

ARTIVERSE 2.0

Team Name: Bio-med Girls

Theme : Al for Stronger Passwords and Safer Online Security

Title : Al-Powered Password Strength Checker for Enhanced

Online Security

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ABSTRACT

Passwords are one of the most common ways to protect our personal information online but weak passwords can leave us vulnerable to hackers and security threats. Many people create passwords that are too simple, short, or easy to guess. This project focuses on developing an AI-powered Password Strength Assessment tool that helps users understand how secure their passwords are and how to make them stronger. The tool works by analyzing the password's features such as its length variety of characters, and how predictable it is. It uses smart algorithms and data to identify common weak passwords. If a password is weak the tool provides clear, helpful suggestions to strengthen it. For example, it may recommend adding special characters, making the password longer, or avoiding common patterns. This tool is easy to use and aims to help people create safer passwords to protect themselves from cyber threats such as hacking and data theft. By making password security easy and accessible it helps users take an important step toward better Online Safety.

KEYWORDS: ➤ Online Safety ➤ Password Strength Assessment ➤ Data Protection ➤ Hacking Prevention ➤ Digital Security PROGRAMMING LANGUAGES & TOOLS: Python Python (Core development) □ **zxcvbn** (Password strength analysis)