README.md 12/8/2022

## Graphs

## Instructions:

• First Read through all of the lecture materials listed in the order listed. You will find all of this material neatly nested in the objectives directory. In the objectives directory you will find 6 subdirectories, each of these directories contains a readme file which contains all of the lecture material. Here you will find lecture material, hyperlinks, psuedocode, graphics, and some sample excercises to try by hand before moving to writing any code. This will provide the necessary background understanding you will need to complete the four projects listed below.

• Once you have completed the learning portion of the materials, you can move onto projects listed below. You will need to open the projects directory, there you will find another list of subdirectories. Open the directory listed for the project you' are working on. Here you will .py files you will be working in as well as the readme containing the instructions to complete the project.

## Lecture and learning materials

- Graph Intro
- Graph Representations
- Breadth First Search
- Depth First Search
- Randomness
- Connected Components

## **Projects**

- Project One: Graph Traversal and Search
- Project Two: Earliest Ancestor
- Project Three: Random Social Network
- Project Four: Adventure Map Traversal