| TextUI      | calls                                 |  |
|-------------|---------------------------------------|--|
| TextUI      | No other methods                      |  |
| MainMenu    | No other methods                      |  |
| RouteChoice | ItemMenu() DisplayInventory()         |  |
|             | AddItemToCart() DisplayCart() Items() |  |
|             | RemoveItemFromCart() CartItems()      |  |
|             | Checkout() setprecision() ClearCart() |  |
| ItemMenu    | No other methods                      |  |

| ShoppingCart | Calls                             |  |
|--------------|-----------------------------------|--|
| ShoppingCart | No other methods                  |  |
| AddItem      | IncreaseQuantity() get_id()       |  |
| Removeltem   | Get_quantity() DecreaseQuantity() |  |
| DisplayCart  | No other methods                  |  |
| ClearCart    | ClearCart()                       |  |
| get_items()  | No other methods                  |  |

| Item             | calls                            |  |
|------------------|----------------------------------|--|
| Item             | Assigns id, type, cost, quantity |  |
| get_id()         | No other methods                 |  |
| get_quantity()   | No other methods                 |  |
| get_cost()       | No other methods                 |  |
| get_type()       | No other methods                 |  |
| IncreaseQuantity | No other methods                 |  |
| DecreaseQuantity | No other methods                 |  |
| ToString         | Setprecision()                   |  |
| Clone            | Item()                           |  |
| operator<<       | No other methods                 |  |

| Store              | Calls                                    |  |
|--------------------|--|--|
| Store              | Item(), ShoppingCart()                   |  |
| DisplayInventory   | ToString()                               |  |
| Items              | ToString()                               |  |
| CartItems          | Get_items(), get_quantity(),             |  |
|                    | get_id(),ToString()                      |  |
| AddItemToCart      | Get_id(), decreasequantity(), clone(),   |  |
|                    | addItem()                                |  |
| RemoveItemFromCart | Get_items(), get_id(), RemoveItem(),     |  |
|                    | IncreaseQuantity()                       |  |
| DisplayCart        | DisplayCart()                            |  |
| Checkout           | Get_items(), get_cost(), get_quantity(), |  |
|                    | get_type(), to_string(), ClearCart()     |  |

ClearCart ClearCart()

## Task 2 Clone():

We utilize this method in the AddItemToCart() method to copy the data over to our 'target' variable. This allows us to add the item to cart by copying the information over and manipulating the quantity in stock. I believe it is included in the class definition because all the item's attributes are private and we need to be able to access them for the cart.

| Task 3:<br>TRAIT  | ltem                                      | Store                                      | TextUI   |  |
|---|---|--|--|--|
| Cohesive  | Yes, there is a pretty linear platform    | Yes, there aren't complex methods          | Half and half, the function calls can get difficult to follow      |  |
| Clear Yes, each fo  | unction is simple and attributes match up | Yes, each method is created with a purpose | No, the methods are hard to trace but it is functional             |  |
| Convenient  Yes, all variables are accessible through getters and setters  Yes, you can access everything like an actual shopping cart  Yes, has a lot of structure with implementation |   |  |  |  |
| Consistent  | Yes all names and parameters make sense   | Yes, all methods and parameters make s     | sense in relation No, some methods and variables could be improved |  |