



Stack Overflow Developer Survey 2019

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OUTLINE



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

- Detailing the methodology, encompassing data collection, analysis, and visualization steps.
- Presenting results through graphs and identifying trends.
- Discussing overarching findings and implications.
- Drawing final conclusions based on the research conducted.

EXECUTIVE SUMMARY



- Understanding the data context and defining analysis objectives.
- Describing methodology
 - * encompassing data collection
 - * Analyzing the data
 - * Data visualization
- Presenting results through graphs and identifying trends.
- Discussing overall findings and implications.
- Drawing final conclusions based on the research conducted.

INTRODUCTION



- This report delves into a subset of data derived from Stack Overflow's comprehensive Developer Survey.
- The survey, with around 90,000 respondents worldwide.
- Survey predicts where the developer community stands
 - Where they are
 - Where they are heading

METHODOLOGY



- Data Collection: Using APIs, Web scraping
- Data Wrangling: Removing Duplicates, Normalization, Dealing with Missing Values
- Exploratory Data Analysis: Distribution, Outliers, Correlation
- Data Visualization: Visualizing Data, Analyzing Relationships, Composition and Comparison
- Dashboards

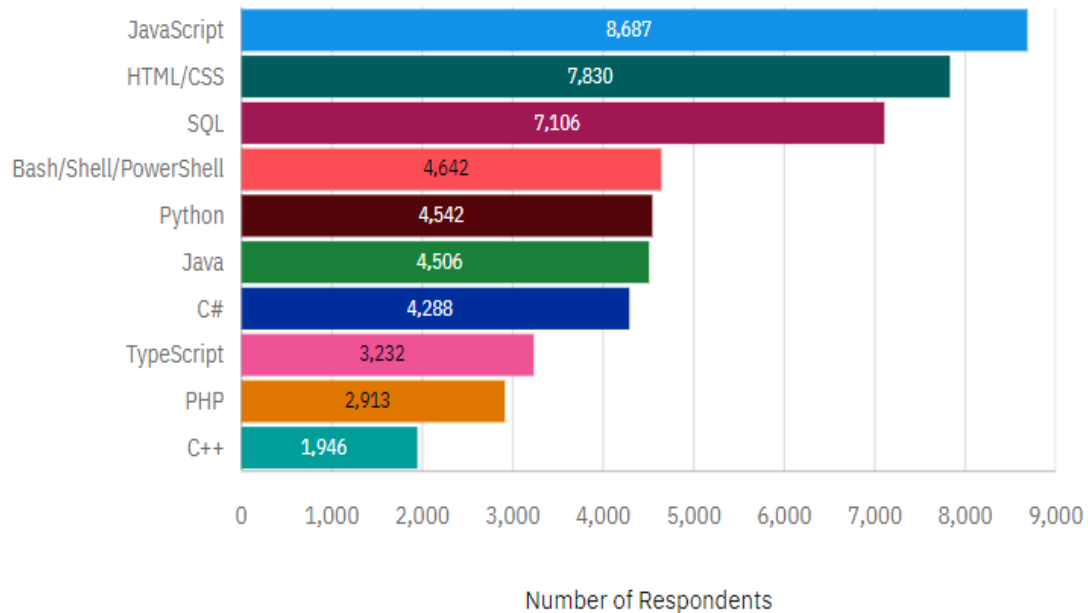
RESULTS



PROGRAMMING LANGUAGE TRENDS

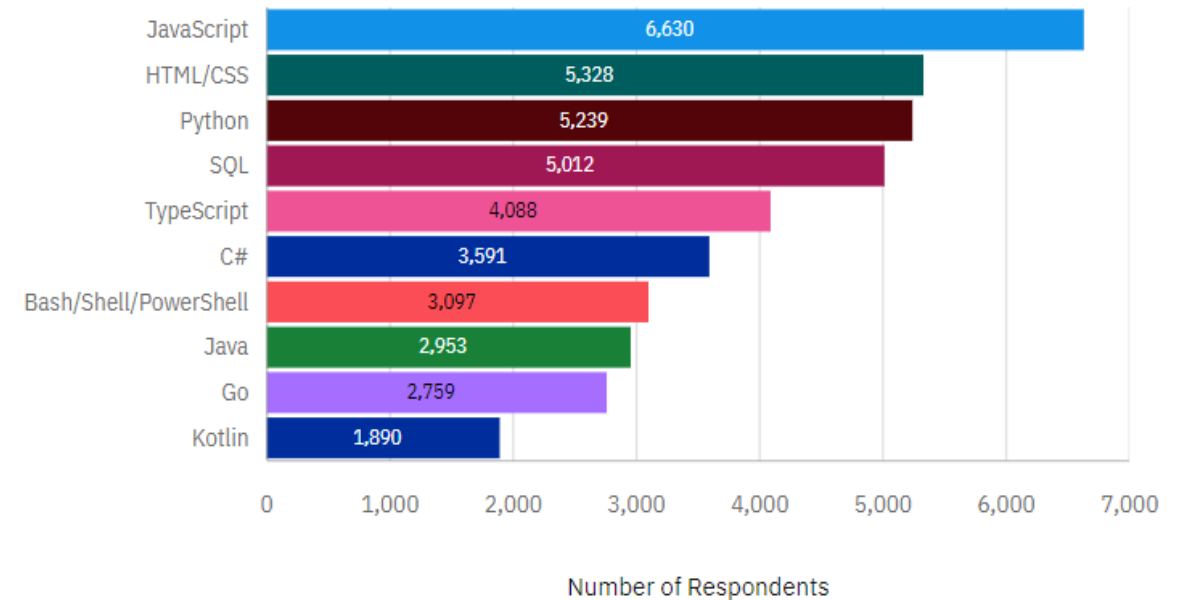
Current Year

Top 10 Languages among respondents



Next Year

Top 10 Languages Desired for next year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- It is quite clear that JavaScript is most famous.
- Python shows consistent growth.
- Interest increasing in typescript.

Implications

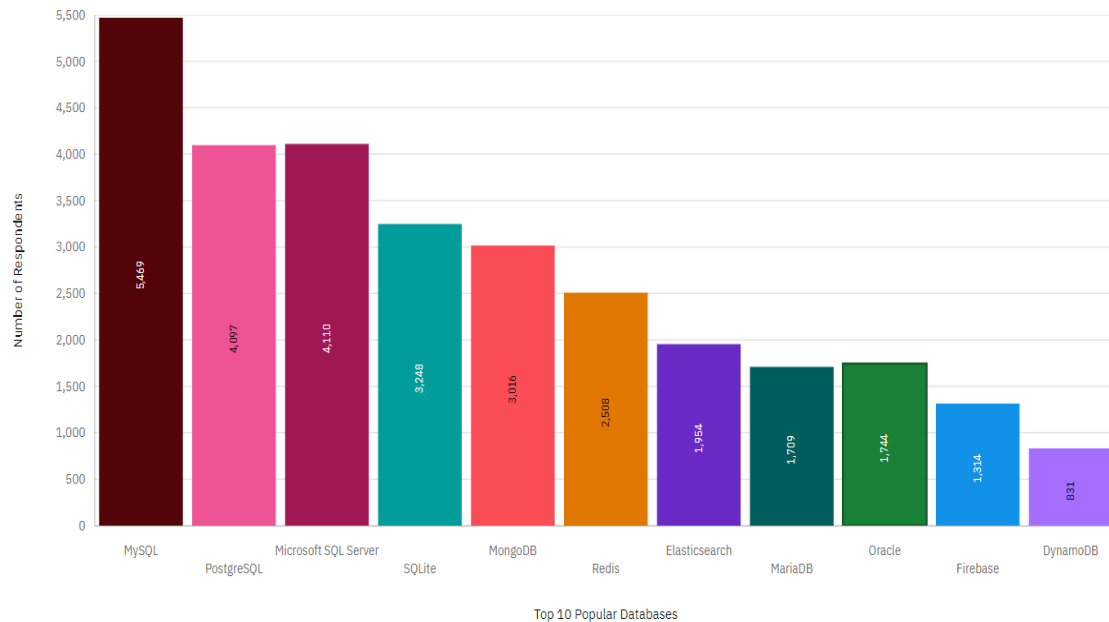
- Developers seems to be migrating from JavaScript and PowerShell I to Typescript, Go and Python

DATABASE TRENDS

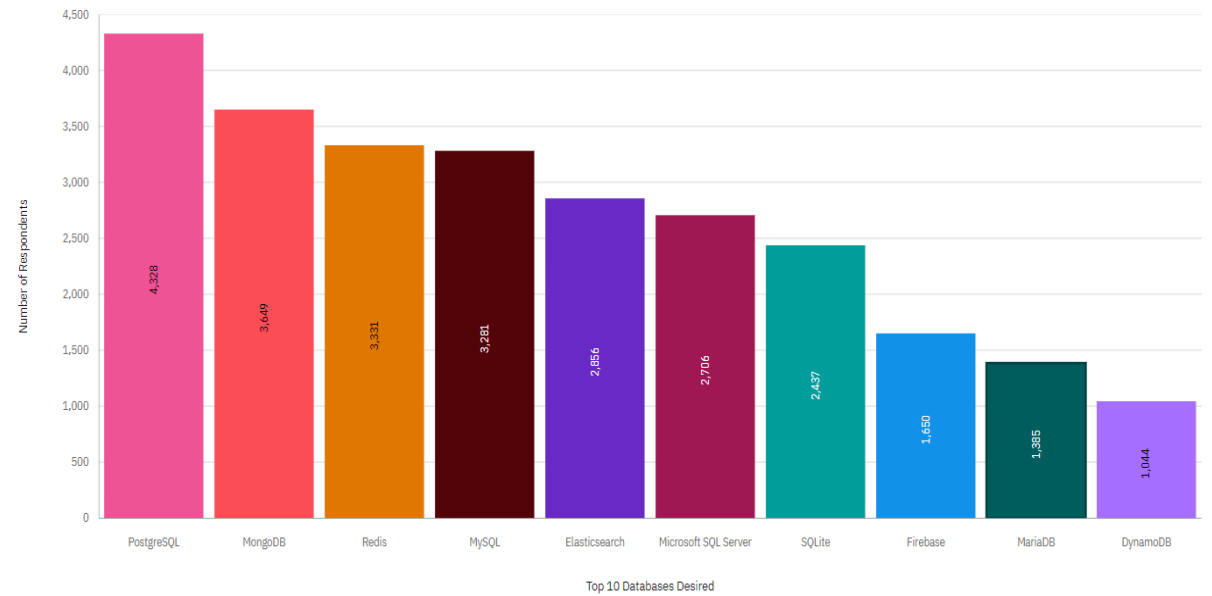
Current Year

Next Year

Top 10 Databases worked with



Top 10 Desired Databases



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most famous
- Increasing interest in PostgreSQL and MongoDB
- Developers are losing interest in Microsoft SQL and SQLite.

Implications

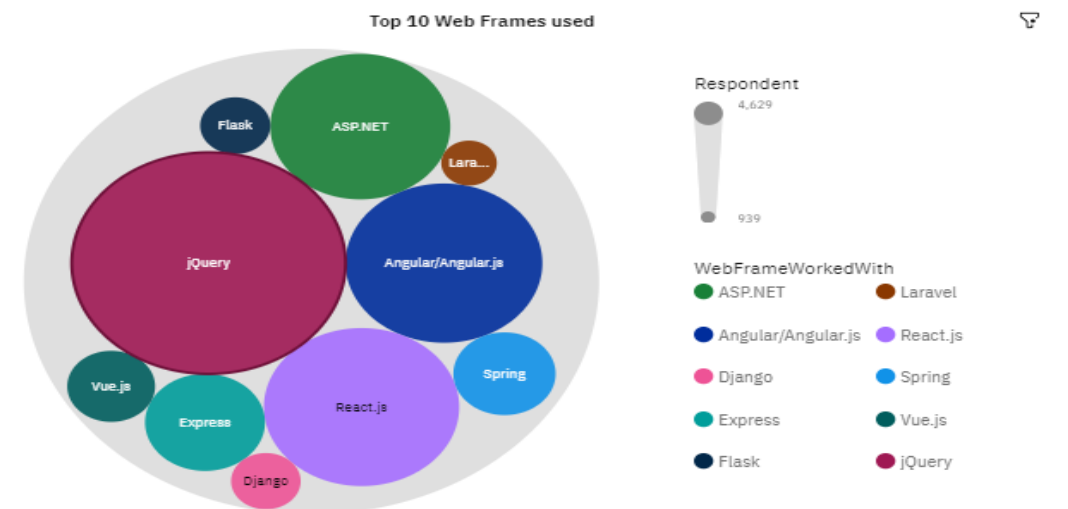
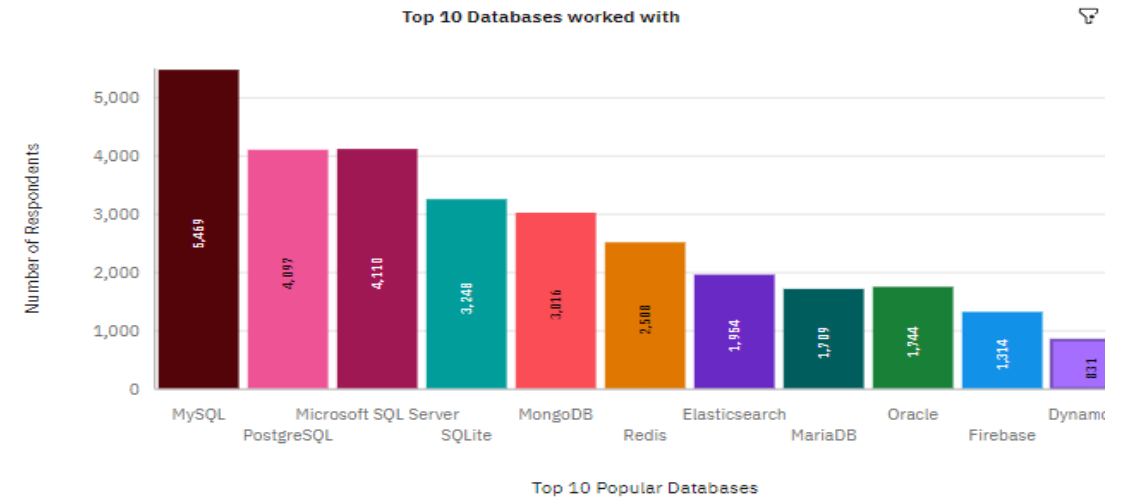
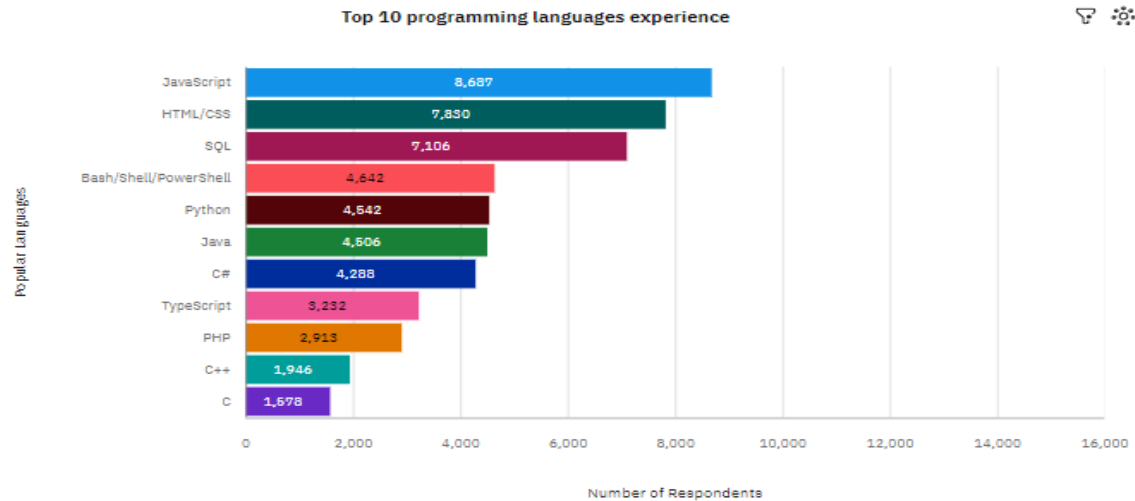
- Microsoft SQL Server is losing grounds in market.
- The waning interest in Microsoft SQL and SQLite implies a potential shift in developer preferences

DASHBOARD



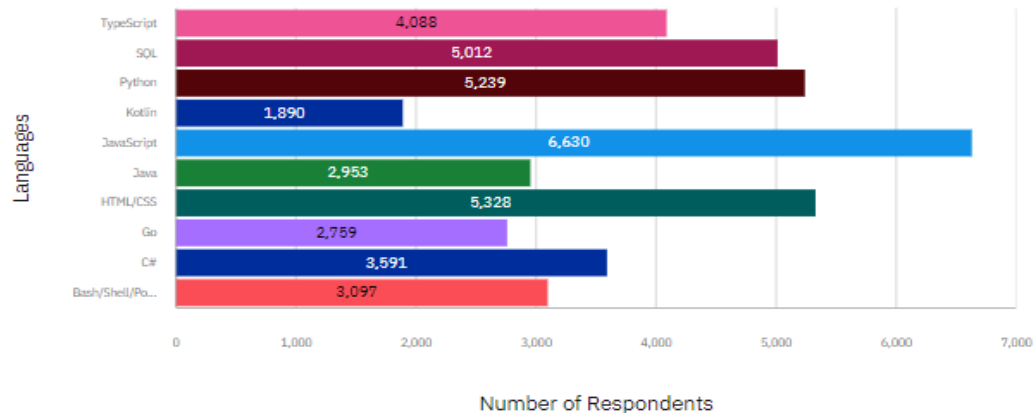
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Current Technology usage

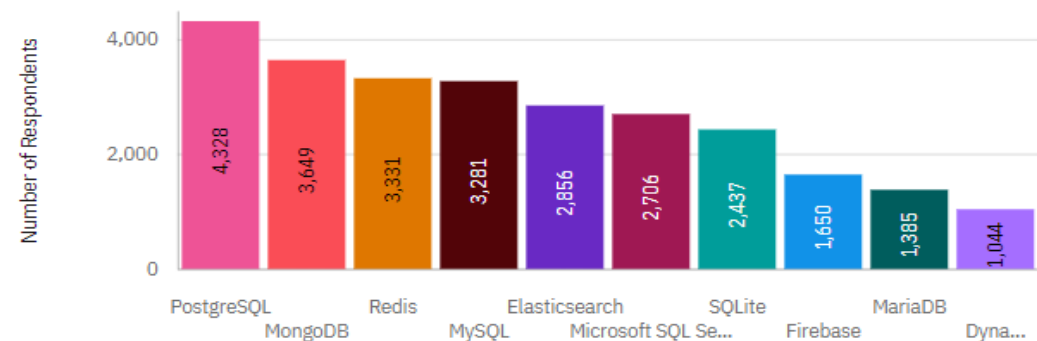


Future Technology Trends

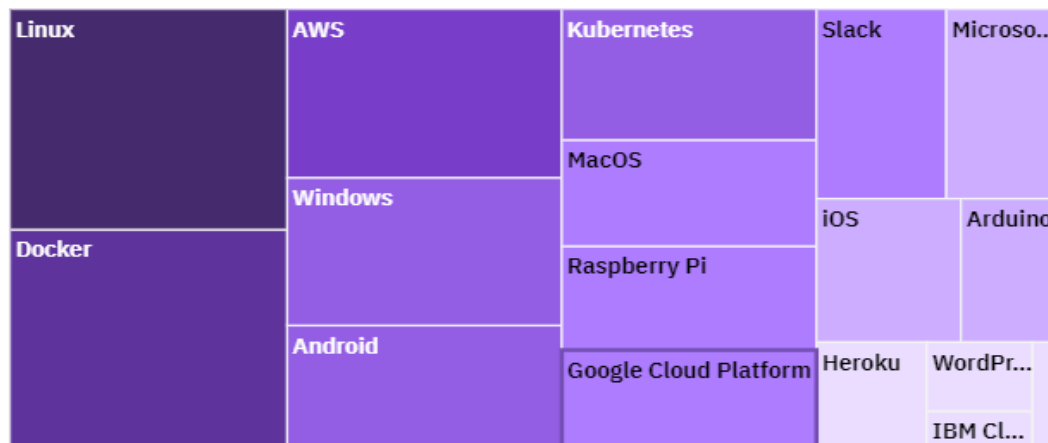
Top 10 Desired Languages to Learn



Top 10 Desired Databases

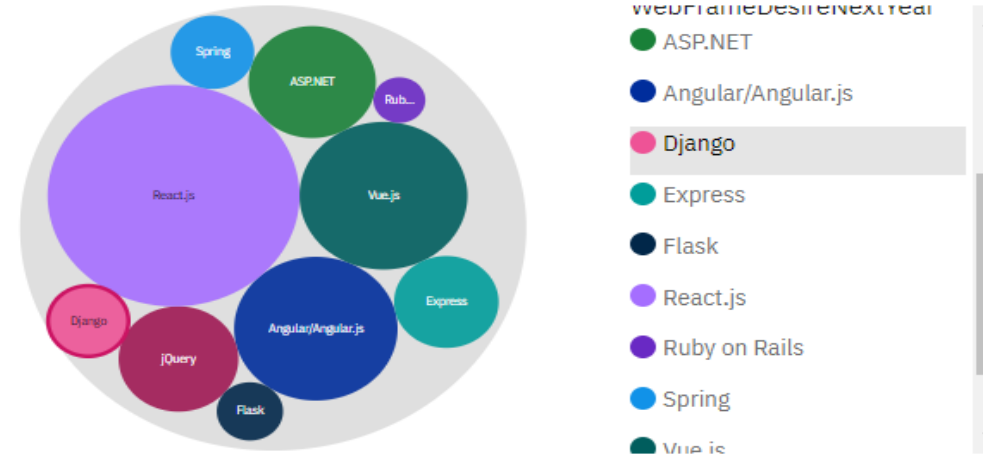


Platform Desired Next Year



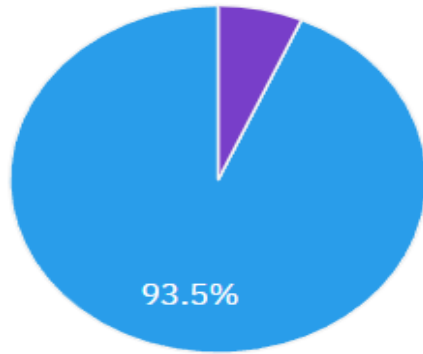
Top 10 Databases Desired

Top 10 Web frames Desired Next Year



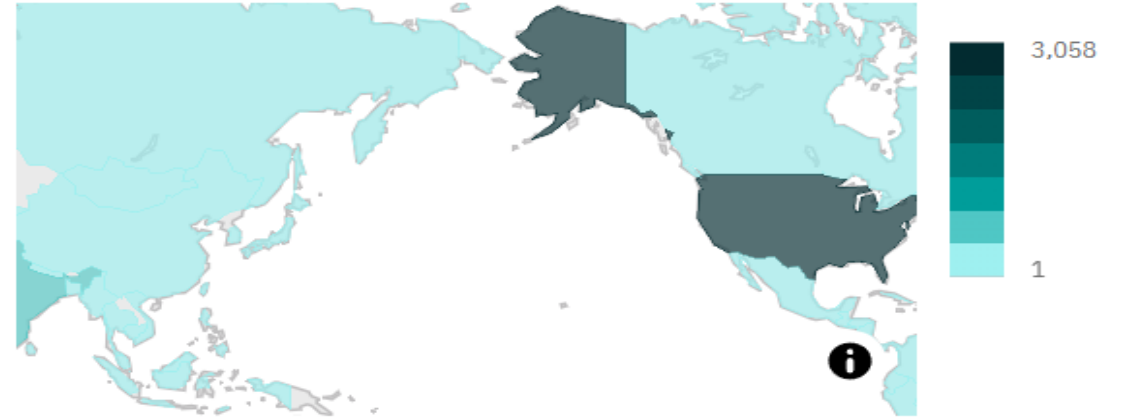
Demographics

Respondent by Gender

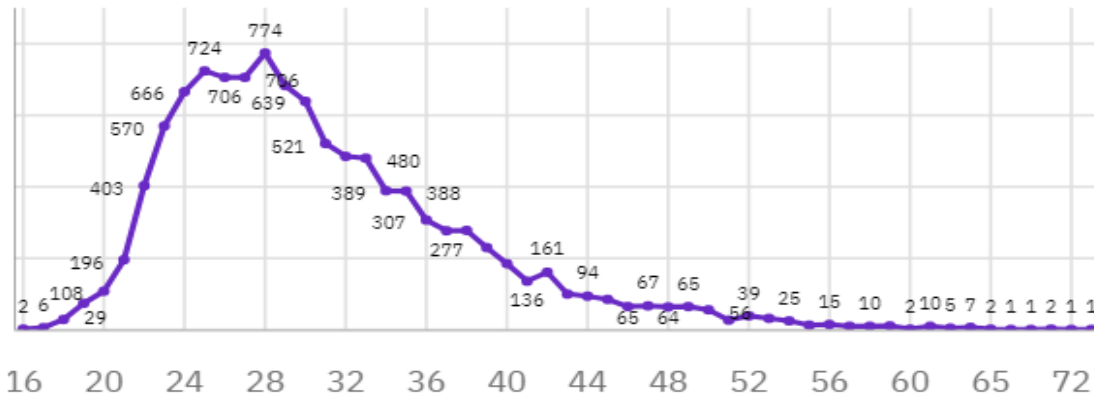


- Woman
- Man

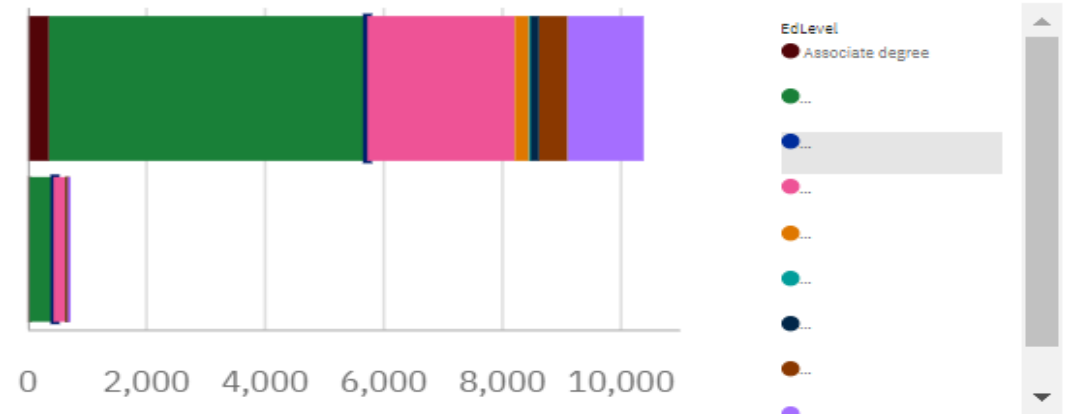
Respondent for Country regions



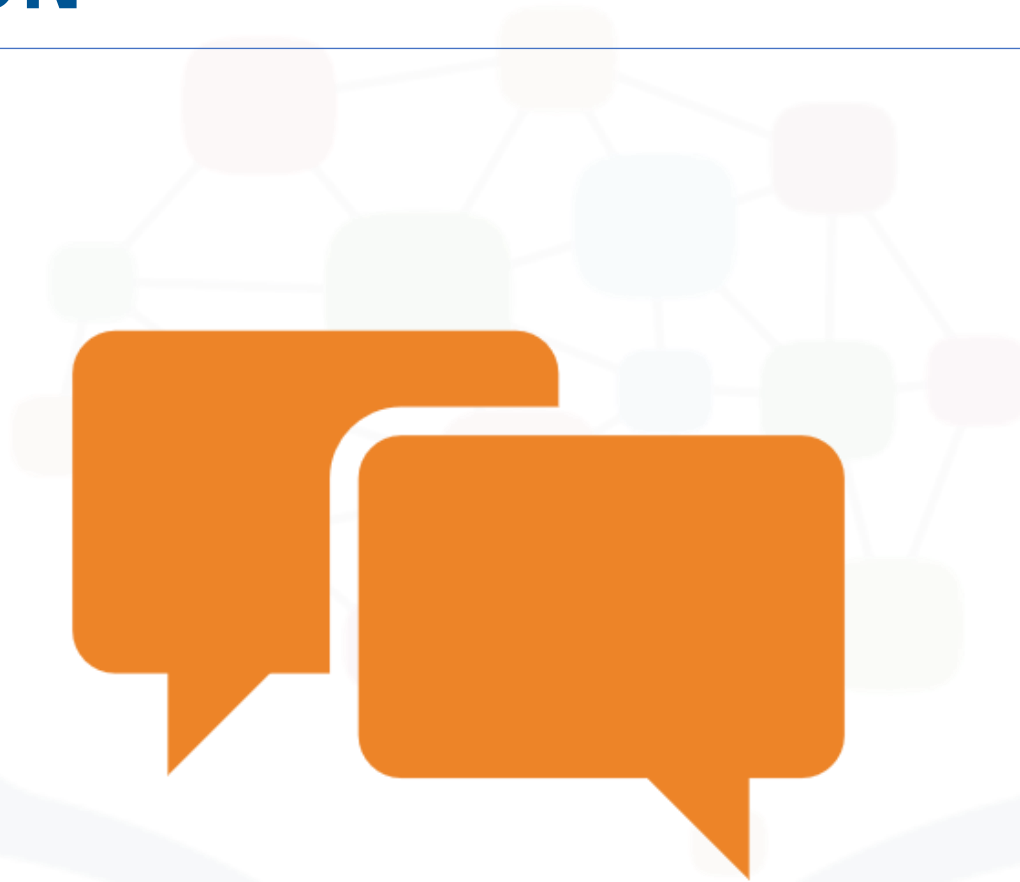
Respondent by Age



Respondent by Gender colored by level of education



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- Overall, there are more than 93% of male respondents.
- Most of developers prefer working on Windows and Linux OS.
- JavaScript is most popular language
- Most number of respondents are from US.

Implications

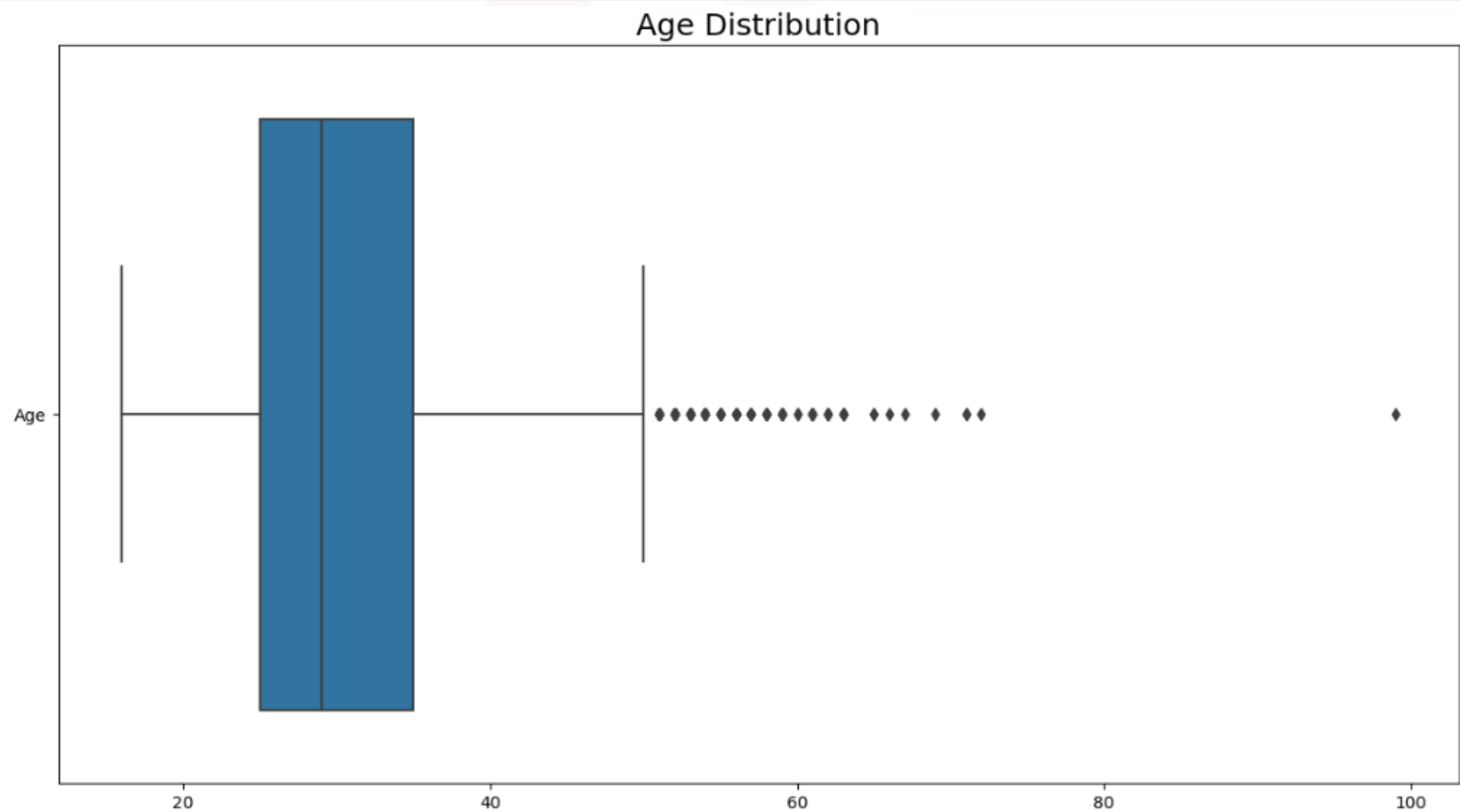
- Address gender diversity concerns in the developer community.
- Emphasize ongoing support for JavaScript and Python.
- Prioritize cross-platform compatibility for Windows and Linux.

CONCLUSION

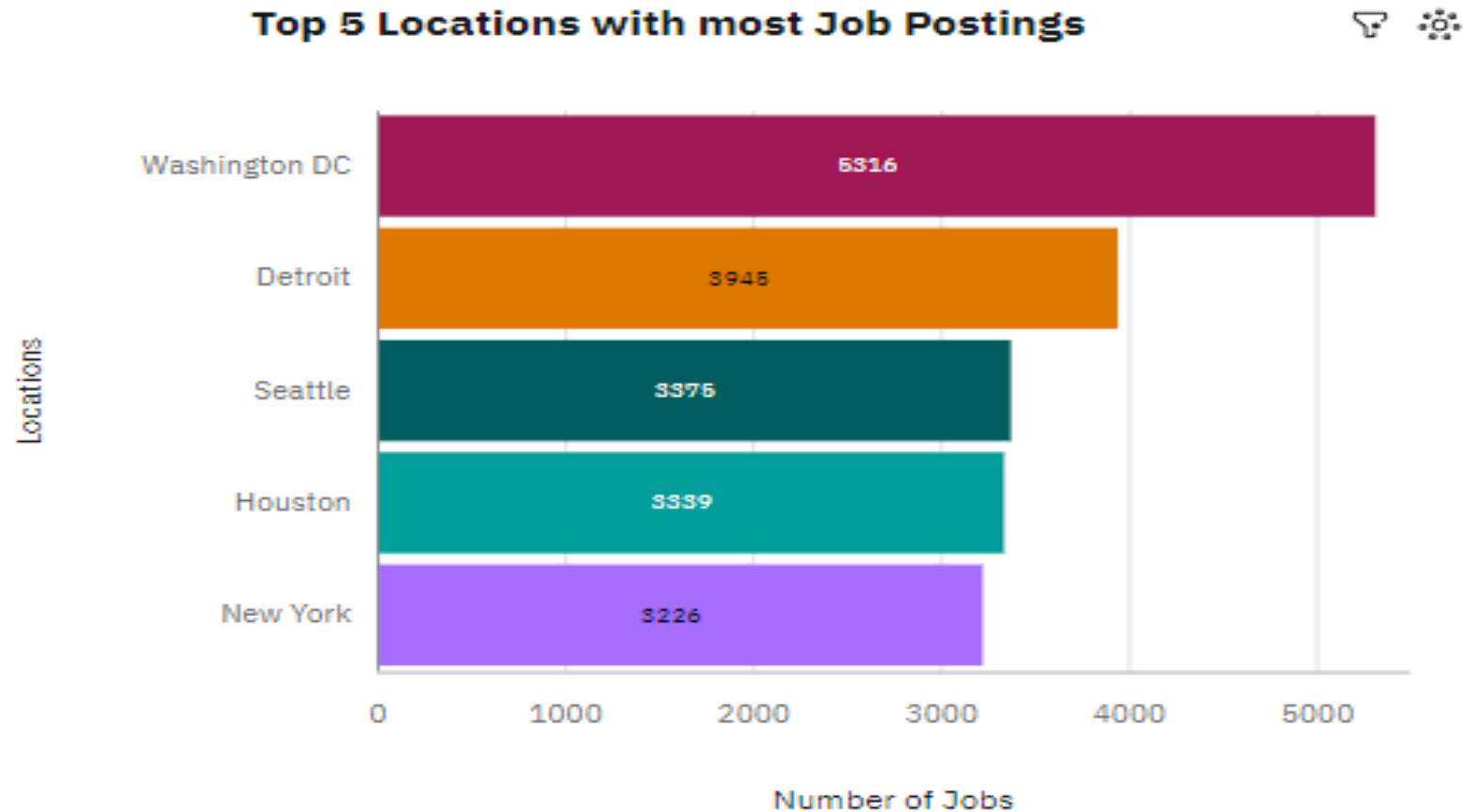


- Developers exhibit distinct characteristics.
- Trends in tool, platform, and language popularity are discernible.
- Efforts needed to extend job opportunities in the tech industry to developing countries.

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

Popular Languages

