



# Stack Overflow Developer Survey 2019

Luis Amadis

4/23/2024

# OUTLINE

---



- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

---



- Data Analysis
- Methodology
  - Data collection
  - Data breakdown
  - Data conversion to visualizations
- Most of the data is visualized in graphs and other data visualization tools
- Discussion regarding the overall findings that were found
- Final conclusion of the findings

# INTRODUCTION

---



- The Stack Overflow Developer Survey is an annual survey that helps improve the Stack Overflow community and the platform that serves them.
- The Report is broken down by various demographics throughout the developer community.
- Nearly 90,000 developers took this 20 minute survey earlier this year.

# METHODOLOGY

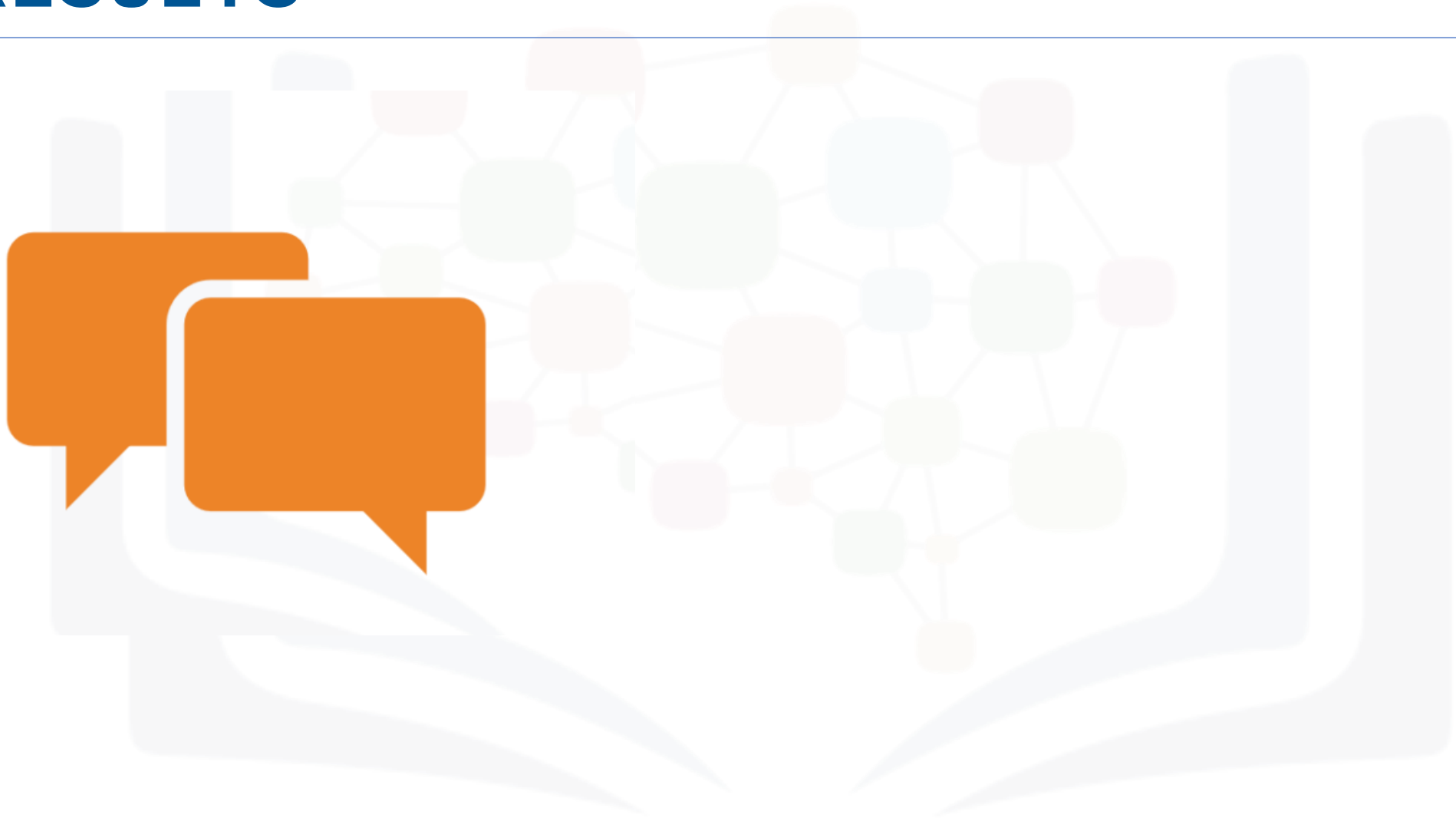
---



- Dashboards
- Data Visualization
- Data Wrangling
- Data Analysis

# RESULTS

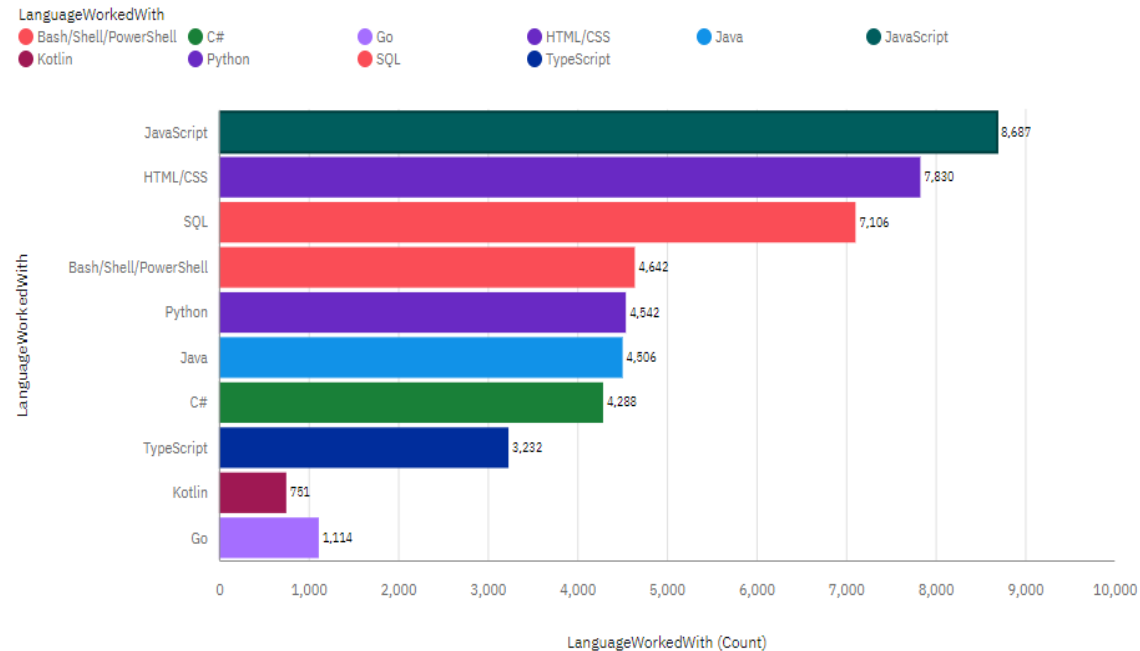
---



# PROGRAMMING LANGUAGE TRENDS

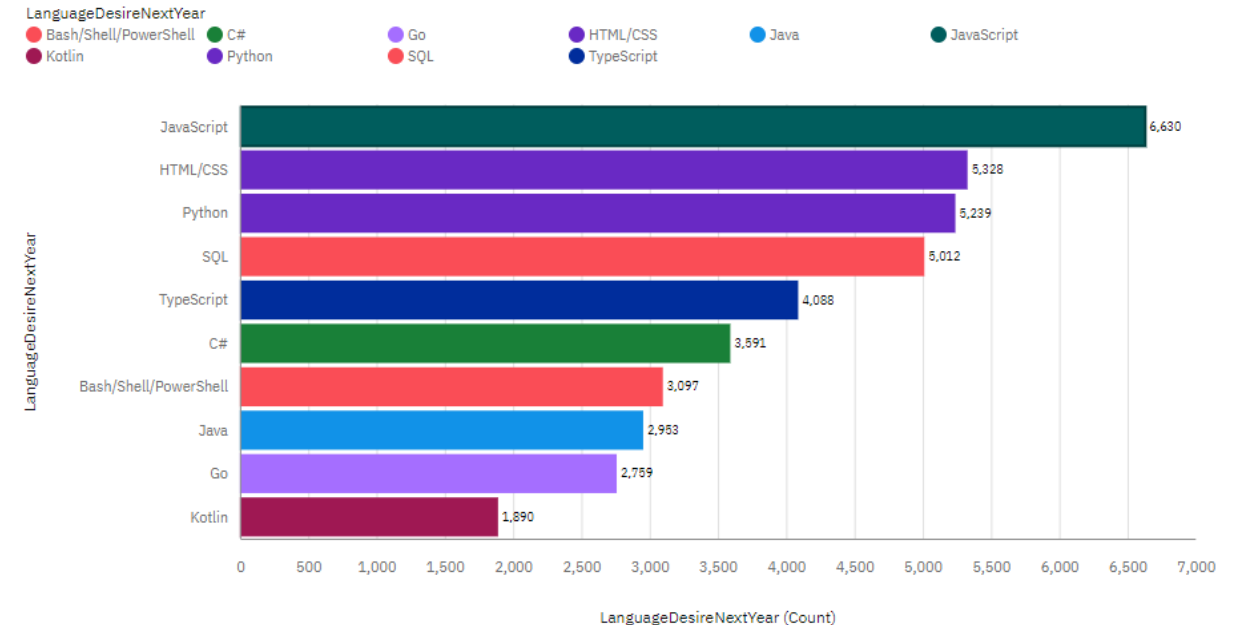
## Current Year

Top 10 LanguageWorked With



## Next Year

Top 10 LanguageDesireNextYear



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

---

## Findings

- Kotlin is the language that is least worked with
- JavaScript is the language that is most worked with
- Python steadily increased the next year

## Implications

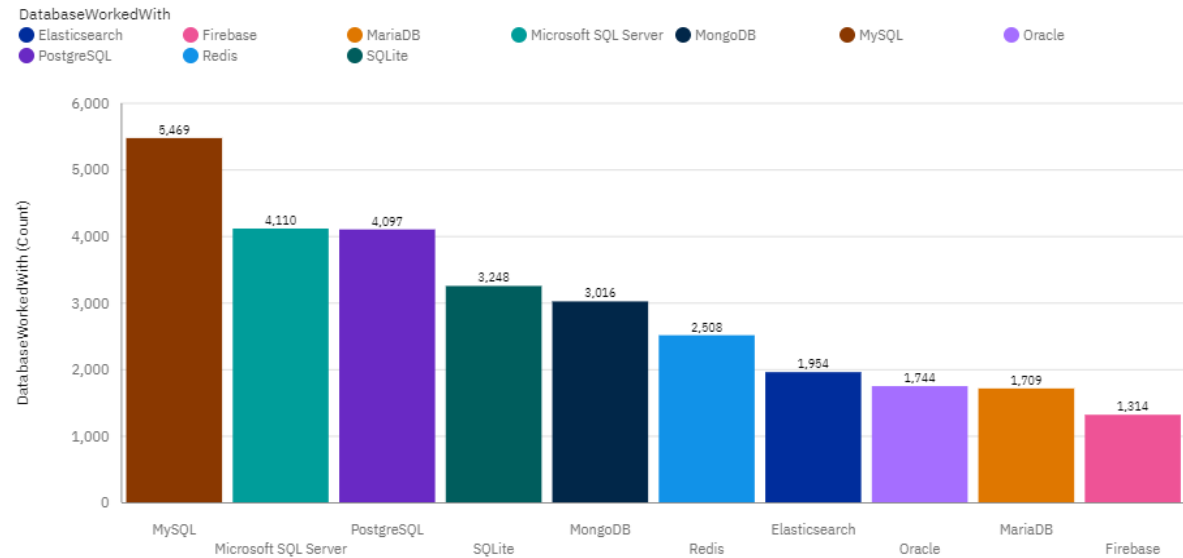
- Java is slowly increasing as time goes on, it almost doubled after 1 year
- After 1 year, the dataset of the languages used seems more compact. That means that people are attempting to use different programming languages and not sticking only with what's popular.



# DATABASE TRENDS

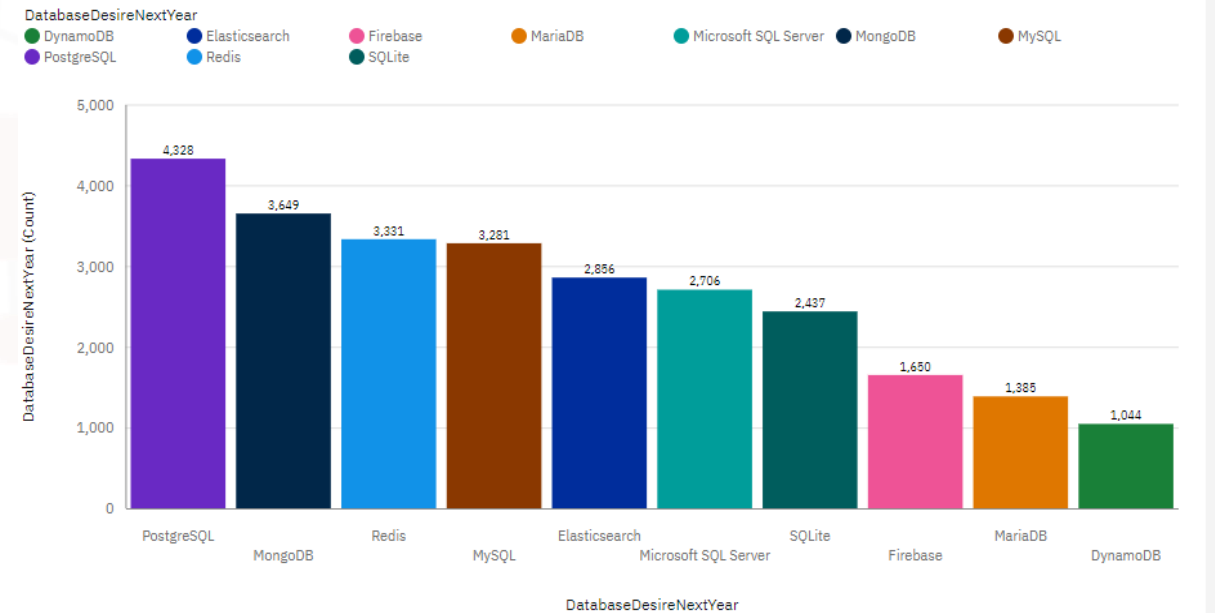
## Current Year

Top 10 DatabaseWorkedWith



## Next Year

Top 10 DatabaseDesireNextYear



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

---

## Findings

- In the current year, MySQL is the database that is mostly used.
- There is an increase of interest for PostgreSQL
- There is a slight loss of interest in MySQL

## Implications

- PostgreSQL are coming up in the market as a top tier database.
- SQLite maybe needs to add some functions or capabilities since they are losing steam in the market
- MariaDB needs to attempt to gain more interest and users since they are at the bottom on both charts

# DASHBOARD

---



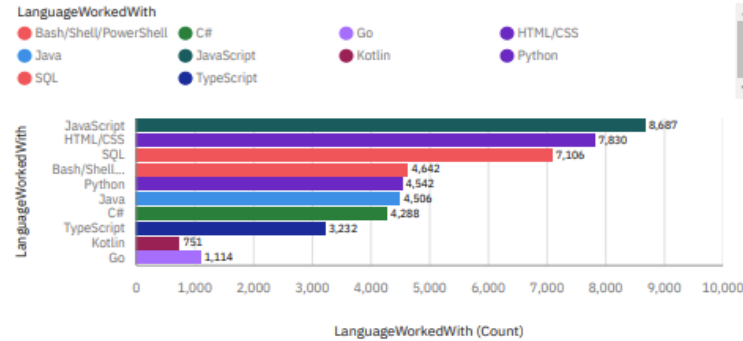
<https://github.com/Amadis15/IBMDashboardsProject/blob/main/Part%201%20of%20Dashboard%20Assignment.pdf>

<https://github.com/Amadis15/IBMDashboardsProject/blob/main/Part%202%20of%20Dashboard%20Assignment.pdf>

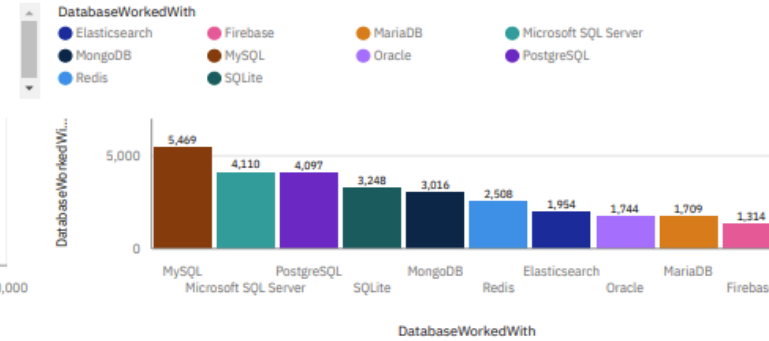
# Current Technology Usage

## Current Technology Usage

### Top 10 LanguageWorked With



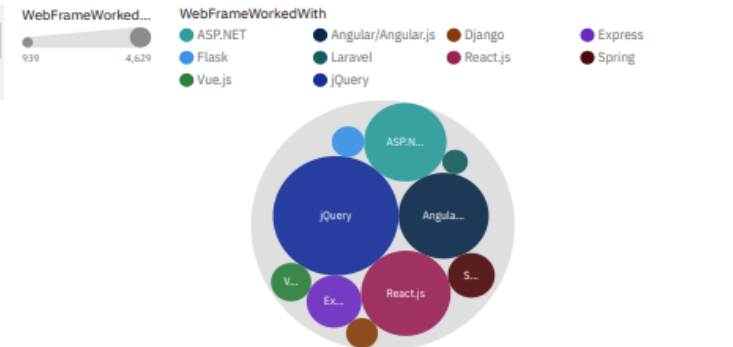
### 1 Top 10 DatabaseWorkedWith



### PlatformWorkedWith



### Top 10 WebFrameWorkedWith



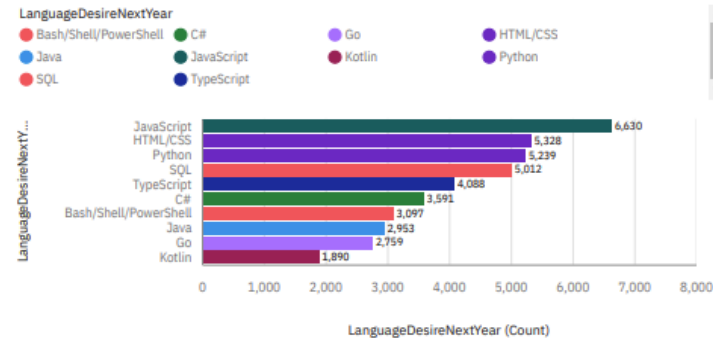
# Future Technology Usage

4/21/24, 8:01 PM

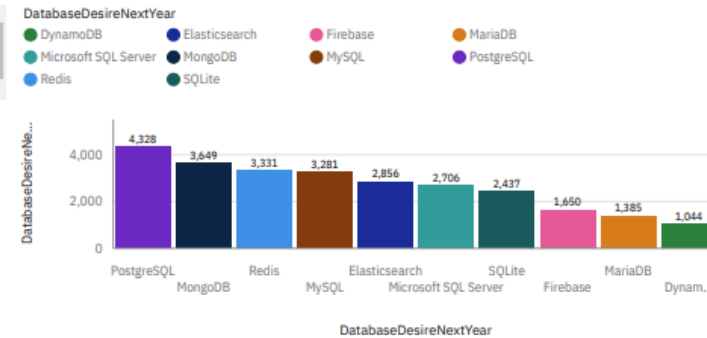
Part 1 of Dashboard Assignment

## Future Technology Trend

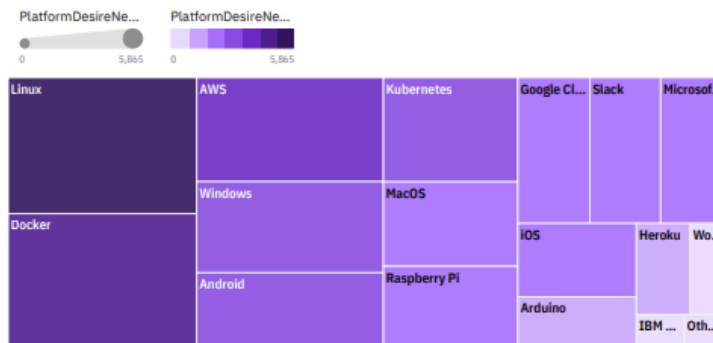
### Top 10 LanguageDesireNextYear



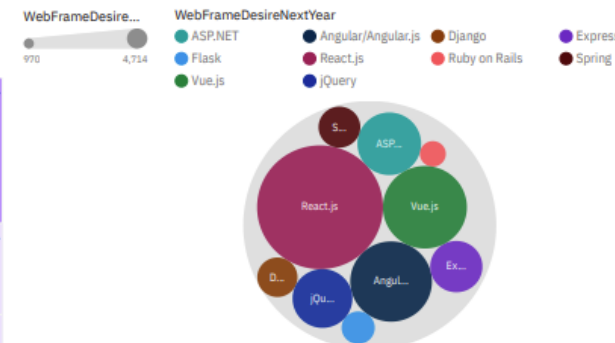
### 4 Top 10 DatabaseDesireNextYear



### PlatformDesireNextYear



### Top 10 WebFrameDesireNextYear

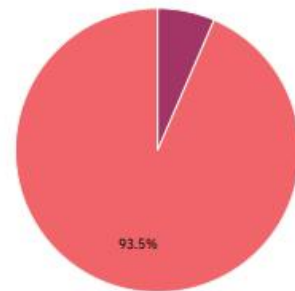


# Demographics

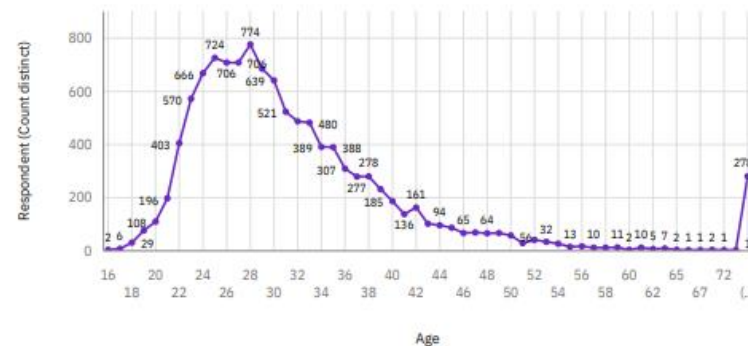
## Demographics

Respondent classified by Gender

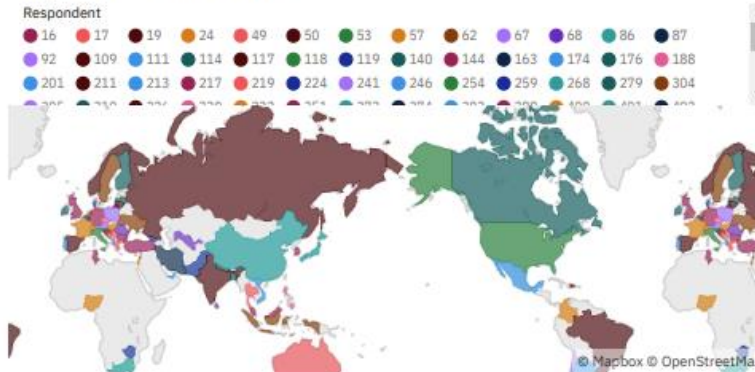
Gender  
 Woman Man



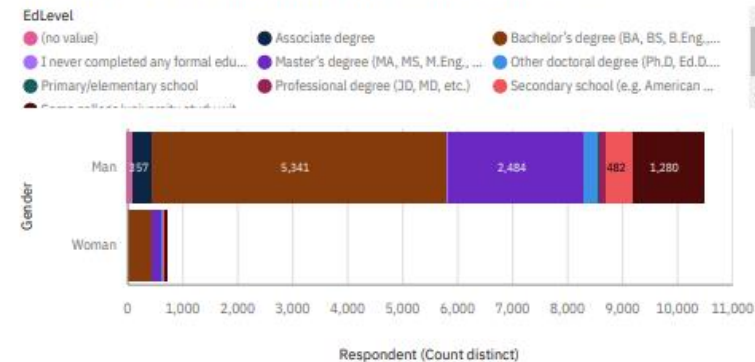
Respondent Count by Age



## 1 Respondent Count for Countries



Respondent Count by Gender, classified by Formal Education Level.



# DISCUSSION

---



# OVERALL FINDINGS & IMPLICATIONS

---

## Findings

- The age with the most developers is age 28
- The country with the highest numbers of developers is the Russian Federation
- There is a growing increase of Interest for PostgreSQL

## Implications

- There are developers spread out all over the world.
- Databases like MariaDB needs to attempt to get more users to use their database
- This is a male dominated field with over 98% of developers being males



# CONCLUSION

---



- There is a need to attempt to spread the accessibility of this field onto various locations where currently there aren't many developers.
- There are variety of tools and databases that are growing as time is going on.
- But there are also a variety of tools that are at the bottom in terms of usage and would need to attempt to gain attention and make more people want to use their tools

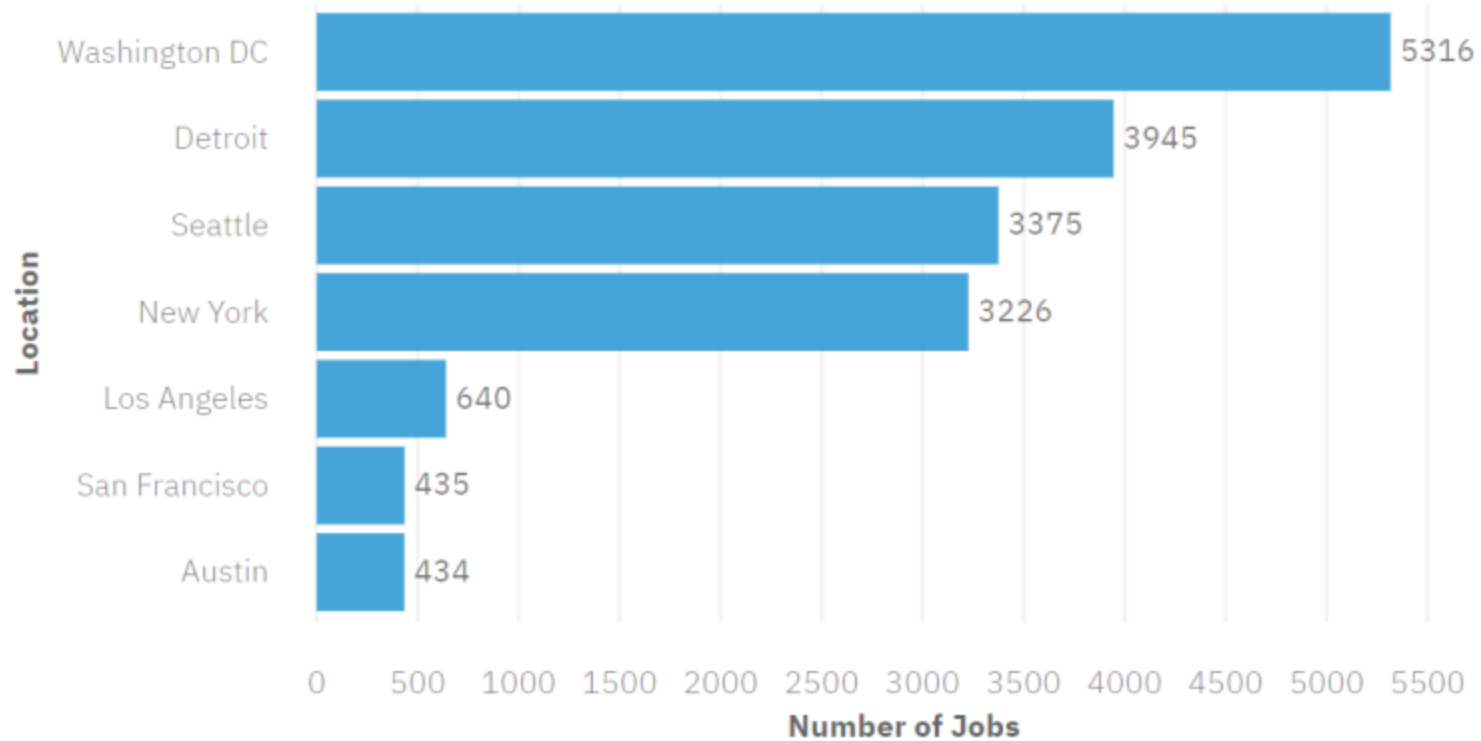
# APPENDIX

---



# JOB POSTINGS

---



# POPULAR LANGUAGES

