



STACK OVERFLOW DEVELOPER SUURVERY 2019

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October 24/2024

OUTLINE



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

EXECUTIVE SUMMARY



- Data Analysis and Visualization goal
- Methodology description
 - Data Gathering
 - Data Analysis
 - Data Visualization
- Key finding presentation with graphs and charts
- Discussion of overall finding and implications regarding the results
- Final conclusions of the carried out research

INTRODUCTION



- Stack Overflows annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- Survey don't represent everyone in the developer community evenly
- Nearly 90 thousand developers participated
- Trends to predict where the developers are going for next year
 - Learning new Programming language
 - Learning new Data base programming languages

METHODOLOGY



- Collect survey data & explore its content
- Data Wrangling
- Exploratory data analysis
 - Analyzing data distribution
 - Handling outliers.
 - Correlations.
- Data Visualizations
 - Highlight distribution of data, relationships, the composition and comparison of data.
 - Dashboards for user interaction with data

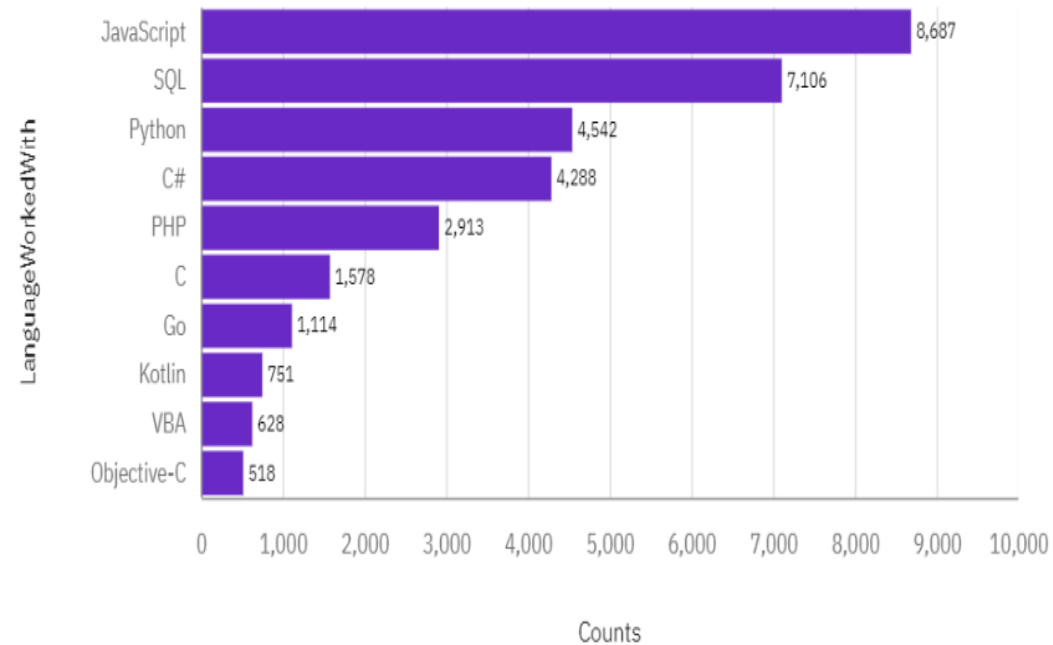
RESULTS



PROGRAMMING LANGUAGE TRENDS

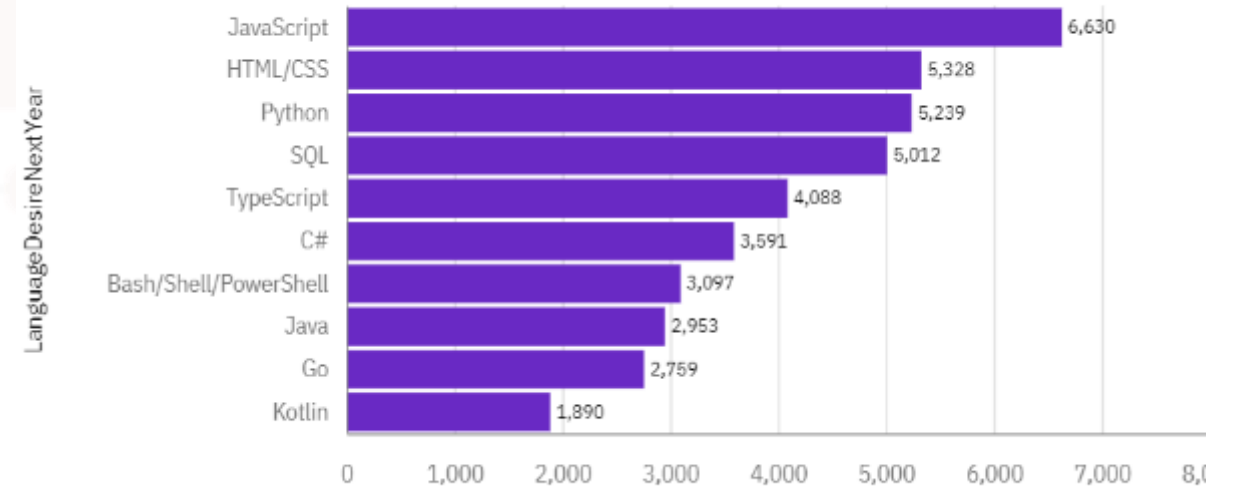
Current Year

Top 10 LanguageWorkedWith



Next Year

Top 10 Language Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript seems to keep as leading language.
- Python fastest-growing.
- Increasing popularity of TypeScript.

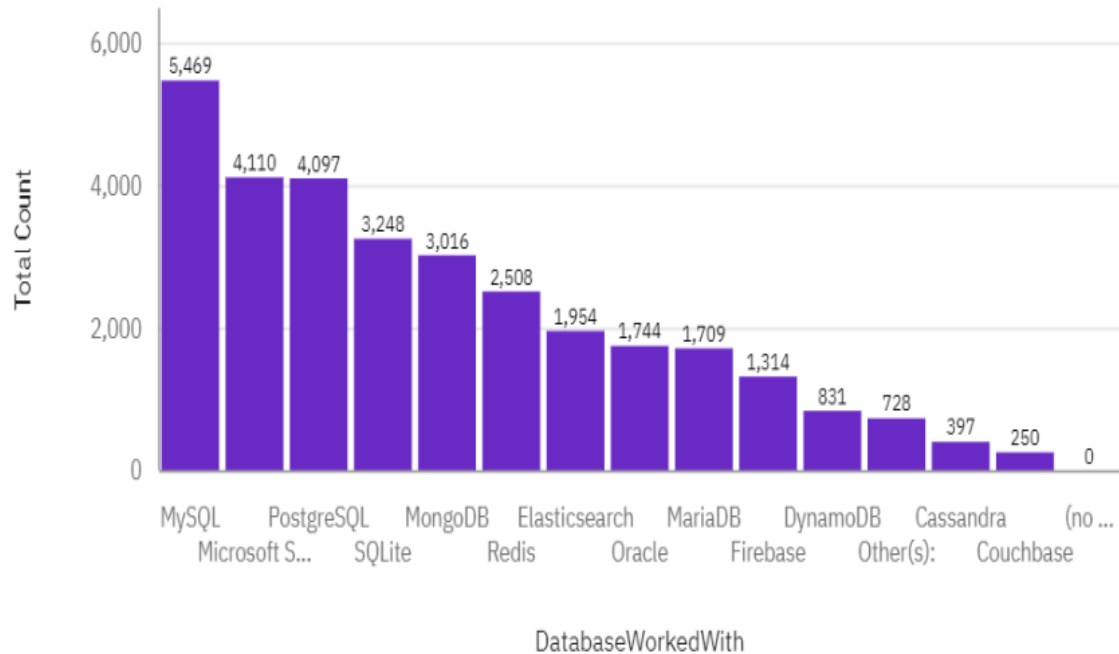
Implications

- Possible developer migration from JavaScript to TypeScript.

DATABASE TRENDS

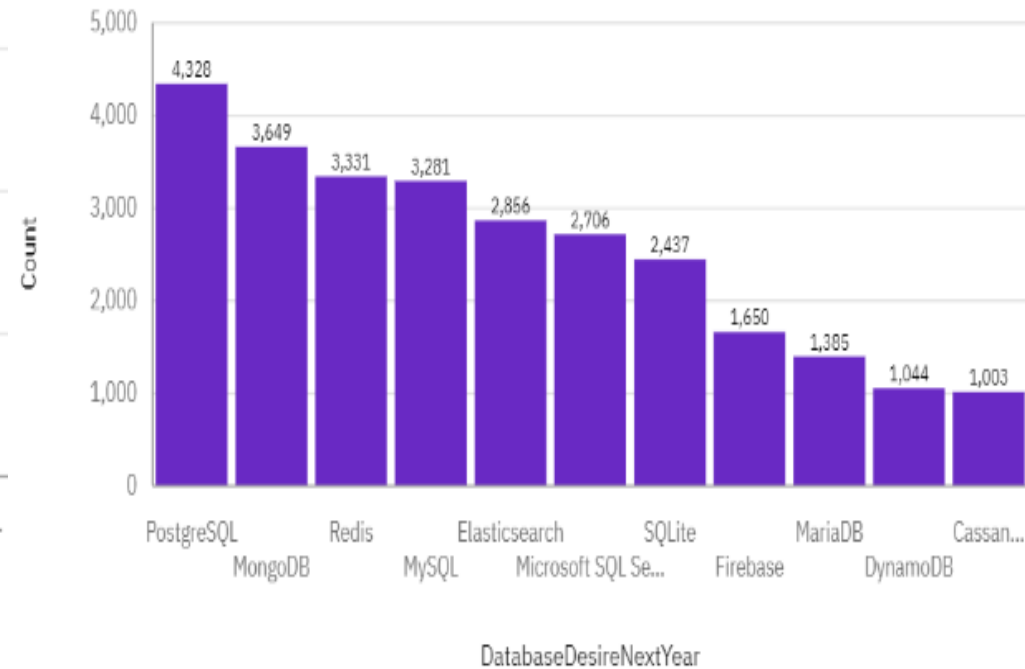
Current Year

Top 10 Database Worked With



Next Year

Top 10 Database Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL as most used database.
- Lack of interest in Microsoft SQL Server and SQLite
- Increasing interest in PostgreSQL and MongoDB

Implications

Microsoft SQL server and SQLite losing ground in the market.

PostgreSQL and MongoDB establishment in the market.

DASHBOARD

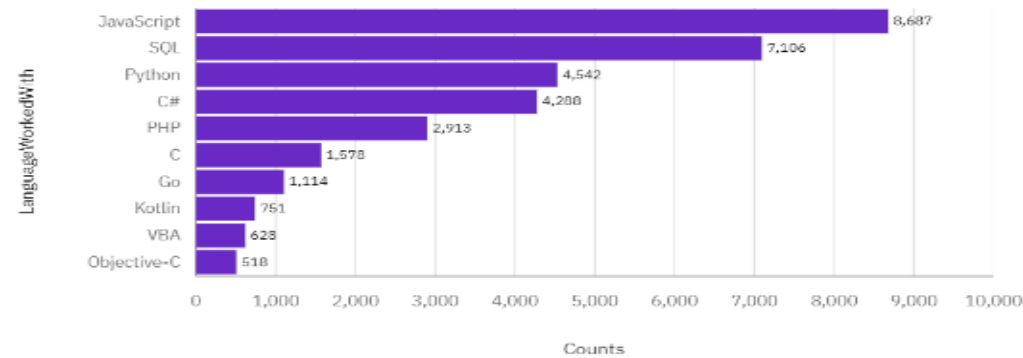


[https://github.com/Suresh-Tamang/IBM-Data-Analyst-Capstone-Project/blob/main/IBM Cognos Dashboard.pdf](https://github.com/Suresh-Tamang/IBM-Data-Analyst-Capstone-Project/blob/main/IBM%20Cognos%20Dashboard.pdf)

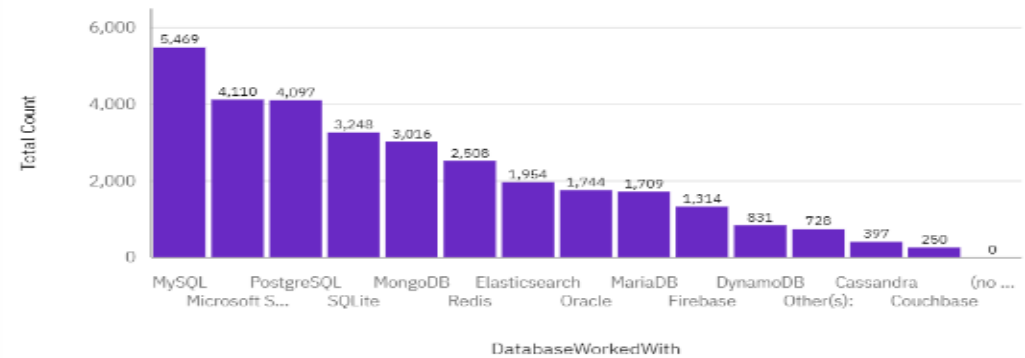
CURRENT TECHNOLOGY USAGE

CURRENT TECHNOLOGY USAGE

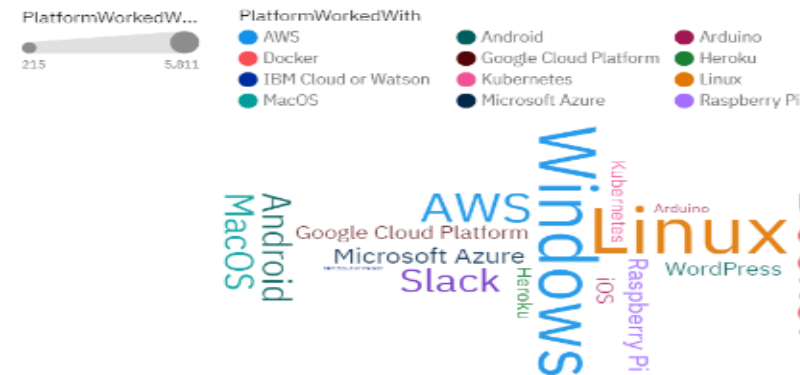
Top 10 LanguageWorkedWith



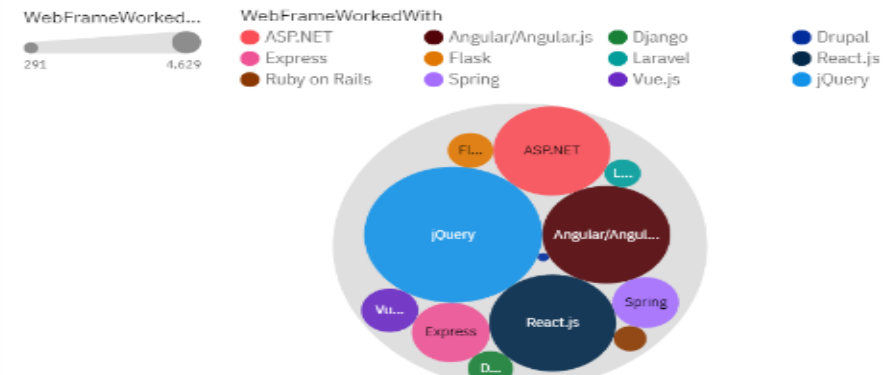
Top 10 DatabaseWorkedWith



Top 10 PlatformWorkedWith



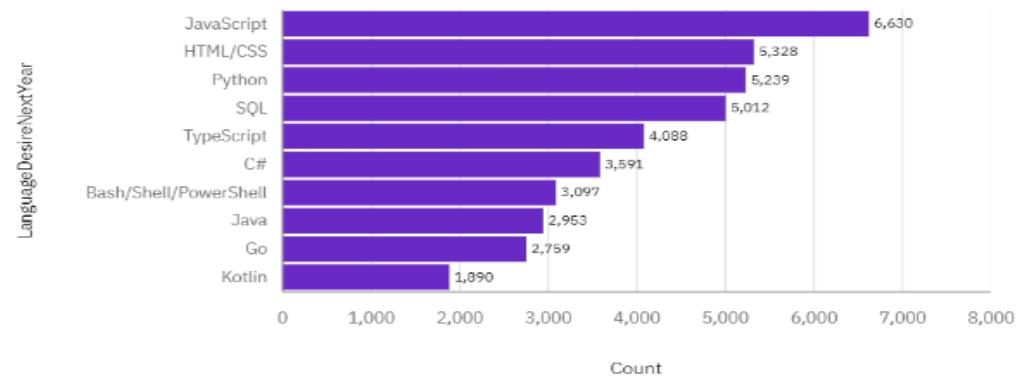
Top 10 WebFrameWorkedWith



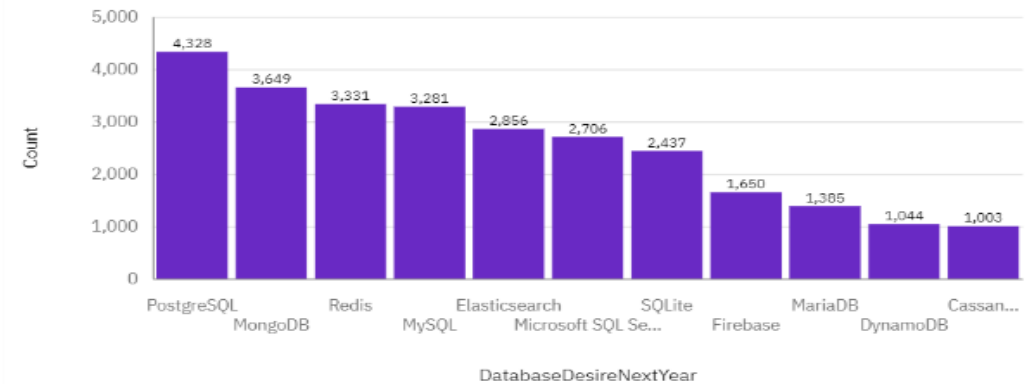
FUTURE TECHNOLOGY TREND

Future Technology Trend

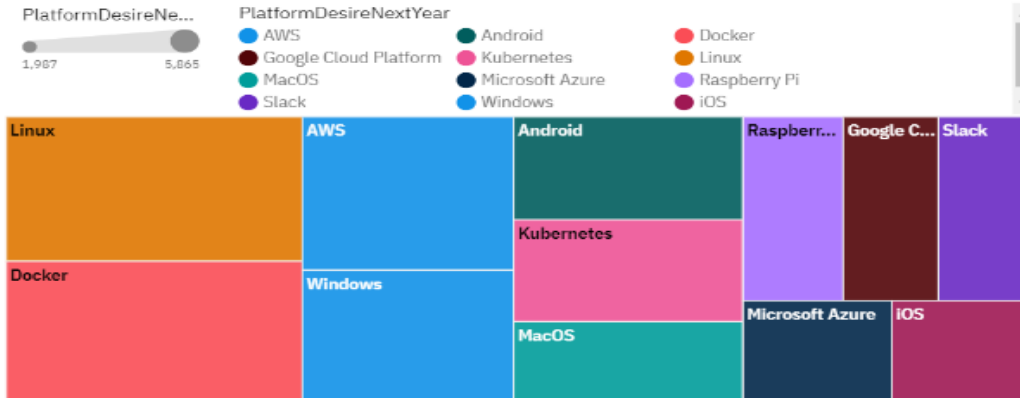
Top 10 Language Desired Next Year



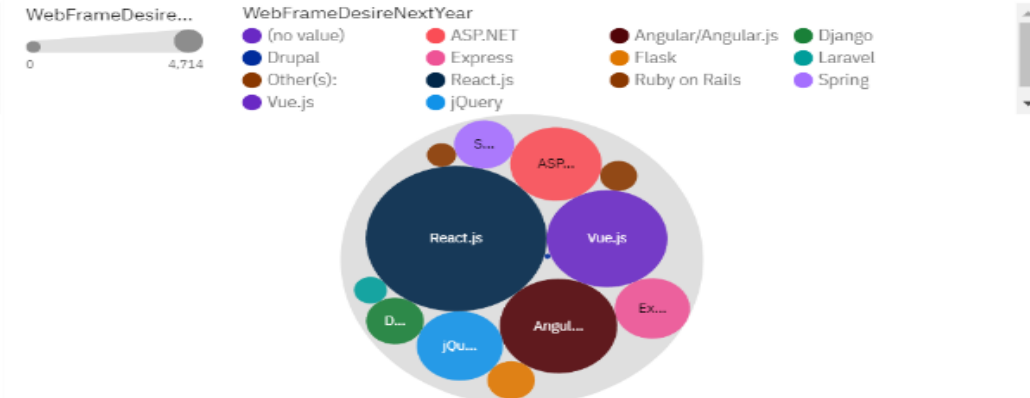
Top 10 Database Desired Next Year



Top 10 Platform Desired Next Year



Top 10 Web Framework Desired Next year

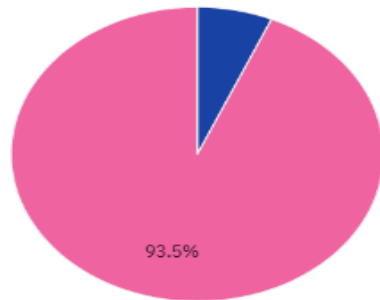


DEMOGRAPHICS

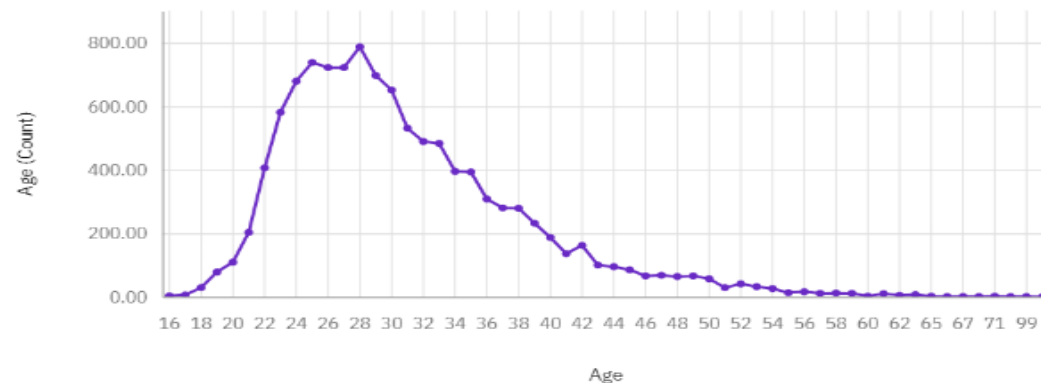
Demographics

Respondent classified by Gender

● Woman ● Man



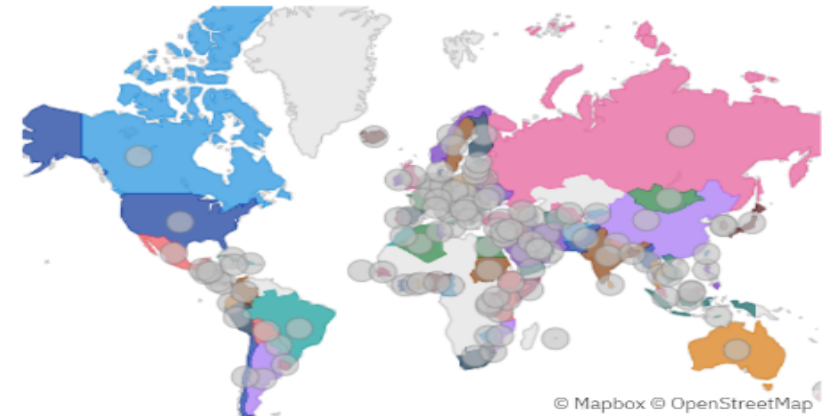
Respondent Count by Age



Respondent Count for Countries

Country

- Australia
- Israel
- South Africa
- Austria
- Argentina
- Iran
- Hungary
- United Arab Emirates
- Nicaragua
- Mexico
- South Korea
- Norway
- Cape Verde
- Indonesia
- Belarus
- Nepal
- Panama



Respondent Count by Gender, classified by Formal Education Level

EduOther (Count ...)

Gender

● Man ● Woman



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is widely used and TypeScript is getting popular.
- Over 90% are young male Developers.
- Developers mostly located in developed countries.

Implications

- JavaScript and TypeScript web frames gaining followers.
- Global polarization of developers location and gender.
- Young developers without postgrad studies on its majority.

CONCLUSION

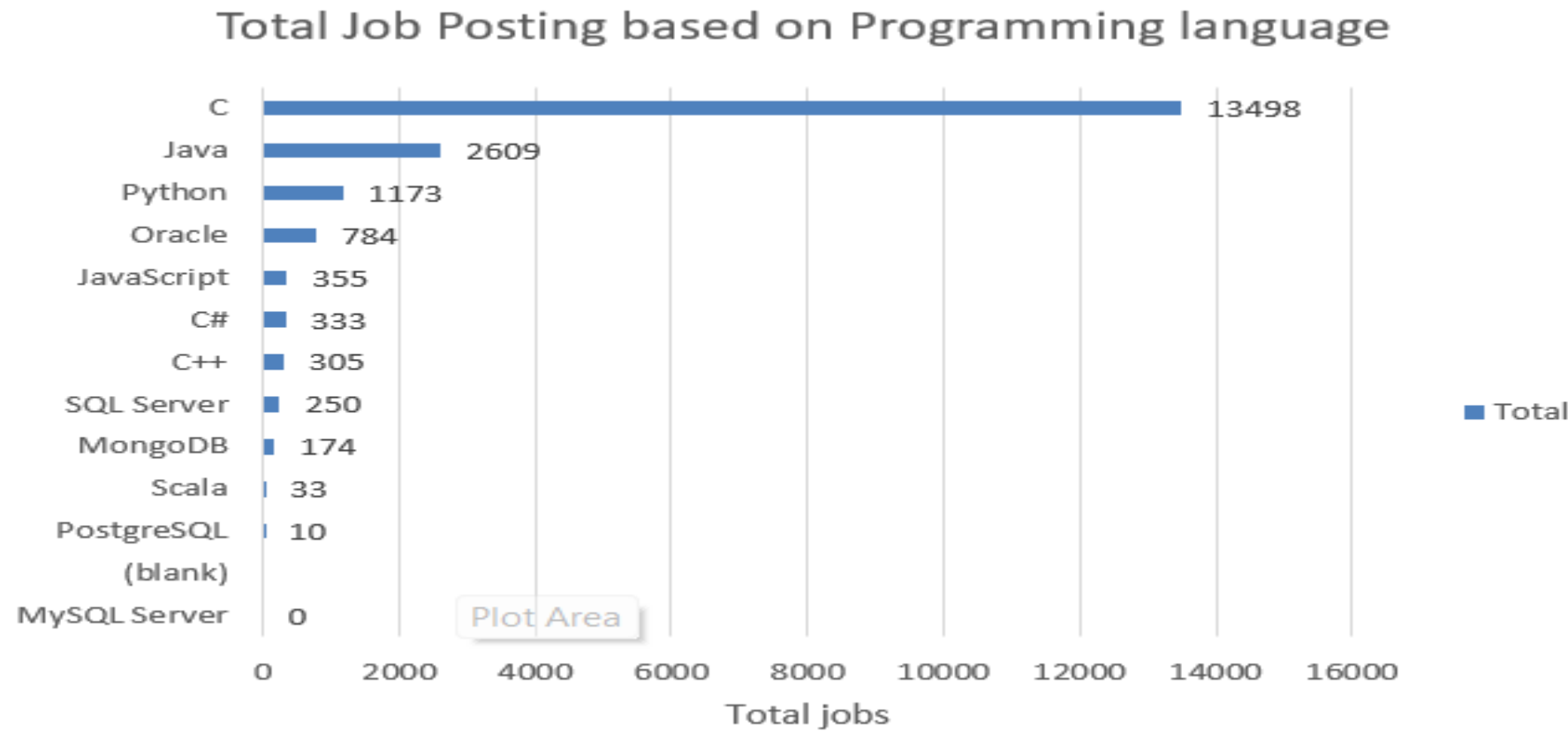


- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- Developers are also from different background.
- We can obtain the future trends of Programming language and Database
- The tech job is spread across the world

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

