Task1:

| TextUI | calls |
|---|---|
| TextUI | NA |
| MainMenu | NA |
| RouteChoice | DisplayInventory(), ItemMenu(), AddItemToCart(), DisplayCart(), CartItems(), RemoveItemFromCart(), Checkout(), ClearCart() |
| ItemMenu | NA |

| ShoppingCart | calls |
|---|---|
| ShoppingCart | NA |
| AddItem | get_id(), IncreaseQuantity() |
| RemoveItem | get_quantity(), DecreaseQuantity() |
| DisplayCart | NA |
| ClearCart | NA |
| get_items() | NA |

| Item | calls |
|---|---|
| Item | NA |
| get_id() | NA |
| get_quantity() | NA |
| get_cost() | NA |
| get_type() | NA |
| IncreaseQuantity | NA |
| DecreaseQuantity | NA |
| ToString | NA |
| Clone | NA |
| operator<< | ToString() |

| Store | Calls |
|---|---|
| Store | Item(), ShoppingCart() |
| DisplayInventory | ToString() |
| Items | get_quantity(), get_id(), ToString() |
| CartItems | get_quantity(), get_id(), ToString() |
| AddItemToCart | get_id(), Clone(), DecreaseQuantity() |
| RemoveItemFromCart | get_id(), IncreaseQuantity(), get_items() |
| DisplayCart | DisplayCart() |
| Checkout | get_items(), get_quantity(), get_cost(), get_type(), ClearCart() |
| ClearCart | ClearCart() |

Task2:
The clone method creates a new item object with the same exact id_, type_, cost_, but with a quantity of 1. In order to add an item to a cart the same item needs to be recreated and added once.

Task3:

| Yes | No |
|-----|-----|

| Trait | TextUI | ShoppingCart | Item | Store |
|-------|--------|--------------|------|-------|
| Cohesive | It only performs as an interface and hands over any computation | Doesn't incorporate outside objects | Does everything related to Item | It only performs the necessary actions |
| Complete | Seems to have all the necessary components | Seems to have all the necessary components | Seems to have all the necessary components | Doesn't allow for multiple users |
| Clear | The multiple if statements in RouteChoice() make it a little confusing | All the operations are straightforward | All the operations are straightforward | A lot of the methods are named similar to other object methods |
| Convenient | Works well as a UI | Prints everything that's necessary | Not necessarily since it can basically just be a struct | Prints everything that's necessary |
| Consistent | Seems to be consistent | Seems to be consistent | Seems to be consistent | Seems to be consistent |