



Stack Overflow Developer Survey 2019

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OUTLINE



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- Methodology
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- Discussion
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EXECUTIVE SUMMARY



- Current Technology Usage Trend
 - Language
 - Database
 - Platform
 - Web Frame
- Future Technology Usage Trend
 - Language
 - Database
 - Platform
 - Web Frame
- Demographics Survey
 - Gender
 - Country
 - Age

INTRODUCTION



- Stack Overflow's annual developer survey is the largest and most comprehensive survey of people who code around the world.
- Despite the survey's broad reach, the results don't represent everyone in the developer community evenly.
- Survey results comprises of nearly 90,000 developers.
- Trends to understand the tools developers are using and the ones they want to learn.
- Demographic breakdown of the developers from around the globe.

METHODOLOGY



- Collect survey data and explore it's content
 - Web-scraping
 - APIs
 - Request Library
- Data Wrangling
- Exploratory Data Analysis
 - Analyzing data distribution
 - Handling outliers
 - Correlations
- Data Visualization
 - Highlight distribution of data, relationship, the composition and comparison of data

RESULTS

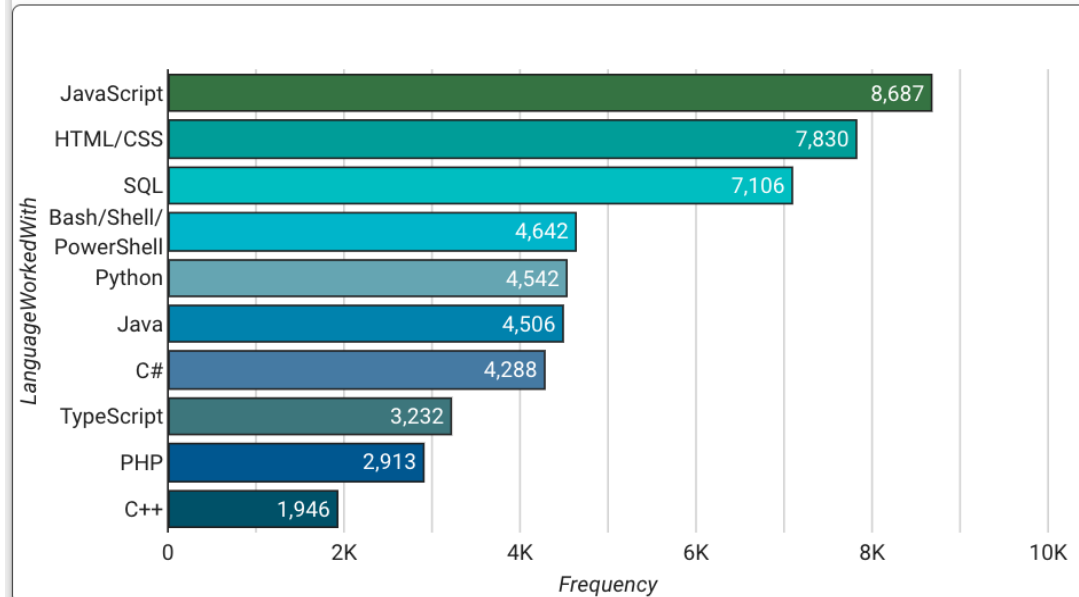
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PROGRAMMING LANGUAGE TRENDS

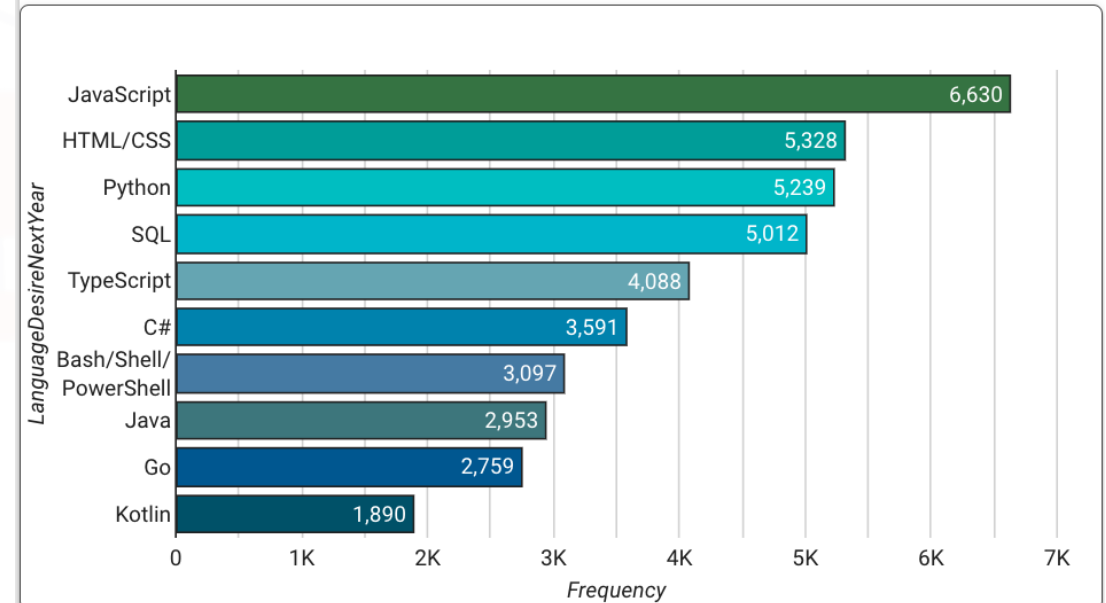
Current Year

Top 10 LanguageWorkedWith



Next Year

Top 10 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most used programming language
- Python is fast growing major programming language today
- Python is also the most wanted language. Developers who do not use it yet want to learn it

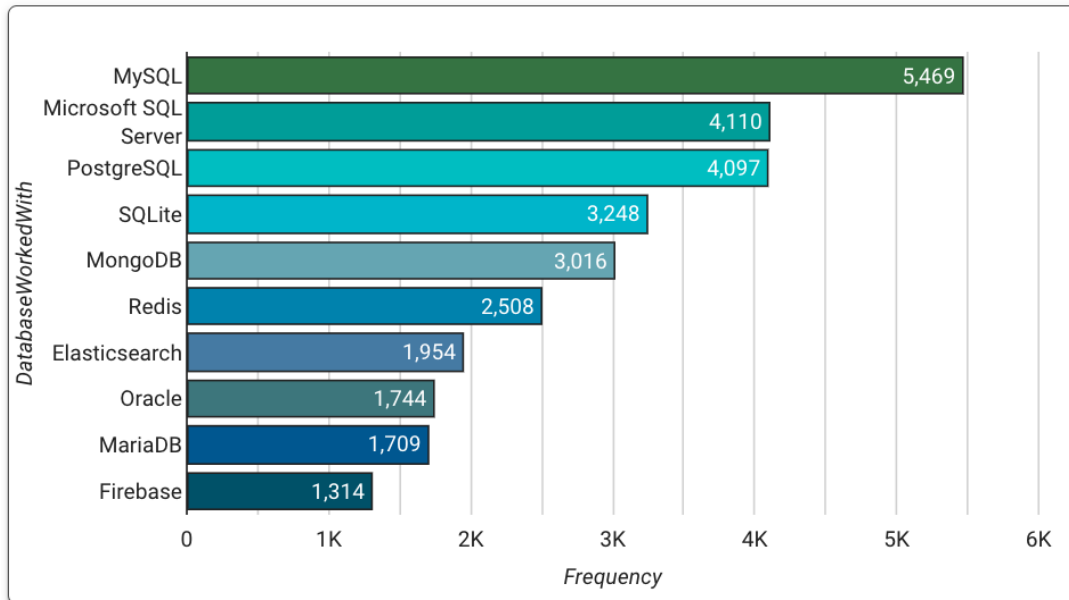
Implications

- Possible that JavaScript remains the most used programming language
- Python might become the second most used language soon
- Even less developers would want to use Java in the coming future

DATABASE TRENDS

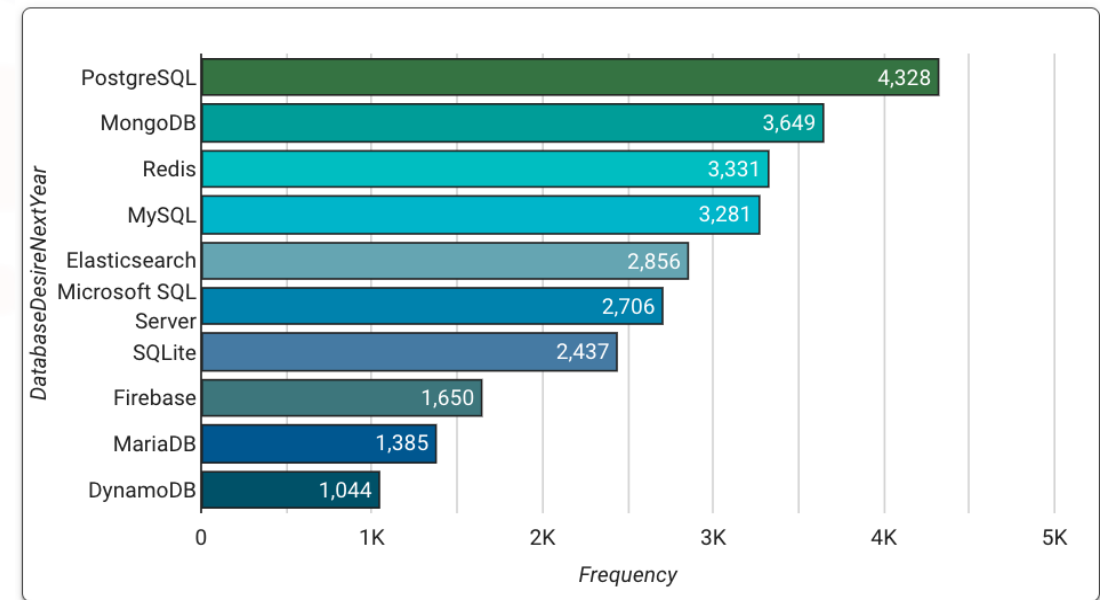
Current Year

Top 10 DatabaseWorkedWith



Next Year

Top 10 DatabaseDesireNextYear



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used database
- Developers have showed most interest in learning PostgreSQL and MongoDB
- Developers are not so keen in learning Microsoft SQL server

Implications

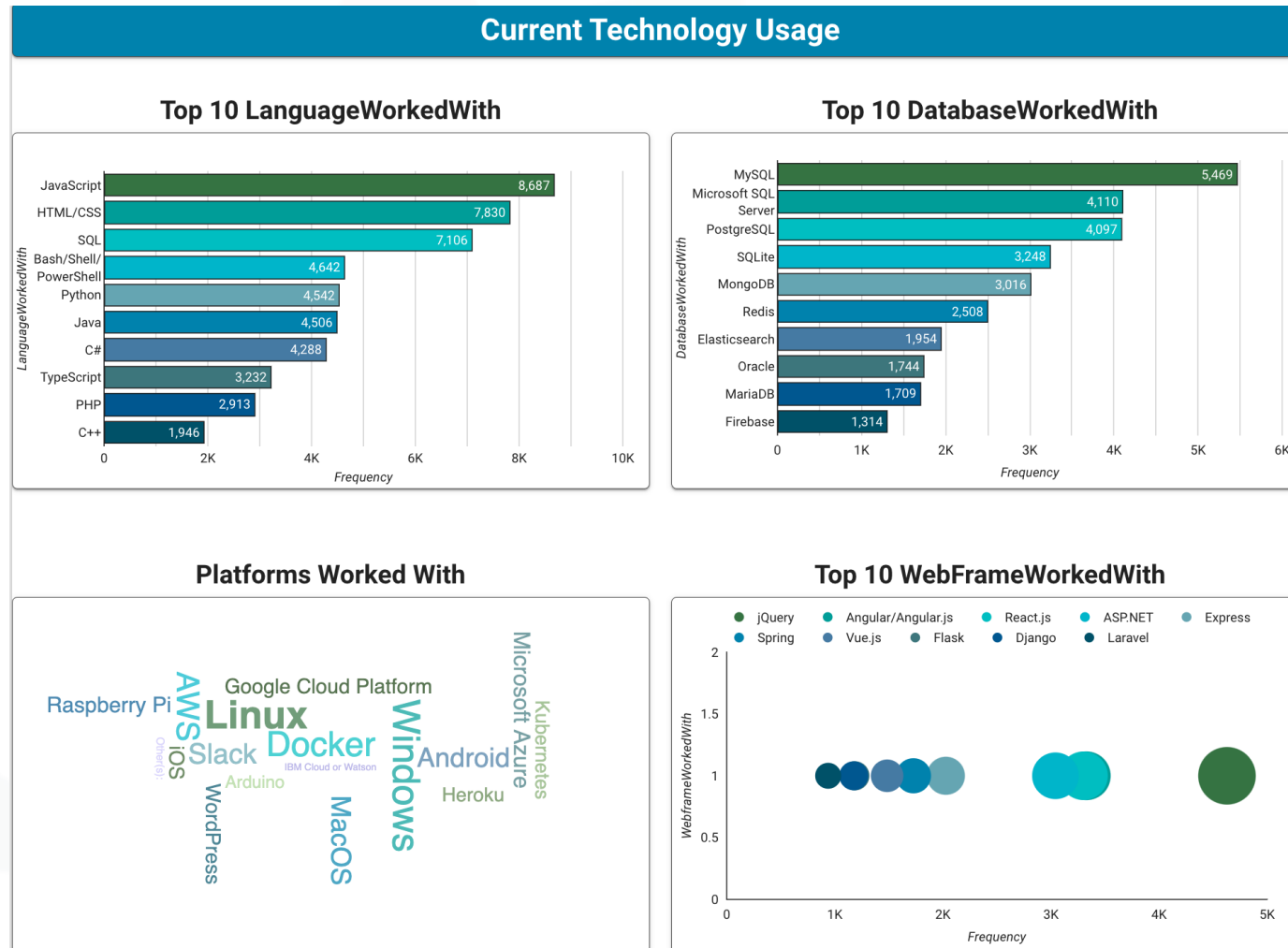
- Microsoft SQL server and SQLite are losing ground in the market
- PostgreSQL and MongoDB will be the most used databases in the near future
- Possibly, developers are going to move on from using Oracle database

DASHBOARD

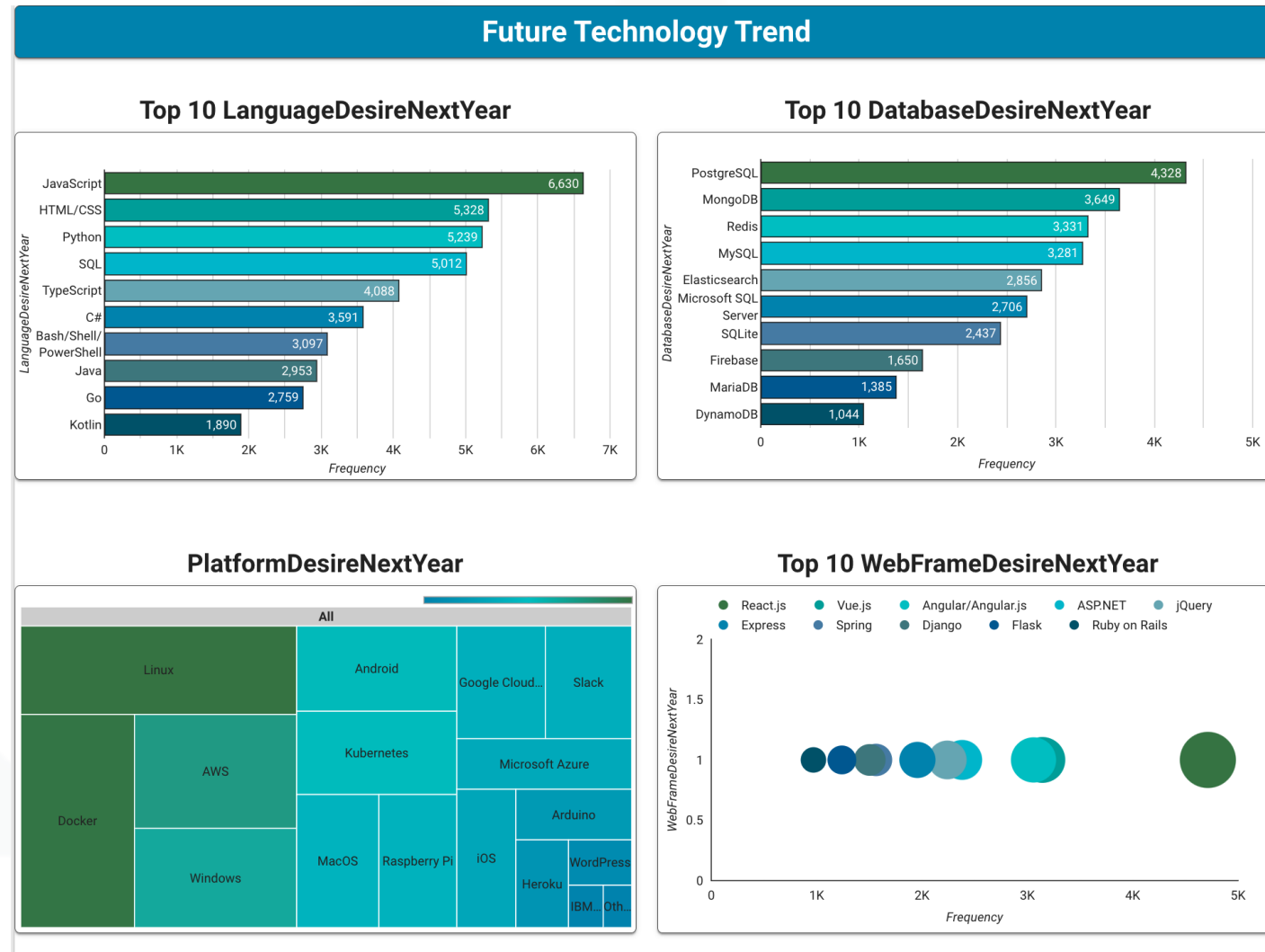


<https://github.com/Vasavdutta/code-chronicles/blob/main/IBM%20Data%20Analyst%20Capstone%20Project%20-%20Dashboard.pdf>

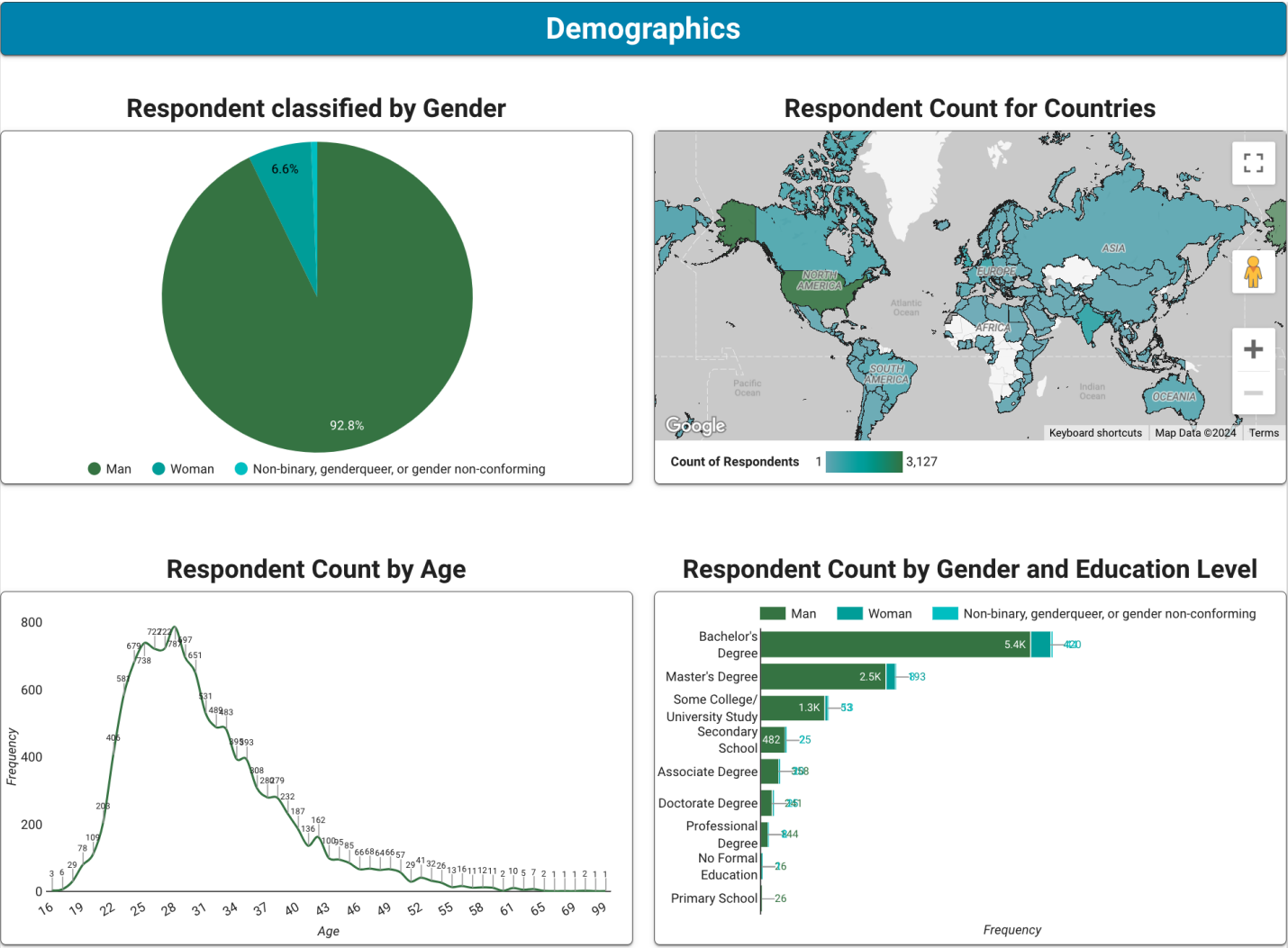
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- Technology Usage Trend – Now and Future
- Gender, Age and Education Discrimination in IT industry

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used and Python becoming the next popular programming language
- 90% of developers are males
- Developers mostly located in developed countries

Implications

- Python programming language gaining a lot of followers
- Global polarization of developer's location and gender
- Majority of young developers only hold Bachelor's degree

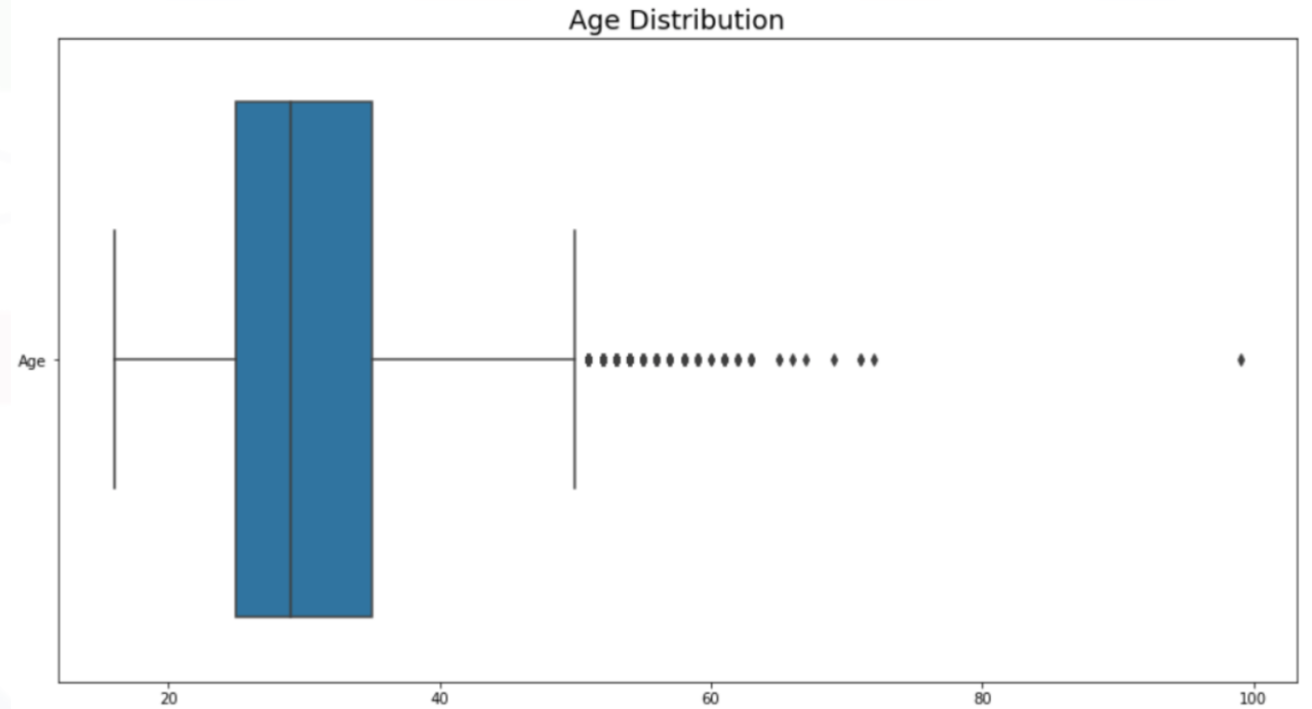
CONCLUSION



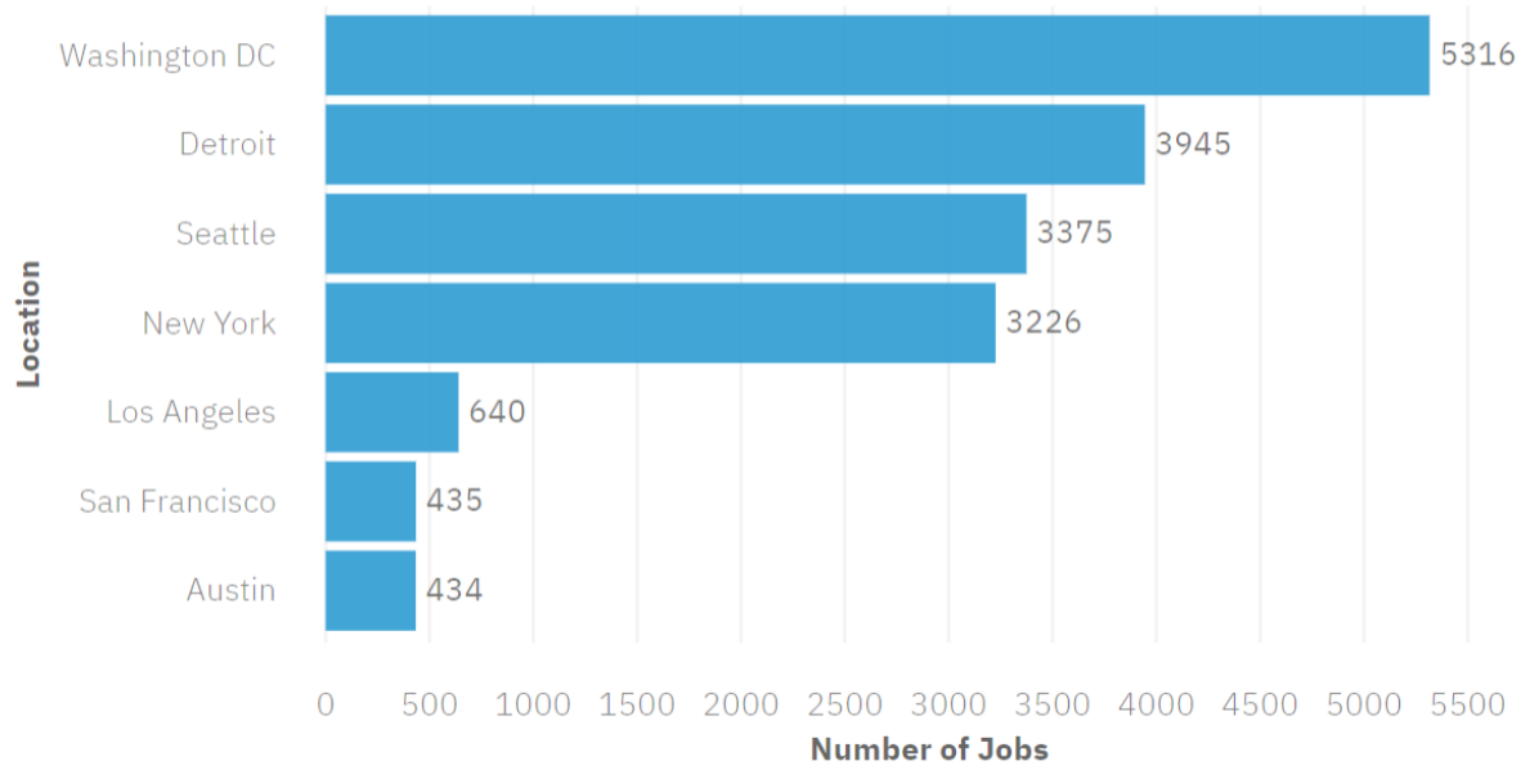
- Developers are people with very marked characteristics
- A good idea of popular trends of different tools, platforms and languages can be obtained
- More countries should have equal chance to be exposed to new technologies

APPENDIX

Age Distribution Box Plot



JOB POSTINGS



POPULAR LANGUAGES

