



STACK OVERFLOW DEVELOPER SURVEY 2019

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OUTLINE



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- Discussion
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EXECUTIVE SUMMARY



- This project outlines the annual survey results from the Stack Overflow Developer Survey for 2019.
- Developer Preferences based on
 - Technology Usage
 - Technology Trends
 - Demographics
- Survey Results are widespread but doesn't include representation from every developer within the developer communities.
- Overall findings and results are presented with graphs and trends.

INTRODUCTION



- This report is about an annual survey conducted in 2019 by Stack Overflow on Developers Preferences.
- The survey is the largest and most comprehensive survey of people who code all around the world, nearly 90,000 developers.
- Results include visualizations depicting
 - Preferred technology usage
 - Future technology trends
 - Demographics by Gender and Country

METHODOLOGY



- Collection of Survey Data and Exploring the Data
- Data Wrangling
 - Cleaning the Data
 - Removing Duplicate Data and Missing Values
 - Normalizing the data
- Exploratory Data Analysis
 - Analyzing Data Distributions
 - Finding Outliers
 - Determining Correlations
- Data Visualizations
 - Highlight Distribution of Data, Relationships and Composition of the Data
- Dashboards

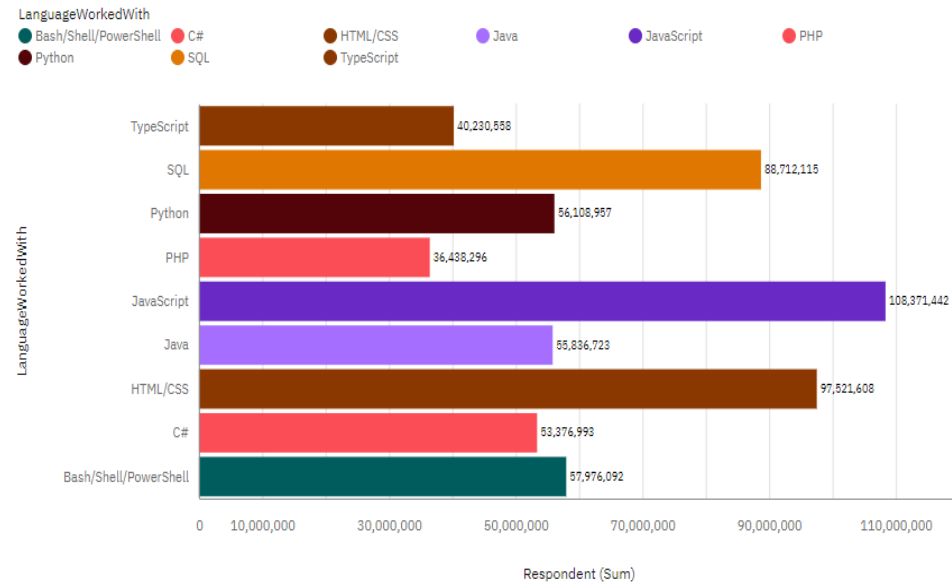
RESULTS



PROGRAMMING LANGUAGE TRENDS

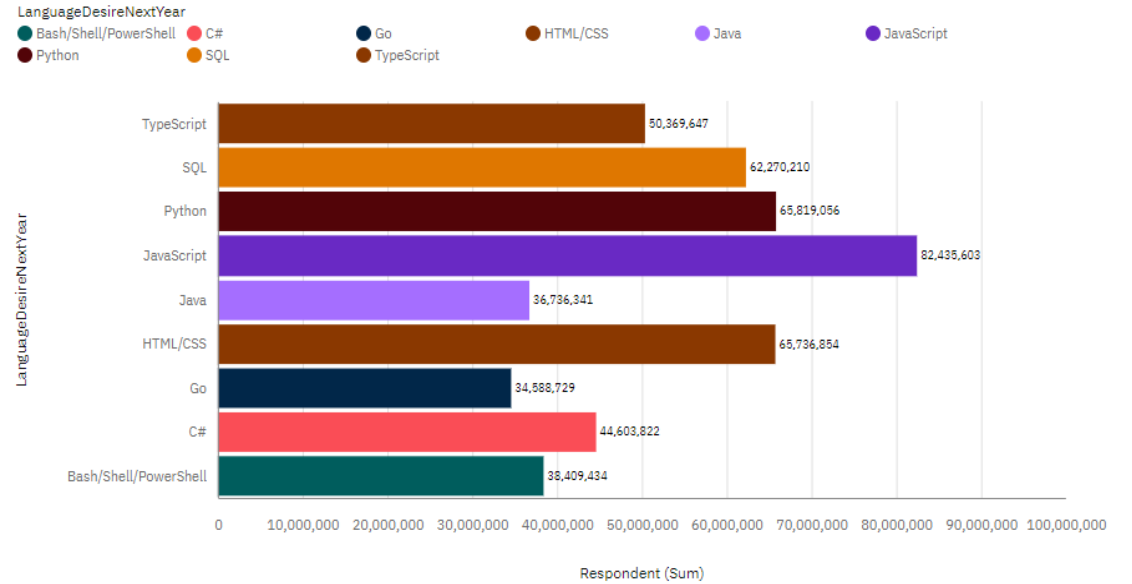
Current Year

Top 10 Languages Worked With



Next Year

Top 10 Languages Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript seems to be the most popular programming language used.
- TypeScript & Python are fast-growing programming languages
- JavaScript may be the most popular programming language, but future trends reflect a decline in usage.

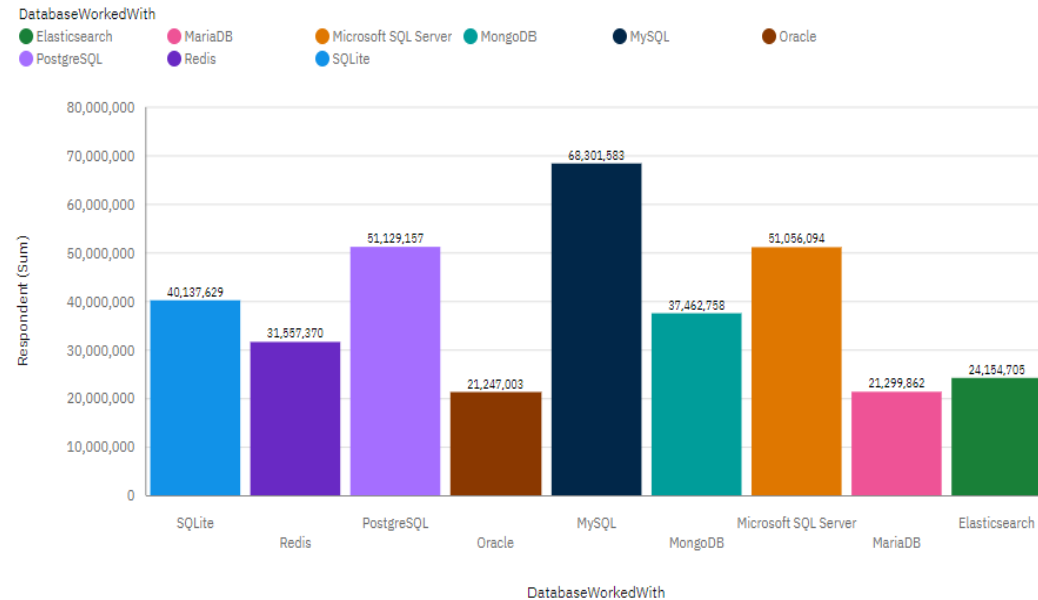
Implications

- Developers may be migrating from JavaScript to TypeScript & Python

DATABASE TRENDS

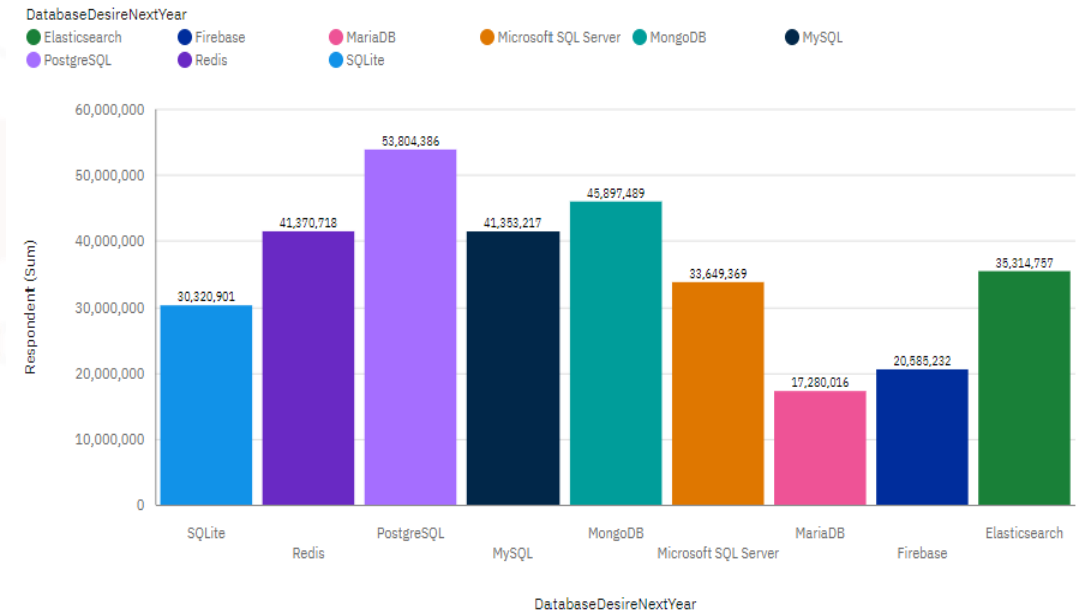
Current Year

Top 10 Databases Worked With



Next Year

Top 10 Databases Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used database
- Oracle & MariaDB are the least desired databases
- Future Trends reflect increased interest in PostgreSQL & MongoDB with a reduction in MySQL

Implications

- Future Trends reflects a loss in market share for Microsoft SQL Server & SQLite as databased become less popular
- PostgreSQL & MongoDB are becoming more established with growing interest and market share

DASHBOARD



<https://github.com/meaghanpeet/Capstone/blob/main/Final%20Assignment%20Part%201.pdf>

https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FFinal%2BAssignment%2BPart%2B1&action=view&mode=dashboard&subView=model00000190feebca61_00000000

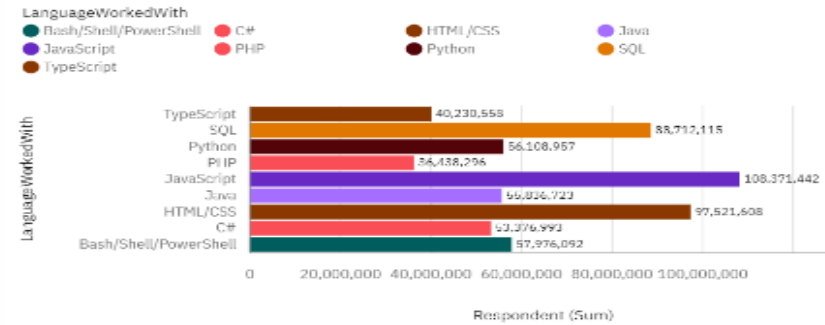
CURRENT TECHNOLOGY USAGE

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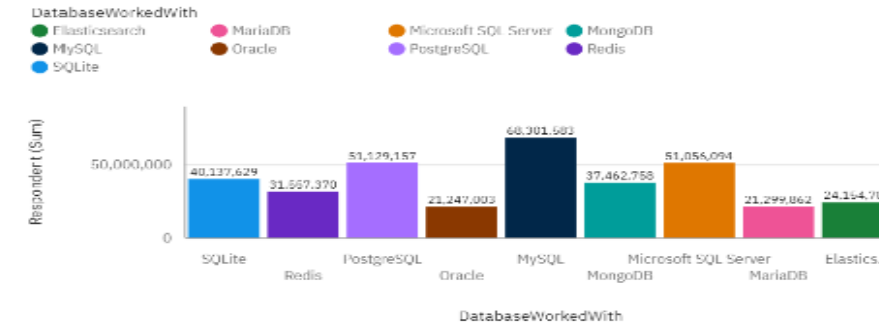
Final Assignment Part 1

Current Technology Usage

Top 10 Languages Worked With



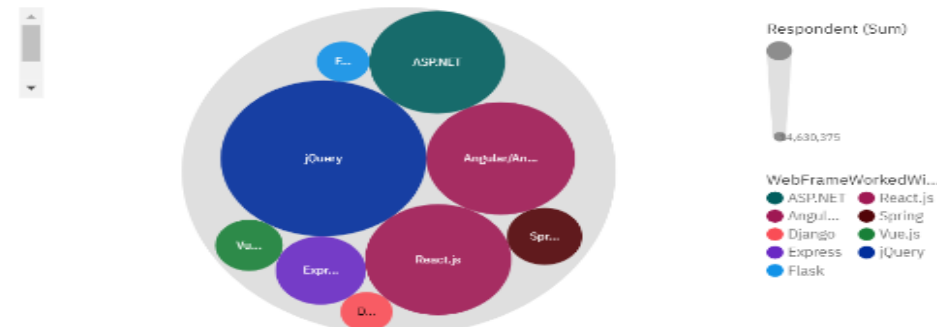
Top 10 Databases Worked With



Platforms Worked With



Top 10 Web Frames Used by Respondents



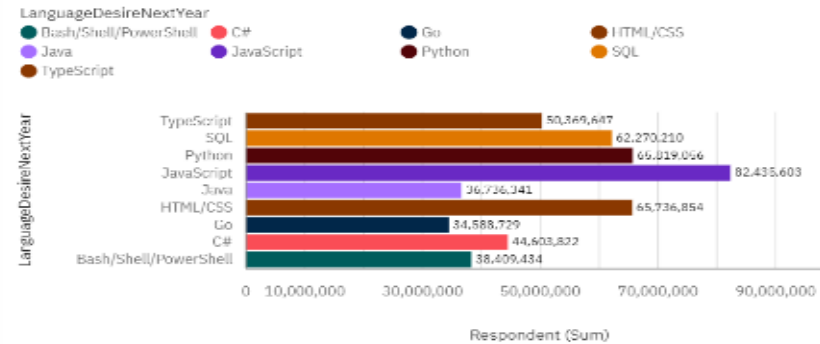
FUTURE TECHNOLOGY TREND

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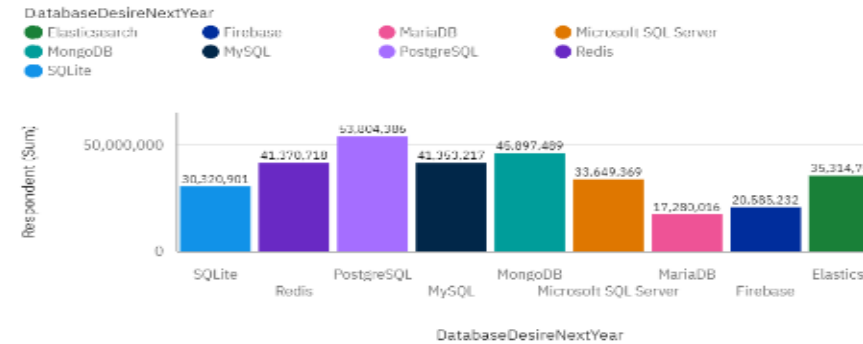
Final Assignment Part 1

Future Technology Trend

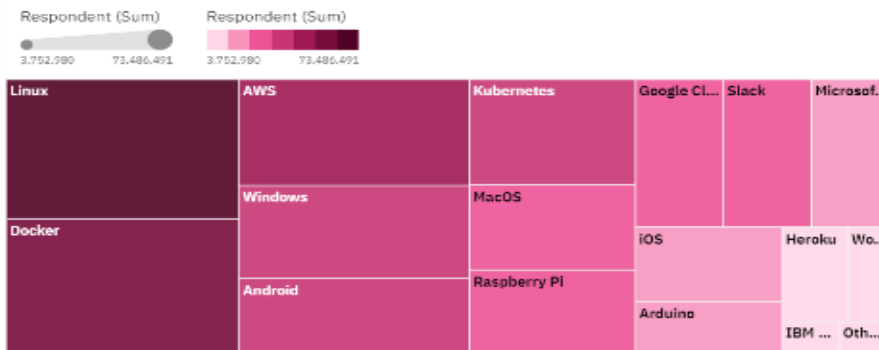
Top 10 Languages Desired Next Year



Top 10 Databases Desired Next Year



Platform Desired Next Year



Top 10 WebFrame Next Year



DEMOGRAPHICS

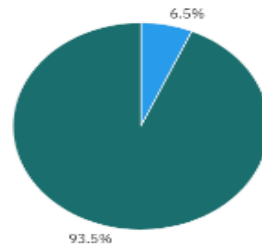
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Final Assignment Part 1

Demographics

Respondent Classified by Gender

Gender
● Woman ● Man

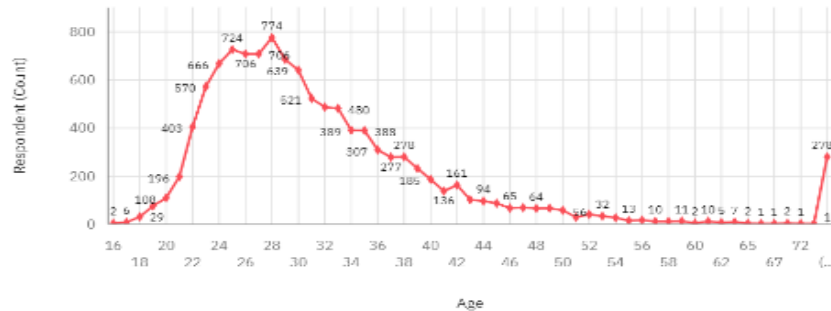


Respondent for Country Regions

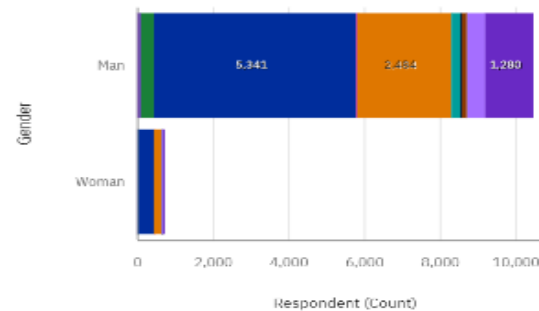
Respondent (Count)
1 3,008



Respondent by Age



Respondent by Formal Education Level & Gender



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most popular and widely used programming language, but TypeScript is becoming popular
- Most Developers reside in developed countries
- Males represent more than 90% of developers
- Linux most used and desired Platform
- jQuery most used WebFrame currently, while React.js is the most desired WebFrame in the future

Implications

- JavaScript is losing market share due to increased popularity in TypeScript
- Male dominated field
- Higher education is harder for women in Developing countries.
- Postgraduate studies in the minority.

CONCLUSION

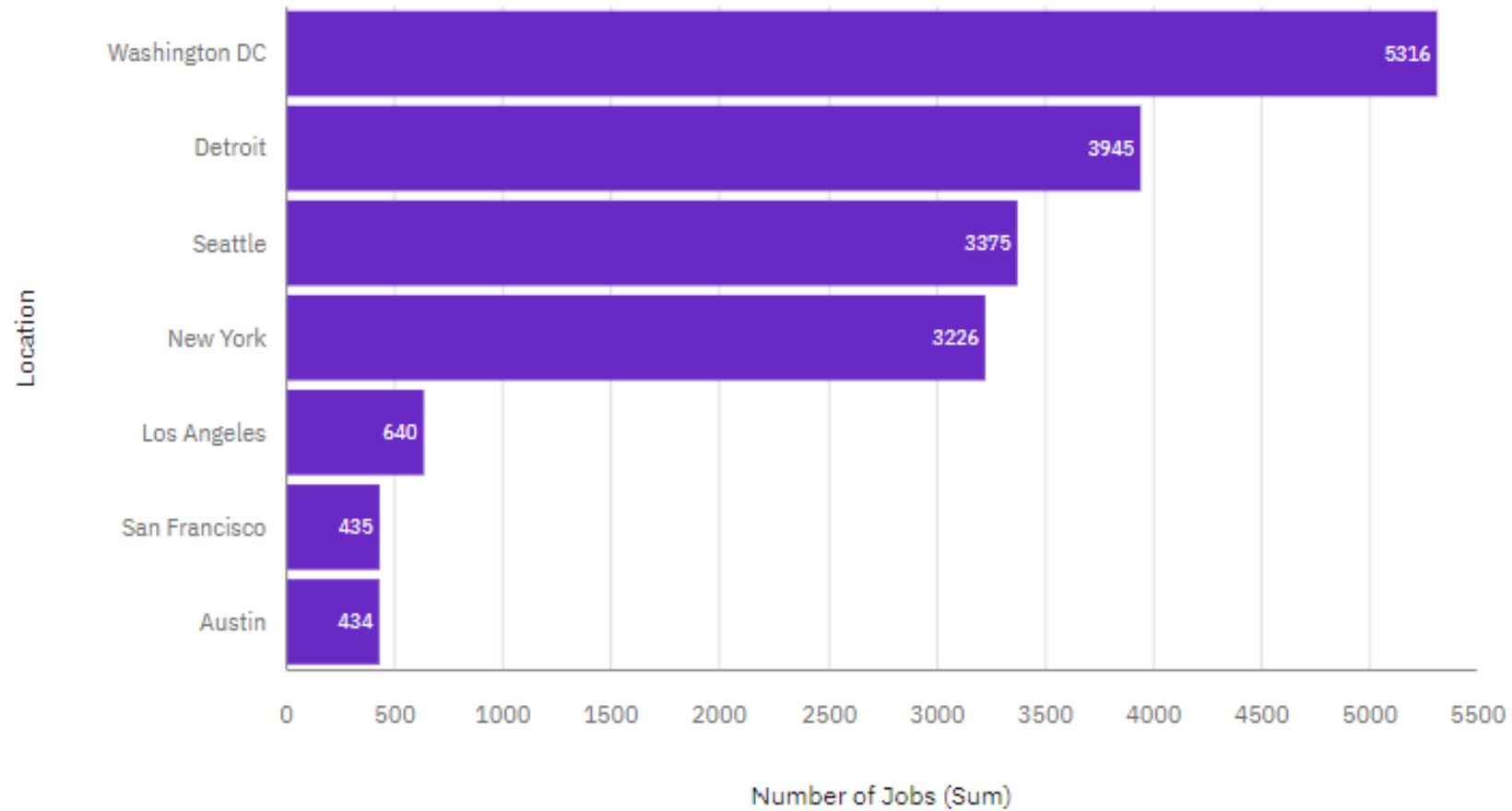


- Most of the respondents are professional developers with University-level education.
- Programme Developing is a male dominated industry.
- The popularity trends of different programming tools, languages and platforms are ever changing.
- Programme Developing is becoming a popular job option around the world.

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

