

ROSHAMBO: ROCK PAPER SCISSORS

Objectives: Enumerations, Abstract Classes

Task: Create a rock, paper, scissors game.

What will the application do?

- The application prompts the player to enter a name and select an opponent.
- The application prompts the player to select rock, paper, or scissors. Then, the application displays the player's choice, the opponent's choice, and the result of the match.
- The application continues until the user doesn't want to play anymore.
- If the user makes an invalid selection, the application should display an appropriate error message and prompt the user again until the user makes a valid selection.

Build Specifications:

1. Create an enumeration called Roshambo that has three values: rock, paper, and scissors.
2. Create an abstract class named Player that stores a name and a Roshambo value. This class should include a method named GenerateRoshambo that allows an inheriting class to generate and return a Roshambo value.
3. Create and name three player subclasses:
 - a. RockPlayer - Always throws Rock
 - b. RandomPlayer - Picks and throws a value at random
 - c. HumanPlayer - Allows the user to select and throw a value. Upon creating an instance of this class, allow the user to input their name.
4. Create a main where you create a HumanPlayer and then allow them to choose their opponent: either RockPlayer or RandomPlayer.
5. Validate your user inputs throughout your app. Try catch blocks, if statements, or any other method of validation is good.

Hints:

- Paper beats rock, rock beats scissors, scissors beats paper.