Python project

In the context of the advanced part of the python course "Practical python programming for Big Data and the scientist" held at EBC in 2016, you are to complete a personal programming project.

There are many things you should first do before writing the first line of code. Planning a project correctly is key to its success and to its completion within deadlines.

Please write up a document containing the description of your project and the answer to all the following questions.

Guidelines and questions

- What is the field of operation of your program? Is it a web server? Is it a data processing tool? Is it a visualisation or graphing project? Is it a video game?
- What is the name of your project? The name of the project often matches the name of the repository it is stored on. It should thus contain only lower case characters and must separate words with an underscore. Bonus points if the letters 'p' and 'y' appear in the name.
- What is your project going to do? Why is it going to be useful? Why would someone want to use it?
- What are the inputs and what are the outputs of your program?
- What are the main objects? Write the name of the main classes you are going to use in your project, as well as the name of the attributes and methods they will have.
- Once you have the name of the classes and methods, write some pseudo code before starting with the real implementation.
- Describe a user case. You have to make up a fictional character named "Bob" who wants to use your project. Describe his ideas and his goals, and tell us how he is going to use your project in a few sentences. Also describe the results he will obtain.

Keep in mind

- Your project should be shareable. If it is snake, it should be playable by someone else. We will try to start your project on our computers to see if it works. So don't forget to provide some example inputs.
- Your project should be distributed on github.
- Write some documentation with your code at the end. So that's not just a bunch of unreadable long python code.
- Make the code clean and try and follow PEP 8 or at least some consistent style guide.