Introduction to Python

Mils Burasakorn

Burasakorn Sabyeying (Mils)

Software Engineer

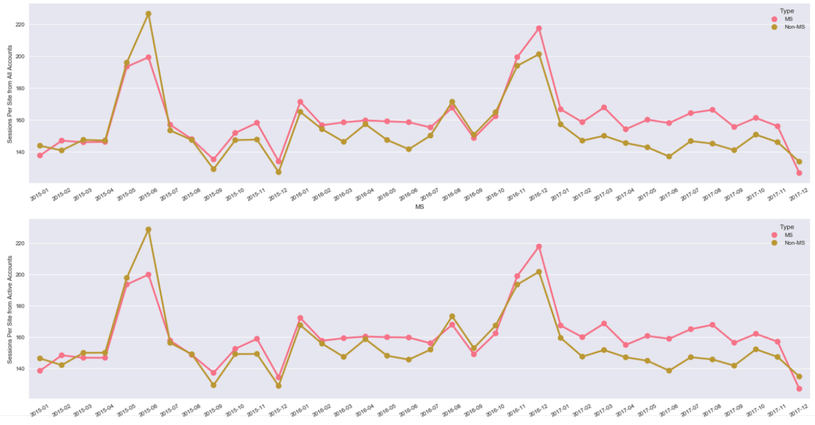
@ Django Girls BKK workshop

I do volunteer !

งาน Girls Who Dev และ Django girls

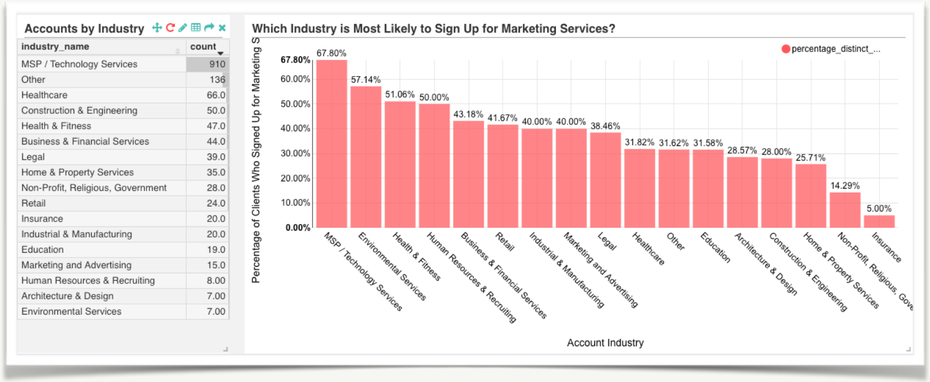
Data Science

```
for index, each in enumerate(metrics):
    data, ylabel = each
    data = data.sort_values('year_month')
    g = sns.pointplot(x='year_month', y='sessions', hue='ms_usage_all', data=data, size=15, ci=None, ax=axs[index], hue
    g.set_xticklabels(g.get_xticklabels(), rotation=30);
    g.set(xlabel='MS', ylabel=f'Sessions Per Site from {ylabel}')
    for p in g.patches:
        g.annotate(str(p.get_height()), (p.get_x(), p.get_height() * 1.015));
    g.legend(title='Type', loc='upper right');
```

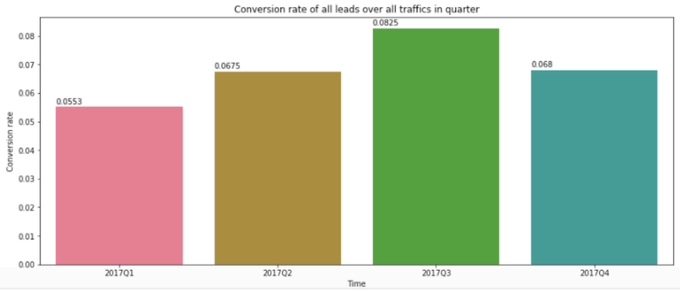


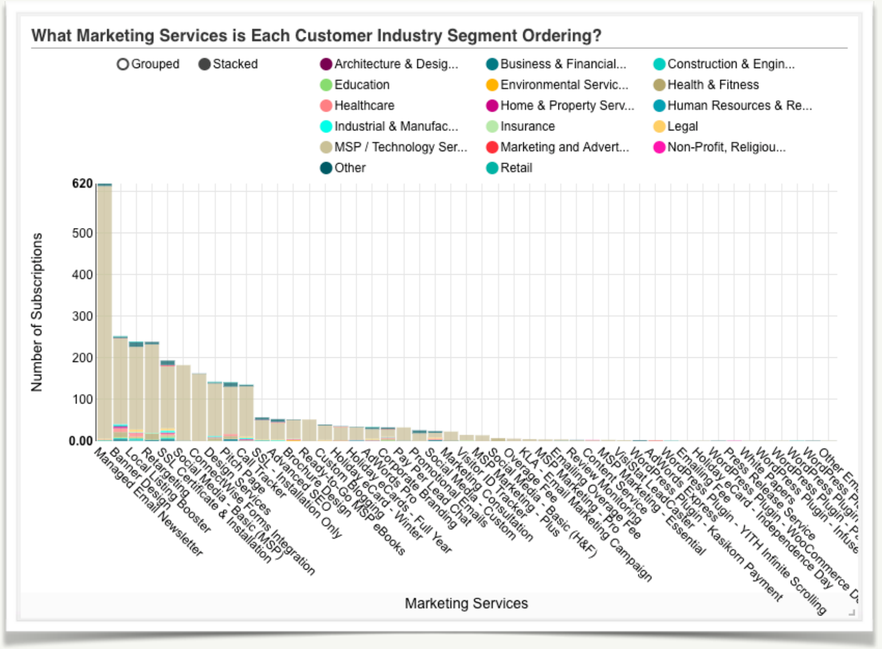
Accounts by Industry

industry_name	count
MSP / Technology Services	910
Other	136
Healthcare	66.0
Construction & Engineering	50.0
Health & Fitness	47.0
Business & Financial Services	44.0
Legal	39.0
Home & Property Services	35.0
Non-Profit, Religious, Government	28.0
Retail	24.0
Insurance	20.0
Industrial & Manufacturing	20.0
Education	19.0
Marketing and Advertising	15.0
Human Resources & Recruiting	8.00
Architecture & Design	7.00
Environmental Services	7.00

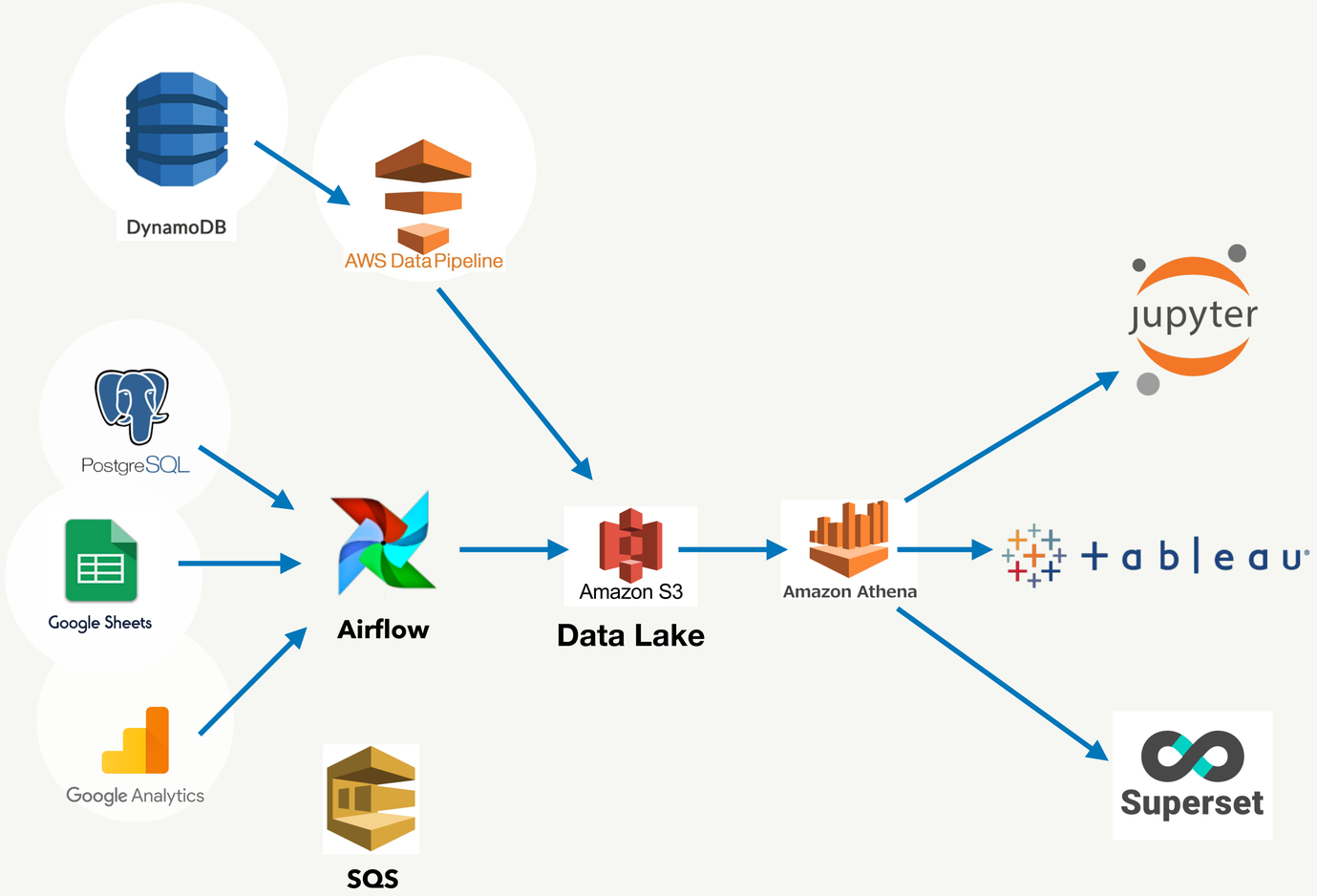



```
In [33]: plt.figure(figsize=(15, 6))
palette = sns.set_palette('husl')
df_quarter_count = df_quarter_count.round(4)
g = sns.barplot(x='year_and_month', y='conversion_rate', data=df_quarter_count, palette=palette)
g.set(xlabel='Time', ylabel='Conversion rate')
g.set_title('Conversion rate of all leads over all traffics in quarter')
for p in g.patches:
    g.annotate(str(p.get_height()), (p.get_x(), p.get_height() * 1.015));
g.set_xticklabels(g.get_xticklabels(), rotation=0);
```

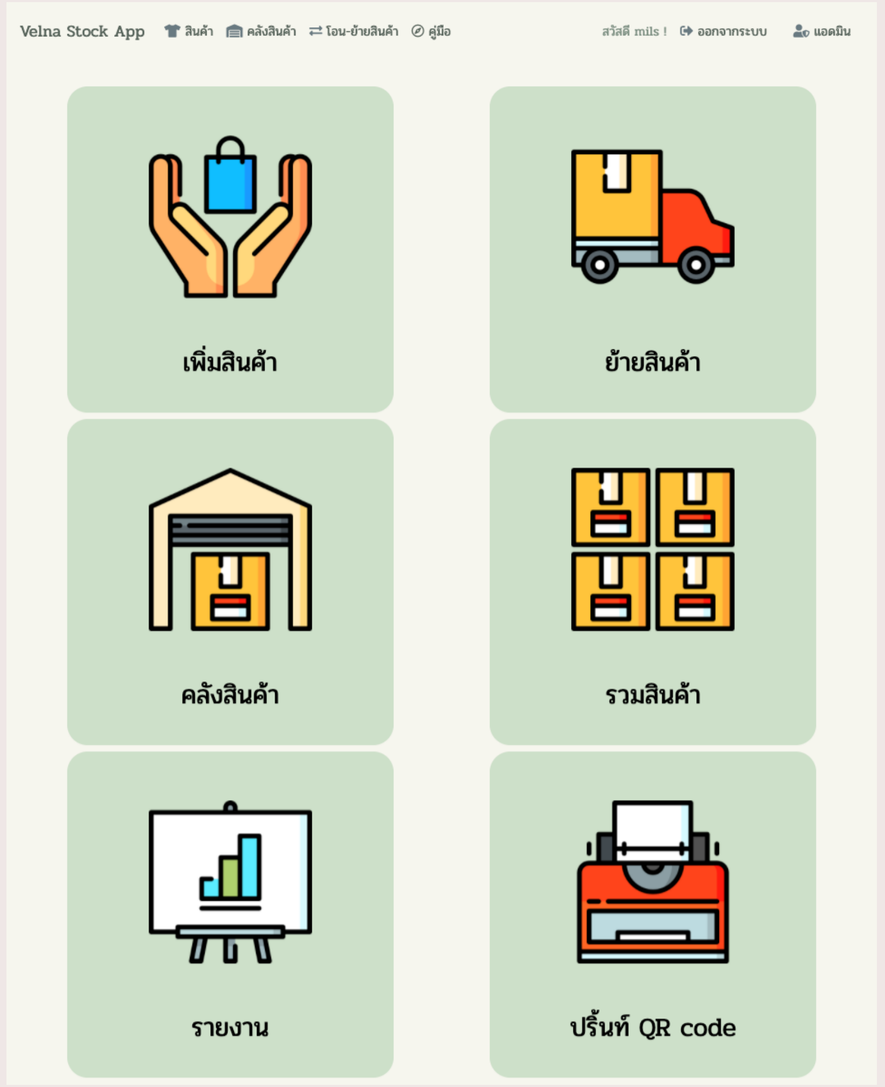




Data Engineer



Stock Management System



“

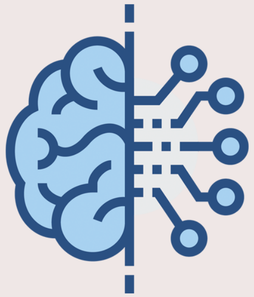
เราจะเขียน Python ไปทำไมนะ

“

- เสียงในหัว -

Python Use Nowadays

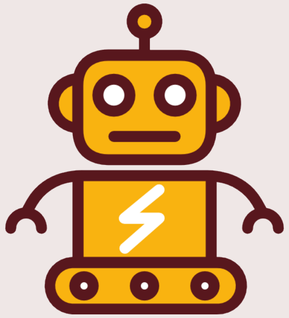
Web Development



Machine Learning

Internet of Things

Data Analysis



Automation

Game

https://beginnersbook.com/2018/01/introduction-to-python-programming/
https://stxnext.com/what-is-python-used-for/

1. Readable, Easy to start and maintain

"Hello World"

Java

```java
public class Main {
  public static void main(String[] args) {
      System.out.println("hello world");
  }
}
```

Python

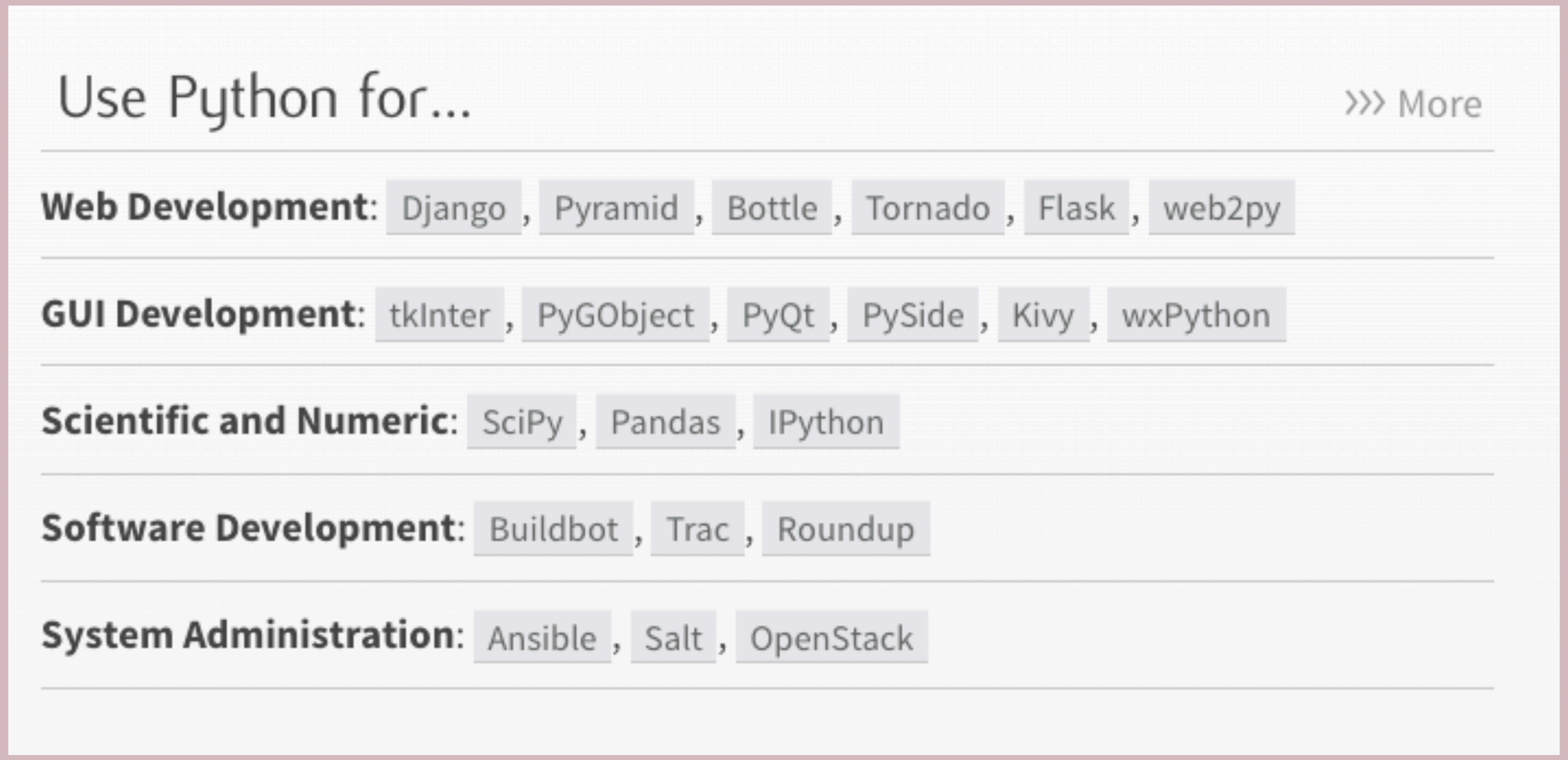
```python
print("hello world");
```

Picture from https://belitsoft.com/java-development-services/java-vs-python-tried-and-true-vs-modern-and-new

2. Robust Standard Library

- csv — CSV File Reading and Writing
- datetime — Basic date and time types
- math — Mathematical functions
- json — JSON encoder and decoder
- secrets — Generate secure random numbers for managing secrets
- random — Generate pseudo-random numbers

3. Many Third party: Open Source Frameworks and tools



https://www.python.org/

“Open Source”

Updated

Free

Support

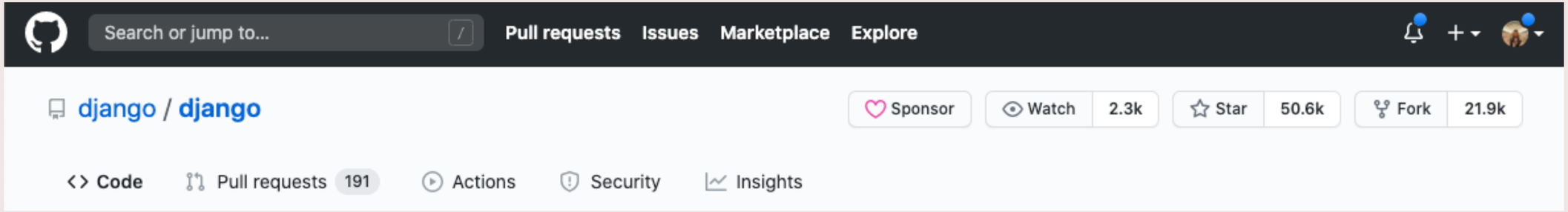
“Open Source”

Updated

Free

Support

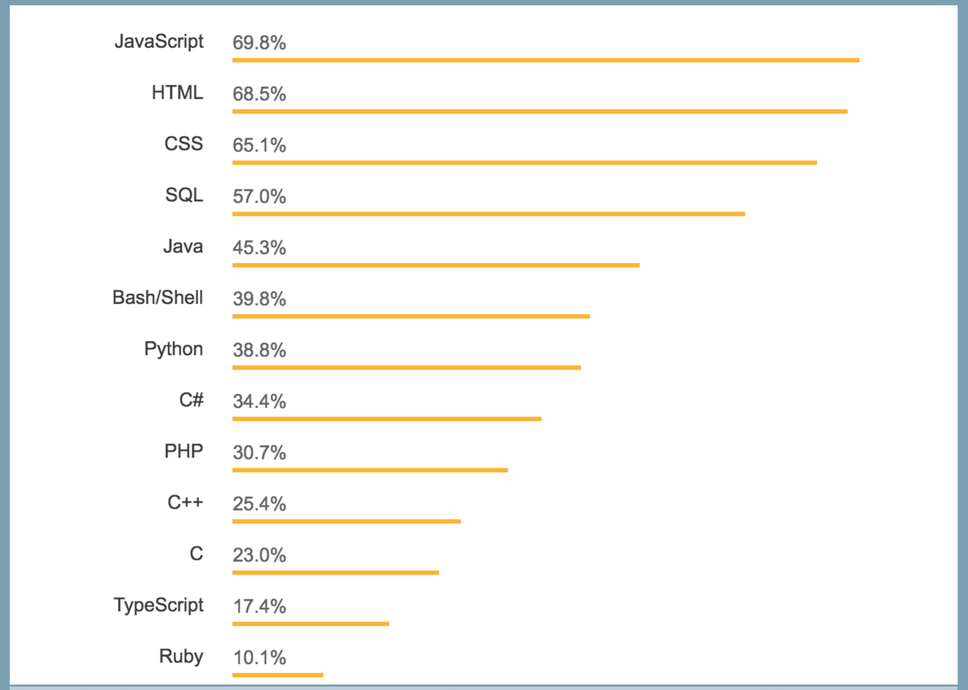
“Open Source”

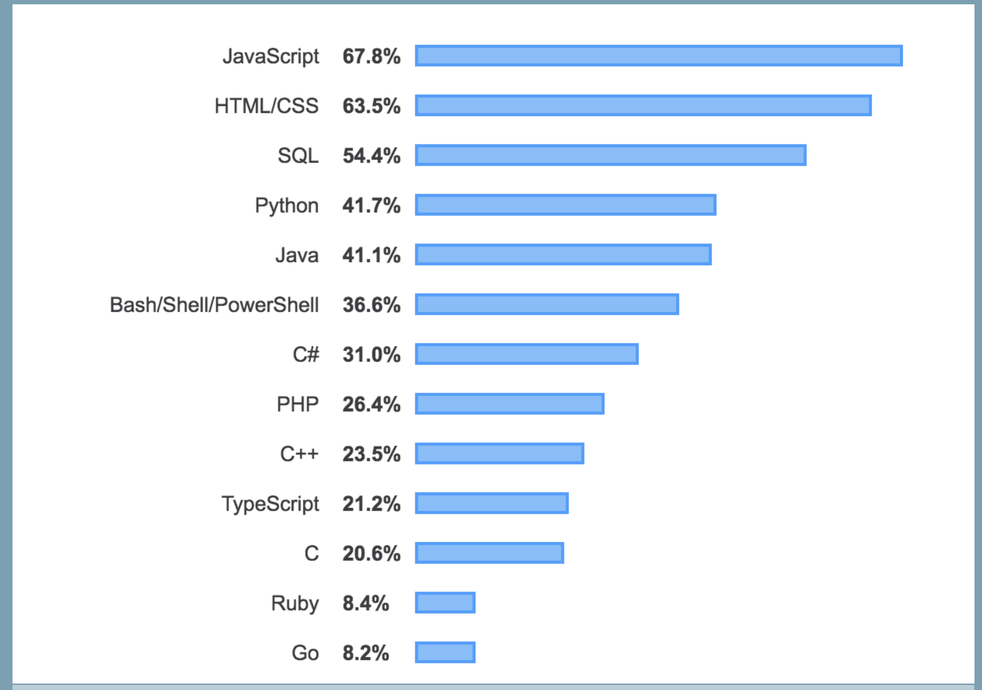


Why we use Python?

Most Popular Technologies from Developer Survey Results

https://insights.stackoverflow.com/survey/2018 and 2019

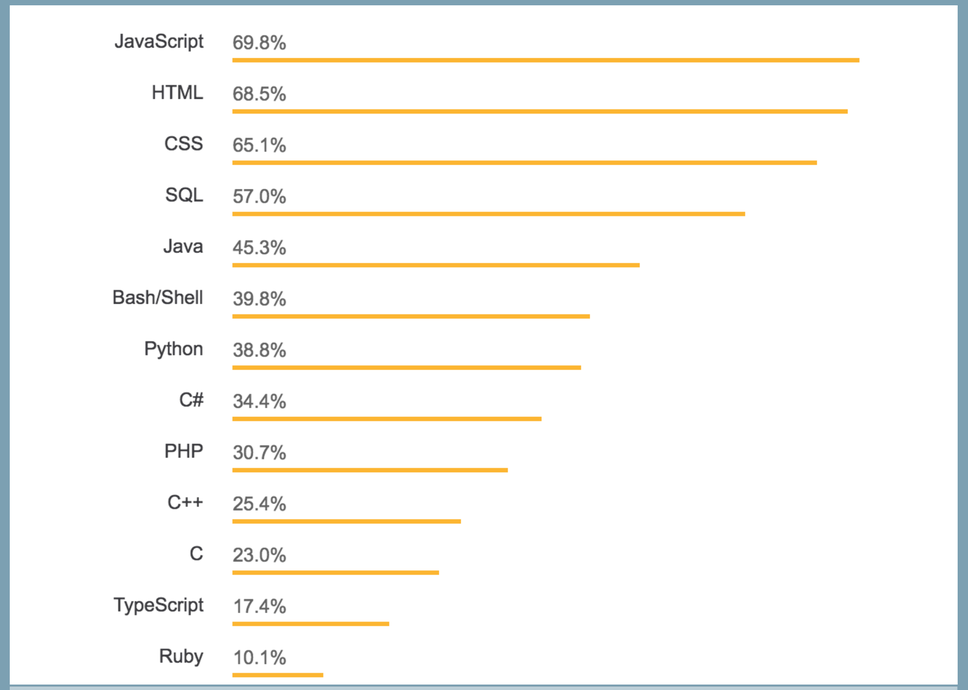


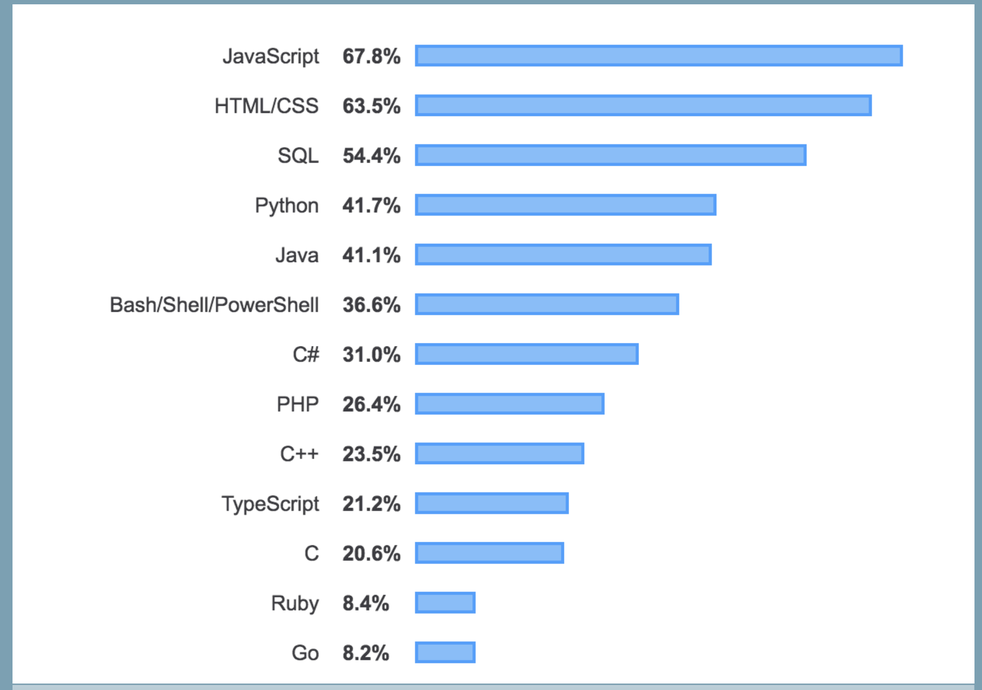


Why we use Python?

Most Popular Technologies from Developer Survey Results

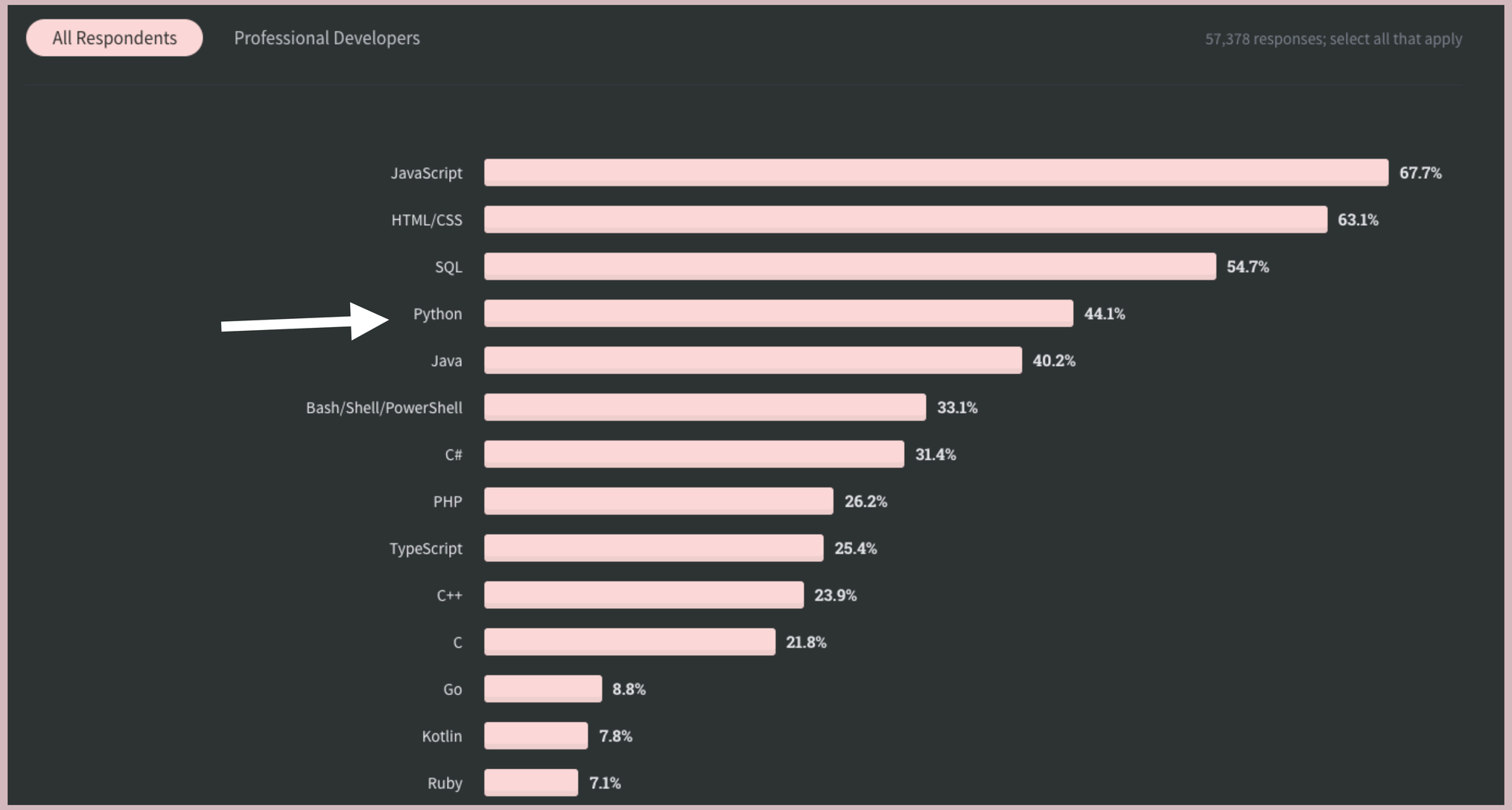
https://insights.stackoverflow.com/survey/2018 and 2019





For the seventh year in a row, JavaScript is the most commonly used programming language, but Python has risen in the ranks *again*. This year, Python just edged out Java in overall ranking, much like it surpassed C# last year and PHP the year before. Python is the fastest-growing major programming language today.

Stack Over Flow Survey 2020



https://insights.stackoverflow.com/survey/2020#most-popular-technologies

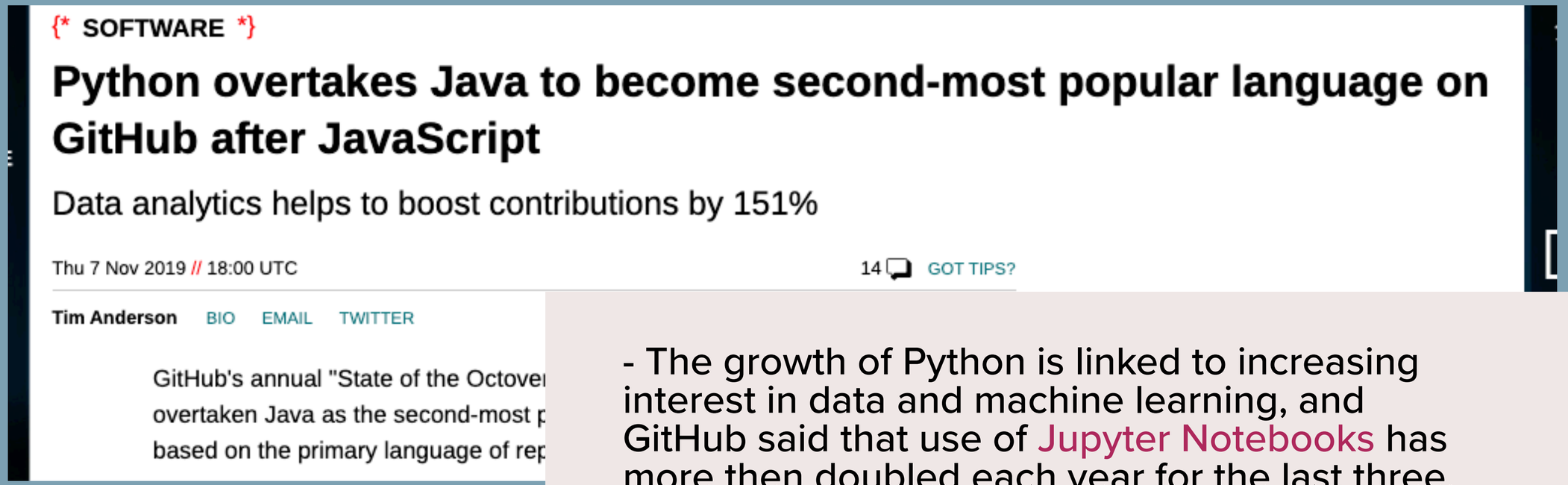
“Most Loved and Wanted Languages”

“For five years running, Rust has taken the top spot as the most loved programming language. TypeScript is second surpassing Python compared to last year.”

When you switch from C++ to Python

“Why Python is so popular?”

Github



{* SOFTWARE *}

Python overtakes Java to become second-most popular language on GitHub after JavaScript

Data analytics helps to boost contributions by 151%

Thu 7 Nov 2019 // 18:00 UTC

14 GOT TIPS?

Tim Anderson BIO EMAIL TWITTER

GitHub's annual "State of the Octover
overtaken Java as the second-most p
based on the primary language of rep

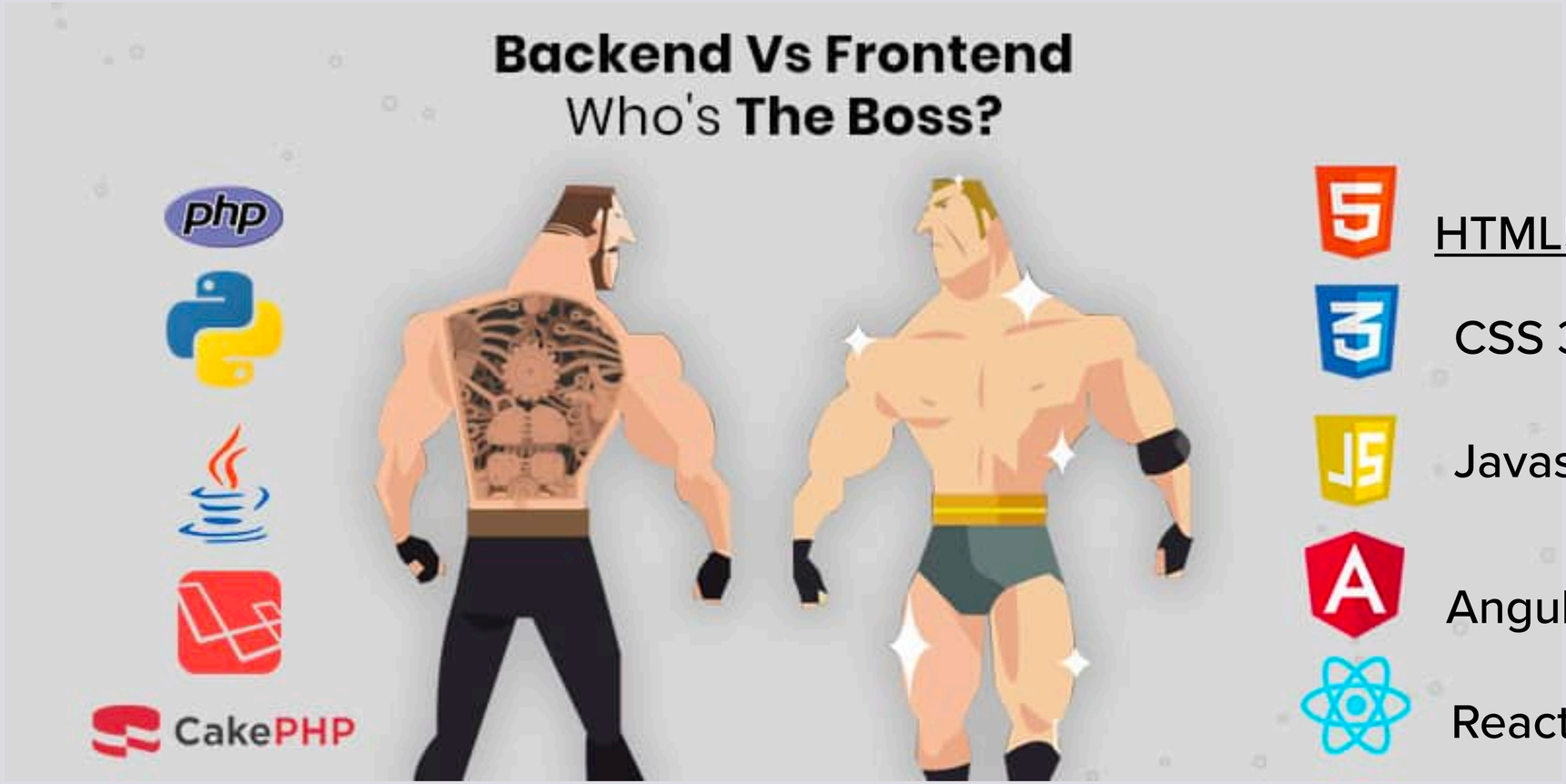
- The growth of Python is linked to increasing interest in data and machine learning, and GitHub said that use of Jupyter Notebooks has more then doubled each year for the last three.

- Jupyter Notebooks are commonly used for data visualisation, statistics and machine learning.

https://www.theregister.com/2019/11/07/python_java_github_javascript/

Backend Web Development

Frontend Web Development



HTML5

CSS 3 Bootstrap

Javascripts

Angular.js

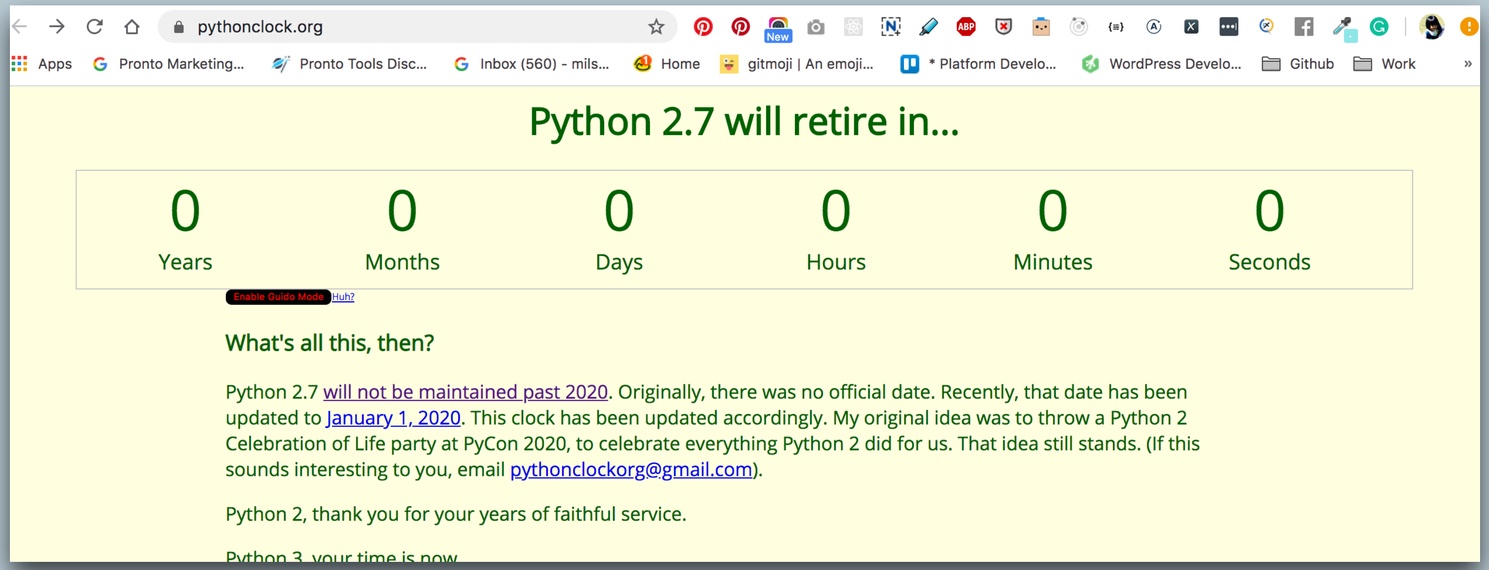
React.js

https://www.excellentwebworld.com/backend-vs-frontend/

Python Version

Python 2

Python 3



https://realpython.com/python-introduction/

Who use it?

https://learn.onemonth.com/10-famous-websites-built-using-python/

Question?