# Object Oriented Programming

Credit Task 9.2C: Case Study — Iteration 7: Paths

## Overview

Object oriented programming makes best sense with larger programs. The case study will be your opportunity to create a larger program and better see how these abstractions make it easier to create software solutions.

**Purpose:** Complete the set iterations of the case study.

**Task:** Understand the case study program and implement iteration 7.

**Time:** **End of Week 10, Friday, 18 July 2025, 23:59:00 (Firmed)**

### Submission Details

All students have access to the Adobe Acrobat tools. Please print your solution to PDF and combine it with the screenshots taken for this task.

- Program source code
- Test source code
- Screenshot of unit tests passing
- Screenshot of program running
- UML class diagram showing what needs to be added
- UML sequence diagram showing how moving works

## Instructions

1. Review the **Case Study Requirements** document. It outlines what you need to create.

2. For this week aim to complete Iteration 7.

Once your tests are working correctly get a screenshot of the tests passing and submit them along with the code. You should also get a screenshot of the program in execution. To get it signed off as complete you will need to demonstrate it working to your tutor either during your lab or at the help desk.

**Note**: Once you have made a submission, this task requires you to have a discussion with your tutor in your lab or at the help desk before it can be signed off as Acknowledgment.

*Assessment Criteria*

Make sure that your task has the following in your submission:

- The program is implemented correctly based on the case study description.
- The "Universal Task Requirements" (see Canvas) have been met.

## A. UML Class Diagram
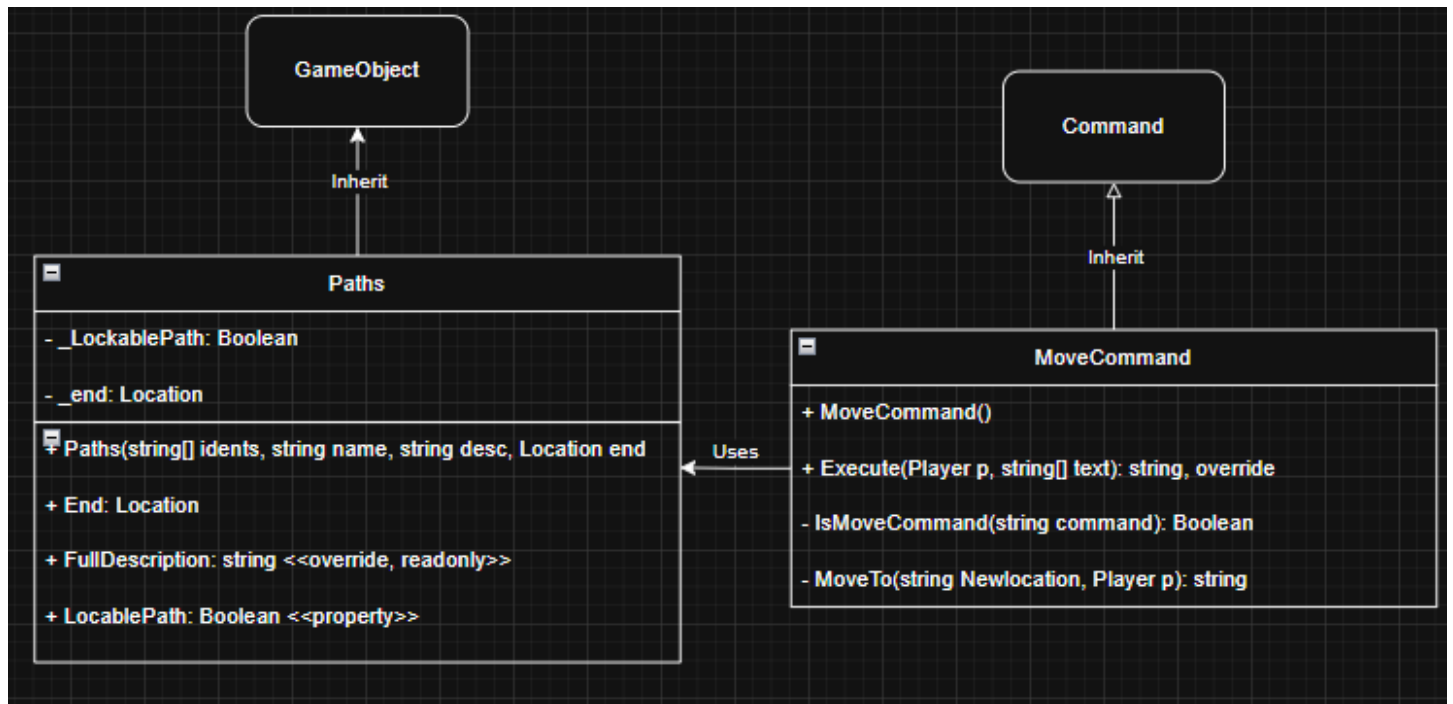


**B. UML Sequence Diagram:** For the Sequence Diagram, I decided to draw and export it into PDF file (in submission details)