

IMPROVING PASSWORD
HABITS THROUGH
GAMEPLAY

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The background features a light peach color with a large white rectangle in the center. A thick black L-shaped line frames the top and right sides of this white rectangle. Inside the white rectangle, there is a smaller peach-colored rectangle containing the text. The bottom-left corner of the overall image is a solid red triangle. The top-right corner has a pattern of small black dashes on a peach background.

WHY DO WE NEED
THAT?

INTRODUCTION

- Cyber threats rising due to poor password practices among internet users
- Weak, reused, compromised passwords leading to data breaches



PROBLEM STATEMENT



POOR PASSWORD HABITS A
MAJOR VULNERABILITY FACTOR



RESEARCH QUESTION: CAN A FUN,
GAME-LIKE WEB APP PROMOTE
BETTER PASSWORD HABITS?

PROPOSED SOLUTION



Develop engaging, game-like password checking web applications



Use gameplay elements to make security education interactive

GOAL OF STUDY



Test if game-like password apps improve adoption of:



Strong passwords



Unique passwords

METHODOLOGY

Develop

Develop variety of game-like password checkers

Recruit

Recruit study participants to use apps over time period

Survey

Survey users on password habits before and after

Analyze

Analyze if improved habits in using strong and unique passwords

NECESSARY TOOLS

- HTML
- CSS
- JavaScript
- Node.js
- PHP

REFERENCE

- [How weak passwords could put your organization at risk | TechRepublic](#)
- [How Gaming May Boost Memory \(brainandlife.org\)](#)
- [How hackers exploit your weak password. | by Todd Ward, PhD | Medium](#)

