CodSoft Internship

Task 4: Rock-paper-Scissors Game

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Introduction:

The Rock Paper Scissors game is a simple yet interesting project developed using Python. In this game, the user competes with the computer by selecting Rock, Paper, or Scissors, while the computer chooses randomly. The winner is decided based on the standard game rules. This project helps in understanding core Python concepts like functions, loops, conditionals, and user input handling. It also improves logical thinking and makes learning Python more engaging

Code:

```
#Rock Paper Scissors Game

import random

# Welcome message

def show_intro():
    print("=" * 50)
    print(" Welcome to Rock Paper Scissors")
    print("=" * 50)

# Function from user choice
```

```
def get_user_move():
 print("\nChoose your move:")
 print("1 >> Rock")
 print("2 » paper")
  print("3 >> Scissors")
 choice = input("Enter 1, 2 or 3: ")
 choices = {'1': 'rock', '2': 'paper', '3': 'scissors'}
  return choices.get(choice)
 Function from Computer choice
def get_computer_move():
 return random.choice(['rock', 'paper', 'scissors'])
 Function to decide winner
def check_winner(user, computer):
 if user == computer:
    return "It's a Draw!"
 elif (user == 'rock' and computer == 'scissors') or \
     (user == 'paper' and computer == 'rock') or \setminus
     (user == 'scissors' and computer == 'paper'):
    return "you Win!"
 else:
    return "Computer wins!"
 Main Game Function
def play():
 show_intro()
 user_score = o
 compile\_score = o
 round_number = 1
 while True:
    print(f"\n--- Round {round_number} ---")
     user = get\_user\_move()
     if user is None:
      print("Invalid input. please try again.")
      continue
```

```
computer = get_computer_move()
     print(f"You chose :{user.capitalize()}")
     result = check_winner(user, computer)
     print(f"Result : {result}")
     if result == "you Win!":
       user_score += 1
    elif result == "Computer wins!":
       compile_score += 1
    print(f"Score >> You: {user_score} | Computer: {compile_score}")
     play_more = input("\nplay again? (yes/No): ").lower()
     if play_more != 'yes':
       print("\nGame Over!")
       print(f"Final Score >> You: {user_score} | Computer: {compile_score}")
       break
     round_number += 1
if __name__ == "__main__ ":
 play()
```

Output:

Welcome to Rock paper Scissors

—-Round 1 —--

Choose your move:

1 ≫ Rock

2 *» Paper*

3 ≫ Scissors

Enter 1, 2 or 3:1

You chose : Rock

Result : It's a Draw!

Secore » you : o | Computer: o

Play again? (yes/No): No

Game Over!

Final Score » you: o | Computer: o

Conclusion:

The Rock Paper Scissors project is a fun and interactive way to apply Python programming concepts in a real-world scenario. By developing this game, we practiced using functions, loops, conditionals, and random modules effectively.

Overall, it is a great beginner-level project to build logical thinking and improve coding skills.