**ROCK-PAPER-SCISSORS-LIZARD-SPOCK**

I have got 5 different class in my project: Homepage, GamePanel, ChoicesPanel, Score and Main classes.

**HOMEPAGE**

**Homepage** class is for displaying the homepage and creating a new game. There is a **showHomepage()** method that creates the game's homepage and arranges its components. There are 5 icons that are moving up and down. I used an **ActionListener** to move them. There is a **Timer** object that calls the ActionListener every 30 milliseconds and changes the location of icons. There are 4 button on that page.

First one is Play (**newGameBtn**) button. When we click on it, it calls the getName() method which creates a JOptionPane for getting a username from the player and returns it as a String. Then when user enters a name, it creates a ChoicesPanel object which display the main game page and close the homepage.

Second button is High Score (**highScoreBtn**) button. It calls the readScore() method from the Score class and shows the high scores.

Third one is Rules (**rulesBtn**) button. It creates a JOptionPane frame that displays the game rules.

And the last button is Exit (**exitBtn**) button. It calls the clearFile() method from the Score class and close the game page.

The constructer of this class calls the **showHomepage()** method and starts the timer. I used MouseListener for every button to change their colors when the cursor enters and exits the bounds of them.

**CHOICESPANEL**

**ChoicesPanel** class creates the game frame. It has 3 methods. **createChoices()** method edits the YOUR CHOICE and COMPUTER'S CHOICE labels, result text, choices images and the panel which contains these. **createRemaining()** method creates the panel that displays the Remaining Game number. **createBottomPanel()** adds these two panel into the main Bottom Panel. The constructer of this class calls these methods and displays the game frame. This class extends GamePanel class.

**GAMEPANEL**

**GamePanel** class is the main game play class which has the game algorithm.

**createScorePanel()** displays the scores.

**createButtonPanel()** sets the buttons for playing, adds images on them.

Every button has an ActionListener which calls the **showChoice()**, **computersChoice()**, **compare()** and **isWon()** methods, and sets the choice1 value to 1-5 according to the selected weapon.

**showChoice()** method displays the user's choice image.

**computerChoice()** method creates a Random object and uses it to set the choice2 value to 1-5 and choose a weapon for computer and show its image.

**compare()** method calls the **setRemaining()** method first and then uses switch-case statements to compare the user's choice and the computer's choice for deciding the winner of the round and calls the **setScore()** method.

**setRemaining()** method sets the remaining game number. **setScore()** method sets the current scores for user and computer.

**isWon()** method decides to whether the user won or lost the game by using if-else statements. If remainingNum value is 0 it calls the **writeScore()** method from the Score class and write the result to the score table.

If score1 is greater then score2 then a JOptionPane window occurs and says "You won". If score2 is greater then score1 then a JOptionPane window occurs and says "You lost". If the scores are equal then a JOptionPane window occurs and says "Tie". Every JOptionPane window asks if the user wants to return to the homepage. If user says "yes" then game page closes and homepage opens, if says "no" then game page closes and it calls the clearFile() method from Score class. Finally the method sets the score1 and score2 values to 0.

**SCORE**

**Score** class creates a text file. **writeScore()** method write the user's name and score. **readScore()** method reads the scores and writes them into an array. It writes the username and the score into an another array. It uses the for loops to sort the scores from the highest to the lowest one. **clearFile()** method clears the scores from the text file.

**MAIN**

And finally the **Main** class creates a Homepage object to start the game.