Random Key Generator

Project Based learning Activity

Aim Of The Project

- To generate the user-defined length key with combination of Uppercase Alphabets And Numbers.
- To understand and implement string functions and python libraries.
- To use python ide And check the program output according to Logic implemented in code.

Introduction

- **Python** is an interpreted high-level general-purpose programming language. Its design philosophy emphasizes code readability with its use of significant indentation. Its language constructs as well as its object- oriented approach aim to help programmers write clear, logical code for small and large-scale projects.
- **About Project-** Random Key generator is a program which generates a Key which is mixture of uppercase letters, as well as numbers enough to generate great User-defined string combination.

What Is A Key ?

- A Key, sometimes called a passcode, is a memorized secret, typically a string of characters, usually used to confirm the identity of a user.

Programming Language Used

- **Python**
- Python is dynamically-typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly, procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its comprehensive standard library.
- Guido van Rossum began working on Python in the late 1980s, as a successor to the ABC programming language, and first released it in 1991 as Python 0.9.0.

Project Features

- To Get Random A Key String Combination Of Uppercase Alphabets And Numbers.
- Key Length Is Defined By User.
- Unique Key Is Generated Each Time.

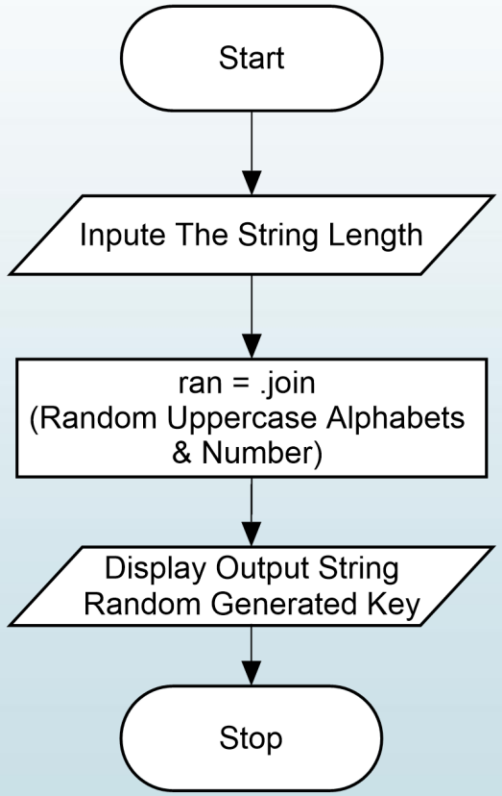
Applications

- Unique Token Number Generator.
- Password Generator.
- Unique Identification Number Generator.

Project Architecture

- Algorithm
  - Start
  - Enter String Length
  - Generate User defined Size String Combination Of Uppercase Alphabets And Numbers.
  - Display String
  - Stop

Flow Chart


Start
Inpute The String Length
ran = .join
(Random Uppercase Alphabets
& Number)
Display Output String
Random Generated Key
Stop

Future Scope

- Special Characteristics May Be added.
- Multiple Unique Output Can Be Accomplished At Once.
- As the world is being advanced day by day, we need to maintain our security, for this password is very important.
- By using this program we can generate passwords which will maintain our security in present as well as future.

Conclusion

- We learn
  - To implement our logic in programming language.
  - To Use Pre-Defined Functions From Python Library.
  - To Test The Program And Look For the Expected Result According the Source Code.
  - To Use Different Python IDES.

Group Members

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Program And Output-

jupyter Random key genrator Last Checkpoint: 02/02/2022 (unsaved changes) Logout

File Edit View Insert Cell Kernel Widgets Help Not Trusted Python 3 (ipykernel)

Run Code

In [*]:
```
import string

import random # define the random module

S =  int(input("Enter a number:"))

# number of characters in the string.

# call random.choices() string module to find the string in Uppercase + numeric data.


ran = ''.join(random.choices(string.ascii_uppercase + string.digits, k = S))

print("The randomly generated string is : " + str(ran)) # print the random data
```

```
Enter a number: 5
```

In [ ]:

```
Enter a number:5
The randomly generated string is : RCHKU
```

In [ ]:

```
Enter a number:10
The randomly generated string is : ZNCP9OVBRZ
```