## Vending Machine Software

Vending Machine Software You've been asked to develop an application for the newest vending machine distributor, Umbrella Corp. They've released a new vending machine (Vendo-Matic 600) that is integrated with everyone's bank accounts allowing customers to purchase products right from their computers for convenience sake.

## Menus and submenus:

- 1. Display items
- 2. Purchase items
  - 1) Feed Money
  - 2) Select Product
  - 3) Finish Transaction
- 3. Exit
- 4. Sales Report\*\* Optional hidden menu item

| Story   | Acceptance Criteria   |
|---|---|
|   | Given a file contains the list of items formatted correctly   |
|   | When the vending machine is started   |
|   | Then inventory is created/updated with what items are in each slot based on the contents of the     |
| vending machine with the correct inventory and so                                 | file. Each inventory item has a name, price, and type (beverage, candy, chips, gum).                |
| that it can show the correct items for purchase every                             |   |
| time it's started.  | Given an item is in the inventory file  |
|   | When the vending machine is started and the inventory is updated                                    |
|   | Then the slot indicated is filled with five of that product   |
| As a customer, I want to see items available for purchase in the vending machine. | Given an item is available  |
|   | When a customer displays items  |
|   | Then the item is displayed with the name, slot identifier and purchase price                        |
|   | Given an item is sold out or otherwise not available  |
|   | When a customer displays items  |
|   | Then the item is displayed as SOLD OUT  |
| As a customer, I want to purchase items from the vending machine.                 |   |
|   | Given a customer is on the purchase menu and has not deposited money (current balance is \$0)       |
|   | When they try to select a product   |
|   | Then they are given an error message that they must deposit money before making a selection         |
|   | Given a customer is in the purchase menu  |
|   | Then they are able to deposit money in whole dollar amounts   |
|   | Given a customer is in the purchase menu  |
|   | When they deposit money   |
|   | Then his/her current balance is updated and displayed   |
|   | Given a customer is on the purchase menu  |
|   | When they select an item for purchase that is available   |
|   | Then: 1) the customer's current balance is updated based on item cost 2) the inventory and balance  |
|   | of the vending machine are updated 3) the item is dispensed and the user receives a message based   |
|   | on the item type: All chip items will print "Crunch Crunch, Yum!" All candy items will print "Munch |
|   | Munch, Yum!" All drink items will print "Glug Glug, Yum!" All gum items will print "Chew Chew,      |
|   | Yum!" 4) the customer is returned to the purchase menu  |
|   | Givena customer is on the purchase menu   |
|   | When the customer attempts to purchase an item is sold out or otherwise not available               |
|   | Then they are given an error message and returned to the purchase menu                              |
|   | Given a customer is on the purchase menu  |
|   | When they choose Finish Transaction   |
|   | Then the customer recieves (a message with) their change using nickels, dimes and quarters using    |
|   | the smallest amount of coins possible and the current balance is updated to \$0.                    |

|  | Given a customer has fed in money  |
|--|--|
|  | When the audit file is viewed  |
|  | Then there should be an entry for every time money was fed in that includes date, time, feed         |
|  | money, amount, current balance.  |
|  | Given an item has been purchased   |
| As a vending machine owner, I want an audit file so    | When the audit file is viewed  |
| that I can see what my vending machine has sold.       | Then there should be an entry for every purchase that includes date, time, item name, item slot,     |
|  | item price, remaining balance  |
|  | Given a customer has completed a transaction   |
|  | When the audit file is viewed  |
|  | Then there should be an entry for every transaction completed labeled give change that includes      |
|  | date, time, amount of change, remaining balance (should be \$0)                                      |
|  | Given a product is in the vending machine  |
|  | When the sales report is run   |
| As a vending machine owner, I want a sales report as a | Then there is a line for that product with the item name   total number of sale                      |
| hidden menu option so that I can see the total sales   |  |
| since the machine was started                          | When the sales report is run   |
|  | Then at the end of the report is a blank line followed by **TOTAL SALES** \$dollar amount indicating |
|  | the gross sales from the vending machine.  |