementation of other models to outperform the base model.

Week 12: Working on the prototype (Phase 1)

Week 13: Working on the prototype (Phase 2)

Week 14: Conducting surveys and implementing features based on the feedback

Till final Presentation: Preparation of software