Python for Application Development

Summer & Fall 2020

# Instructor Information

|  |  |  |
| --- | --- | --- |
| Instructor | Email | Office Hours |
| Keenan M. | keenan@thepythonacademy.com | MWF – 8 to 8:30 pm, after class on Google Hangouts |

# General Information

## Description

This Course, Python for Application Development, is the final step to completing the green belt certification.  The course further develops skills you already know, as well as teaches you how to:

* Create powerful and useful commercial desktop Applications
* How to use object-oriented programming with tkinter and pyqt for graphical user interface.
* You will also learn sql-lite for backend data storage and processing
* As well as logging error and messages for application monitoring.

## Expectations and Goals

By the end of this class, you will able to create attractive, functional and shippable graphical user interfaces and applications for your customers, using 100% python.

We expect you to attend class, pay attention, and do your homework. If you don’t do your homework or code along in class, you will fall behind and get frustrated. In return, we promise you to give you 100% effort on giving you the most up-to-date material and experience you will need to be successful in the data science field.

# Course Materials

## Required Materials

* You will need to have your own laptop or desktop (we only support troubleshooting for Windows, our staff has limited knowledge of MACs)
* You will need to purchase a copy of “Learning Python Application Development” by Ninad Sathaye.

# Course Schedule (next page)

**Week 1**

The following topics are covered in this class. All topics are covered with real life examples and applications of the topic. Homework is always given after the class and reviewed at the beginning of the next class.

* Principles of application development
* The different components of a desktop application
  + Graphical User Interface (GUI)
  + Logs
  + Backend / Database
* Creation of basic widgets

**Week 2**

The following topics are covered in this class. All topics are covered with real life examples and applications of the topic. Homework is always given after the class and checked at the beginning of the next class.

* Creation of basic widgets (continued)
* Creating our first application – a fully functional phonebook managed in python
  + Creating multiple windows
  + Saves and writes records
  + Fully functional
  + Sharing application with customers

**Week 3**

The following topics are covered in this class. All topics are covered with real life examples and applications of the topic. Homework is always given after the class and checked at the beginning of the next class.

* Object-oriented application development
* Connecting to a databse
* Logging
* Final Project