Advanced Python - Course Summary

Autumn/Winter 2017
Course Summary

Session 1: Python Basics
- Create a Python file and run it from your command line
- Do basic math operations with integer and floating point numbers
- Do basic string manipulation
- Create and manipulate variables
- Print numbers, strings, and formatted text
- Use comments in your code

Session 2: User input, functions, loops, conditional statements
- Get input from a user
- Write a function (also known as a "method")
- Create and query an array (also known as a list)
- Write an iterative statement (a "for" loop)
- Use logic and Boolean operators
- Write a conditional ("if/else") statement

Session 3: Best practice, git and command line
- Navigate through folders using basic command line commands
- Create a new folder and file using your command line
- Use basic git commands in command line to commit code
- Start using best practice as you develop your projects

Session 4: Flask, and using Python and HTML together
- Import libraries into Python
- See how Python, Flask, Jinja2, and HTML interact with each other
- Write and run a simple Flask web app
- Use route paths and decorators along with functions to do different things on different "pages" of your web app
- Pass variables between Python and HTML using render_template(), an HTML form, and Jinja2 syntax
- Access HTML form data in Python

Session 5: APIs
- Use an API to trigger an email send, and get weather information
- Get data from a user using an HTML form, and use it in an API call
- Get JSON formatted data from a payload response

Session 6: Deploying your code
- Understand the purpose of platforms like Heroku
- Understand the importance of version control and testing
- Deploy your first app

Session 7: Course Competition Prep

● This session is dedicated to project work, and an opportunity to get guidance and support from your instructors

Session 8: Course Competition!

● The first part of this session is for putting the finishing touches on projects. Then each group gets to present their work!