# Course Recommendation System Install Guide

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The following steps are intended to set up your computer to run the Course Recommendation System found at (<https://github.com/Alkamoore/SSW800-CourseReccomendations>). The steps written with Windows 10 in mind but overall steps should be similar for most operating systems

## Step 1: System Installation

Install the following required software needed to run the system.

### Step 1.1: Python

* Go to <https://www.python.org/downloads/> and select the appropriate download. The software was written on Python **version 3.6.1** and it is not compatible with Python 2.
* Once you have installed Python you will want to add it to your environment variables:
  + In Windows: Control Panel 🡪 System 🡪 Advanced System Settings 🡪 Environment Variables (Note: on Linux or Mac this step is unnecessary)
  + In the lower window ‘System Variables’, Select the ‘Path’ and add the Python Installation location to your environment variables. The current default installation location is ‘*C:\Python34*’
* Now you can use Python from the command line and use that to install PIP. This will allow you to install Python modules like pip.

### Step 1.2: Pip and Flask

* Open Windows Explorer
* Then open a command line window by entering ‘cmd’ in the address bar in Windows Explorer or by selecting File 🡪 Open Command Prompt in Windows Explorer
* In the command line type: *python -m pip install -U pip setuptools* (Note: On Linux or Mac the command is *pip install -U pip setuptools*)
* Now that you have pip you can use it to install flask by entering the following into your command line: *pip install flask*

### Step 1.3: MongoDB

* Next install MongoDB by going to <https://www.mongodb.com/> and selecting a download.
* Go to the download location and hit install.
* Select the default installation options and follow the commands

### Step 1.4: Initial Database Update

* Go to your MongoDB Server Installation and navigate to the bin directory. On Windows it looks something like: *C:\Program Files\MongoDB\Server\3.4\bin*
* Select and run *mongod.exe* then select and run *mongo.exe*
* Navigate to the directory where you downloaded the Course Recommendation System project and go to the ‘src’ directory.
* Open a command line window and type: *python update\_db.py --courses --degrees --schedule --students --popularity --reviews*
* This will populate all databases. If you do not have access to the students.json, you can create your own by navigating to: */src/app/db/students* and creating a students.json
* The format for the students.json is as follows:  *{ "name" : "John Smith", "cwid" : "12345678", "advisor" : "Jane Doe", "major" : "SSW", "courses" : ["SSW 540", "SSW 555" ] }*
* Note: After the initial installation if you want to update certain databases just remove those arguments when running the update\_db.py script

## Step 2: Running the System

* Start MongoDB by going to your MongoDB Server Installation and navigate to the bin directory. On Windows it looks something like: *C:\Program Files\MongoDB\Server\3.4\bin*
* Then select and run *mongod.exe* then select and run *mongo.exe*
* Navigate to the directory where you downloaded the Course Recommendation System project and go to the ‘src’ directory.
* Then double click the run.py to begin running the system
* Finally, open a browser and navigation to <http://127.0.0.1:5000>