

SCC461 – Programming for Data Scientists

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Week 9

Assignment

Deadline: Monday, 11/12, 9am

Upload on Moodle your code, your test cases (with the output), and your short reflection.

1. PyGame Exercise (5%)

In this assignment, you will have a hands-on experience with learning a library, and understanding and modifying a complete OOP source code. The assignment will consist of the following steps:

- (a) Study Chapter 17 of How to Think Like a Computer Scientist (<http://openbookproject.net/thinkcs/python/english3e/pygame.html>)
- (b) Study the Aliens game example (aliens.py, it comes with the PyGame library)
- (c) Propose and implement an “interesting” modification to the aliens game:
 - For example: Exercise 4 at 17.10 (the variation where the shots could kill the player)
 - Any modification that is more trivial/easier than Exercise 4 will not get full marks, but will get marks
- (d) Write a short report about your full experience, including steps (a), (b) and (c)
- (e) Do not forget to show your test cases (which may be screenshots in this context), and to include your reflection.

As mentioned in class, you must write a short text reflecting how you approached these problems. You must also report who you discussed with, what you searched online, who you helped, etc. Discussions are allowed, and looking for online materials, books, etc, is allowed. However, directly copying full Python code is not allowed.