Peer-review of assignment 4 for *INF3331-chriklev*

Reviewer 1, torgrirn, torgrirn@student.matnat.uio.no
Reviewer 2, sofiemj, sofiemj@student.matnat.uio.no
Reviewer 3, chrisye, chrisye@uio.no

October 9, 2018

1   Review

Python version and operation system:
Python 3.5.5, Ubuntu 18.04.1 LTS

Assignment 4.1

Well documented with good docstring and useful comments.
The code is easy to read and pretty self-explanatory.
Code works as expected. No need to validate inputs.

Assignment 4.2

Good docstring, but the code is not commented as well as in 4.1. It is, however, fairly short and self-explanatory.
Got the warning: "RuntimeWarning: overflow encountered in square w[ind] = w[ind]**2 + z[ind]" when running this script, but the code seems to work as expected.
Numpy is used in an effectively. I see no obvious way to improve this.
Runtimes are listed in the report, but I miss a calculation of the speed increase.

Assignment 4.3

Good docstring here as well. The code is easy to read and well commented.
Works as expected with significant speed increase.
Report does not contain runtime numbers.

Assignment 4.4

INF3331, so no Cython implementation.

Assignment 4.5

The interactive user interface is a cool idea, but it is a little confusing. A non-interactive interface could probably have been solved more elegant using Argparse for command line arguments.
The script fails if path (location to save image) is set to home directory. This should not be a problem in most cases.
Given a negative value for iterations, the script still runs, but creates a blank image. It might be a good idea to return an error instead.
The script is relatively simple program, but it lacks comments.

Assignment 4.6

The setup script installs the module/package, but I cannot find a "compute_mandelbrot" function. The "test_outside" function will not check values after zero iterations if given a region that is partly inside the mandelbrot set. In this case, the calculate function it will continue to run until it is done.
There should be an explanation of how to run the tests.
The names of the tests are meaningful enough to understand what it's about.

Assignment 4.7

Not implemented.

Assignment 4.8

Not implemented.

General feedback

Good work, but there should be a readme file to explain how to run the code.