# RPSLS (Rock, Paper, Scissors, Lizard, Spock)

## Introduction

For this project, you will be building a console version of the Rock Paper Scissors Lizard Spock game! RPSLS is a great way to get more familiar with key Object-Oriented Programming concepts, like classes/objects, properties, methods, and inheritance. This project will require thinking critically about where inheritance makes the most sense, and writing the logic of the game in such a way that any kind of player can play the game with the same results, and minimal modification of the code. Bear in mind your SOLID principles and keep it simple!

## Technologies

Python, Visual Studio Code with Debugging, Git/GitHub

## Learning Objective

Apply the concepts of Object-Oriented Programming to build a console application that incorporates inheritance and SOLID principles of programming.

💡 Do not start your project until you have an instructor approved game algorithm and list of classes!

## Resources

**PowerPoints**

* Inheritance

**Documents**

* RPSLS User Stories

**Relevant Projects**

* Robots vs. Dinosaurs

**Other Resources**

* [Explanation of game rules](https://bigbangtheory.fandom.com/wiki/Rock,_Paper,_Scissors,_Lizard,_Spock)
  + Rock crushes Scissors     
    Scissors cuts Paper    
    Paper covers Rock    
    Rock crushes Lizard    
    Lizard poisons Spock    
    Spock smashes Scissors    
    Scissors decapitates Lizard    
    Lizard eats Paper    
    Paper disproves Spock    
    Spock vaporizes Rock

## Task

Create a new Python project in Visual Studio Code and collaborate using Git/GitHub as you program your way through the features of this project.

## Setup Steps

1. Create a GitHub repository for the project and commit your created project to the repo.
2. In the project, add the debugger for Python in Visual Studio Code
3. Create a main.py file to serve as the entry point for your application when you run it
4. Start creating classes. Start thinking through what every class “has” and “does” based on the user stories.
5. Before you begin coding, write an algorithm that represents the steps necessary to play a game of rock, paper, scissors, lizard, Spock in a best-of-three format. By writing out the steps, it will make you think about every piece needed to bring the game to life. **Please submit to your instructor Slack channel once completed for approval to start coding.** Below is an example of how to get started:
   1. Step 1: Display the rules of the game
   2. Step 2: Ask how many human players will be playing
   3. … etc

## End Result

This is an example of what your user could see in the console when playing. Note the clear prompts for input and messages that show the result of each round.

