System Test Plan:

Document Authors: Lyndsay Barnes , Casey Beise and Will Greene
Date: 4/12/22

Introduction (anything that is true for all test cases and not specified in each test case):
Because a full game would take up one page or more, some test cases, such as testTie, assume the last round has concluded without giving the user input of 1+ rounds.

Test Files: None

Test Cases

Test ID	Description	Expected Results	Actual Results
testInitialOutput Author: Lyndsay Barnes	$java -cp bin TheOriginalWordle 1 (Ctrl+C to stop execution)	Welcome to Mastermind! A game of logic, with a bit of chance. This game is for 2 players. Player 1 name?	

testInitialGameSetUp Author: Lyndsay Barnes	$java -cp bin TheOriginalWordle 1 Welcome to Mastermind! A game of logic, with a bit of chance. This game is for 2 players. Player 1 name? **Player1** Player 2 name? **Player2** Number of rounds? **1**	Great! 4-color codes have been initialized for both players. Let's begin. [Round 1, Guess 1] Total Points for Player1 : 0 Player 1, please enter guess (R-ed, G-reen, B-lue, Y-ellow) :	
testVisualDisplay Author: Lyndsay Barnes	$java -cp bin TheOriginalWordle 1 "Welcome to Mastermind! A game of logic, with a bit of chance. This game is for 2 players. Player 1 name? **Player1** Player 2 name? **Player2** Number of rounds? **1** Great! 4-color codes have been initialized for both	Player1 |							
---	---	---	---	---	---	---	---
R	G	B	Y	w	b			 Player2	

	players. Let's begin. [Round 1, Guess 1] Total Points for Player1 : 0 Player1, please enter guess (R-ed, G-reen, B-lue, Y-ellow) : **RGBY** [Round 1, Guess 1] Total Points for Player2 : 0 Player2, please enter guess (R-ed, G-reen, B-lue, Y-ellow) : **KBGR**	K B G R b b
testPlayer1CorrectGuess Author: Lyndsay Barnes	*Preconditions*: Game Started seed 2 (new seed) Player 1: **Player1** Player 2: **Player2** Player 1 Guess 1: **RGBY** Player 2 Guess 1: **KBGR**	Player1 R G B Y b b b b

		Player2 ![grid] K B G R w w Congratulations, Player1! You have guessed the code! Player2 will continue guessing.	
testPlayer1InvalidGuess Author : Will Greene	*Preconditions*: Game Started seed 2 (new seed) Player 1: **Player1** Player 2: **Player2** Player 1 Guess 1: **BGXG**	Invalid input : use characters R, B, Y, G only." Player1, please enter guess (R-ed, G-reen, B-lue, Y-ellow) :	

testPlayer2InvalidGuess Author : Will Greene	*Preconditions*: Game Started seed 2 (new seed) Player 1: **Player1** Player 2: **Player2** Player 1 Guess 1: **BGBY** Player 2 Guess 1: **YYGX**	Invalid input : use characters R, B, Y, G only. Player2, please enter guess (R-ed, G-reen, B-lue, Y-ellow) :	
testPlayer1NameTooLong Author : Will Greene	*Preconditions:* Game Started This game is for 2 players. Player 1 name? **This name is too long. This name is too long. This name is too long.**	Name too long - max 50 characters Player 1 name?	
testPlayer2NameTooLong Author : Will Greene	*Preconditions:* Game Started This game is for 2 players. Player 1 name? **Alexa** Player 2 name? **This name is too long. This name is too long. This name is too long.**	Name too long - max 50 characters Player 2 name?	

testPlayer1Wins Author : Will Greene	*Preconditions* : Player 1 Name : SpongeBob *Instructions :* Select to play for 1 round, trying to guess the code for Player 1 while repeating the same wrong guess for Player 2.	Congratulations, SpongeBob! You are the winner! Play again (Y-es, Q-uit)?	
testPlayer2Wins Author : Will Greene	*Preconditions* : Player 2 Name : Patrick *Instructions :* Select to play for 1 round, trying to guess the code for Player 2 while repeating the same wrong guess for Player 1.	Congratulations, Patrick! You are the winner! Play again (Y-es, Q-uit)?	
testTie Author : Will Greene	*Instructions :* Select to play for 1 round, make sure each player's first guess is wrong and guess the same for all 8 guesses.	Oh no! It's a tie! Try playing again to settle the tiebreak. Play again (Y-es, Q-uit)?	

testInvalidRoundsZero Author : Will Greene	*Preconditions:* Game Started Player names assigned Number of rounds? **0**	Invalid number of rounds. Please enter an integer between 1 and 10, inclusive. Number of rounds?	
testValidRoundsFive Author : Will Greene	*Preconditions:* Game Started Player names assigned Number of rounds? **5**	Great! 4-color codes have been initialized for both players. Let's begin. [Round 1, Guess 1] Total Points for Player1 : 0 Player 1, please enter guess (R-ed, G-reen, B-lue, Y-ellow) :	
testValidRoundsTen Author : Will Greene	*Preconditions:* Game Started Player names assigned Number of rounds? **10**	Great! 4-color codes have been initialized for both players. Let's begin. [Round 1, Guess 1] Total Points for Player1 : 0 Player 1, please enter guess (R-ed, G-reen, B-lue, Y-ellow) :	

testInvalidRoundsEleven Author : Will Greene	*Preconditions:* Game Started Player names assigned Number of rounds? **11**	Invalid number of rounds. Please enter an integer between 1 and 10, inclusive. Number of rounds?	
testPlayAgain Author : Will Greene	*Preconditions :* Last round completed. Play again (Y-es, Q-uit)? **Y**	Welcome to Mastermind! A game of logic, with a bit of chance. …	
testQuit Author : Will Greene	*Preconditions :* Last round completed. Play again (Y-es, Q-uit)? **Q**	Program exits.	
testInvalidPlayAgainInput Author : Will Greene	*Preconditions :* Last round completed. Play again (Y-es, Q-uit)? **u**	Invalid input. Play again (Y-es, Q-uit)?"	

testValidPointsPlayer2Round1Guess2 Author: Casey Beise	*Preconditions*: Game Started seed 2 (new seed) Player 1: **Player1** Player 2: **Player2** Player 1 Guess 1: **RGBY** Player 2 Guess 1: **KBGR**	[Round 1, Guess 2] Total Points for p2Name : 1	