



PASSWORD GENERATER

18.01.2025

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Section (A)



1. Introduction

Purpose:

- This project aims to create a program that generates secure and unique passwords.

Scope:

- Users will be able to easily generate strong passwords according to their requirements, such as the desired length and types of characters (letters, numbers, special characters).

Audience:

- This document is intended for developers and users to better understand the project.

2. Functional Requirements

- The user will input the desired password length
- The user can select:
 - Only alphabets (A-Z, a-z).
 - Include numbers (0-9).
 - Include special characters (!, @, #, etc.)
- The generated password will be displayed to the user.
- The user can regenerate the password.

3. Non-Functional Requirements

- The program should be fast and provide immediate responses.
- The user interface should be simple and easy to understand.
- The generated passwords must be secure and unique.

4. System Requirements

Software:

- C++ programming language.
- Any text editor or IDE (e.g., Visual Studio or Code::Blocks).

Hardware:

- At least 2GB RAM.
- 1GHz processor.

5. Assumptions and Constraints

- The user will only select a reasonable password length (e.g., 8 to 20 characters).
- The program is designed for a single user (not a web application).

6. Use Case Example

Actor: User.

Steps:

1. The user opens the program.
2. The user selects the password length and types of characters.
3. The user clicks "Generate."
4. The program displays a password.