

Test	Duration	Traits	Error Message	Run	Debug
BagTesting (5)	173 ms				
CommandProcessorTesting (4)	789 ms				
InventoryUnitTesting (5)	159 ms				
ItemUnitTesting (3)	153 ms				
LocationPathTesting (2)	165 ms				
LocationTesting (3)	155 ms				
LookCommandLocationTesting (5)	178 ms				
LookCommandTesting (8)	158 ms				
MoveCommandTesting (3)	160 ms				
PathValidationTesting (1)	159 ms				
PlayerLocationTesting (4)	147 ms				
PlayerUnitTesting (5)	161 ms				
UnitTesting1 (6)	156 ms				

Group Summary

BagTesting

Tests in group: 5

Total Duration: 173 ms

Outcomes

5 Passed

```

C:\Users\Joshua\OneDrive\Des  x  +  v
Enter your player's name: joshua
Enter a description for your player: a king

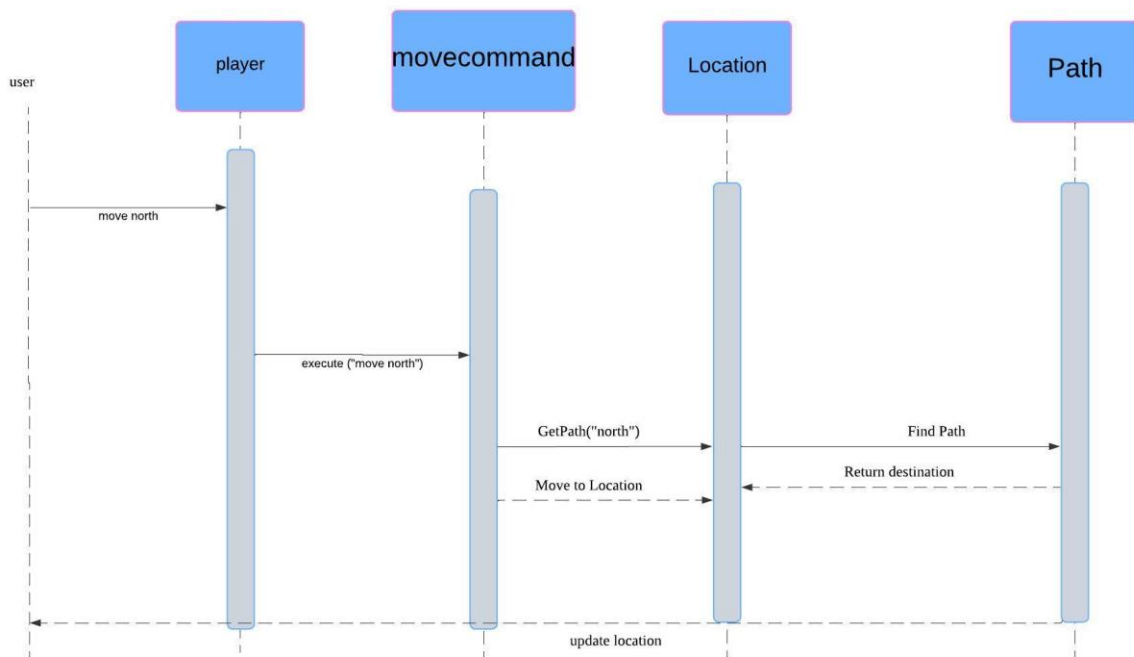
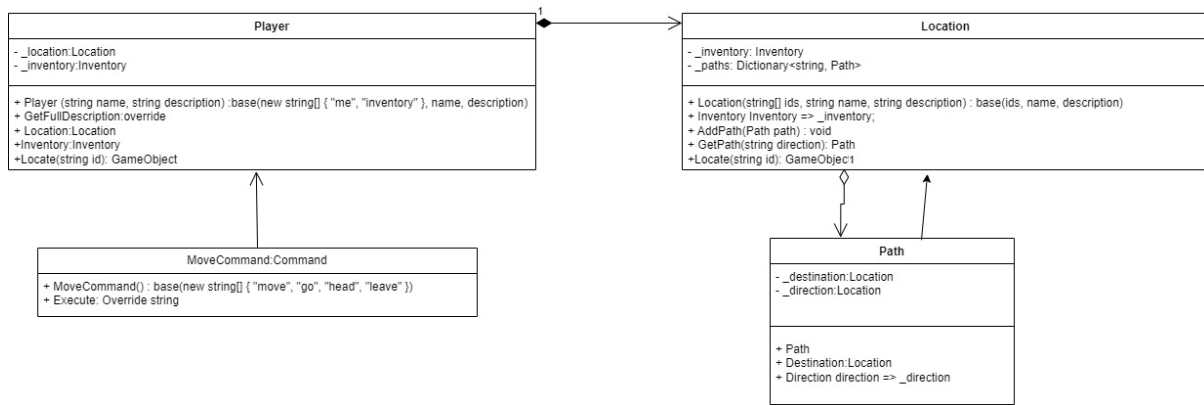
Welcome, joshua the a king!

Item 'Sword' added to inventory.
Item 'Shield' added to inventory.
Item 'a small bag' added to inventory.
A small bag has been added to your inventory.

Item 'a gem' added to inventory.
Item 'gem' has been placed inside the small bag.

Enter a command (or type 'exit' to quit):
look around
Dark Forest: A dark and ominous forest.
Enter a command (or type 'exit' to quit):
move north
You move north to the Small Village.
Enter a command (or type 'exit' to quit):
move west
You can't go that way.
Enter a command (or type 'exit' to quit):
move east
You move east to the Snowy Mountain.
Enter a command (or type 'exit' to quit):
|

```



Program.cs:

using System;

using SwinAdventure;

class Program

{

static void Main(string[] args)

{

// Step 1: Set up the player with their name and description.

Console.WriteLine("Enter your player's name: ");

string playerName = Console.ReadLine();

```

Console.Write("Enter a description for your player: ");

string playerDescription = Console.ReadLine();

Player player = new Player(playerName, playerDescription);

Console.WriteLine($"
Welcome, {playerName} the {playerDescription}!
");

// Step 2: Set up locations and paths

Location forest = new Location(new string[] { "forest" }, "Dark Forest", "A dark and ominous
forest.");

Location village = new Location(new string[] { "village" }, "Small Village", "A peaceful village with
friendly folk.");

Location mountain = new Location(new string[] { "mountain" }, "Snowy Mountain", "A tall,
snowy mountain peak.");

Location lake = new Location(new string[] { "lake" }, "Crystal Lake", "A clear, sparkling lake.");

// Connect locations with paths

forest.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.North, village));
village.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.South, forest));
village.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.East, mountain));
mountain.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.West, village));
mountain.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.North, lake));
lake.AddPath(new SwinAdventure.Path(SwinAdventure.Path.Direction.South, mountain));

// Step 3: Place the player in the initial location

player.Location = forest;

// Step 4: Add some items to the player's inventory

Item sword = new Item(new string[] { "sword" }, "Sword", "A sharp, shiny sword.");
Item shield = new Item(new string[] { "shield" }, "Shield", "A sturdy wooden shield.");
player.Inventory.Put(sword);

```

```
player.Inventory.Put(shield);
```

```
Bag smallBag = new Bag(new string[] { "bag", "small bag" }, "a small bag", "A small leather bag.");
```

```
player.Inventory.Put(smallBag);
```

```
Console.WriteLine("A small bag has been added to your inventory.\n");
```

```
Item gem = new Item(new string[] { "gem" }, "a gem", "A shiny, valuable gem.");
```

```
smallBag.Inventory.Put(gem);
```

```
Console.WriteLine("Item 'gem' has been placed inside the small bag.\n");
```

```
// Initialize the CommandProcessor with all commands
```

```
CommandProcessor commandProcessor = new CommandProcessor();
```

```
// Step 5: Main game loop
```

```
while (true)
```

```
{
```

```
    Console.WriteLine("Enter a command (or type 'exit' to quit):");
```

```
    string command = Console.ReadLine();
```

```
    if (command.ToLower() == "exit")
```

```
    {
```

```
        break; // End the game
```

```
    }
```

```
// Split the command into an array of words
```

```
string[] commandWords = command.Split(' ');
```

```
// Execute the command using CommandProcessor and display the result
```

```

        string result = commandProcessor.ExecuteCommand(player, commandWords);

        Console.WriteLine(result);
    }

    Console.WriteLine("Goodbye!");
}
}

Location.cs:
namespace SwinAdventure
{
    public class Location : GameObject, IHaveInventory
    {
        private Inventory _inventory;
        private Dictionary<string, Path> _paths;
        public Location(string[] ids, string name, string description) : base(ids, name, description)
        {
            _inventory = new Inventory();
            _paths = new Dictionary<string, Path>();
        }

        public Inventory Inventory => _inventory;
        public void AddPath(Path path)
        {
            _paths[path.direction.ToString().ToLower()] = path;
        }

        // Method to retrieve a Path based on direction
        public Path GetPath(string direction)
        {
            _paths.TryGetValue(direction.ToLower(), out Path path);
            return path;
        }
    }
}

```

```

    }

    public GameObject Locate(string id)
    {
        if (AreYou(id))
        {
            return this;
        }
        return _inventory.Fetch(id);
    }
}

```

Path.cs:

```
using static MiNET.Entities.Entity;
```

```
namespace SwinAdventure
```

```

{
    public class Path : GameObject
    {
        private Location _destination;
        private Direction _direction;
        public enum Direction
        {
            North,
            South,
            East,
            West,
        }

        public Path(Direction direction, Location destination)
    }
}

```

```
        : base(new string[] { direction.ToString().ToLower() }, direction.ToString(), $"A path to the {direction}")
```

```
    {  
        _direction = direction;  
        _destination = destination;  
    }
```

```
    public Location Destination => _destination;
```

```
    public Direction direction => _direction;
```

```
    }  
}
```

Movecommand.cs:

```
namespace SwinAdventure
```

```
{  
    public class MoveCommand : Command  
    {  
        public MoveCommand() : base(new string[] { "move", "go", "head", "leave" }) { }    }
```

```
    public override string Execute(Player player, string[] text)
```

```
    {  
        if (text.Length != 2)  
        {  
            return "Where do you want to go?";  
        }  
    }
```

```
    string directionString = text[1];
```

```
    Path path = player.Location?.GetPath(directionString);
```

```
    if (path == null)
```

```
{  
    return "You can't go that way.";  
}  
  
player.Location = path.Destination;  
return $"You move {directionString} to the {path.Destination.Name}.";  
}  
}  
}
```