Python for Robotic Process Automation

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 Robotic Process Automation, is the second stage to obtaining the blue belt certification.  This course will teach you how to create advanced models with Python, including:

* Overview of RPA tools and Capabilities
* PuODBC for database automation
* Selenium for web automation
* TagUI for application automation
* As well as how to How to Design RPA Implementation plans

## Expectations and Goals

By the end of this class, you will able to create powerful backend and frontend automation tools to boost the productivity of your company’s processes.

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 receive a free copy of the “Python for Data Analysis” by Wes McKinney, the creator of the famous python library “pandas”.

# 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 Robotic Process Automation in python
* Front-end and GUI automation with tagUI
* Project #1 for UI automation

**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.

* Web automation with selenium
  + Over of html and CSS
  + Finding and clicking elements
  + Setting up automated job
* Intro to DB automation

**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.

* Backend automation project for DBs and data
* Other automation tasks with examples
* Capstone project