COS 20007: Object Oriented Programming

Pass Task 7.1: Case Study — Iteration 5

Show Wai Yan/105293041

Program.cs

```
namespace SwinAdventure
{
    public class Program
    {
        public static void Main(string[] args)
        {
            // Configurations
            string helpCommand =
                $"Here is the List of command\n\t- look at me: Display what you are carrying in your
inventory\n\t- look at <item> [?in <container>]: Get description of that item,which inside in the
container\n\t- quit/exit: Halt the program\n";

            // Getting Player's Name and Description
            string PlayerName = "";
            string PlayerDescription = "";
            Console.WriteLine("Write Your Name, Traveller!");
            Console.Write("NAME -> ");
            PlayerName = Console.ReadLine();
            Console.WriteLine("How about Your description, Traveller!");
            Console.Write("Description -> ");
            PlayerDescription = Console.ReadLine();

            // Object Configurations
            Player me = new Player(PlayerName, PlayerDescription); // Create Player

            // Create two items and put these to player's inventory
            Item sword = new Item(
                new string[] { "sword", "bronze sword" },
                "Bronze Sword",
                "A shiny bronze sword"
            );
            Item shield = new Item(
                new string[] { "shield", "wooden shield" },
                "Wooden Shield",
                "A tough wooden shield"
            );

            me.Inventory.Put(sword);
            me.Inventory.Put(shield);

            // Create a bag and put it to player's inventory
            Bag myBag = new Bag(
                new string[] { "bag", "backpack" },
                "Leather Bag",
                "A sturdy leather bag to carry items"
            );
            me.Inventory.Put(myBag);

            // Create another item and add it to the bag
            Item potion = new Item(
                new string[] { "potion", "health potion" },
                "Health Potion",
                "A magical red potion that restores health"
            );

            myBag.Inventory.Put(potion);

            // Game Loop
            Console.WriteLine("Write '-h' for helper");
            while (true)
            {
                string command = "";
                Console.Write("Command -> ");
                command = Console.ReadLine().ToLower();
                if (command == "exit" || command == "quit")
                {
                    Console.WriteLine("Take the rest, Traveller!");
                    return;
                }
                else if (command == "-h")
```

```
            {
                Console.WriteLine(helpCommand);
            }
            else
            {
                Console.WriteLine(new LookCommand().Execute(me, command.Split(' ')));
            }
        }
    }
}
```

Screenshot of the console output showing all valid and invalid commands

```
Write '-h' for helper
Command → -h
Here is the List of command
        - look at me: Display what you are carrying in your inventory
        - look at <item> [?in <container>]: Get description of that item,which inside in the container
        - quit/exit: Halt the program

Command → look at me
You are Show Wai Yan 105293041
You are carrying
        a bronze sword (sword)
        a wooden shield (shield)
        a leather bag (bag)

Command → hello at me
Error in look input
Command → look atttt me
What do you want to look at?
Command → look on me
What do you want to look at?
Command → look at sword
A shiny bronze sword
Command → look at shield in inventory
A tough wooden shield
Command → look at bag
A sturdy leather bag to carry items.
You look in the leather bag and see:
        a health potion (potion)

Command → look at potion in bag
A magical red potion that restores health
Command → look at potion under bag
What do you want to look in?
Command → look at book in bag
I cannot find the book in the bag
Command →
```