Rock Paper Scissors

Rock, Paper, Scissors

Mankind has been plagued for millennia by disagreement and indecision. Luckily, we have recently discovered plans for constructing the ultimate decision-making tool in ancient manuscripts attributed to scholars from lost Atlantis. It’s... Rock, Paper, Scissors!

For this activity, you will program a Rock, Paper, Scissors game using Scratch.

- Make a Scratch script that makes two sprites say either “Rock,” “Paper,” or “Scissors” as appropriate when the green flag is pressed. You must use a `pick random` block to generate both sprites’ choices.

- Add a third sprite. After the first two sprites pick their choices and say the accompanying words, the third sprite should say who wins each round (or whether the round is a tie). You may find this chart of rock, paper, scissor outcomes useful.

- Add score variables (e.g., `cat_score` and `duck_score`) that keep track of how many times each character has won (ties net zero points each). Remember, you can make these variables visible on the stage by clicking on the check-box next to the variable name.

- The third sprite should end the game when either contestant (e.g., Cat or Duck) reaches a score of three wins, and announce the winner.

Instructions

In this assignment, you will program a Rock, Paper, Scissors game using Scratch. Your original program should:

1. Simulate a Rock, Paper, Scissors game,
2. include two contestants who choose answers randomly,
3. include a referee who officiates automatically (based on this chart of rock, paper, scissor outcomes),
4. use score variables that keep track of how many times each character has won,
5. ends when one contestant wins three rounds,
6. be personalized in at least three ways,
7. be usable, efficient, and effective, and
8. provide documentation (describe what it does) in the Instructions. Be sure to describe how your program is original.

When you are satisfied with your work, submit a link to your program or the program itself. Your work will be reviewed by a peer, and in turn, you will review one of your peers’ projects. You should base your evaluation on the assignment rubric.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
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<tbody>
<tr>
<td>Uses random block appropriately to generate plays.</td>
<td>1 pt</td>
</tr>
<tr>
<td>Displays correct/consistent plays for randomly generated numbers.</td>
<td>3 pts</td>
</tr>
<tr>
<td>Resolution of all cases is correct (e.g., Rock beats Scissors).</td>
<td>3 pts</td>
</tr>
<tr>
<td>Scores for each sprite are correctly calculated and displayed.</td>
<td>2 pts</td>
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<tr>
<td>Game ends as described.</td>
<td>1 pt</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10 pts</strong></td>
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