

Password Generator (Python Project)

This Python project is a Password Generator that creates strong and random passwords. The user can specify the password length, and the program will generate a secure password using uppercase, lowercase, digits, and special characters. This project is beginner-friendly and a great choice for showcasing on GitHub as it demonstrates the use of randomization, string manipulation, and user input handling in Python.

```
import random
import string

def generate_password(length):
    characters = string.ascii_letters + string.digits + string.punctuation
    password = ''.join(random.choice(characters) for _ in range(length))
    return password

def main():
    print("=== Password Generator ===")
    try:
        length = int(input("Enter password length: "))
        if length < 4:
            print("Password length should be at least 4 characters.")
            return
        password = generate_password(length)
        print(f"Generated Password: {password}")
    except ValueError:
        print("Invalid input. Please enter a number.")

if __name__ == "__main__":
    main()
```