

Scissors Paper Stone KATA

Next exercise is a TDD Kata to work the concepts of refactor and unit testing. The basis are the rules for the game “Scissors, Paper and Stone”:

- Scissors cuts paper
- Papers covers stone
- Stone crushes scissors

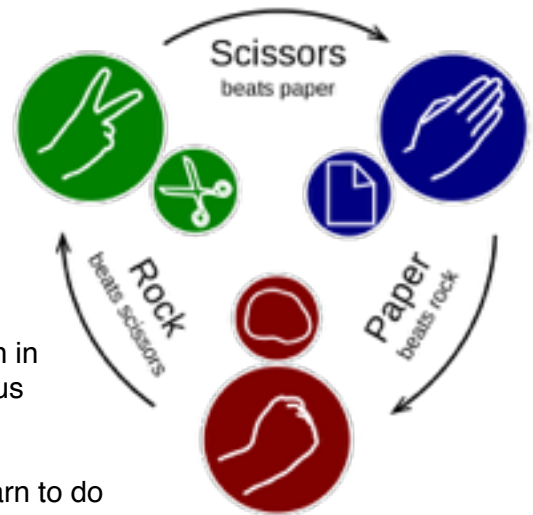
You're going to apply the process we have learned about TDD: Red, green and refactor.

Before start:

Please, read and develop the exercise following the instruction in order and don't go further before you have develop the previous steps.

Make one task each time, the main idea for this exercise is learn to do incrementally work.

Try to implement only the test that you need for each step. Be carefully about all possible scenarios.



Scissors, Paper, Stone

Creates a main program with class that implements IGame interface.

```
public interface IGame{
    RoundResult PlayRound(RoundChoice player1, RoundChoice player2);
}
```

Create nested enums RoundChoice.java and RoundResult.java as follow:

```
//Represents the possible choices for the players
public enum RoundChoice{
    Stone,
    Scissors,
    Paper,
}

//Represents the round result for a game
public enum RoundResult{
    Player1Wins,
    Player2Wins,
    Draw
}
```

After you have create your class that implements IGame, read the following instructions:

1. Create the tests when player1 and player2 choose the same option.
2. Write tests first and code after, for the scenario when player1 choose "paper" and player2 choose "stone"
3. Write tests first and code after, for the scenario when player1 choose "paper" and player2 choose "scissors"
4. Spend a minute taking a look at your code and try to refactor it.
5. Write tests first and code after, tor given scenario when player1 choose "scissors" and player2 choose "stone"
6. Continue with the other options to complete the game, always writing test first and after code the solution.

When you've finished, try to go forward:

Extension: Add Lizard & Spock

Our PO has forgotten to explain us there're some new feature to include in the game... 2 new choices appear: Lizard and Spock



The rules implemented won't change but there're some new rules to implement:

- Paper unauthorized Spock
- Spock smashes scissors
- Scissors decapitates Lizard
- Lizard poisons Spock
- Spock vaporizes rock
- Rock crushes Lizard
- Lizard eats paper

To implement these rules inside your game, follow the same process as you've followed before: start creating the tests for the next rule you're going to implement, and after that codes minimum to solve the tests. After each, try tor refactor your code to keep it clean.