

# Python and MongoDB - Immersive

## Basics

- Resume update
- LinkedIn update
- GitHub
- Intro to Git
- Linux basic commands

## Setup Dev Environment

- Install Python 3
- Install PyCharm
- Create “Hello World!” project
- pip install

## Python Language

- What is a programming language
- Variables, data types
- Arithmetic and String operations
- Iteration and control flow
- Keywords
- Classes

## REST API using Flask

- Explore Chrome Developer Tool
- Intro to Flask
- “Hello World!”
- API, HTTP, REST
- HTTP verbs, status codes
- HTTP Request and Response
- JSON
- Implement all verbs

## MongoDB

- Install MongoDB and Compass
- Introduction to MongoDB
- Introduction to MongoDB
- Create DB, collection using Compass
- Basic CRUD operations using Compass

- Data modeling

## **Flask REST API + MongoDB**

- Object Oriented Design
- MongoDB data modeling
- REST API definition using Flask
- Connecting the APIs and MongoDB using PyMongo

## **Projects**

- Mini Project 1 - Object Oriented (2 weeks)
- Mini Project 2 - Flask (2 weeks)
- Mini Project 3 - MongoDB (2 weeks)
- Mini Project 4 - Flask + MongoDB (2 weeks)
- Capstone Project - Complete Backend for E-Commerce (4 weeks)