Detection of Malicious Links within the Scope of Web Security Using Machine Learning

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Abstract:

In the current digital age, the widespread use of the internet has made websites an indispensable aspect of daily life for many individuals. Nevertheless, some of these websites may contain malicious links that pose serious security risks to users. Therefore, web security and the detection of malicious links have become pivotal issues in contemporary information security research. This project aims to provide an effective solution for protecting websites against malicious links and ensuring user safety. The main objective is to develop a tool that allows users to verify the security status of a given website. This tool will take a website URL as input, initially assessing whether it is listed among known malicious sites, followed by employing a machine learning model to further evaluate its safety. The primary focus areas of this project include web security, detection of malicious links, applications of machine learning, and the development of a user-friendly interface. This study demonstrates the potential of leveraging advanced technologies in cybersecurity to enable users to navigate the internet safely.

Keywords:

Web Security, Malicious Link Detection, Machine Learning, Information Security, URL Safety Evaluation.