



**ACADEMIC YEAR 2025 – 2026**

## **Stone Paper Scissor Game**

Technology : Python , CSV file storage

### **> Stone Paper Scissor Game**

**Course : Python Essentials**

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**Here you go!**

**I prepared complete PPT text slide-wise for the Multi-Game Python Program you provided (Number Guessing, Tic-Tac-Toe, Hangman, Rock–Paper–Scissors).**

PPT: MULTI-GAME PYTHON PROJECT

## **Slide 1: Title Slide**

- Multi-Game Python Project
- Number Guessing • Tic-Tac-Toe • Hangman • Rock-PaperScissors

## **Slide 2: Introduction**

- This project contains four different games in a single Python file.
- Users can select any game from a menu.
- Helps beginners understand loops, conditions, lists, and game logic.

## **Slide 3: Games Included**

- Number Guessing Game
- Tic-Tac-Toe (Two Player)
- Hangman
- Rock-Paper-Scissors

## **Slide 4: How the Program Works**

- User chooses a game from the main menu.
- Based on choice, the code runs that specific game.
- Program uses loops so user can keep playing until exit.

## **FUNCTIONAL REQUIREMENTS**

## **Slide 5: Functional Requirements – Overview**

- These describe what the system must do.

## **Slide 6: Game Selection**

- User must be able to choose from 4 games.
- Invalid input must ask for re-entry.
- System must run the selected game.

## **Slide 7: Number Guessing – Requirements**

- System generates a random number between 1–100.
- User enters guesses until correct.
- Program must show:
  - Higher / Lower hints
  - Guess count
- Must stop when correct number is guessed.

## **Slide 8: Tic-Tac-Toe – Requirements**

- 2-player game (X and O).
- Board must display after every move.
- System must check:
  - Win condition
  - Tie condition

- Must allow replay.

## **Slide 9: Hangman – Requirements**

- System chooses a random word.
- User guesses letters.
- Must track:
  - Correct letters
  - Wrong attempts
  - Remaining chances
- Must show win or lose message.

## **Slide 10: Rock-Paper-Scissors – Requirements**

- Player inputs choice.
- Computer randomly selects choice.
- System compares choices and shows:
  - Win
  - Lose

- Tie
- Score must be updated and shown at end.

## NON-FUNCTIONAL REQUIREMENTS

### **Slide 11: Non-Functional Requirements – Overview**

- These describe how well the program works.

### **Slide 12: Usability**

- Menu is simple and beginner-friendly.
- Instructions displayed clearly for each game.
- Easy to understand input prompts.

## **Slide 13: Performance**

- All games must run instantly.
- Random number and word generation must be fast.

## **Slide 14: Reliability**

- Program must not crash on wrong inputs.
- Must handle repeated plays without errors.

## **Slide 15: Maintainability**

- Code divided into sections for each game.
- Easy to add more games in future.
- Functions used in Tic-Tac-Toe improve readability.

## **Slide 16: Error Handling**

- Invalid menu input → Ask again.
- Tic-Tac-Toe: invalid position → Error message.
- Hangman: invalid letter → Error message.

## Slide 17: Scalability

- More games can be added easily.
- Hangman word list can be expanded anytime.

## CODE EXPLANATION SLIDES

## Slide 18: Main Menu Code

```
game = input("ENTER 1 FOR NUMBER GUESSING,  
2 FOR TIC-TAC-TOE,  
3 FOR ROCK-PAPER-SCISSORS,4 hangman : ")
```

- Allows user to choose which game to play.



- Loop ensures valid input.

## **Slide 19: Number Guessing Logic**

- Uses random number.
- Gives hints (higher/lower).
- Counts guesses.
- Ends when correct.

## **Slide 20: Tic-Tac-Toe Logic**

- Uses a list of 10 elements for the board.
- Checking win conditions using combinations.
- Alternates between X and O.

## **Slide 21: Hangman Logic**

- Selects random word from list.
- Replaces letters with underscores.
- Decreases attempts on wrong guess.

## **Slide 22: Rock-Paper-Scissors Logic**

- Computer chooses randomly.
- Compares choices to decide outcome.
- Score increases/decreases.