



# Developer Survey Analysis

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# OUTLINE



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

# EXECUTIVE SUMMARY



- ▶ Demographics survey
- ▶ Trends in databases and programming languages
  - ▶ Javascript is the most used programming language
  - ▶ Swift is the highest paying programming language
- ▶ Data technologies field is preferred by students pursuing bachelors and masters degree

# INTRODUCTION



- Dashboards were created to visualize the data
- Analyzed the trends in programming languages

# METHODOLOGY



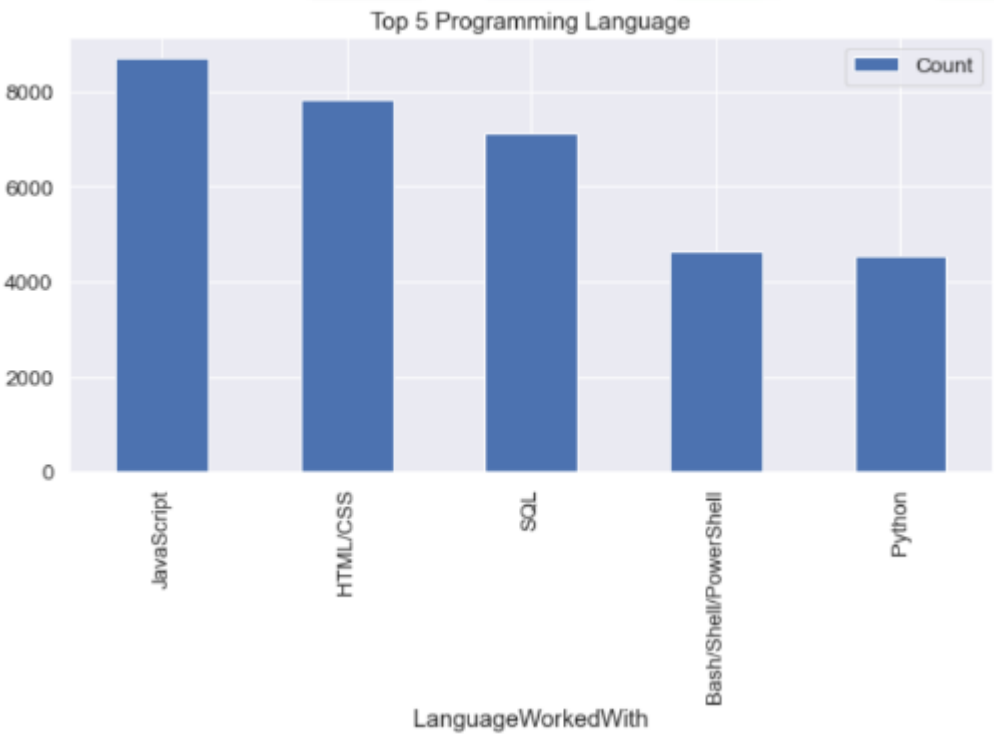
- ▶ Data Collection
- ▶ Data Exploration
- ▶ Data Cleaning
- ▶ Data Visualization
- ▶ Presentation

# RESULTS

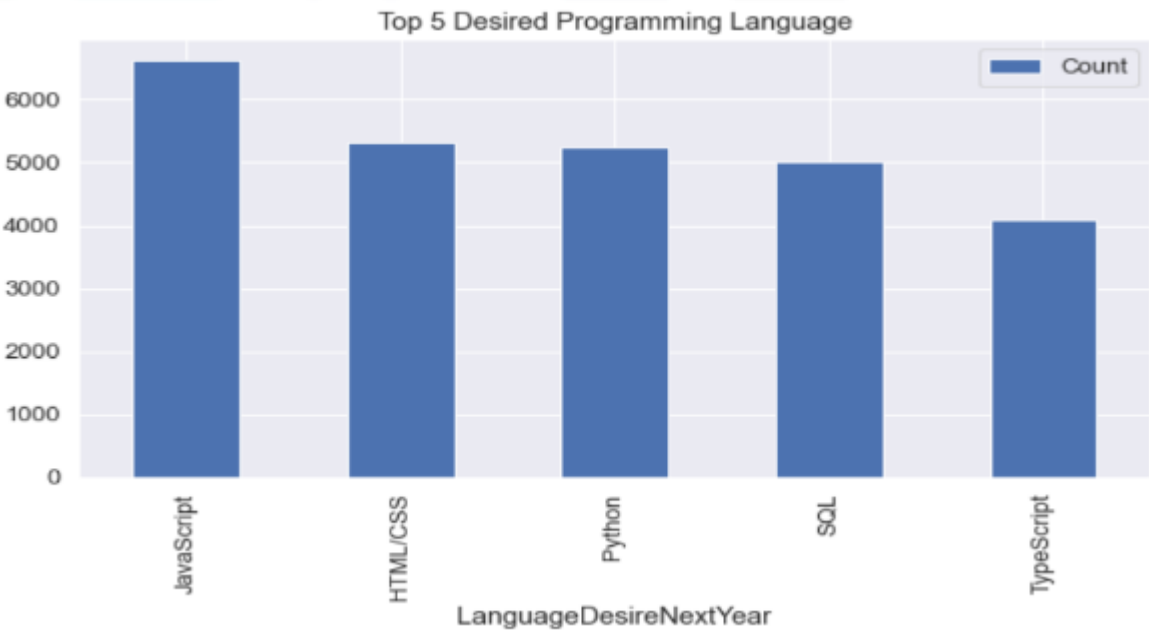
- ▶ The data was collected from stack overflow under Open Database License.
- ▶ In the next few slides we will be discussing our findings.

# PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- ▶ PowerShell is edged out next year
- ▶ Top 3 programming languages are, JavaScript, HTML/CSS and SQL
- ▶ They were followed by Bash and Python

## Implications

- ▶ With Deep Learning, Machine Learning and Artificial Intelligence is in rising demand, Python is the best choice
- ▶ Web development is still in high demand

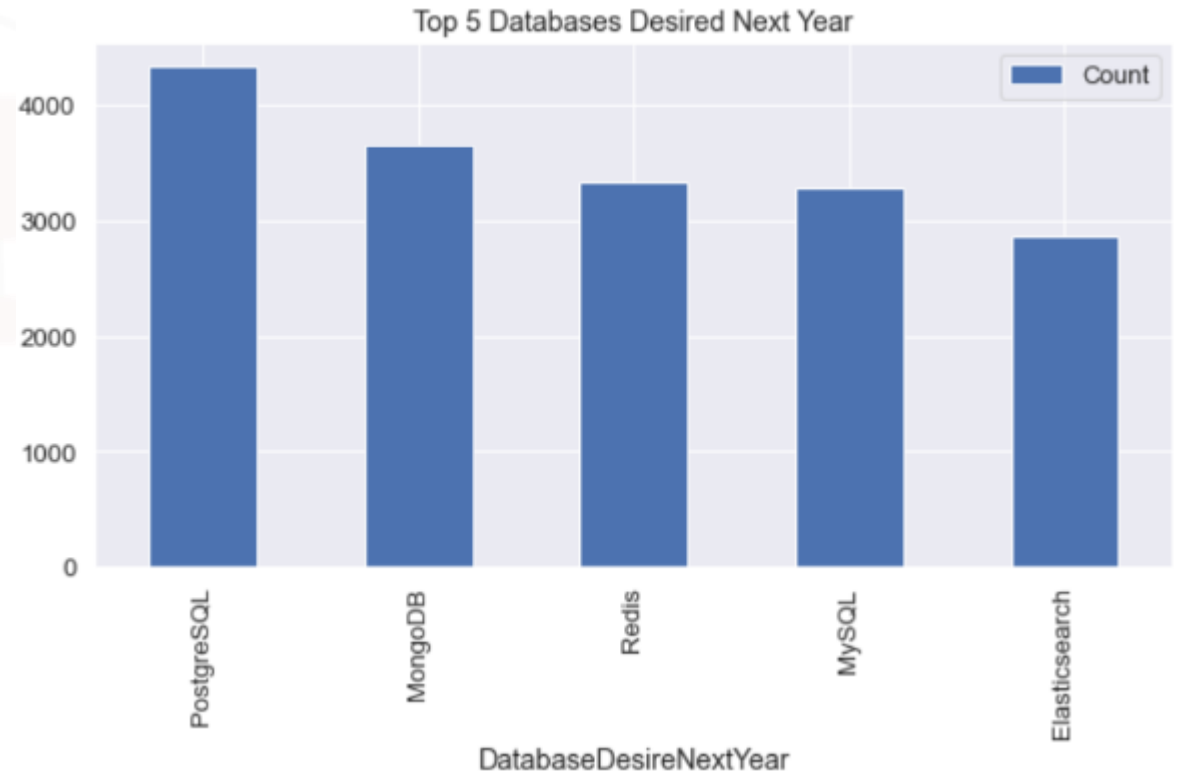


# DATABASE TRENDS

Current Year



Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- ▶ My SQL dominates the platform
- ▶ PostgreSQL was the second data base preferred
- ▶ MongoDB and Redis are coming after them

## Implications

- ▶ Redis supports abstract data types
- ▶ We may see MongoDB and PostgreSQL more often
- ▶ MySQL may reach a saturation point

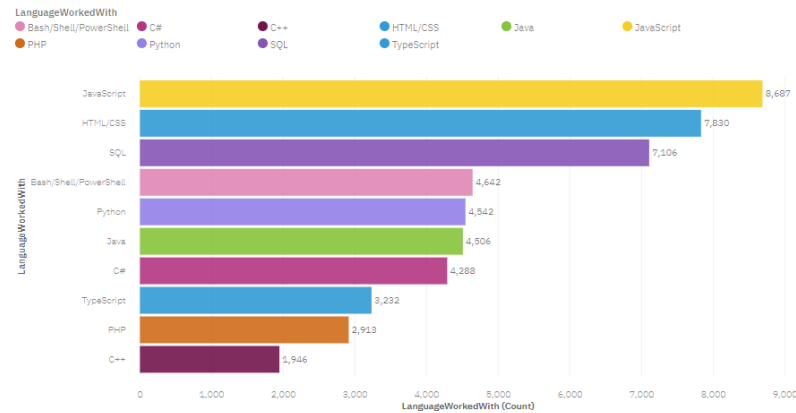
# DASHBOARD



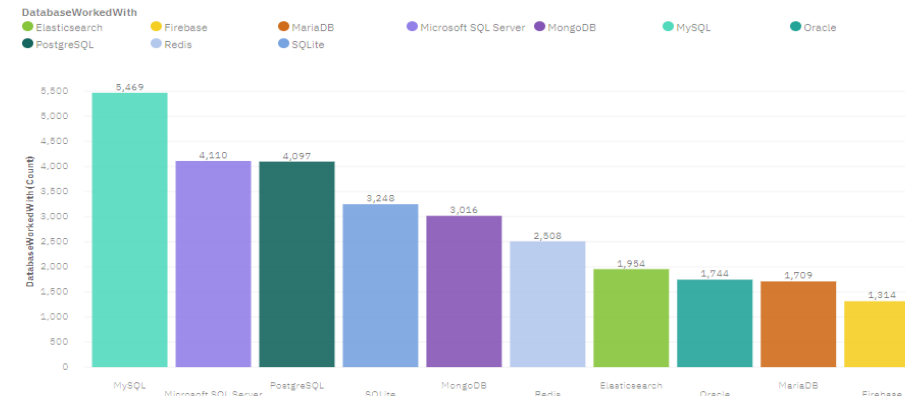
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# Technology Usage Dashboard

### Top 10 Languages Worked With



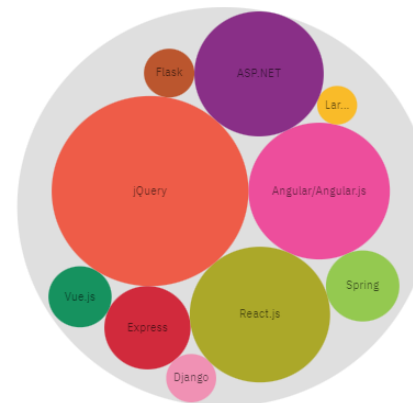
## Top 10 Database Worked With



Platform Worked With

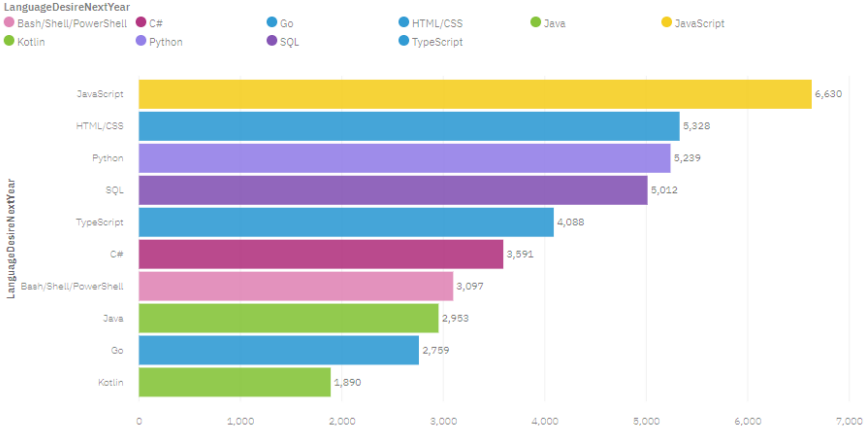


## Top 10 Web Frameworks Worked With

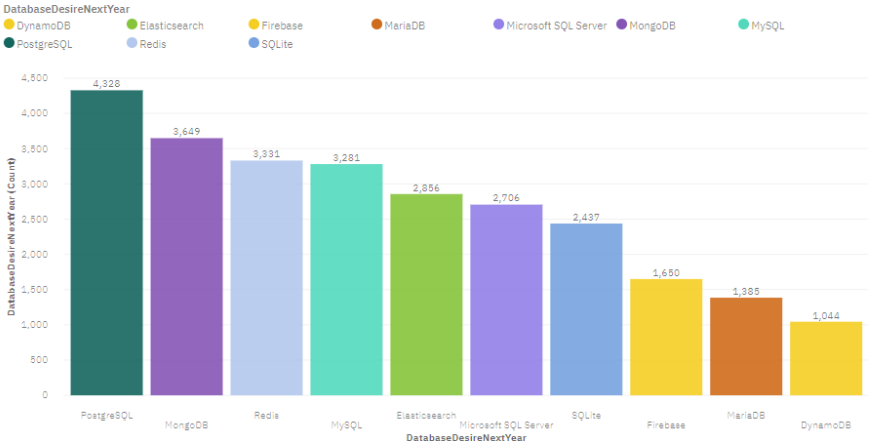


# Future Tecnology Trend Dashboard

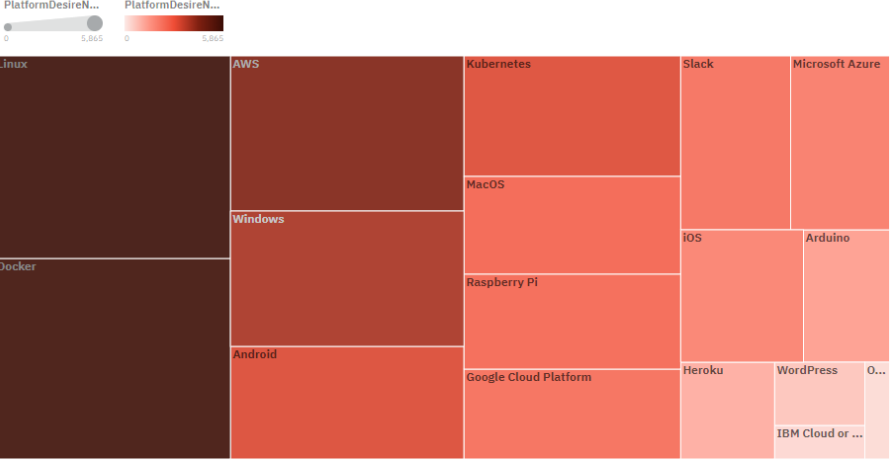
Top 10 Language Desired Next Year



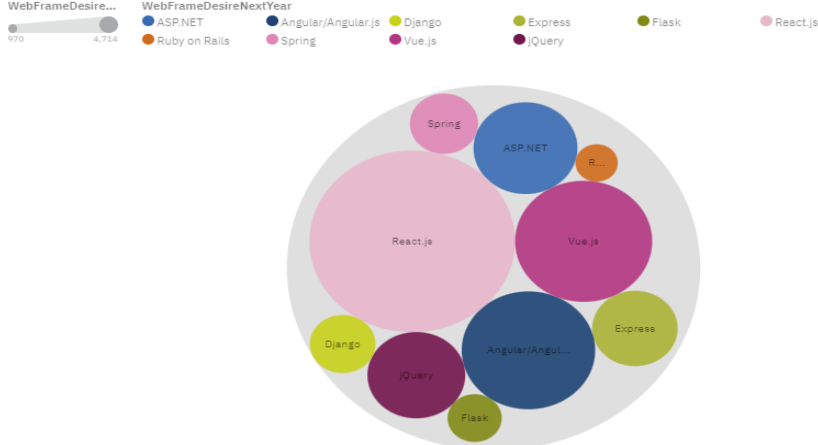
Top 10 Database Desired Next Year



Platform Desired Next Year

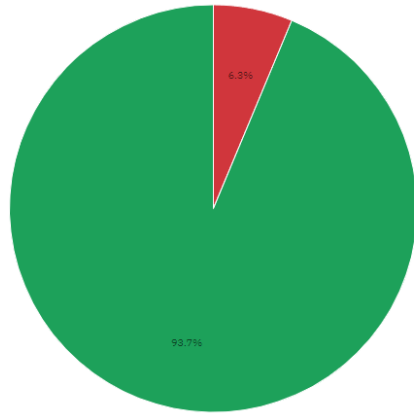


Top 10 Web Frame Desired Next Year

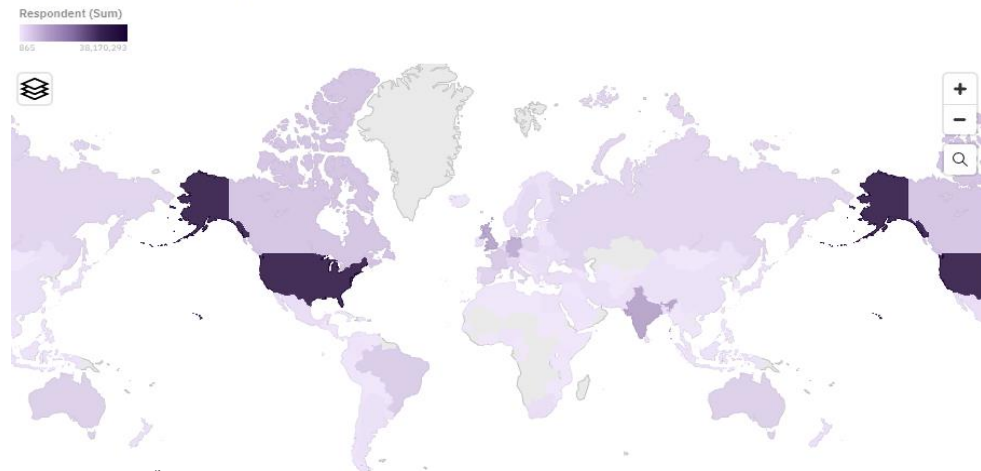


# Demographics Dashboard

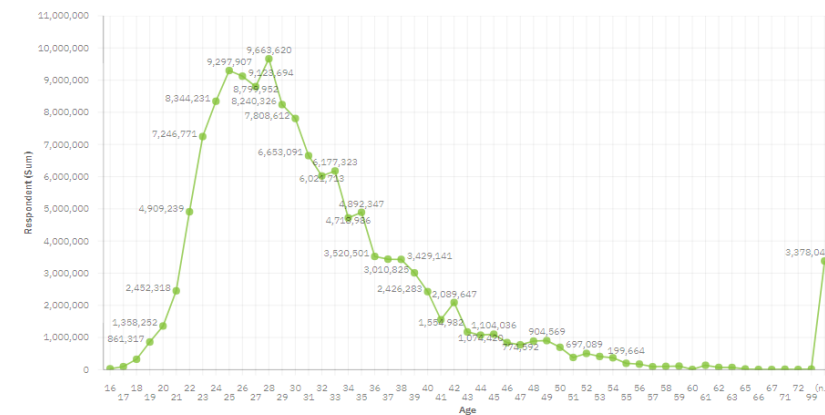
### Respondent Classified by Gender



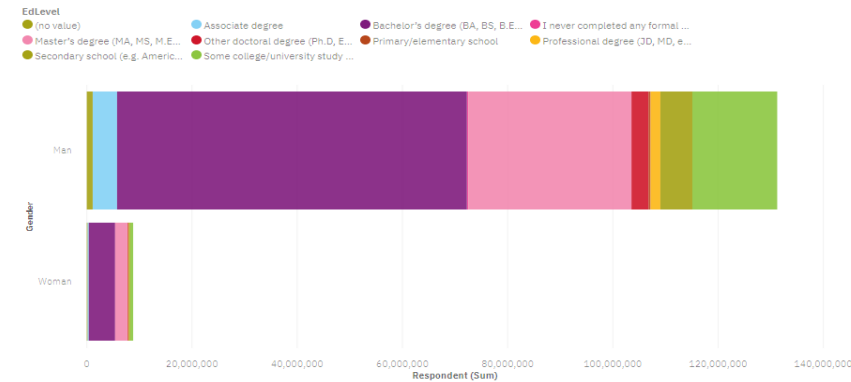
### Respondent Count for Countries



### Respondent Count by Age



Respondent Count by Gender, Classified by Education Level



# DISCUSSION



- ▶ Would MongoDB and PostgreSQL be better than MySQL?
- ▶ Why is the popularity of MySQL is decreasing?
- ▶ Is python losing its popularity?

# OVERALL FINDINGS & IMPLICATIONS

## Findings

- ▶ Survey results are dominated by male and majority of them are USA respondents.
- ▶ Bachelor's and Master's students highly prefer data technology.

## Implications

- ▶ Companies need to be more flexible

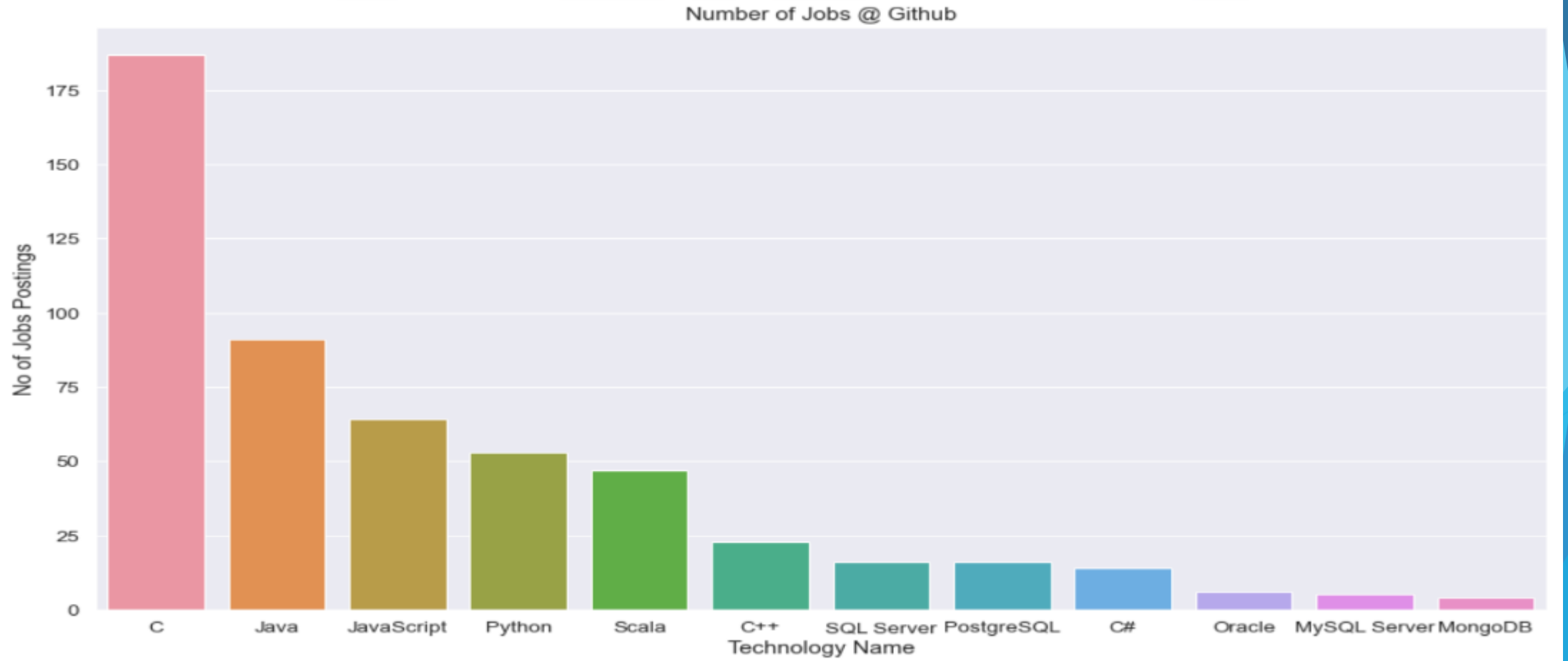


# CONCLUSION

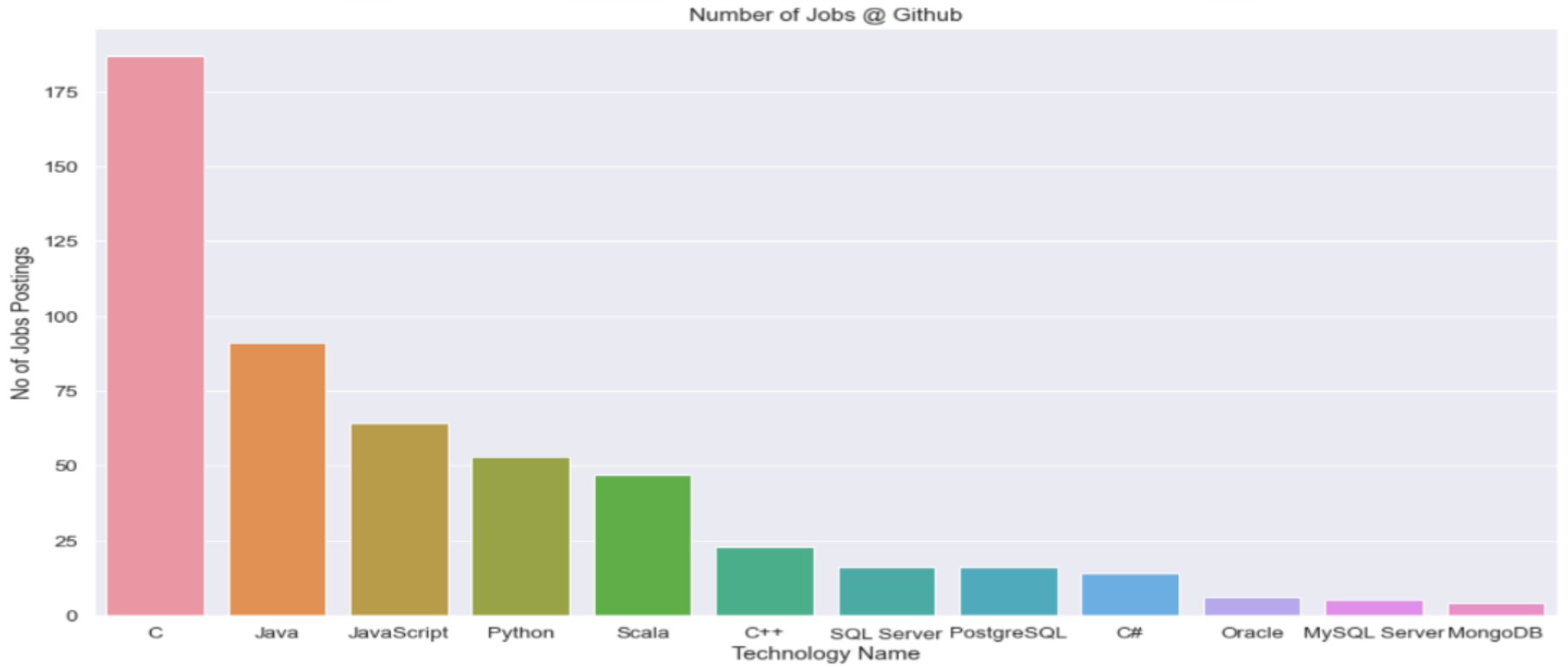


- ▶ From the data visualization charts it is clear that the data technologies are mostly preferred by 20-40 years old people.
- ▶ Results are dominated by male and majority of them are USA respondents.
- ▶ MongoDB and PostgreSQL are going to overtake SQL

# APPENDIX



# GITHUB JOB POSTINGS



# POPULAR LANGUAGES

