מיני פרוייקט בנושאים מערכות הגנה לרשת

מגישים:

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Project scope:

System Description and Requirements: The project aims to develop a Chrome extension that detects phishing websites. The extension will utilize several detection mechanisms, including user-submitted ratings, geographic server location analysis, and DNS back-resolution checks. The system will include a user-friendly interface for submitting and viewing website ratings, and a background process that conducts security checks in real-time.

Objectives: The primary goal is to create a Chrome extension that enhances user safety while browsing by identifying potential phishing websites. Specific measurable outcomes include successfully flagging phishing websites based on suspicious characteristics, collecting and displaying user feedback, and achieving a high detection accuracy rate without significantly impacting browsing speed.

Challenges and Risks: Some potential challenges include ensuring the accuracy of phishing detection and minimizing false positives. Additionally, gathering sufficient user data for website ratings might take time. The risk mitigation strategies include using reliable third-party APIs, regularly updating detection algorithms, and testing thoroughly to improve detection accuracy

Assumptions: It is assumed that users will contribute to the rating system, which will improve the extension's accuracy over time. Additionally, it is assumed that reliable geolocation and DNS APIs are available for server checks. Since user rating tends to be unreliable we need to balance that with objective criteria.

Work Documentation: The project will be documented in detail, including system architecture, user instructions, and technical aspects. This documentation will be updated throughout the project and included in the final report.

Project Timetable and Milestones:

- Research on Filtering Mechanisms and Chrome Extension Development (Week 1)

- Develop the Chrome extension and an API to Receive URLs and Return Ratings (Week 2)

- Integrate Objective Filtering Mechanisms (Domain Age, Server Location, DNS Back-Resolution) (Week 3)

- Build the Database (Week 4)

- Integrate User Ratings (Week 5)

- Develop User Interface (Week 6)

- Final Testing, Review, and Documentation (Week 7)