Graphical filters to protect password input

Bachelor Thesis

Recent work has shown that using graphical filters to distort the user's text passwords (instead of replacing them with asterisks) helps them edit passwords faster. This is because when a user examines a distorted version of their own input, it is easy to map the distorted characters to the password's characters. However, for an observer, it is often difficult to reverse the distortions in their mind.

The aim of this project is to extend over the previous work by conducting a large-scale study to investigate whether or not the filters 1) help people recognize typos in their passwords (e.g. by inducing errors into their distorted passwords), and 2) impact user’s input speed, and 3) impact observation resistance of the passwords.

Tasks:

- Build the application
- Conduct a large-scale survey
- Evaluate the data
- Analyze the results

Requirements:

- Web development, including front-end development using Javascript

Contact:

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