**Report**

**1. Introduction**

This report aims to document the development and implementation of a Node.js console application for a Rock-Paper-Scissors game. The application solicits user input through the console and generates computer selections, then determines the winner according to the game's rules.

**2. Implementation Details**

**2.1 Environment Setup**

Node.js environment was set up to facilitate the development of the application.

The prompt package was utilized for handling user input.

**2.2 Functionality**

generateComputerSelection() function:

This function generates a random computer selection between 'ROCK', 'PAPER', or 'SCISSORS' based on a random number generated using Math.random().

determineWinner(userSelection, computerSelection) function:

This function determines the winner of the game based on the user's selection and the computer's selection according to the standard Rock-Paper-Scissors rules.

startPrompt() function:

This function initiates the prompt for user input, receives the input, compares it with the computer's selection, determines the winner, and continues prompting until the user chooses to exit.

**Explanation:**

1. Importing the prompt package:

* The code starts by importing the prompt package, which allows for interactive command-line prompts.

1. Generating Computer Selection:

* The generateComputerSelection() function generates a random selection for the computer. It uses Math.random() to generate a random number between 0 and 1 and maps it to one of three options: 'ROCK', 'PAPER', or 'SCISSORS', based on predefined ranges.

1. Determining the Winner:

* The determineWinner(userSelection, computerSelection) function determines the winner of the game based on the user's selection and the computer's selection. It follows the standard Rock-Paper-Scissors rules to determine the outcome: whether the user wins, the computer wins, or it's a tie.

1. Starting the Prompt:

* The startPrompt() function initiates the prompt for the user to input their choice. It handles the user's input, compares it with the computer's selection, determines the winner using the determineWinner() function, and displays the outcome. It continues to prompt the user until they choose to exit.

1. Prompting the User:

* The prompt.get() function prompts the user to input their choice ('ROCK', 'PAPER', 'SCISSORS', or 'EXIT'). It waits for the user's input and then executes the callback function, passing any error and the user's input.

1. Handling User Input:

* The user's input is converted to uppercase to ensure case-insensitive comparison. If the user inputs 'EXIT', the program prints a message and exits. Otherwise, it proceeds to generate the computer's selection, determine the winner, and display the outcome.

1. Starting the Prompt Loop:

* After setting up the prompt, the code starts the prompt loop by calling startPrompt().