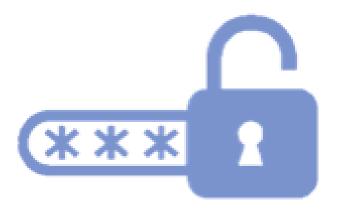
Bauhaus-Universität Weimar

RANDOM PASSWORD GENERATOR

<u> Hand-over II – Project Document</u>



Software Engineering Summer Semester 2024

Group F

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INTRODUCTION. -

This document presents the results and conclusions reached during the stakeholder meeting for the further development of the Random Password Generator program. [Group "X" in charge of the delivery - Group "F" as recipient of the work]. This document will present the analysis of the requirements to be implemented and the extra requirements requested by the delivery group. More information about the results can be found in the "Maintenance" document.

REQUIREMENTS ANALYSIS:

1. Future Implementation Group X - Implement Security Best Practices Tips: Recovered from conversation group X:

"Focus on implementing <u>security best practices</u> such as avoiding_hard coded passwords, protecting user data, an<u>d following secure coding guidelines</u>. Regularly review and update the application to ensure it adheres to the latest. Security standards and practices."

Ambiguity: "Security best practices". It is not specified what tool or techniques are desired to achieve this objective (whether they want a system of tips for the user or to implement a Standard when generating passwords).

Impression: "following secure coding guidelines". It is not specified which standard we should follow to advise the user.

2. Benefit 2 of Description program and Requirement 6 – Easy to use: Recovered from conversation group X:

<u>"Support multiple languages</u> to make the application more user-friendly for non-English speakers. Improve accessibility by ensuring compatibility with screen readers and <u>providing</u> <u>keyboard shortcuts for users with disabilities."</u>

Ambiguity: "Support Multiple Languages". The number of languages and the languages to be added are not specified.

Incompleteness: "Keyboard shortcuts for users with disabilities". The type of disability to be supported is not specified, it is considered that the system is simple enough to be used for users with low and medium disabilities, and for higher range they need external support.

3. Benefit 4 of Description of Program - No Need to Remember:

"Since you don't need to <u>remember the generated passwords</u>, you can focus on using them securely."

Ambiguity: "Remember Password". It is not specified why the password should not be remembered (will a database or a saving mechanism be used?).

Incompleteness: Nowhere was it stated that a password storage system must be created or if the user will have to write down passwords on paper.

Because a system to store the information is not specified anywhere in the description as a requirement. We as group F proposed as a new feature the implementation of a password saving system.

SUMMARY OF PREVIOUS HANDOVER MEETING. -

During the meeting with group X, the doubts regarding the requirements (ambiguities, incomplete or imprecise) were discussed. And the following was concluded.

- Improvement of the GUI: The actual GUI was not very user friendly and don't provide much visual effect about the strength of the password or personalization for colors. It was commented that the interface is somewhat basic and not very attractive, we proposed the option of improving it with logos, better colors, and distribution. Group "X" accepted this issue.
- Implemented language support for a number of languages: Focusing in improving the
 accessibility and easy use of the program we discussed with group X the number of
 languages to be implemented, it was established that the number should be 2, and Spanish
 and German were chosen.
- Security Standards: Group "X", commented that they want is a way to advise the user on good habits to improve the use of their passwords. So, we proposed a new interface with tips for the user.
- Password storage: We proposed to Group "X" the idea of creating a file that can be accessed
 in the program to see the passwords and to which program it belongs. Group "X" liked the
 idea.

Current Implementations:

- Generate passwords with user-specified length.
- Include options for lowercase, uppercase, numbers, and special characters.
- Copy to clipboard functionality.
- Password strength measurement.
- Visual feedback for password strength.
- User-friendly interface for password generation.
- Secured password generation.
- Improvement of the GUI making it more intuitive.
- Implementation of language support for multiple languages.
- Security Tips Extra GUI for Safety Tips.
- Storage System for passwords.
- Login System for Individual User

Future Implementations:

- Accessibility: Implementation of additional languages such as Arabic and Bangla consistent with the interface [Improvement].
- Password Storage: Connect the login system to the password storage system so that the user can access only their passwords [New Feature].

• Secure Text Files: Research how to make the text files more secure because anyone can open these text files [New Feature].
More info about this implementation/maintenance in maintenance.pdf.