Jackson Cummins

Professor Lusby

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Pseudocode for Left Center Right Dice Game

CREATE GameDisplay object currentGame

CREATE string variable myFile with name of rules file

CREATE ifstream variable to read from myFile

WHILE myFile has another line:

PRINT the current line to the console

END WHILE

CREATE int variable numPlayers

READ value from user and assign to numPlayers

WHILE numPlayers LESS THAN 3:

PRINT message telling the user their input was invalid

READ value from user and assign to numPlayers

END WHILE

CREATE array of Player objects called playerArray

CREATE int variable currentPlayerNumber = 1

CREATE int variable currentDiceRoll

CREATE Boolean variable isGameOver = False

INVOKE playRound(currentPlayerNumber) function on currentGame object

WHILE isGameOver Equals False;

playRound(currentPlayerNumber) function:

IF currentPlayerNumber is greater than numPlayers:

currentPlayerNumber EQUALS 1

PRINT message to console stating it’s Player currentPlayerNumber ‘s turn

SWITCH numChips of player at playerArray[currentPlayerNumber – 1]:

Case 0:

break

Case 1:

currentDiceRoll EQUALS result of rollDice() function

IF currentDiceRoll EQUALS 1:

Increment player before currentPlayer’s numChips by 1

Decrement currentPlayer’s numChips by 1

ELSE IF currentDiceRoll EQUALS 2:

Increment player after currentPlayer’s numChips by 1

Decrement currentPlayer’s numChips by 1

ELSE IF currentDiceRoll EQUALS 3:

Decrement currentPlayer’s numChips by 1

ELSE do nothing

break

DEFAULT CASE:

FOR loop that iterates twice:

currentDiceRoll EQUALS result of rollDice() function

IF currentDiceRoll EQUALS 1:

Increment player before currentPlayer’s numChips by 1

Decrement currentPlayer’s numChips by 1

ELSE IF currentDiceRoll EQUALS 2:

Increment player after currentPlayer’s numChips by 1

Decrement currentPlayer’s numChips by 1

ELSE IF currentDiceRoll EQUALS 3:

Decrement currentPlayer’s numChips by 1

ELSE do nothing

END FOR

break

END SWITCH

PRINT the number of tokens for each player

ASSIGN isGameOver to result of checkForWinner function

INCREMENT currentPlayerNumber by 1

END playRound function

END WHILE

PRINT message stating who won the game

BOOLEAN checkForWinner function:

CREATE int variable playersWithChips

FOR every player in the playersArray:

IF the player has chips:

INCREMENT playersWithChips by 1

IF playersWithChips is greater than 1:

RETURN FALSE

END FOR LOOP

RETURN TRUE

END checkForWinner function