

Building Intelligent Applications

Lab Setup

Overview

This course includes labs that require you to conduct data science experiments in Microsoft Azure Machine Learning (Azure ML) Studio and to develop C# and Python code. This setup guide describes how to prepare for the labs.

Setup Tasks

To prepare the lab environment, you must perform the following tasks:

1. Create an Azure ML account
2. Download and extract the lab files
3. Install Visual Studio
4. Install Python Anaconda

What You'll Need

To perform the setup tasks, you will need the following:

- A Windows, Linux, or Apple Macintosh computer.
- A web browser and Internet connection.

NOTE: A Windows computer is required for Visual Studio. Optionally, you can install Parallels Desktop on a Macintosh computer and then install Windows and Visual Studio on that platform.

Create an Azure ML Account

Azure ML offers a free-tier account, which you can use to complete the labs in this course.

Sign Up for a Microsoft Account

1. If you do not already have a Microsoft account, sign up for one at <https://signup.live.com/>.

Sign Up for a Free Azure ML Account

1. Browse to http://bit.ly/azureml_login and click **Get started now**.
2. When prompted, choose the option to sign in, and sign in with your Microsoft account credentials.
3. On the **Welcome** page, watch the overview video if you want to see an introduction to Azure ML Studio. Then close the **Welcome** page by clicking the checkmark icon.

Note: Your free-tier Azure ML account allows you unlimited access, with some reduced capabilities compared to a full Microsoft Azure subscription. Your experiments will only run at low priority on a single processor core. As a result, you will experience some longer wait times. However, you have full access to all features of Azure ML.

Install Visual Studio

1. Follow the instructions found [here](#) to install Visual Studio. As of this writing, the current version is Visual Studio 2015 and you can install the free Community Edition for this course.

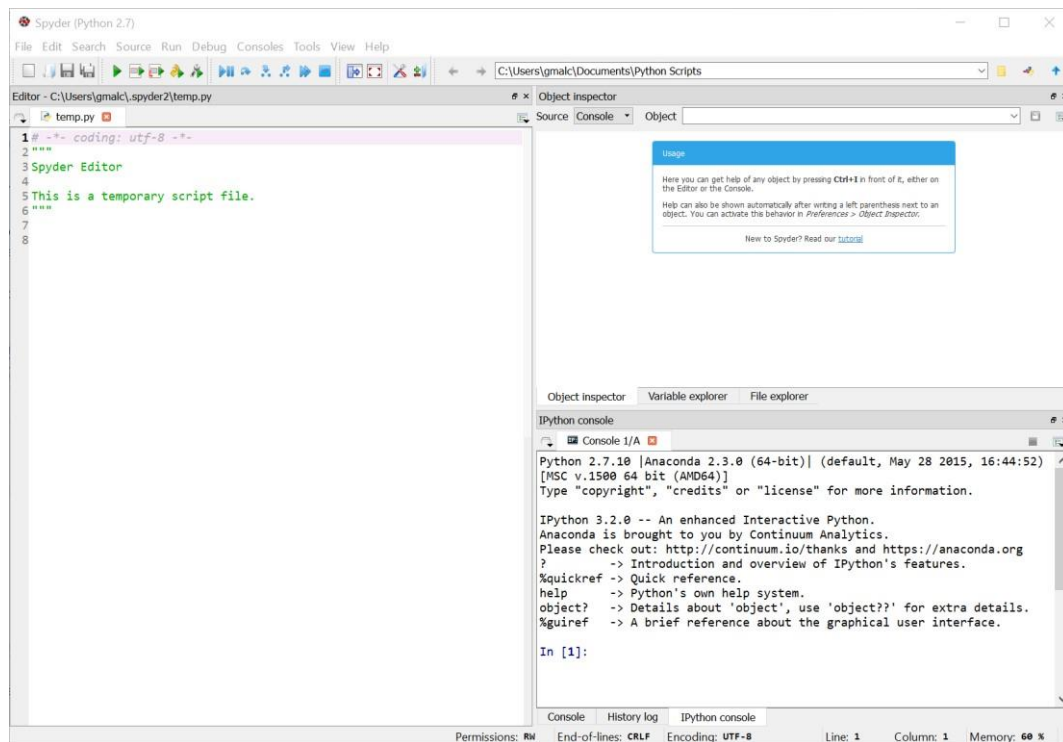
Install Python Anaconda

Python Anaconda is a distribution of Python that includes the Spyder Integrated Development Environment (IDE), which you will use to create Python code in the labs for this course.

Note: In this course, you can choose to complete programming exercises in Python or R (or both). If you plan to use Python, complete this procedure to install the Python runtime and development tools. If you do not plan to use Python, you can skip this procedure.

Install the Python Anaconda Distribution

1. In a web browser, navigate to <http://continuum.io/downloads>.
2. Choose the installer for your operating system (Windows, Apple Macintosh, or Linux).
3. Complete the installation process for Python 2.7.
4. After installation is complete, verify the installation by starting Spyder, which should look similar to the following image:



5. Close Spyder.

Download and Extract the Lab Files

Each lab in this course may require sample data files and code script files that you will use to build machine learning experiments. These files are available in the [GitHub repository](#) for this course.

Summary

By completing the tasks in this setup guide, you have prepared your environment for the labs in this course. Now you're ready to start learning how to build data science and machine learning solutions.