pkg

## Alphabet

- + UPPERCASE\_LETTERS : String = "ABCDEFGHIJKLMNOPQRSTUVWXYZ" {readOnly}
- + LOWERCASE LETTERS: String = "abcdefghijklmnopgrstuvwxyz" {readOnly}
- + NUMBERS : String = "1234567890" {readOnly}
- + SYMBOLS : String =  $"!@#$%^&*()-_ = + \/~?"$  {readOnly}
- pool : StringBuilder {readOnly}
- + Alphabet(uppercaseIncluded : boolean, lowercaseIncluded : boolean, numbersIncluded: boolean, specialCharactersIncluded: boolean): void
- + getAlphabet(): String

## GeneratorTest

- password : Password {readOnly}
- firstAlphabet : Alphabet {readOnly}
- secondAlphabet : Alphabet {readOnly}
- generator : Generator {readOnly}
- + test1(): void
- + test2(): void
- + test3(): void
- + test4(): void
- + test5(): void

Main

- + keyboard : Scanner {readOnly}
- + main(args : String[]) : void

Generator

- alphabet : Alphabet
- + keyboard : Scanner
- + Generator(scanner : Scanner) : void
- + Generator(IncludeUpper: boolean, IncludeLower: boolean, IncludeNum:

boolean, IncludeSym: boolean): void

- + mainLoop(): void
- GeneratePassword(length: int): Password
- printUsefulInfo(): void
- requestPassword(): void
- isInclude(Input : String) : boolean
- PasswordRequestError(i : String) : void
- checkPassword(): void
- printMenu(): void
- printQuitMessage(): void

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## **Password**

- Value : String
- Length: int

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- + Password(s : String) : void
- + CharType(C : char) : int
- + PasswordStrength(): int
- + calculateScore(): String
- + toString(): String