8.2_Final_Project_Template

October 11, 2023

1 Project title:

• Author:

1.1 Abstract

- Briefly introduce your project objective
- how you design/implement this project with python (what external packages were used, what modules/functions/classes you wrote)
- how your design and implementation makes project easier, faster, or more accurate

1.2 Introduction

- What is your project objective? Describe the task you intend to accomplish using Python
- Why is it important?
 - how your proposed solution will make the task easier, faster, and/or more accurate
 - why your task could not simply be accomplished using the "out-of-the-box" tools (e.g., from ArcGIS/QGIS), or why your script gives a particular advantage over those tools (e.g., iterations or conditionals are required)
- What do you plan to do?

1.3 Study area and data (optional)

1.4 Sample data

1.5 Project design

- How do you divide and conquer? What are the components comprising the project and how do you plan to tackle each?
- What external packages do you plan to use and why? What functions or classes are you going to write?

1.6 Results and discussion

[]: import numpy as np

I will use the function from the external package numpy to generate a 1-dimensional array of length 3 below:

[]: np.zeros(3)

I will call the function from my user-defined module $my_mod.py$ to accomplish the task (describe your task):

```
[ ]: import my_mod
[ ]: my_mod.my_function
[ ]: my_mod.MyClass
```

- 1.7 Conclusions
- 1.8 References (any citation style)