Shopping Cart Checkout Simulator Black Box Test Plan (Project 1, Part 2)

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Introduction

The Shopping Cart Checkout Simulator is a program that simulates customers checking out from a grocery store.

The program is started by running the SimulationViewer class as a Java Application in Eclipse. The user will be prompted for a set number of carts to checkout, how many registers are available and the animation speed. The user will then select Start to begin the simulation or Quit to end the program.

Test ID	Description	Expected Results	Actual Results
Test 1:	Preconditions: The program has started and	Dialog box opens that says	Dialog box opens that says
Cart	the GUI is displayed	"The number of shopping	"The number of shopping
amount	Falsa ((fift)) for the Northern of Character	carts must be an integer."	carts must be an integer."
not integer	Enter "fifty" for the Number of Shopping Carts		
integer	Carts		
(Joey	Enter 3 for the Number of Checkout Registers		
Schauer)	_		
	Click Start		
	Charle Basselle		
	Check Results		
	Close GUI		
Test 2:	Preconditions: The program has started and	Dialog box opens that says	Dialog box opens that says
Cart	the GUI is displayed	"There must be at least one	"There must be at least one
amount		shopping cart in the	shopping cart in the
too small	Enter 0 for the Number of Shopping Carts	simulation."	simulation."
(Joey	Enter 12 for the Number of Checkout		
Schauer)	Registers		
	Click Start		
	Check Results		
	Check results		
	Close GUI		
Test 3:	Preconditions: The program has started and	Dialog box opens that says	Dialog box opens that says "Number of registers must be between 3 and 12
Register	the GUI is displayed	"Number of registers must	
amount	Faton FO fourth a Namehou of Changing Courts	be between 3 and 12	
too low	Enter 50 for the Number of Shopping Carts	inclusive."	inclusive."
(Joey	Enter 2 for the Number of Checkout Registers		
Schauer)	3.000.0		
	Click Start		
	Check Results		
	Close GUI		

Test 4: Register amount too big (Joey Schauer)	Preconditions: The program has started and the GUI is displayed Enter 350 for the Number of Shopping Carts Enter 13 for the Number of Checkout Registers Click Start	Dialog box opens that says "Number of registers must be between 3 and 12 inclusive."	Dialog box opens that says "Number of registers must be between 3 and 12 inclusive."
	Check Results Close GUI		
Test 5: Each Cart Has Own	Preconditions: The program has started and the GUI is displayed	UI shows carts entering and leaving register queues	UI shows carts entering and leaving register queues
Register (Joey	Enter 7 for the Number of Shopping Carts Enter 12 for the Number of Checkout	Average Wait Time: 0.00 seconds	Average Wait Time: 0.00 seconds Average Checkout Time: 197.29 seconds
Schauer)	Registers	Average Checkout Time: 197.29 seconds	
	Click Start Check Results		
	Close GUI		
Test 6: Low boundary	Preconditions: The program has started and the GUI is displayed	UI shows carts entering and leaving register queues	UI shows carts entering and leaving register queues
value for registers	Enter 7 for the Number of Shopping Carts	Average Wait Time: 150.00 seconds	Average Wait Time: 150.00 seconds
(Joey Schauer)	Enter 3 for the Number of Checkout Registers Click Start	Average Checkout Time: 197.29 seconds	Average Checkout Time: 197.29 seconds
	Check Results		
Test 7: Low boundary value for carts (Joey Schauer)	Preconditions: The program has started and the GUI is displayed	UI shows carts entering and leaving register queues	UI shows carts entering and leaving register queues
	Enter 1 for the Number of Shopping Carts	Average Wait Time: 0.00 seconds	Average Wait Time: 0.00 seconds
	Enter 7 for the Number of Checkout Registers Click Start	Average Checkout Time: 37.00 seconds	Average Checkout Time: 37.00 seconds
334461	Check Results	2.100 00001100	2.133 3331103
	Close GUI		

Document Revision History

Date	Author	Change Description
2/9/2017	Joey Schauer	Created tests for Shopping Cart Checkout Simulator
3/2/2017	Joey Schauer	Ran tests with Shopping Cart Checkout Simulator