Request for Comments

For this étude, you will write a Request For Comment (RFC) document that outlines a simple two-player game to be implemented in a semi decentralized manner.

Problem Description

The game you will implement is "Rock Paper Scissors". Each player chooses one of the three shapes (Rock, Paper, or Scissors) and "throws" (reveals) their choice at the same time as the other player. The winner of the throw is determined by:

RPS Rules

- Rock blunts Scissors -> Rock wins
- Scissors cuts Paper -> Scissors win
- Paper cover Rock -> Paper wins
- Equal shapes -> Draw (no winner)

The game is won when one player has won a total of three moves.

Task

Your RFC must be in ASCII plaintext, and must follow the RFC's instructions to authors. Players communicate with a centralized server to determine their new opponent, and to report the match outcome and move history. However, all match gameplay communication must occur between the two players.

Your proposal must address the handling of dishonest players, and other common issues related to a network (e.g., timeouts).

As an informational RFC, your proposal can be theoretical in nature, and does not require low-level detail such as network packet formats. However, it should address the use of encryption, timestamping, etc. Your RFC should be no more than 10 pages.

While the theoretical underpinnings of the game are evaluated, the primary contribution of this étude is the writing of an RFC document itself, and your ability to communicate your ideas clearly. RFCs follow a strict style guide that must be adhered to.

Relates to Objectives

1.2 1.4 2.1 2.2 2.3 2.6 2.9 2.10 3.2 3.4 4.2 4.5 4.8 (2 points, Group)