



```
1 using System;
 2
 3 namespace SwinAdventure
 4 {
 5
       public class Paths : GameObject
 6
 7
            bool _isLocked;
            Locations _source, _destination;
 8
 9
            string[] _ids;
10
            public Paths(string[] ids, string name, string desc, Locations
11
              source, Locations destination) : base(ids, name, desc)
12
            {
13
                _isLocked = false;
14
                _source = source;
15
                _destination = destination;
                _ids = ids;
16
17
18
                AddIdentifier("path");
                foreach (string s in name.Split(" "))
19
20
21
                    AddIdentifier(s);
22
                }
            }
23
24
25
            public Locations Destination
            {
26
27
                get
28
                {
29
                    return _destination;
30
                }
            }
31
32
            public override string ShortDescription
33
34
35
                get
36
                {
37
                    return "- " + _ids[0] + ": " + _destination.Name + "\n";
38
                }
            }
39
40
41
            public bool IsLocked
42
            {
43
                get
44
                {
45
                    return _isLocked;
46
47
                set
48
                {
```

```
...20007-working\Paths and Moving\SwinAdventure\Paths.cs
```

2

```
1 using System;
2
 3 namespace SwinAdventure
 4 {
 5
       public class MoveCommand : Command
 6
 7
            public MoveCommand() : base(new string[] {"move"})
 8
 9
            }
10
            public override string Execute(Player p, string[] text)
11
12
                string error = "I don't know how to move that.";
13
14
                string _direction;
                switch (text.Length)
15
16
17
                    case 1:
18
                        return "Move where?";
19
                    case 2:
                        _direction = text[1].ToLower();
20
21
                        break;
22
                    case 3:
                        _direction = text[2].ToLower();
23
24
25
                    default:
26
                        return error;
27
                }
28
29
                GameObject _path = p.Location.Locate(_direction);
30
                if (_path == null)
31
                {
32
                    return error;
33
                if (_path is Paths)
34
35
                    Paths _p = (Paths)_path;
36
37
                    if (_p.IsLocked)
38
                    {
39
                        return "The path is blocked.";
40
41
                    p.Location = _p.Destination;
42
                    return "You moved to " + p.Location.Name + ".\n";
43
44
                return error;
45
            }
46
47
48
       }
49 }
```

```
... Study - Iteration 7 - Paths\SwinAdventure\Program.cs
```

```
1 namespace SwinAdventure
2 {
 3
       internal class Program
 4
       {
           static string[] CommandExe(string input)
 6
7
               return input.Split(' ');
 8
           }
9
           static void Main(string[] args)
10
11
               Console.WriteLine("Enter player's name:");
12
               string playerName = Console.ReadLine();
13
14
               Console.WriteLine("Enter player's description:");
15
16
               string playerDescription = Console.ReadLine();
17
18
               Player player = new Player(playerName, playerDescription);
19
               Locations home = new Locations("Home", playerName + "'s
20
                 home.");
21
               Locations forest = new Locations("Forest", "A dense forest.");
               Locations cave = new Locations("Cave", "A dark cave.");
22
               Paths home2forest = new Paths(new string[] { "north" }, "Path
23
                 1", "A path from home to the forest.", home, forest);
24
               Paths forest2home = new Paths(new string[] { "south" }, "Path
                 2", "A path from the forest to the cave.", forest, cave);
25
               home.AddPath(home2forest);
               forest.AddPath(forest2home);
26
27
28
               Console.WriteLine(home.PathsList);
29
30
               player.Location = home;
31
               Item BronzeSword = new Item(new string[] { "sword", "weapon" }, >
32
                   "Bronze Sword", "A simple bronze sword.");
               Item BronzeAxe = new Item(new string[] { "axe", "weapon" },
33
                  "Bronze Axe", "A simple bronze axe.");
34
35
               player.Inventory.Put(BronzeSword);
               player.Inventory.Put(BronzeAxe);
36
37
38
               Bag bag = new Bag(new string[] { "bag", "inventory" }, "Bag",
                  "A simple bag.");
39
               player.Inventory.Put(bag);
40
               Item gem = new Item(new string[] { "gem", "jewel" }, "Gem", "A >
41
                 shiny gem.");
               bag.Inventory.Put(gem);
42
```

```
... Study - Iteration 7 - Paths\SwinAdventure\Program.cs
```

```
2
```

```
43
44
                while (true)
45
                {
46
                    Console.WriteLine("Enter a command: ");
                    Command command = new CommandProcessor();
47
48
                    string _input = Console.ReadLine();
49
                    string[] _temp = _input.Split(" ");
50
                    if (_input.ToLower() == "quit")
51
52
53
                        break;
54
                    }
55
                    else
56
                    {
                        Console.WriteLine(command.Execute(player, _temp));
57
58
                    }
59
                }
           }
60
       }
61
62 }
63
```



Enter a command: move north You moved to Forest.

Enter a command:

```
...teration 7 - Paths\IdentifiableObjectTest\PathTest.cs
```

```
1 using SwinAdventure;
 2
 3 namespace PathTest
 4 {
 5
       public class PathTest
 6
 7
            Paths _path;
 8
            Locations _roomA;
 9
            Locations _roomB;
10
            [SetUp]
11
            public void Setup()
12
13
                _roomA = new Locations("Room A", "A room.");
14
                _roomB = new Locations("Room B", "A room.");
15
16
                _path = new Paths(new string[] { "north" }, "Path", "A path
17
                  from the source to the destination.", _roomA, _roomB);
18
            }
19
            [Test]
20
21
            public void PathisIdentifiableTest()
22
                Assert.IsTrue(_path.AreYou("path"));
23
24
            }
25
            [Test]
26
27
            public void PathFullDescriptionTest()
28
29
                string desc = _path.FullDescription;
30
                Assert.AreEqual("Path (north): A path from the source to the
31
                  destination.", desc);
            }
32
33
            [Test]
34
            public void PathIsLockedTest()
35
36
            {
37
                Assert.IsFalse(_path.IsLocked);
            }
38
39
            [Test]
40
41
            public void PathSetIsLockedTest()
42
43
                _path.IsLocked = true;
44
                Assert.IsTrue(_path.IsLocked);
45
            }
46
47
```

```
...teration 7 - Paths\IdentifiableObjectTest\PathTest.cs
```

2

```
...n 7 - Paths\IdentifiableObjectTest\MoveCommandTest.cs
```

```
1 using SwinAdventure;
2
 3 namespace MoveCommandTest
4 {
 5
       public class MoveCommandTest
 6
7
           Command _moveCommand;
8
            Player _player;
           Locations _location, _destination;
9
            Paths _path, _returnPath;
10
11
           [SetUp]
12
13
            public void Setup()
14
            {
               _moveCommand = new MoveCommand();
15
               _player = new Player("Sen", "luv ur mom");
16
               _location = new Locations("Location", "A location");
17
               _destination = new Locations("Destination", "A destination");
18
19
               _path = new Paths(new string[] { "north" }, "Path", "A path
                 from the source to the destination.", _location,
                  _destination);
               _returnPath = new Paths(new string[] { "south" }, "Path", "A
20
                  path from the source to the destination.", _destination,
                 _location);
21
               _location.AddPath(_path);
22
               _destination.AddPath(_returnPath);
23
               _player.Location = _location;
            }
24
25
26
           [Test]
27
            public void MoveToDestinationTest()
28
            {
29
               string[] text = new string[] { "move", "to", "north" };
               Assert.AreEqual("You moved to Destination.\n",
30
                  _moveCommand.Execute(_player, text));
            }
31
32
           [Test]
33
            public void MoveToLockedPathTest()
35
               _path.IsLocked = true;
36
               string[] text = new string[] { "move", "to", "north" };
37
38
               Assert.AreEqual("The path is blocked.", _moveCommand.Execute
                  (_player, text));
            }
39
40
41
            [Test]
42
            public void MoveToInvalidPathTest()
43
```

```
...n 7 - Paths\IdentifiableObjectTest\MoveCommandTest.cs
                                                                                 2
               string[] text = new string[] { "move", "to", "east" };
44
               Assert.AreEqual("I don't know how to move that.",
45
                                                                                 P
                 _moveCommand.Execute(_player, text));
           }
46
47
           [Test]
48
49
           public void MoveAndReturnTest()
50
51
               string[] text = new string[] { "move", "to", "north" };
               _moveCommand.Execute(_player, text);
52
               text = new string[] { "move", "to", "south" };
53
               Assert.AreEqual("You moved to Location.\n",
54
                 _moveCommand.Execute(_player, text));
55
           }
56
       }
57 }
```

58

