**Python Project Details**

**What Software Do I Need?**

To complete this project, the following software requirements apply:

* Python 3. The following packages in the Python Standard Library will likely be useful: *csv*, *pprint*, *datetime*, and *time*.
* A text editor, like **[Sublime](https://www.sublimetext.com/" \t "_blank)** or **[Atom](https://atom.io/" \t "_blank)**.
* A terminal application (Terminal on Mac and Linux or Cygwin on Windows).

**What files are included? All these files are available in the zip file (bikeshare.zip) that is attached in my email:**

* bikeshare.py
* chicago.csv
* new\_york\_city.csv
* washington.csv

**What should the program (bikeshare.py) output when run?**

Fill in the code in the template file (bikeshare.py) to answer the following questions about the bike share data.

* What month occurs most often in the start time?
* What day of the week (Monday, Tuesday, etc.) occurs most often in the start time? *Hint: datetime.weekday()*
* What hour of the day occurs most often in the start time?
* What is the total trip duration and average trip duration?
* What is the most frequently used start station and most frequently used end station?
* What is the most common trip (i.e., the combination of start station and end station that occurs the most often)?
* What are the counts of each user type?
* What are the counts of gender?
* What is the earliest birth year (when the oldest person was born), most recent birth year, and most common birth year?

**An Interactive Experience**

The file (bikeshare.py) is set up as a script that takes in raw input to create an interactive experience in the terminal that answers questions (listed above) about the dataset. The experience is interactive because depending on a user's input, the answers to the questions (listed above) will change. There are four questions that will change the answers:

1. Would you like to see data for Chicago, New York, or Washington?
2. Would you like to filter the data by month, day, or not at all?
3. Which month? January, February, March, April, May, or June?
4. Which day of the week? Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday?

The four questions above are already provided for you as input() statements in bikeshare.py. You will write the conditional code to guide this interactive experience.

A sample end product would look something like this:

* **Prompt**: Hello! Let's explore some US bike share data! Would you like to see data for Chicago, New York, or Washington?
* **User input**: Chicago
* **Prompt**: Would you like to filter the data by month, day, or not at all? Type "none" for no time filter.
* **User input**: oOPs4$t
* **Prompt**: Sorry, that is not a valid input. Please try again.
* **Prompt**: Would you like to filter the data by month, day, or not at all? Type "none" for no time filter.
* **User input**: nope
* **Prompt**: Which month? January, February, March, April, May, or June?
* **User input**: March
* *Statistics for Chicago in March are printed out*
* **Prompt**: Would you like to restart? Type 'yes' or 'no.'
* **User input**: no

For printing out statistics, keep in mind one goal of the script is to present the statistics (e.g., "What hour of the day occurs most often in the start time?") in a way that is pleasurable to read.

**Note that this bikeshare.py file is simply a template you can use, but you don't need to use it.** You can change the functions however you like as long as you have an ending product that works like the above sample interactive experience. Changes to the structure of bikeshare.py (e.g., adding and/or deleting helper functions) that you think make the code more efficient or have a better style are encouraged!

**The csv Module**

The csv module is core to completing this project. Its DictReader class will allow you to interact with the bikeshare data CSV files as if they were Python dictionaries. DictReader returns an iterator that produces each row as needed.