Report on Programming Survey

Alexandre Ferreira

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OUTLINE

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- Methodology
- Results
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  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

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EXECUTIVE SUMMARY

- Details about the present in IT
  - Languages
  - Databases
  - Webframes

- Future trends in IT

- Classification by demographics data:
  - Age
  - Gender
  - Countries
  - Education

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INTRODUCTION

- Dataset brings data about Technologies

- Dataset was collected, cleaned and analyzed

- The purpose is comparing the data and find insights

- Main comparisons:
  - Language
  - Database
  - Webframes
  - Age
  - Gender
  - Countries

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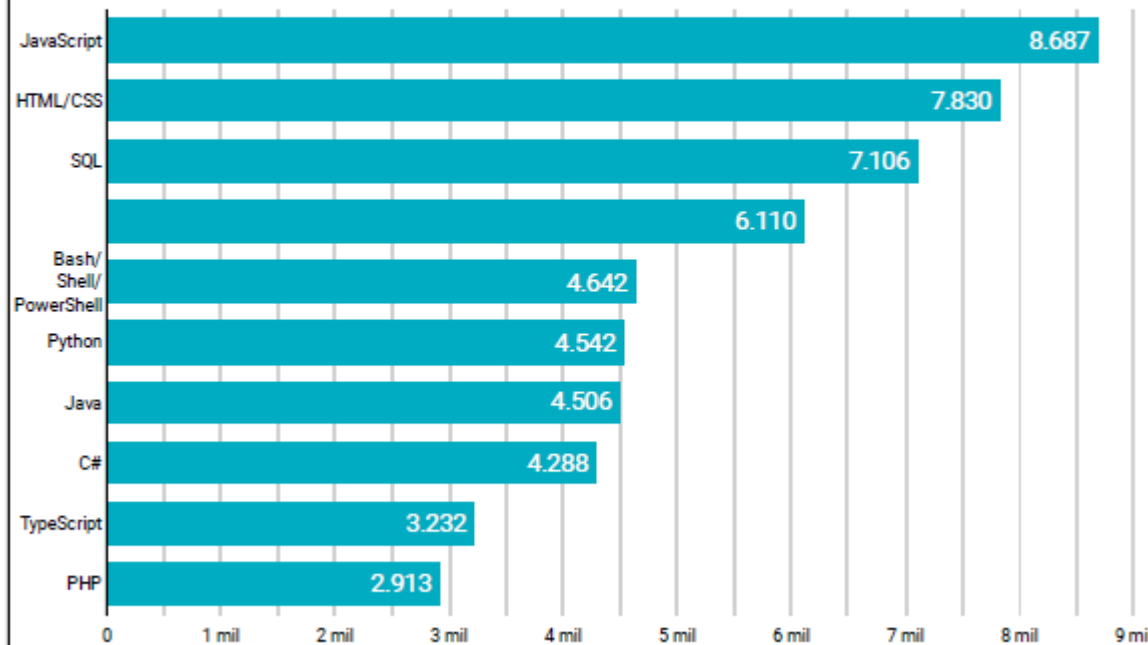SKILLS NETWORK

METHODOLOGY

- The data was collected by API and Webscraping

- Top programming skills that are in demand
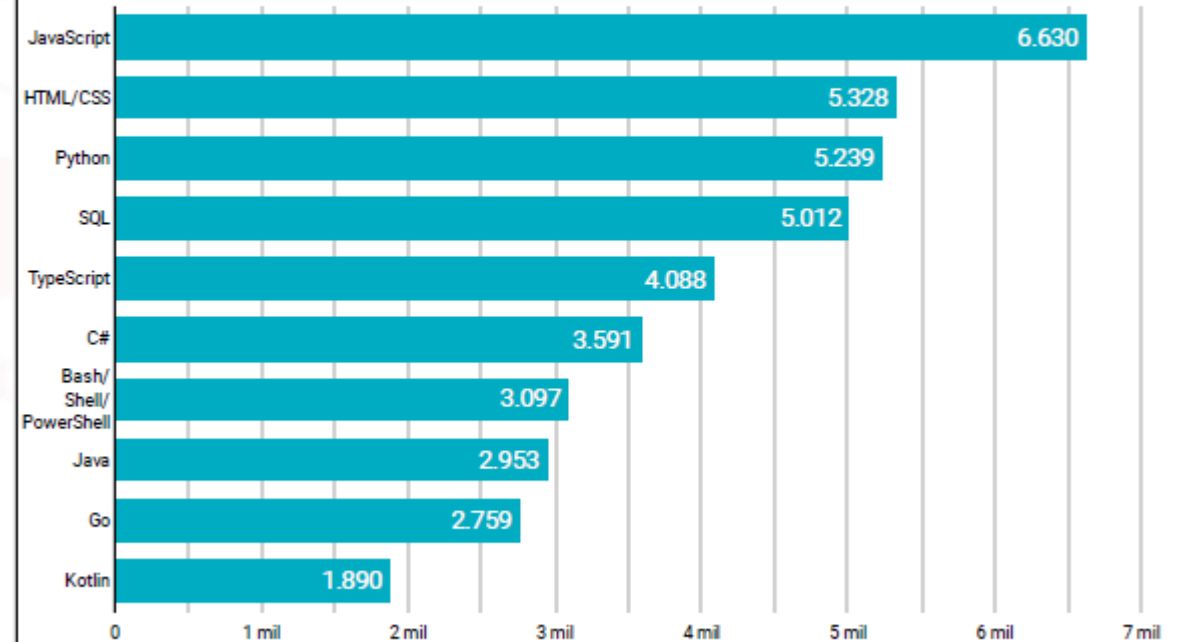 - Job Post
  - Surveys
  - Portals

RESULTS

PROGRAMMING LANGUAGE TRENDS

Top 10 LanguageWorkedWith

Language	Value
JavaScript	8.687
HTML/CSS	7.830
SQL	7.106
	6.110
Bash/Shell/PowerShell	4.642
Python	4.542
Java	4.506
C#	4.288
TypeScript	3.232
PHP	2.913

Top 10 Language Desired next Year

Language	Value
JavaScript	6.630
HTML/CSS	5.328
Python	5.239
SQL	5.012
TypeScript	4.088
C#	3.591
Bash/Shell/PowerShell	3.097
Java	2.953
Go	2.759
Kotlin	1.890

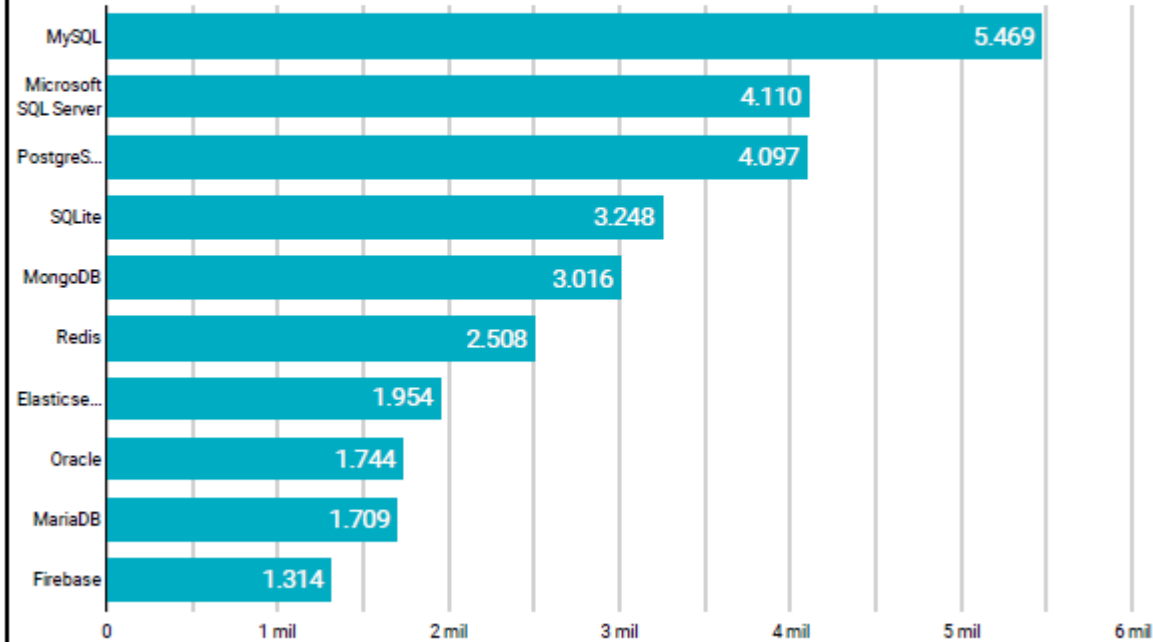# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript is the top programming language
- SQL is the top 3
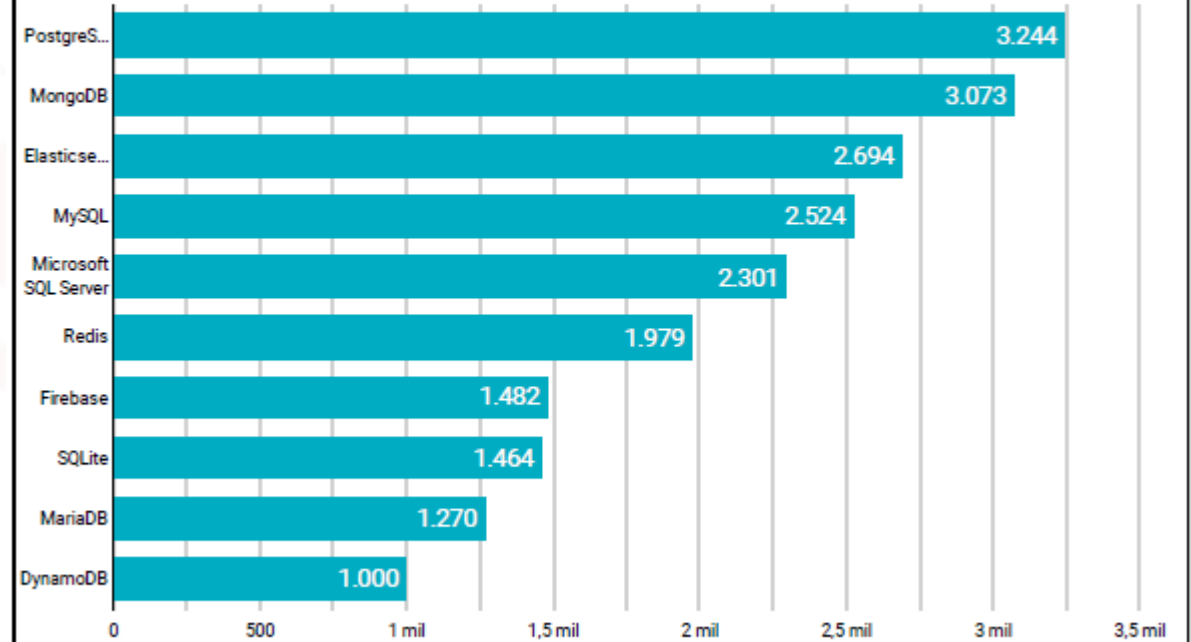- Python is the top 5

Implications

- People tends to learn more the language that has more opportunities:
  - Javascript
  - SQL
  - Python

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DATABASE TRENDS

Top 10 Database Worked With

Database	Value
MySQL	5.469
Microsoft SQL Server	4.110
PostgreS...	4.097
SQLite	3.248
MongoDB	3.016
Redis	2.508
Elasticse...	1.954
Oracle	1.744
MariaDB	1.709
Firebase	1.314

Top 10 Database Desired Next Year

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PostgreS...	3.244
MongoDB	3.073
Elasticse...	2.694
MySQL	2.524
Microsoft SQL Server	2.301
Redis	1.979
Firebase	1.482
SQLite	1.464
MariaDB	1.270
DynamoDB	1.000

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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is top trending
- SQL Server and PostgreSQL are almost in the same level
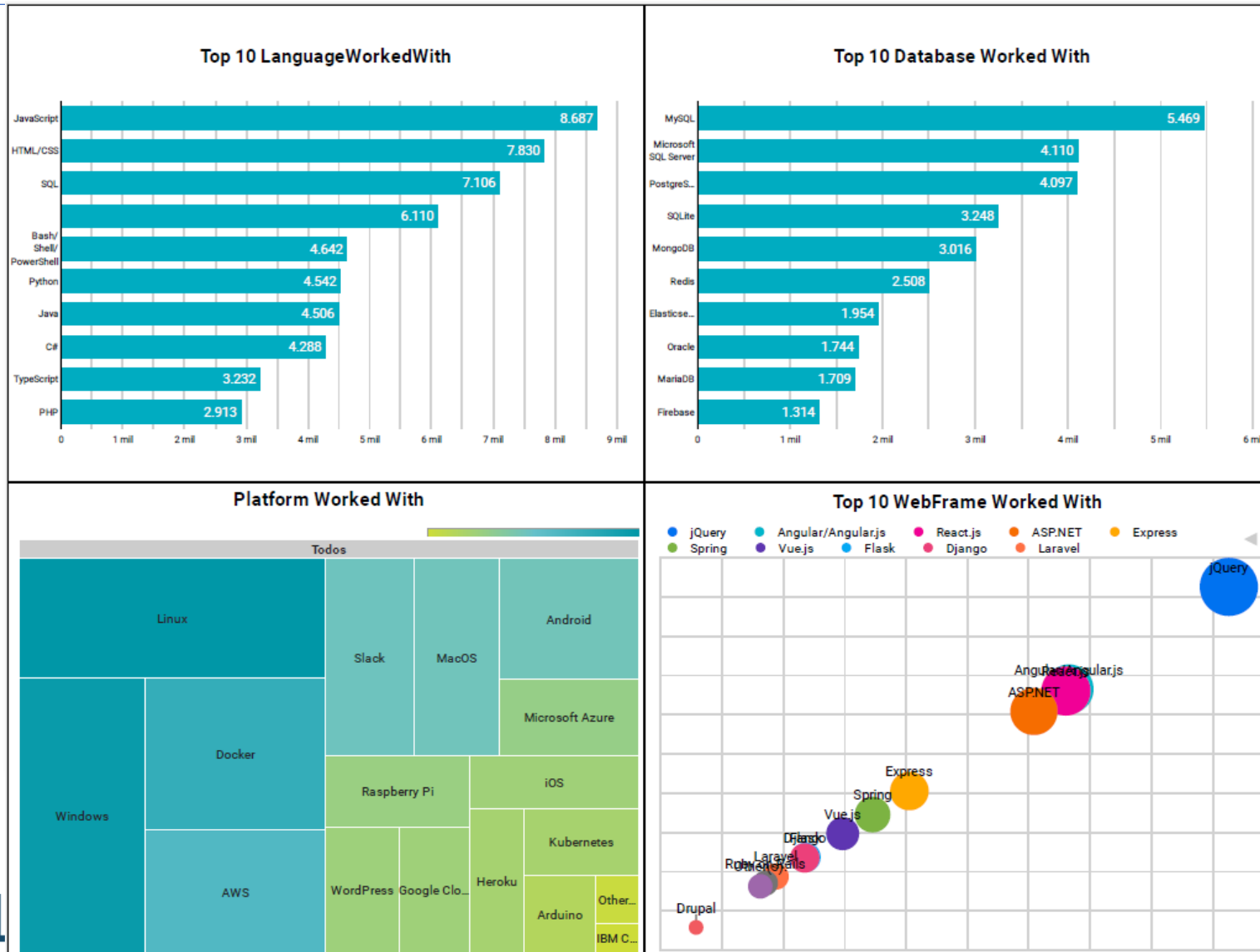- PostgreSQL and MongoDB are most desired in the future

Implications

- We can see a change in the future, but the SQL languages are very similar.
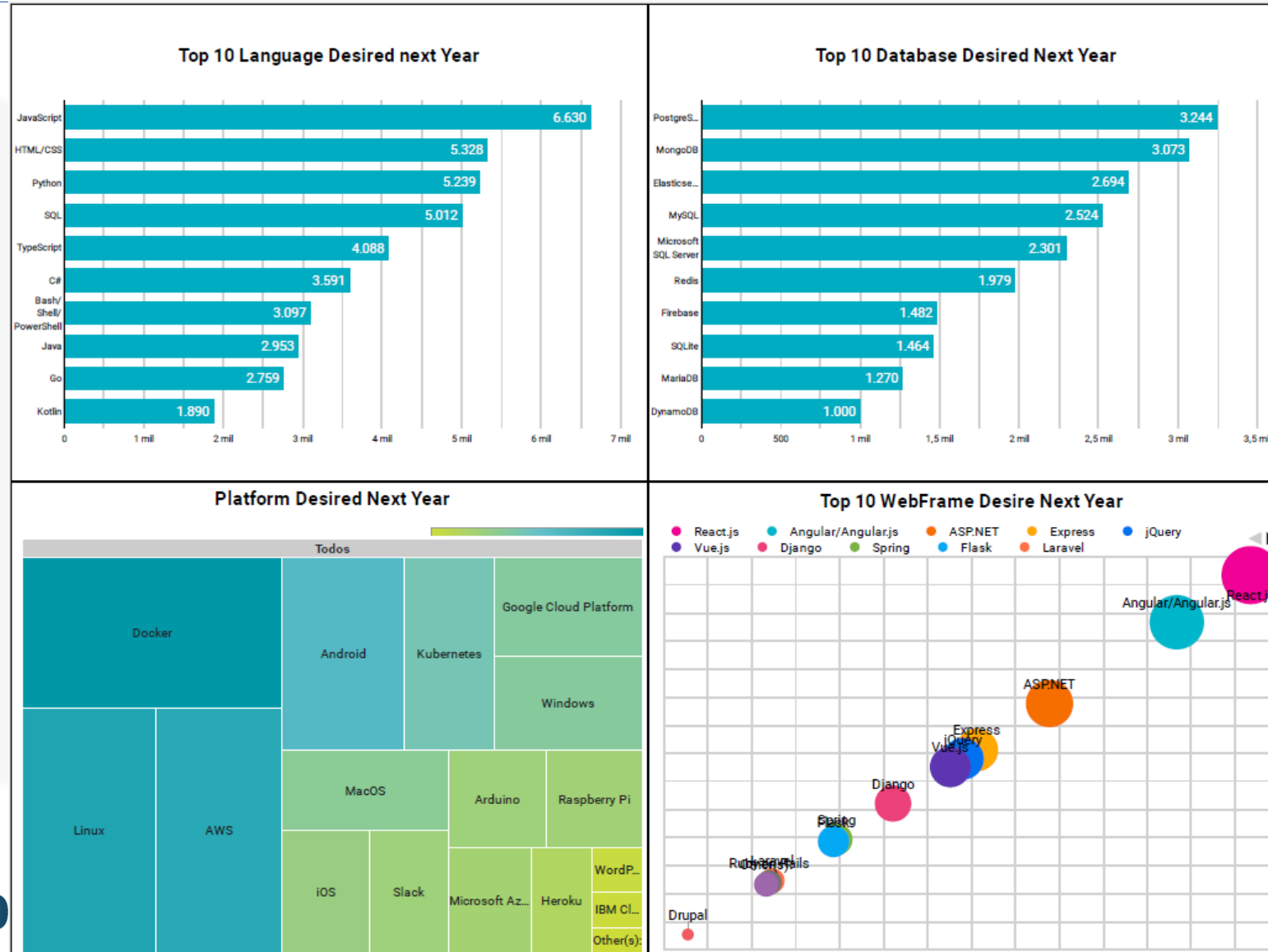
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DASHBOARD

https://github.com/alexandre-ferreira-1986/Portfolio/blob/main/Python/Coursera/Mod05_Looker_IBM_Data_Analyst_Certification.pdf
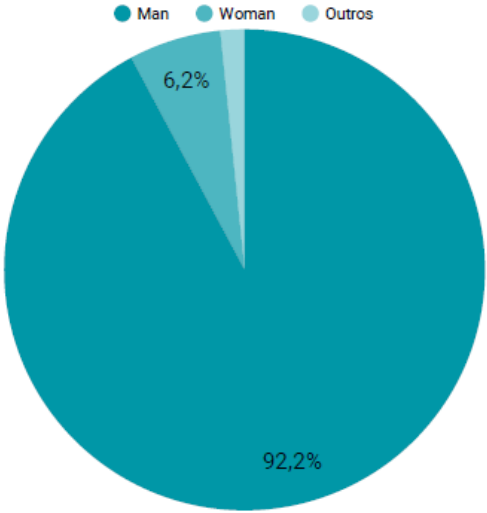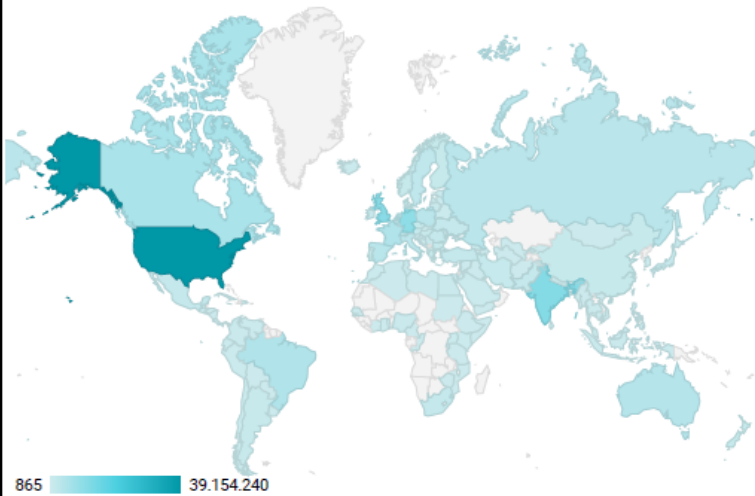
DASHBOARD TAB 1

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Platform Worked With

Todos

Linux, Slack, MacOS, Android, Docker, Microsoft Azure, Windows, Raspberry Pi, iOS, Kubernetes, AWS, WordPress, Google Clo..., Heroku, Arduino, Other..., IBM C...

Top 10 WebFrame Worked With

Legend: jQuery, Angular/Angular.js, React.js, ASP.NET, Express, Spring, Vue.js, Flask, Django, Laravel

jQuery, AngularReactgular.js, ASP.NET, Express, Spring, Vue.js, Django, Laravel, RubyonRails, Drupal

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DASHBOARD TAB 2

Top 10 Language Desired next Year

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DynamoDB	1.000

Platform Desired Next Year

Todos

Docker
Android
Kubernetes
Google Cloud Platform
Windows
Linux
AWS
MacOS
Arduino
Raspberry Pi
iOS
Slack
Microsoft Az...
Heroku
WordP...
IBM Cl...
Other(s):

Top 10 WebFrame Desire Next Year

- React.js
- Angular/Angular.js
- ASP.NET
- Express
- jQuery
- Vue.js
- Django
- Spring
- Flask
- Laravel

React.js
Angular/Angular.js
ASP.NET
Express
jQuery
Vue.js
Django
Spring
Flask
Ruby on Rails
Drupal

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DASHBOARD TAB 3

DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- The Male gender represents 92% in the survey.
- A large percentage has a Bachelor or a Master Degree.
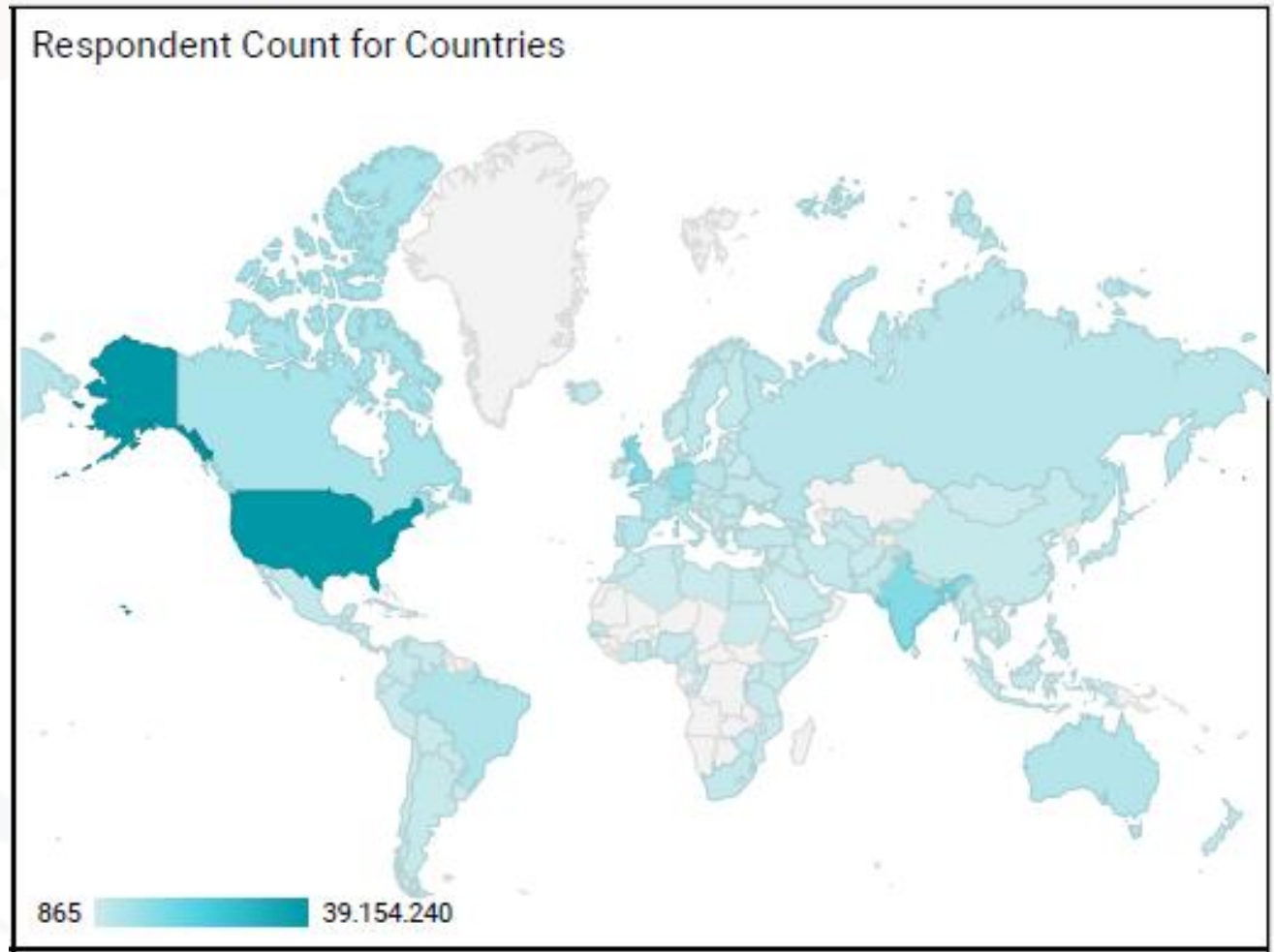
Implications

- It's more difficult to a woman enter in the IT career, maybe company's need to change the process to improve it.
- People with formal education has more chances.
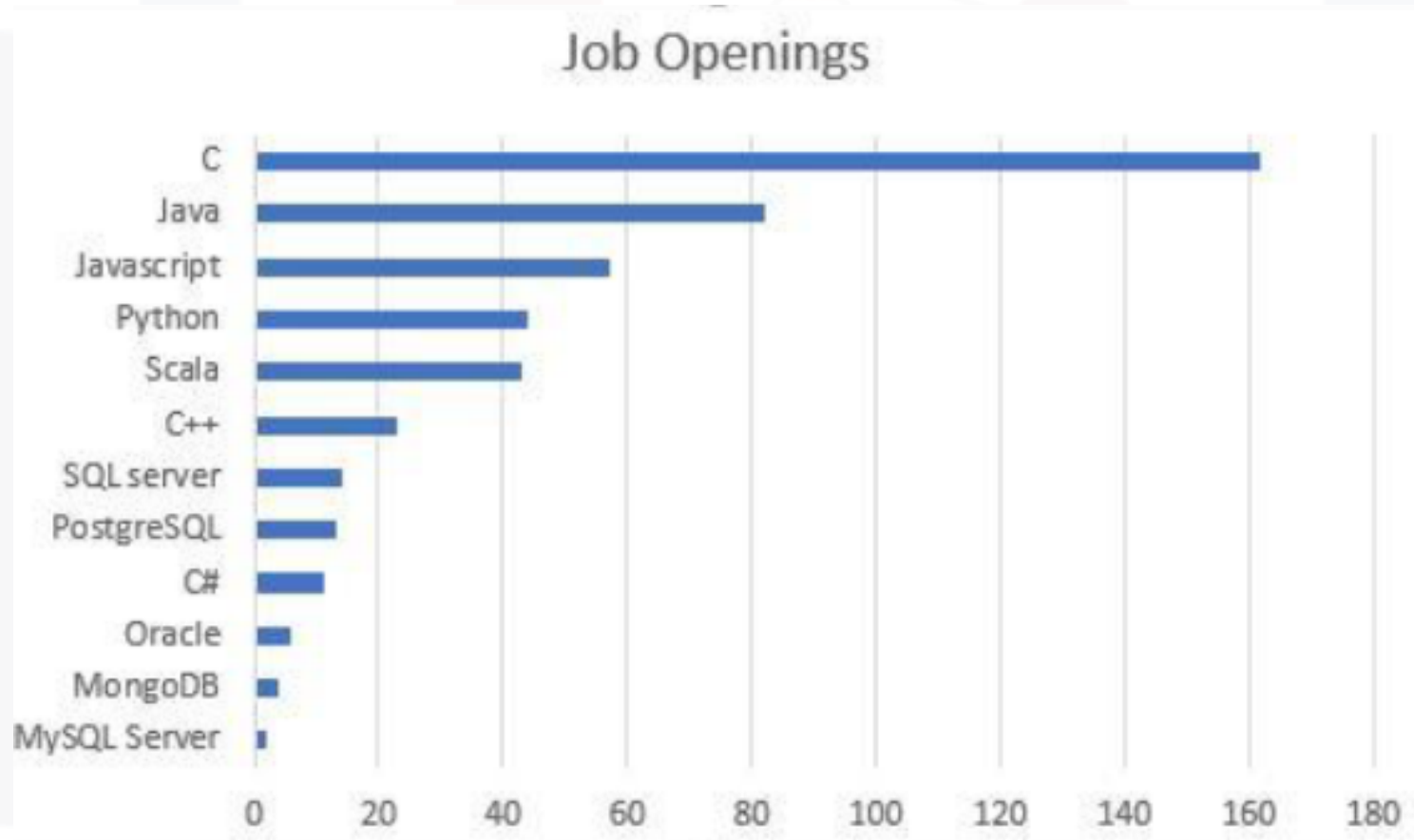
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CONCLUSION

- Javascript is the language with most people working with, but we have important languages as SQL and Python in the sequence.

- Male gender is dominant, and it's important to change it.

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APPENDIX

Respondent Count for Countries

865 ▭ 39.154.240

JOB POSTINGS

Job Openings

C	
Java	
Javascript	
Python	
Scala	
C++	
SQL server	
PostgreSQL	
C#	
Oracle	
MongoDB	
MySQL Server	

0   20   40   60   80   100   120   140   160   180

POPULAR LANGUAGES

Average Annual Salary