Object Oriented Programming (Java)

Password Validator program

This Java program prompts the user to input a password and validates it based on certain criteria. It checks if the password length is between 8 and 16 characters, and if it contains at least one lowercase letter, one uppercase letter, one digit, and one special character from the predefined set. If the password meets these requirements, it is considered valid; otherwise, it is considered invalid.

Code:

import java.util.Scanner;

public class PasswordValidator

{

public static void main(String[] args)

{

Scanner scanner = new Scanner(System.in);

System.out.println("Enter the password: ");

String password = scanner.nextLine();

scanner.close();

if(ValidPassword(password))

{

System.out.println("The password is valid.");

}

else

{

System.out.println("The password is invalid.");

}

}

public static boolean ValidPassword(String password)

{

if (password.length() < 8 || password.length() > 16)

{

return false;

}

boolean LowerCase = false;

boolean UpperCase = false;

boolean Digit = false;

boolean SpecialCharacter = false;

for(char c : password.toCharArray())

{

if(Character.isLowerCase(c))

{

LowerCase = true;

}

else if(Character.isUpperCase(c))

{

UpperCase = true;

}

else if(Character.isDigit(c))

{

Digit = true;

}

else

{

SpecialCharacter = true;

}

}

return LowerCase && UpperCase && Digit && SpecialCharacter;

}

}