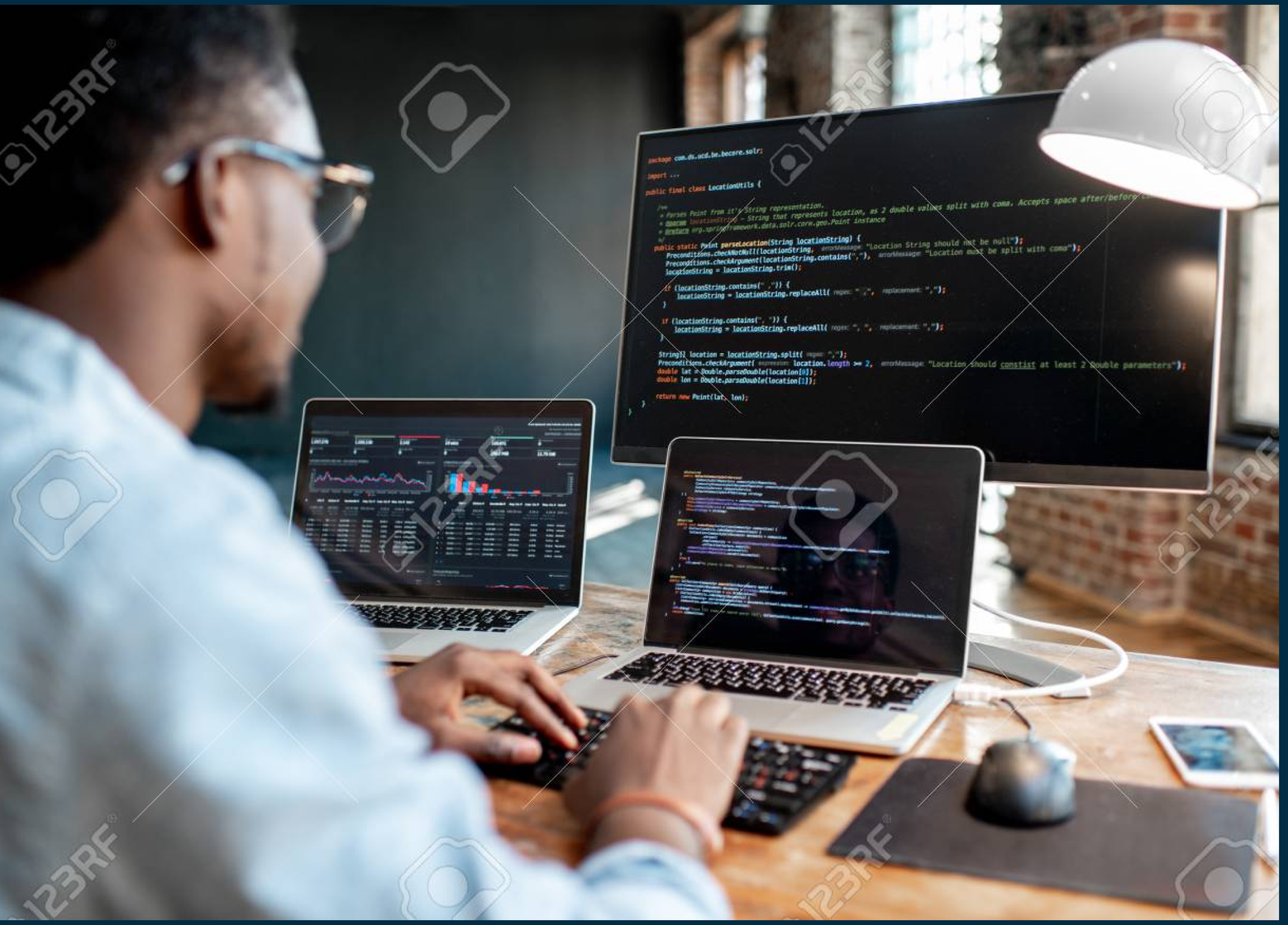


PASSWORD GENRATOR

Presented by AFROJ ALAM.

ABOUT..

A password generator is a software tool that creates random or customized passwords for users. It helps users create stronger passwords that provide greater security for a given type of access.Password generators typically use algorithms to create random passwords based on a combination of characters, numbers, and symbols. The length of the password and the type of characters used can be customized to meet specific security requirements.

RELATED METHODOLOGY

Random Generation

Password Length

Avoiding Common
Words and Patterns

Secure Hashing

Offline Generation

Understanding the Concept of developing a Random Password Generator

Step 1: First of all, we will create a string or list containing all the alphabets (both in small and capital letters), numbers, and symbols

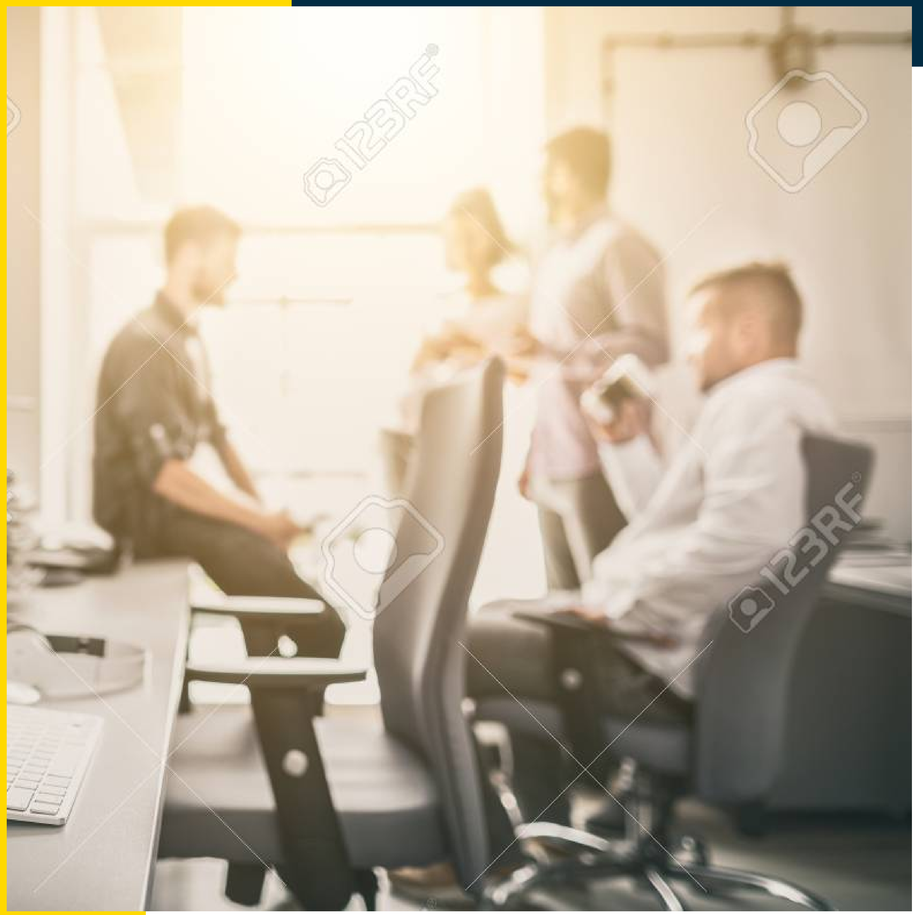
Step 2: Secondly, we will accept the length of the required password as input from the user

Step 3: At last, we will use a loop iterating from 0 to the length of the password, and in every iteration, we will randomly select a letter from the set of letters defined above and store them into a resultant password.

Sample Output

Suppose the user inputs the length of the required password as 8; then one of the randomly generated passwords will appear as shown below:

Output: A randomly generated Password is: JBXY}K2U*>ird]7



UNDERSTANDING

THE REQUIREMENTS OF THIS PROJECT

In order to build a Random Password Generator in Python, we will require a good understanding of Programming in Python, such as the working of operators, loops, and functions. We will also use some data structures such as strings, lists, and more.

Some of the most important methods of the random module are randint(), sample(), seed(), choice().

Steps to Build the Random Password Generator in Python

Step 1: Firstly, we will import the required modules.

Step 2: We will define a function to generate a password using all alphanumeric characters.

Step 3: We will update the program to accept the password length as the user input.

Step 4: We will update the program again to generate multiple passwords.

Step 5: Finally, we will integrate Graphical User Interface (GUI) in the Password Generator using Tkinter.

PYTHON CODE FOR PASSWORD GENERATOR

```
IMPORT RANDOM
IMPORT STRING
DEF GENERATE_RANDOM_PASSWORD(LENGTH=12):
CHARACTERS = STRING.ASCII_LETTERS + STRING.DIGITS +
STRING.PUNCTUATION
PASSWORD = ''.JOIN(RANDOM.CHOICE(CHARACTERS) FOR _ IN
RANGE(LENGTH))
RETURN PASSWORD
IF __NAME__ == "__MAIN__":
PASSWORD_LENGTH = 16 # YOU CAN CHANGE THE DESIRED PASSWORD
LENGTH HERE
GENERATED_PASSWORD =
GENERATE_RANDOM_PASSWORD(PASSWORD_LENGTH)
PRINT("GENERATED PASSWORD:", GENERATED_PASSWORD)
```

CONCLUSION

The Random Password Generator is a program that is able to generate strong random passwords of the specified length with the combination of alphabets, numbers, and symbols.

In this tutorial, we have learned different ways of developing the Random Password Generator using Python as the programming language.

We have also learned the use of different methods of the random.At last, we have discussed the reason for creating the Random Password Generator and how strong passwords can be generated using this application

THANK YOU

USN = 22BTRSN062