# University of Sussex

# Programming in Python (823G5)

# Coursework Part 3 Instructions

This assignment is worth for 30% of the total marks for this module.

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|---|---|
| **Due:** | Check Canvas |
| **Format:** | ZIP file. Electronic submission only (Canvas) |

### General instructions

1. Answer all parts of the brief.
2. Do not copy the work of another student. Plagiarism is a very serious matter. Discussion between students is to be encouraged – copying is an academic disciplinary matter.
3. Hand your submission in on time. There are penalties for late submission.
4. If I cannot read your submission, I cannot mark it. It is your responsibility to ensure that the presentation of your submission is appropriate for a university student.
5. If you do not understand the brief, you can get help at the workshop sessions.
6. Ensure your candidate number is on your final submission. It is surprising how many students forget this basic information.

# Coursework Part 3

# “Moving through Space” GUI Version

## Specifications

For the final part of your project you should modify and enhance the program you created for the first part of this assignment. You should:

- Implement a GUI for your game using Tkinter.
- Include visual images to enhance your GUI. For example, when you enter a room there should be visual representation of that room.
- Incorporate all or any improvements suggested by your tutor(s) in the feedback for assignment part 1.
- Create a log of the user's journey through your game as they play it (record a script of the user inputs as a separate log file each time they play).
- Implement automated testing for your game.
- Implement exception handlers such that your project follows a strategy of error prevention and recovery.
- Create supporting class and method level documentation for your project.

## Marking scheme

| **Aspect** | **Max. mark** |
|---|---|
| Design and coding style | 20 |
| GUI implementation | 20 |
| Images / other enhancements of the visual interface | 10 |
| Log of user’s journey | 10 |
| Error prevention and recovery | 20 |
| Class and method level documentation and code comments | 10 |
| Report | 10 |
| **Total** | **100** |

## Submission

The submission consists of a report and code project files that should be submitted in electronic form. The report should consist of the following:

- Front page.
- The problem statement: This should be a brief description of the problem the program addresses. Given that your program will implement something other than the original basic Adventure World, you should make clear here what the application domain is.
- A class diagram for your project (a UML class diagram). If you did not use PyCharm for your development, you should provide clear instructions on how to run your program in your other development environment and supply all the necessary files. It is your responsibility to make sure that you have supplied all the necessary material and files for the running of your program.
- A brief description of how the starting program (your Assignment 1 program) was modified. You do not have to describe the starting program or any of its classes, but you have to say how these classes were modified (those that did change). Also describe any new classes. The description of new classes should be brief and should complement the UML diagram. In other words, the description should be at a high level.

**Your report should consist of no more than 1,500 words (*excluding* any appendices if you have them).** You can write your report in any word processing software you like, just make sure to convert to pdf before submission.

**Put all your files together in one ZIP file and upload the zip file using the electronic submission point on Canvas.** Please remember to check that your ZIP files unpack correctly before submitting them (I sometimes get empty files because students have not checked – empty files do not grade well!).

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