



Cybersecurity Essentials Training Platform

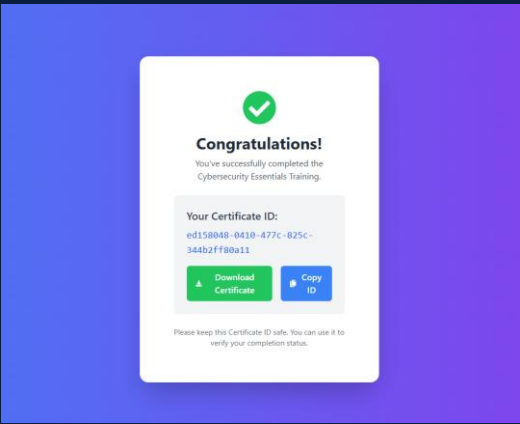
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PROBLEM

In today's fast-changing digital environment, organizations face an unprecedented surge in cyber threats that are growing in both scale and complexity. These attacks are no longer confined to large corporations; small and medium-sized businesses are equally vulnerable. The consequences of breaches can be devastating, leading to financial losses, operational disruptions, exposure of sensitive data, and erosion of stakeholder trust. Despite the escalating risks, many organizations struggle to ensure their employees are adequately prepared and aware of cybersecurity best practices. A lack of customized training and reliance on outdated approaches has left significant security gaps. To address these challenges, the Cybersecurity Essentials Training Platform was created to build a culture of resilience by empowering employees with the knowledge, skills, and confidence to safeguard their organizations against evolving cyber threats.

SYSTEM DESIGN

This web app features a user-friendly and intuitive design, making it accessible to users of all technical skill levels. It offers a series of interactive modules aimed at enhancing cybersecurity literacy, providing practical knowledge that can be directly applied in professional settings. Each module focuses on key areas of cybersecurity, such as social engineering, where users learn to identify and avoid tactics like phishing, pretexting, and baiting. The password management module educates users on creating and maintaining strong, secure passwords while introducing tools like password managers to improve security. The secure browsing module provides guidance on protecting online activities, emphasizing the importance of HTTPS, the use of VPNs, and keeping software updated with the latest patches. Together, these modules empower users to adopt best practices and proactively safeguard their digital environments.



IMPLEMENTATION

The training platform is a React-based web application designed to provide an interactive and engaging learning experience. Users can access various modules, answer questions, and track their progress throughout the training program. The platform leverages React's powerful features to ensure smooth navigation and a dynamic interface. The landing page serves as an intuitive entry point, guiding users to explore the available modules. Each module is crafted with an emphasis on user engagement, offering scenarios, quizzes, and tips to deepen understanding of cybersecurity principles. Upon successful completion of all modules, users can access the Certificate page, which not only displays their achievement but also provides an official certification that can be downloaded or shared with employers. The platform is designed to be mobile-responsive, ensuring accessibility across devices and promoting flexible learning. Furthermore, React's component-based architecture enables seamless updates and scalability, making the platform a future-proof solution for continuous cybersecurity education.

SUMMARY

The increasing volume of online traffic underscores the critical need for cybersecurity awareness to protect against malicious activities. Employers must take proactive measures to educate their employees on safe cybersecurity practices to minimize the risk of breaches that could result in financial losses and damage to their reputations. Similarly, individuals must enhance their cybersecurity knowledge to recognize deceptive attempts, particularly in workplace environments. To address this, a React-based web application has been designed to provide cybersecurity training through interactive and user-friendly modules. These modules cover essential topics, including social engineering, password management, and secure browsing. The Social Engineering Module focuses on common tactics such as phishing, pretexting, and baiting, offering interactive questions to help users identify and avoid these threats. The Secure Browsing Module provides guidance on protecting online activities by using HTTPS, VPNs, and keeping software up to date. The platform features a landing page that introduces the training program and modules, along with a certification page. Users who successfully complete all the modules receive a certificate that can be shared with employers as proof of their training. Leveraging React's dynamic features, the platform ensures an engaging learning experience while helping users develop cybersecurity skills applicable to their professional lives.

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ACKNOWLEDGEMENT

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