

ROCK PAPER SCISSORS LIZARD SPOCK RADIOACTIVE, POISONOUS, INFESTED EDITION

EE363 PROJECT II (15%)

Radioactive, Poisonous, or Infested

In the Radioactive, Poisonous or Infested edition, each weapon may be “augmented” by one of three characteristics. It may be either: radioactive, poisonous, or infested.

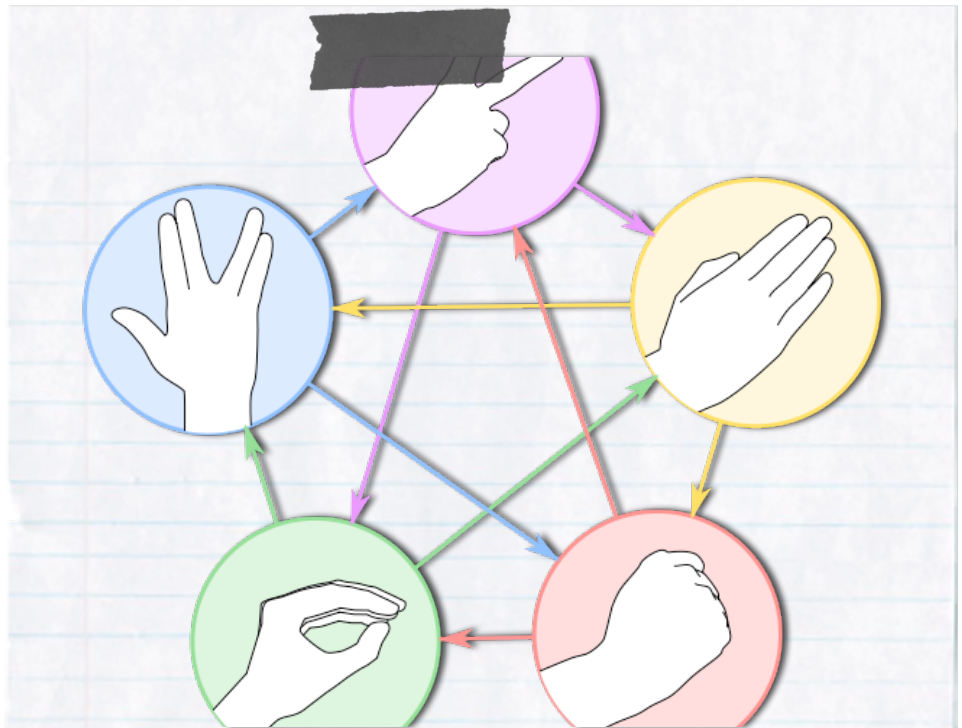
Radioactivity destroys poison; poison destroys infestation, and infestation survives (“beats”) radioactivity.

A player indicates his weapon by throwing his right hand, and augments it by throwing his left: 1 finger for radioactive, 2 for poisonous, and 3 for infested.

Scoring

You can decide to score the game in any number of ways:

- R/P/I first - giving weight to the characteristic of the weapon; the weapon is used to break any ties.
- R/P/s/L/S first - giving weight to the weapon itself, over any characteristic it might have; the characteristic is used to break any ties.



Rock, Paper, Scissors, Lizard, Spock

RPsLS is a five-gesture variant of roshambo (otherwise known as “rock, paper, scissors”) in which two or more players chant the weapon names: Rock, Paper, Scissor, Lizard, Spock, then “throw” by making a hand gesture indicating their weapon of choice.

In the five-gesture variant, each weapon defeats two others, and is defeated by

two others. A defeated player is out in the next round. Rounds continue until only one player remains.

If playing in pairs, that is, only two players, often 3 rounds are played with the winner being chosen by a “best-of” strategy (or two-out-of-three).

Using the Object Oriented design patterns and principles we have learned this semester, design and implement an object model to represent a game of RPsLS/RPI.

Create a “Scoring” object that has a method called: “selectWinner”. The method should take an array of gestures, and return the index of the gesture that won.

Provide a suite of unit tests that demonstrate your code works as intended. Test both scoring mechanisms, and all combinations of two-player throws.