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

Document Author(s): Joey Schauer

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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: Cart amount not integer (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter "fifty" for the Number of Shopping Carts Enter 3 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	Dialog box opens that says "The number of shopping carts must be an integer."	Dialog box opens that says "The number of shopping carts must be an integer."
Test 2: Cart amount too small (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter 0 for the Number of Shopping Carts Enter 12 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	Dialog box opens that says "There must be at least one shopping cart in the simulation."	Dialog box opens that says "There must be at least one shopping cart in the simulation."
Test 3: Register amount too low (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter 50 for the Number of Shopping Carts Enter 2 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	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."

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** *Check Results* **Close GUI**	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."
Test 5: Each Cart Has Own Register (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter 7 for the Number of Shopping Carts Enter 12 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	UI shows carts entering and leaving register queues Average Wait Time: 0.00 seconds Average Checkout Time: 197.29 seconds	UI shows carts entering and leaving register queues Average Wait Time: 0.00 seconds Average Checkout Time: 197.29 seconds
Test 6: Low boundary value for registers (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter 7 for the Number of Shopping Carts Enter 3 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	UI shows carts entering and leaving register queues Average Wait Time: 150.00 seconds Average Checkout Time: 197.29 seconds	UI shows carts entering and leaving register queues Average Wait Time: 150.00 seconds Average Checkout Time: 197.29 seconds
Test 7: Low boundary value for carts (Joey Schauer)	**Preconditions:** The program has started and the GUI is displayed Enter 1 for the Number of Shopping Carts Enter 7 for the Number of Checkout Registers Click **Start** *Check Results* **Close GUI**	UI shows carts entering and leaving register queues Average Wait Time: 0.00 seconds Average Checkout Time: 37.00 seconds	UI shows carts entering and leaving register queues Average Wait Time: 0.00 seconds Average Checkout Time: 37.00 seconds

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