



Most Common and Most Desired Programming Assets

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OUTLINE



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

EXECUTIVE SUMMARY



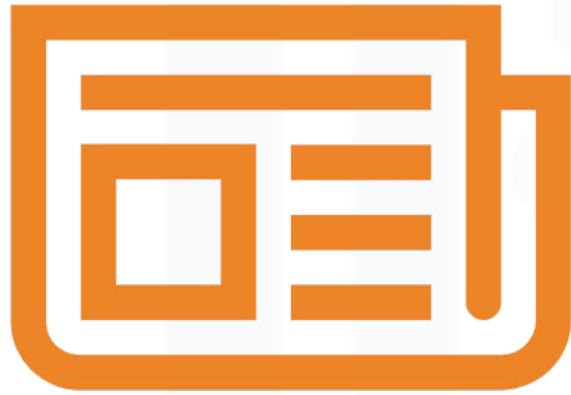
- Summary of Methodology
- Summary of Programming Language Trends
 - Correlations between Current and Next Year Data
 - Uptrends of Desired Languages in the Next Year
 - Implications from correlated data
- Database Trends
- Dashboard Findings and Discussions
- Summary of all Results

INTRODUCTION



- Project Background and Context
- Programming is a vastly growing industry, constantly requiring programmers to adapt and grow with fundamental aspects of programming. This project focuses on listing the Top Used Languages, Databases, Platforms, and Webframes, and what the top desired aspects for a programmer will be next year.
- Finding correlations between Current and Desired programming Assets
- Some Problems that will be answered
 - Which programming assets are the most desired to learn and most commonly known?
 - What is the correlation between currently used and desired databases?

METHODOLOGY



- Data Collection Methodology
 - To collect the data surveys were taken by individual companies, respondents were asked to select programming assets that are currently used and the assets they desire for next year.
- Perform Visual analytics using IBM cognos
- Performed analysis for correlated data
- Performed Data Visualization
 - Analyzed data and segmented graphs for easier understanding

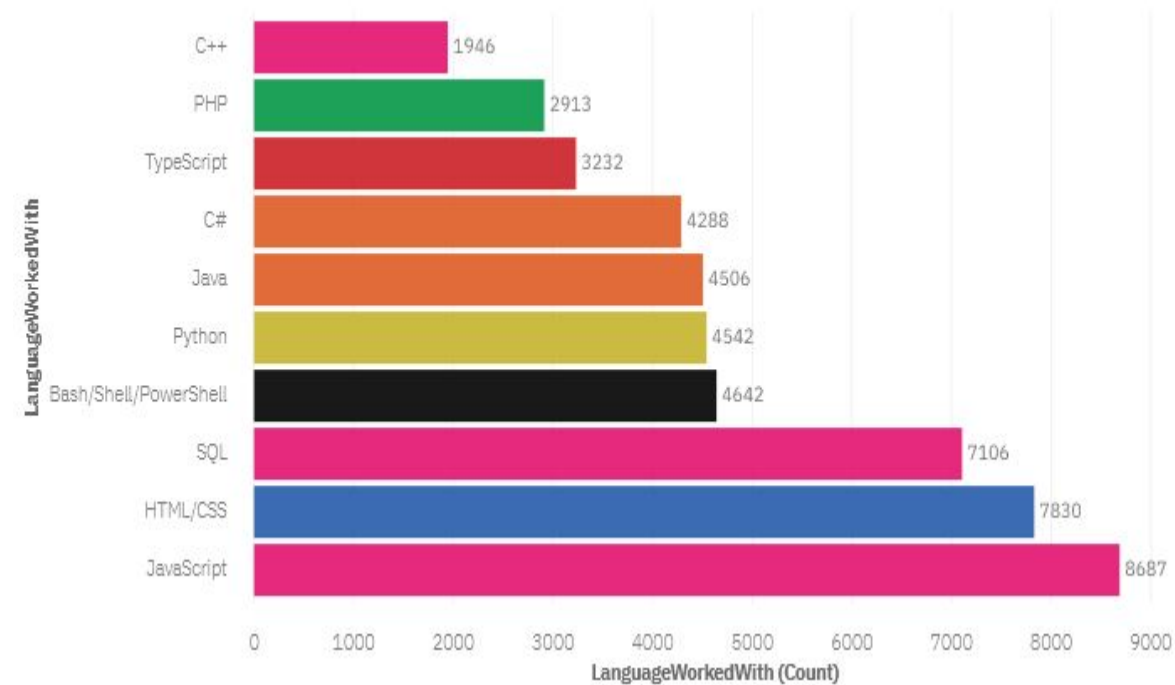
RESULTS

The results in my finding is that while many programming assets are updated and modified to continue to be used as we upgrade our technology there are occasions that we must relearn or adapt into a new asset as to better assess and analyze specific data.

PROGRAMMING LANGUAGE TRENDS

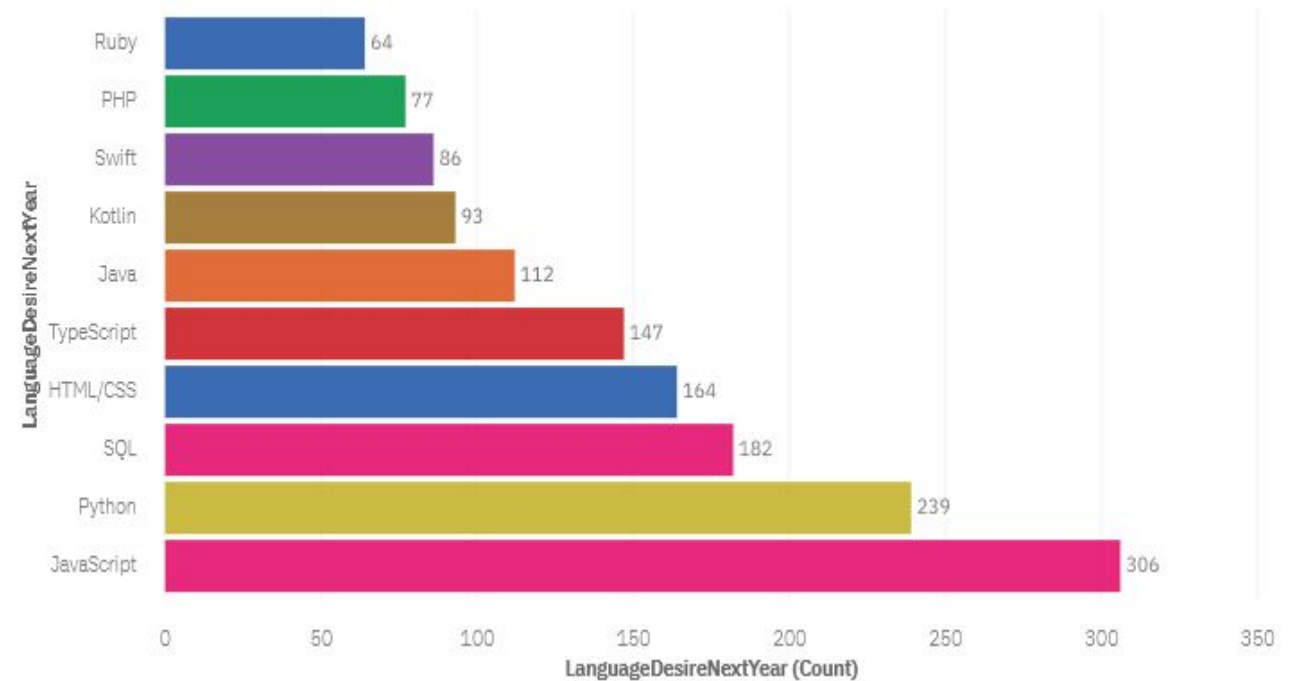
Top Coding Languages
Being Used This Year

Top 10 Most Common Coding Languages



Top Coding Languages
Desired Next Year

Top 10 Languages Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- While Javascript, HTML/CSS, SQL are the top 3 currently in use, Python is becoming a top desired Language.
- C++, C#, PowerShell are becoming less desired in the next year
- Some Languages that are currently in use are still going to be a top desire of next year, like SQL and Javascript

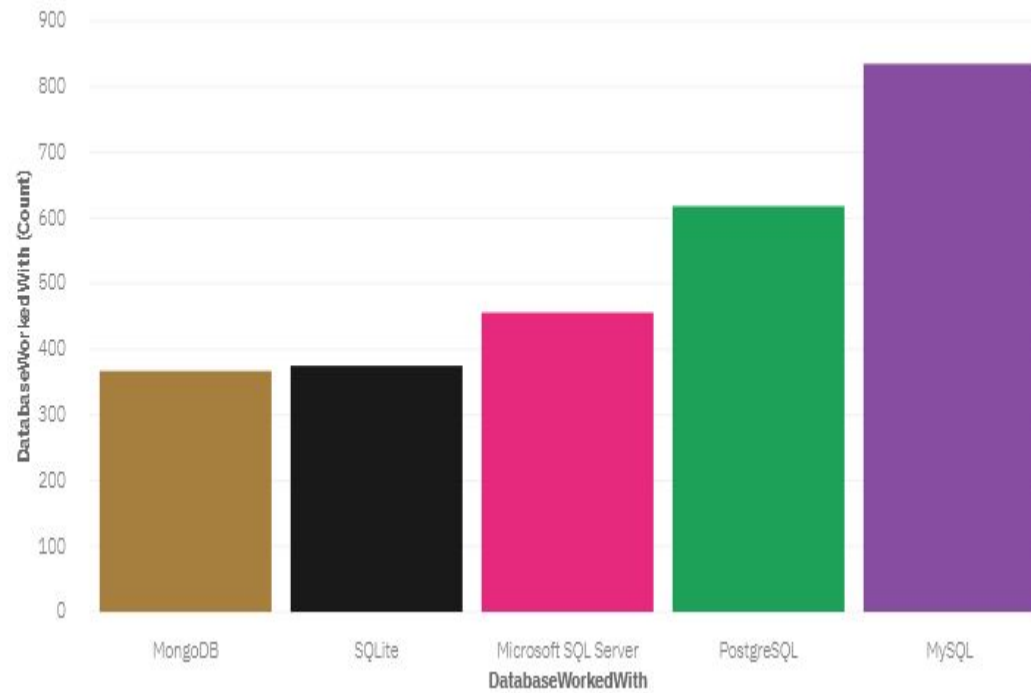
Implications

- SQL is in demand by Big Data Technology Companies
- With the rise of AI and AI development, Python is seeing a spike in Desire
- Web Development is still in good demand

DATABASE TRENDS

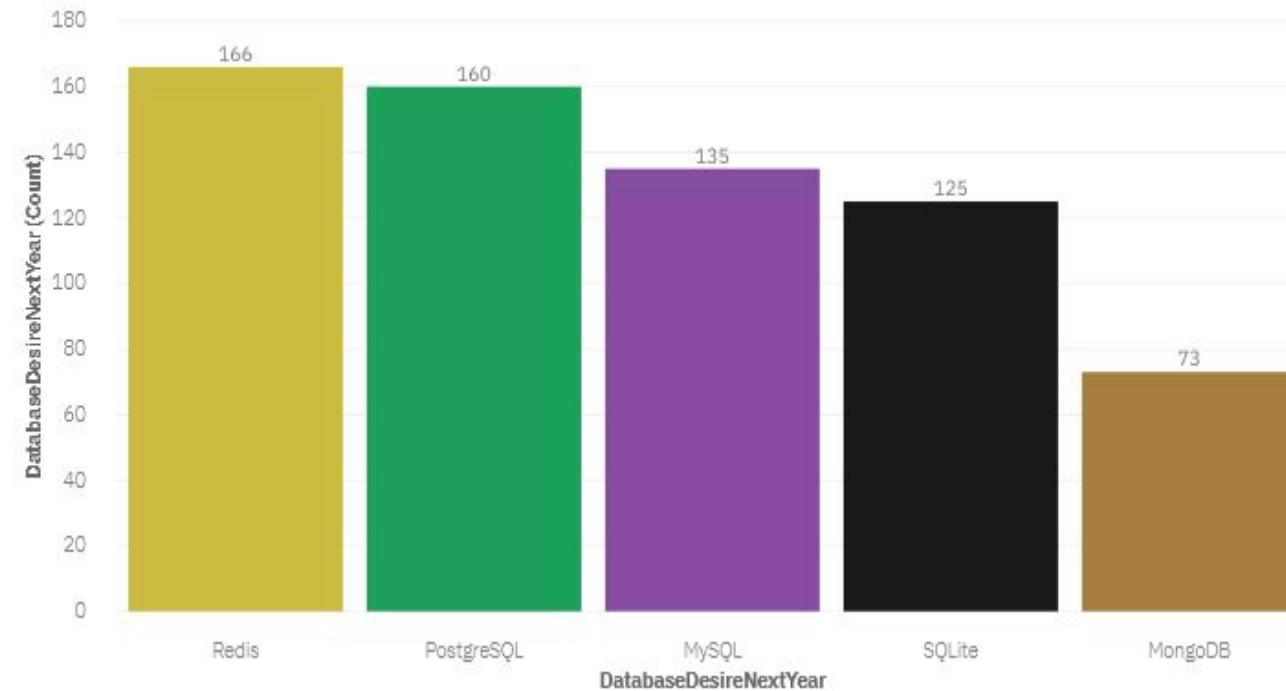
Current Year

Top 10 Databases Worked With



Next Year

Top 10 Database Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is currently the most used
- MySQL is the 3rd most desired of next year
- Redis is a NoSQL database that is the most desired of next year

Implications

- Most Companies prefer open source databases still
- NoSQL databases like Redis will make an impact in storing non-relational data
- Support of more abstract data types is in desire next year

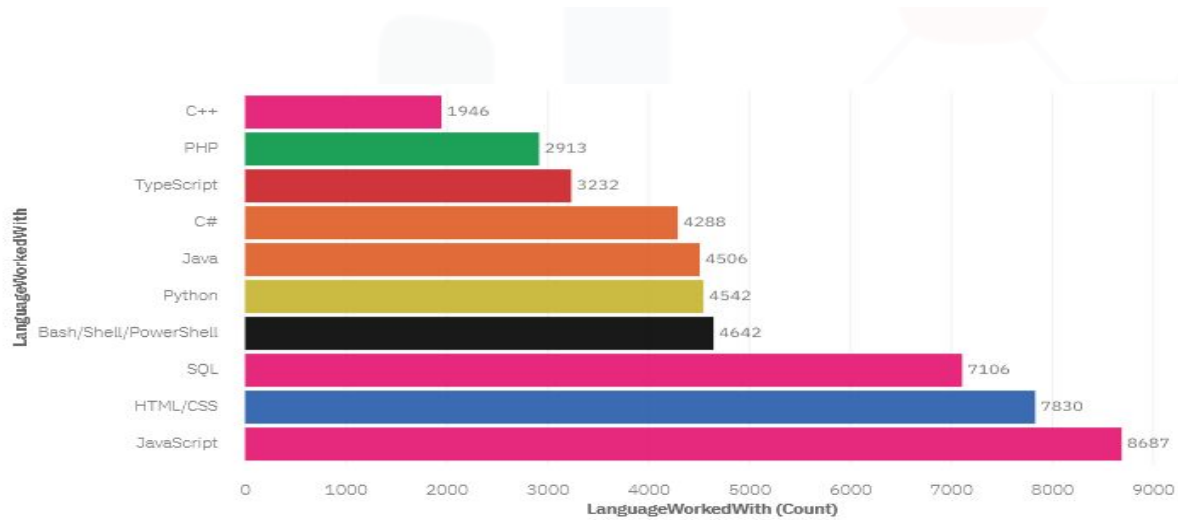
DASHBOARD



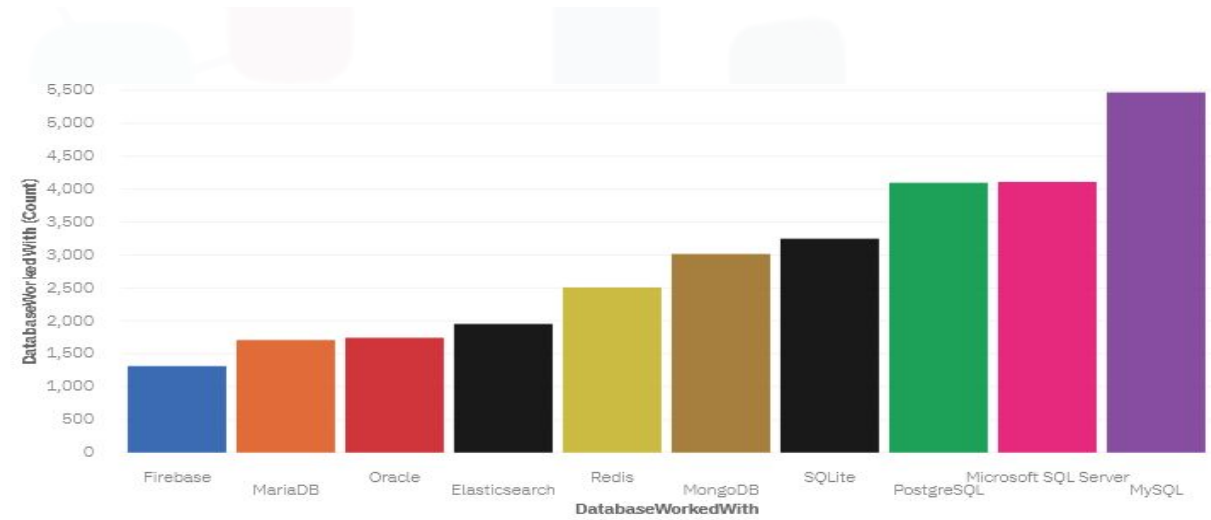
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DASHBOARD TAB 1

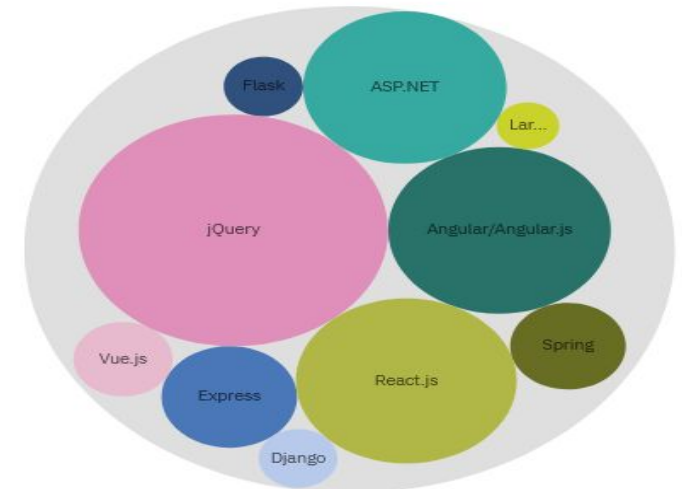
Top 10 Most Common Coding Languages



Top 10 Databases Worked With

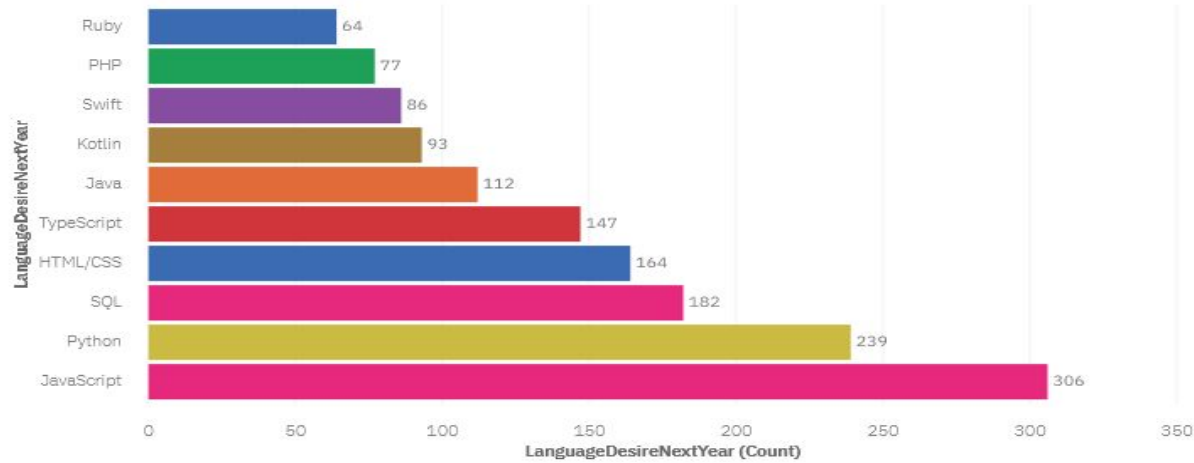


Platforms Worked With by Count

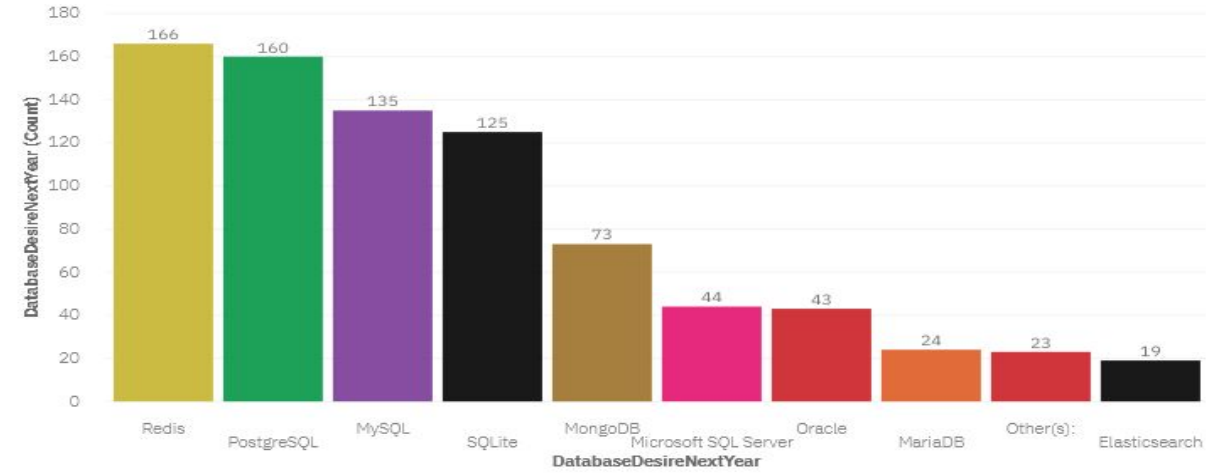


DASHBOARD TAB 2

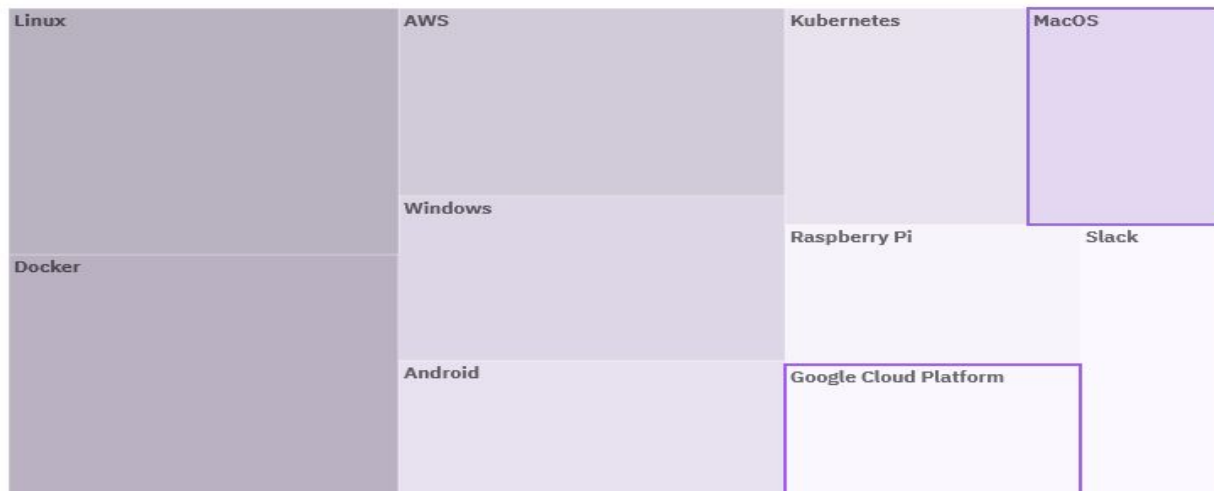
Top 10 Languages Desired Next Year



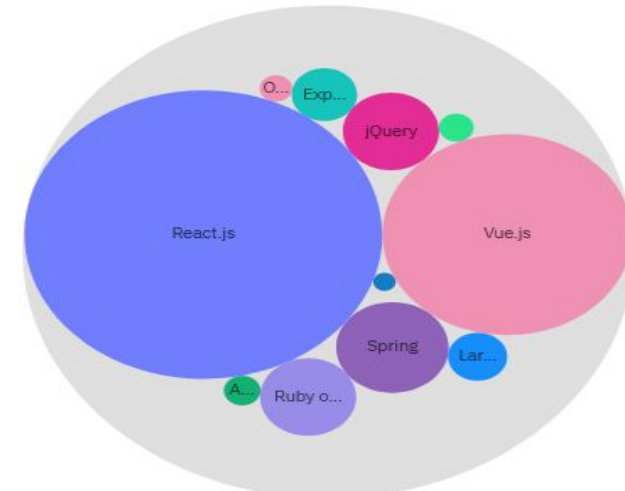
Top 10 Database Desired Next Year



Top 10 Platforms Desired Next Year

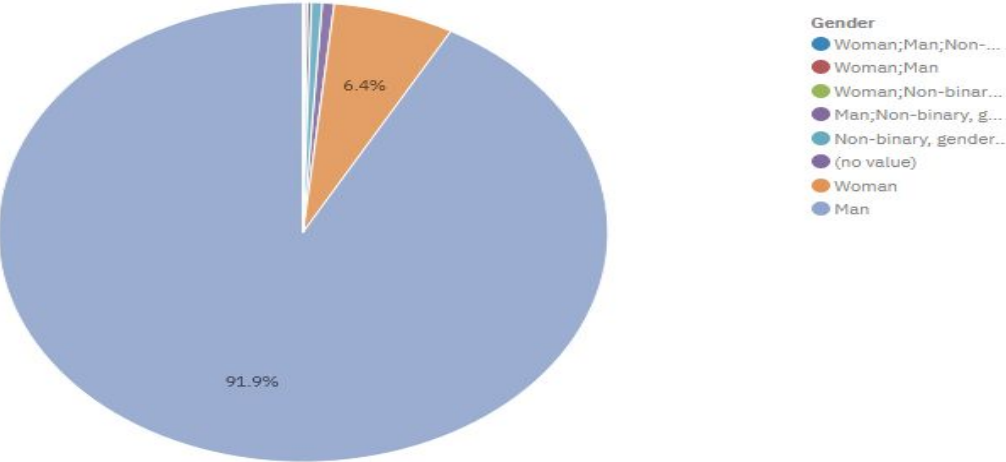


Top 10 Webframes Desired Next year

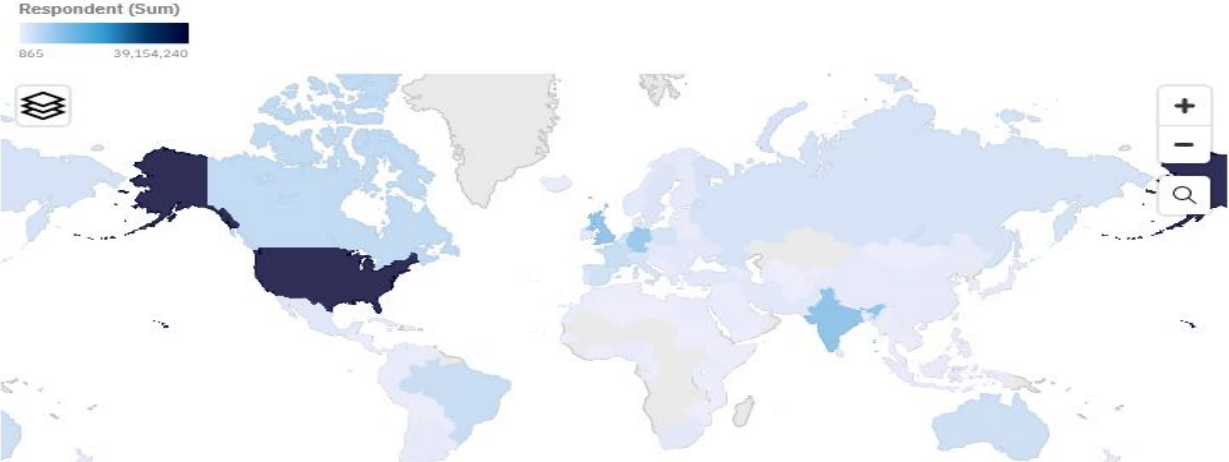


DASHBOARD TAB 3

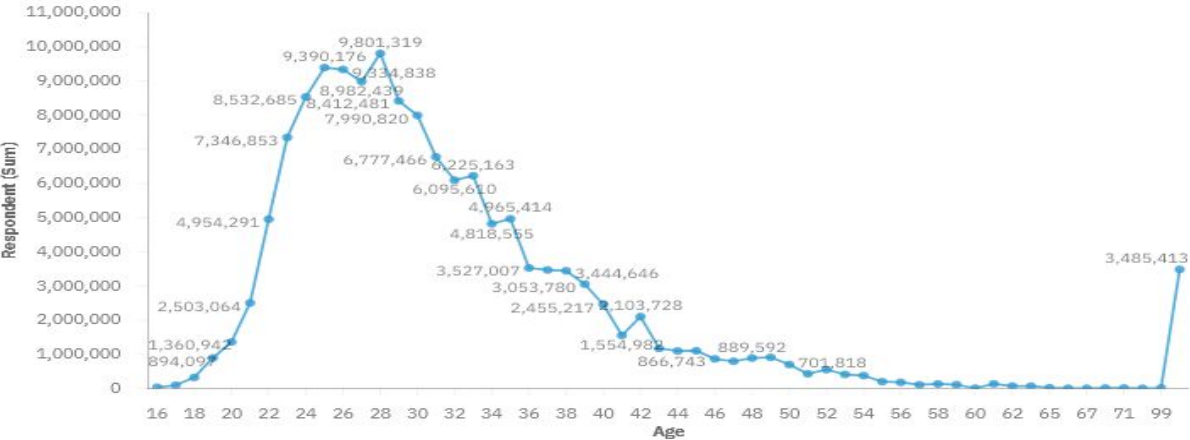
Respondent Classified by Gender



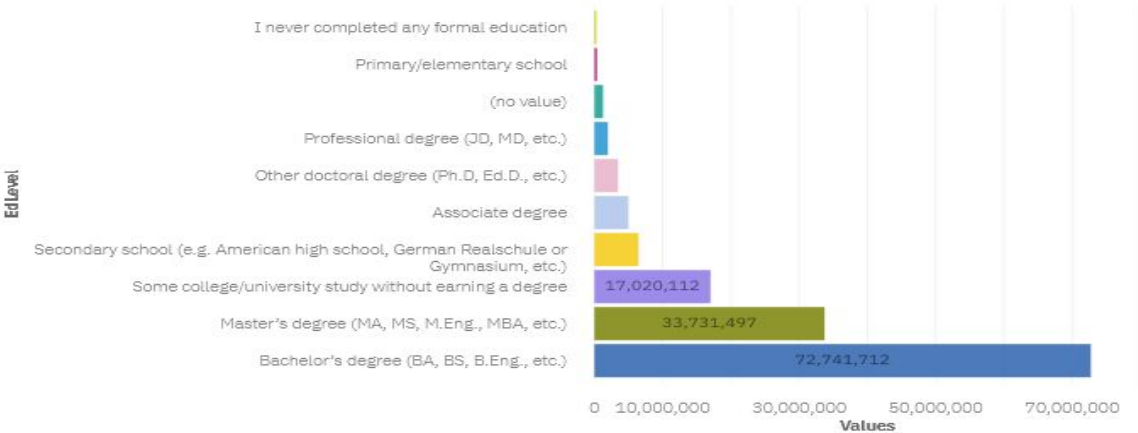
Respondent Count by Country



Respondent Count by Age



Formal Education of Respondents



DISCUSSION



Now and Future
Technology Trends

Training and
Reskilling Workers

Non-discriminatory
Gender Participation
in Technology Fields

OVERALL FINDINGS & IMPLICATIONS

Findings

- Technology is constantly changing and adapting yearly
- Gender Gaps in technology Jobs
- Technology proficiency in several countries

Implications

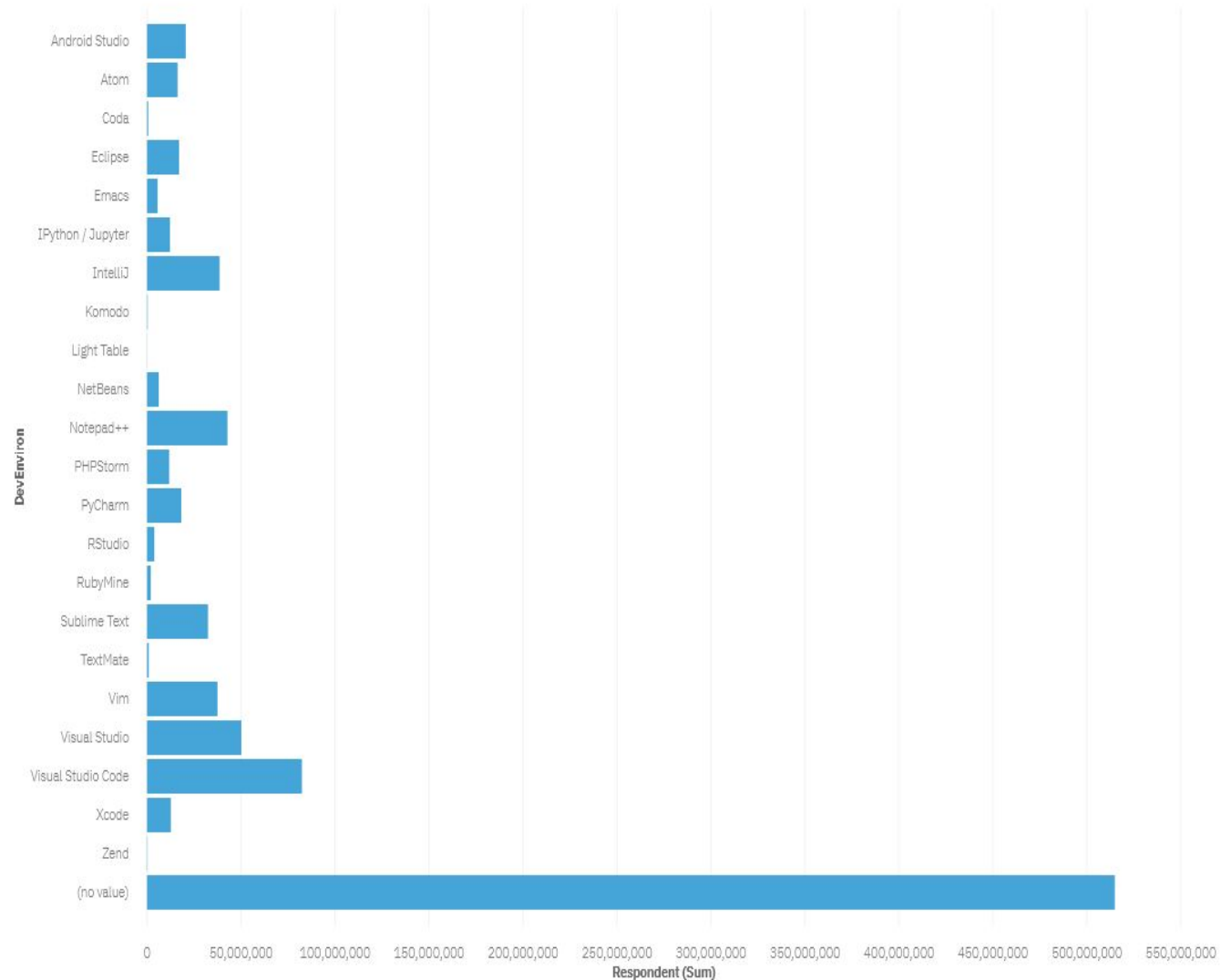
- Companies need to adapt to rapid change in the technology industry
- Bridges to technology should be built for less tech advanced countries
- Tech is always going to grow and adapt as new technologies are advanced and made

CONCLUSION

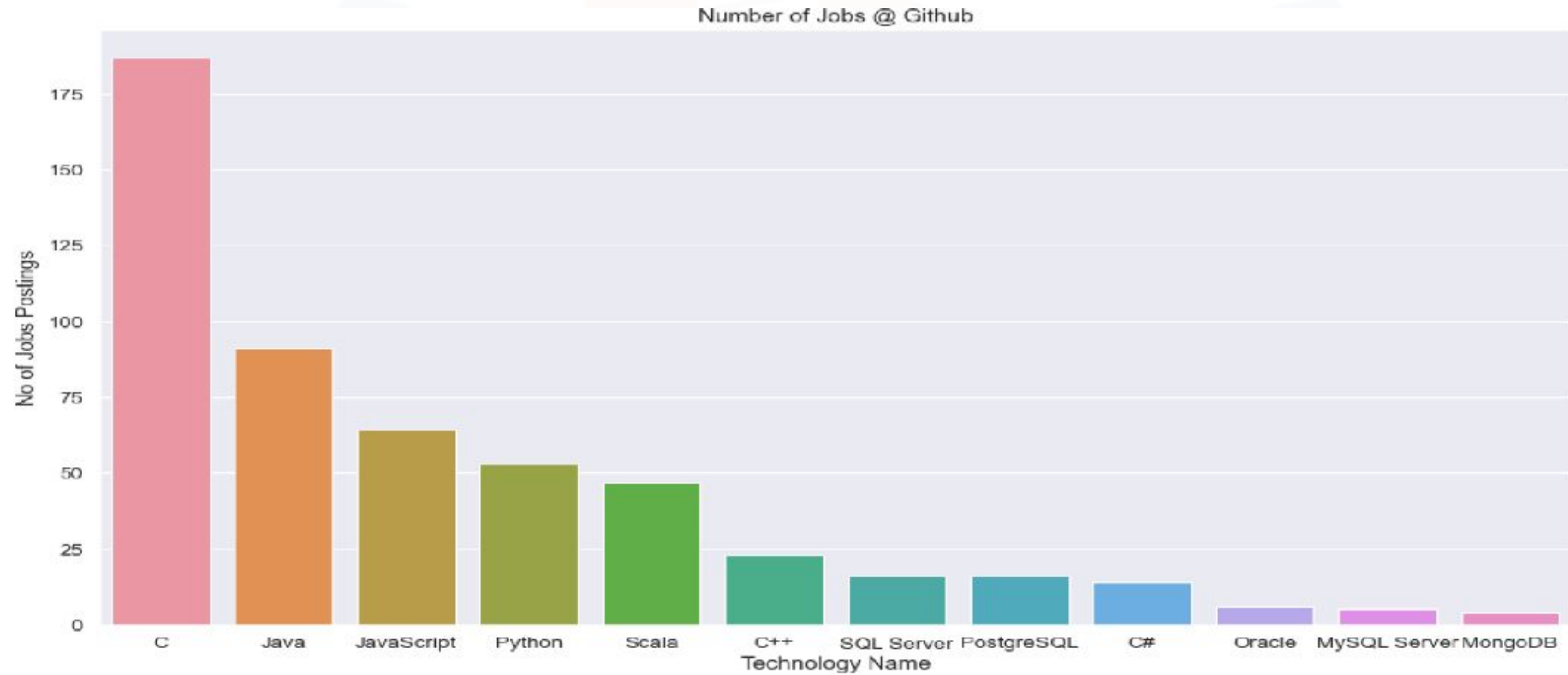


- Tech Trends of years to come are subject to change that we may not even know
- Programmers and Tech enthusiasts will have to adapt constantly to a changing environment
- The demographic in tech currently is not diverse and causes tech to be a heavily misogynistic field
- In future, we could see tech companies hiring more diverse and capable talents as more diverse people come to the tech field

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

