



STACK OVERFLOW DEVELOPER SURVEY

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OUTLINE



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

EXECUTIVE SUMMARY



- Data contextualization and analysis goal.
- Methodology description.
- Data gathering
- Data analysis
- Data visualizations
- Results presentation supported with graphs and trends.
- Discussion of overall findings and implications regarding the results previously exposed.
- Final conclusions of the carried out research

INTRODUCTION



- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- Results don't represent everyone in the developer community evenly.
- Nearly 90,000 developers.
- Trends to predict where the developers are going.
- Characterization of developers around the globe.

METHODOLOGY



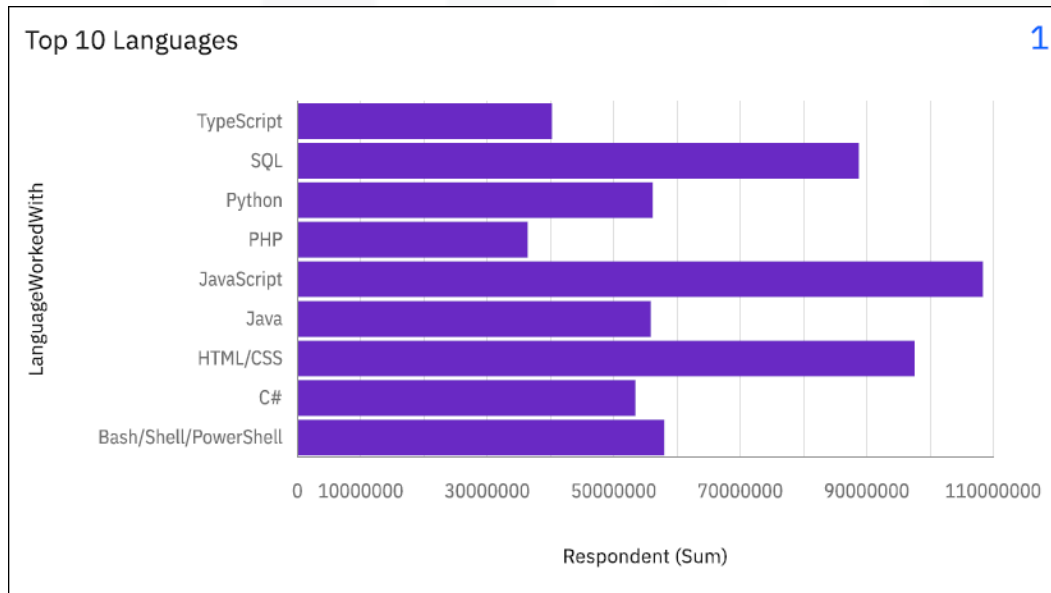
- Collect survey data & explore its content
 - Web Scraping
 - APIs.
 - Request library.
- Data Wrangling
- Exploratory data analysis
 - Analyzing data distribution.
 - Handling outliers.
 - Correlations.
- Data Visualization
 - Highlight distribution of data, relationships, the composition and comparison of data.
- Dashboards

RESULTS

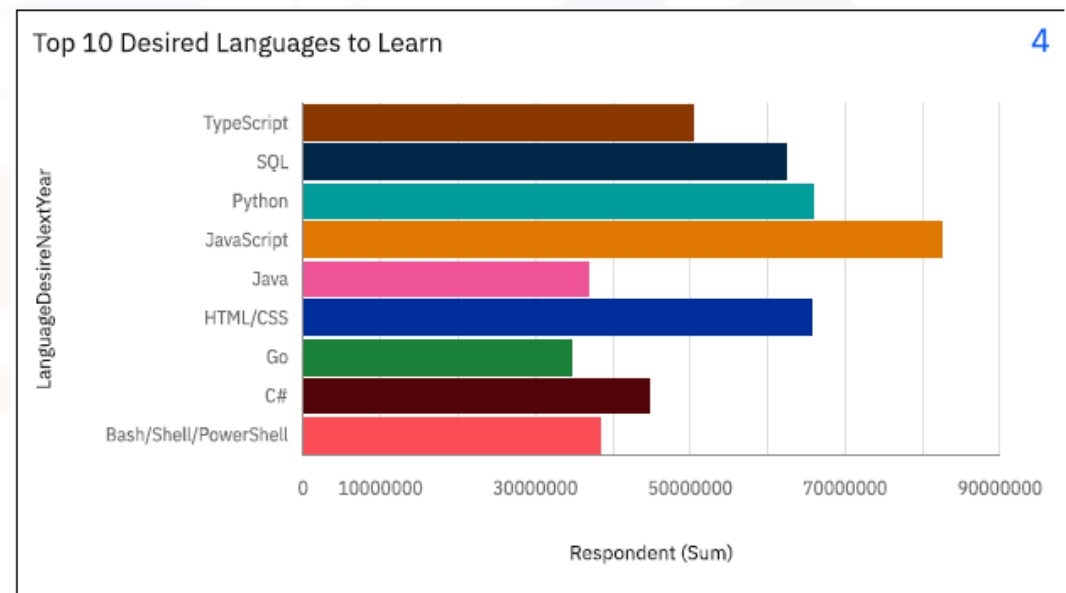


PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

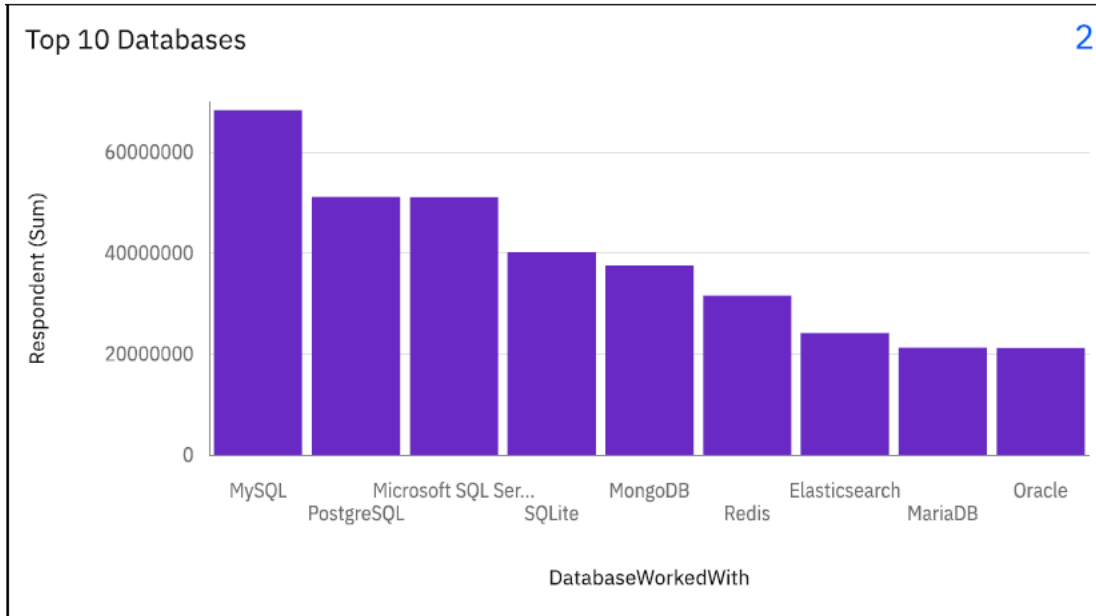
- Javascript is the top language for the current year
- Javascript is also the top desired database for next year
- PHP is the least used language this year and Go is the least desired language for the next year

Implications

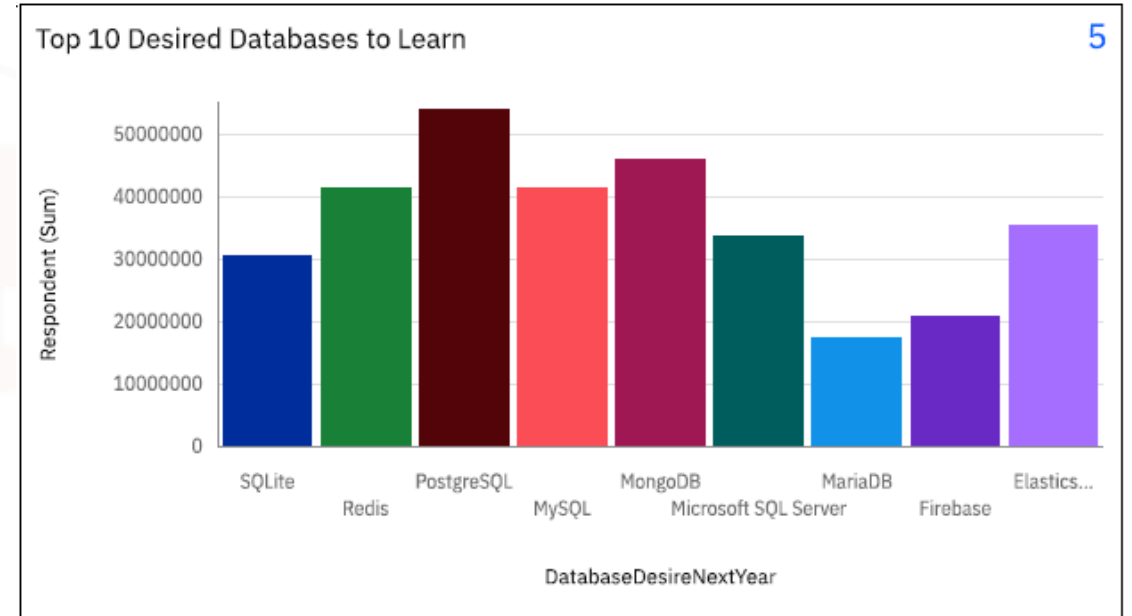
- Demand for Javascript will greatly increase
- Demand for PHP and Go will decrease

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the top database for the year
- PostgreSQL is the top desired database for next year
- Oracle is the least used database this year and MariaDB is the least desired database for next year

Implications

- Demand for MySQL and PostgreSQL will greatly increase
- Demand for MariaDB and Oracle will decrease

DASHBOARD

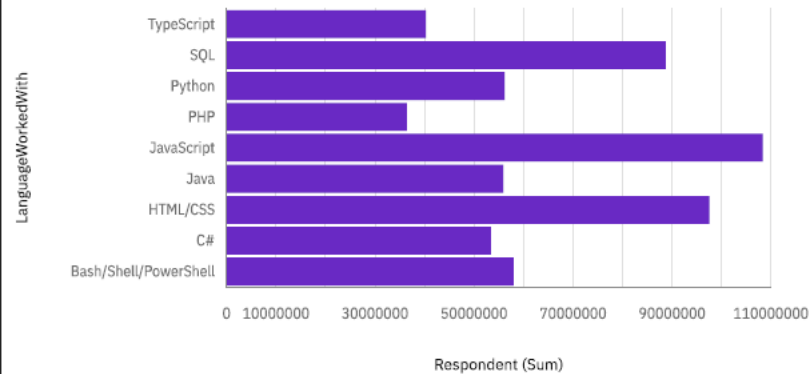


https://github.com/edwinstanley10/Data_Analyst_Capstone_Project/blob/main/5%20-%20Dashboards.pdf

DASHBOARD TAB 1

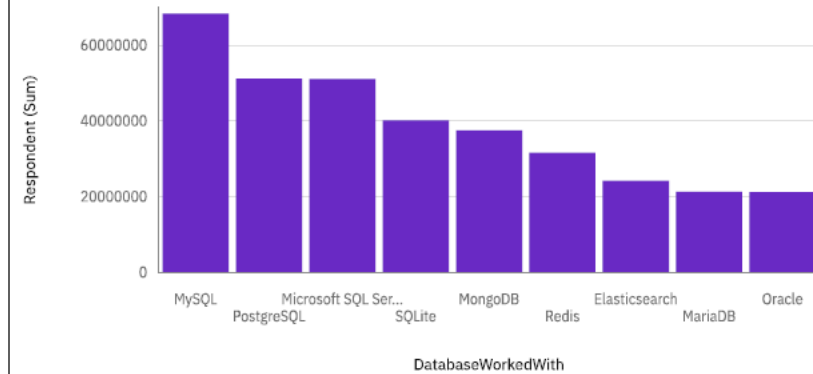
Current Technology Usage

Top 10 Languages



1

Top 10 Databases

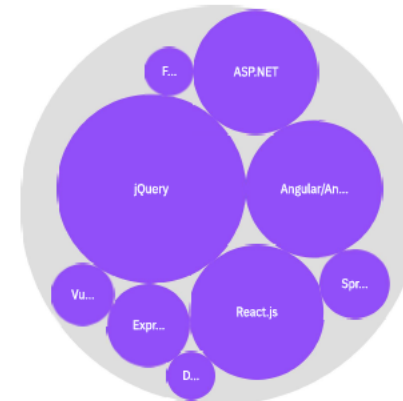


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Platforms



Top 10 Web Frames



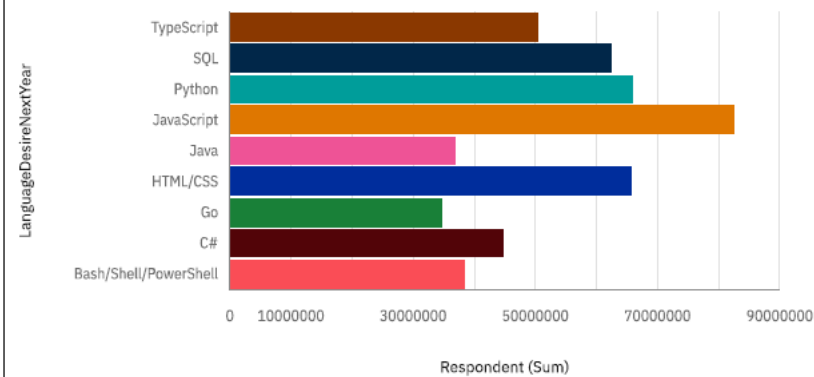
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DASHBOARD TAB 2

Future Technology Trend

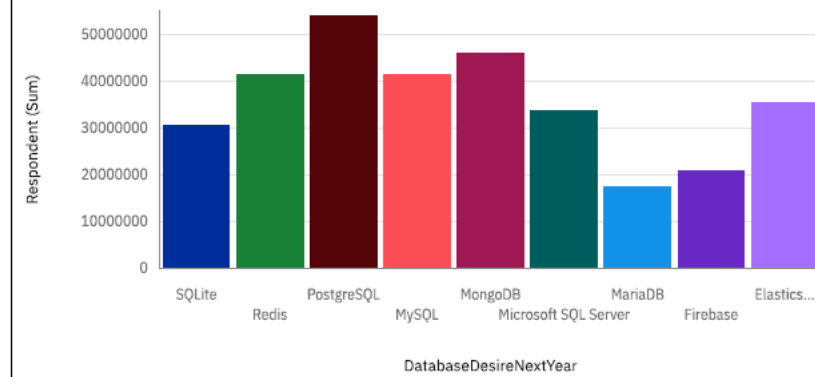
Top 10 Desired Languages to Learn

4



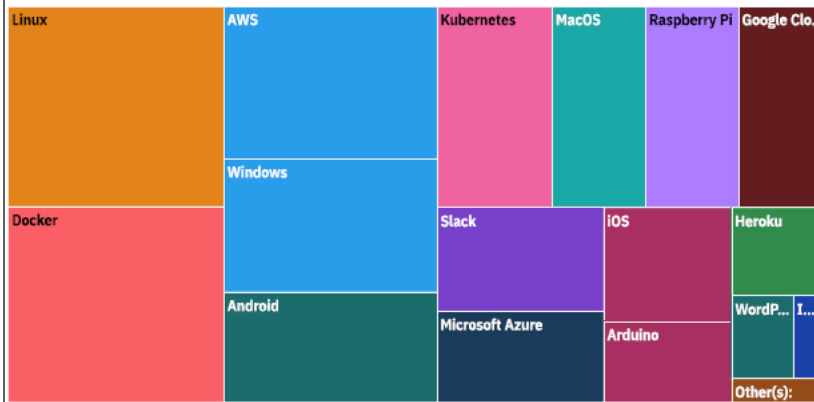
Top 10 Desired Databases to Learn

5



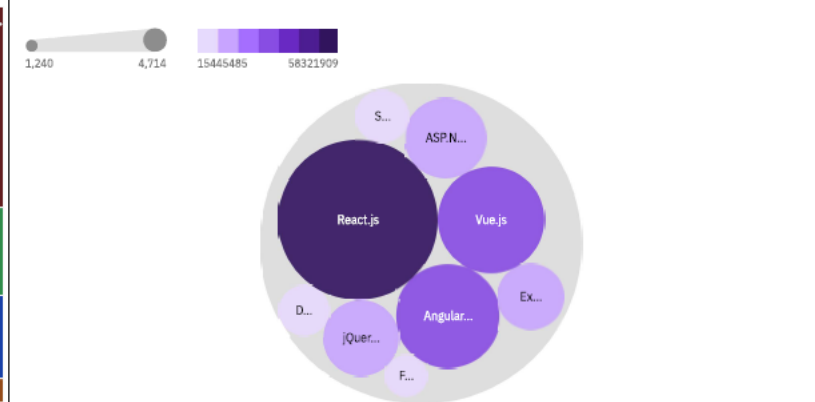
Platforms Desired for Next Year

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Top 10 Web Frames Desired to Learn

7

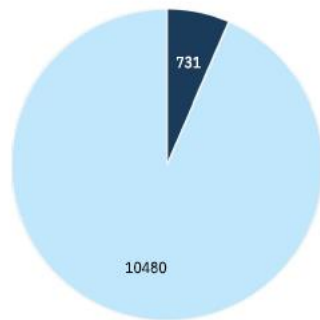


DASHBOARD TAB 3

Demographics

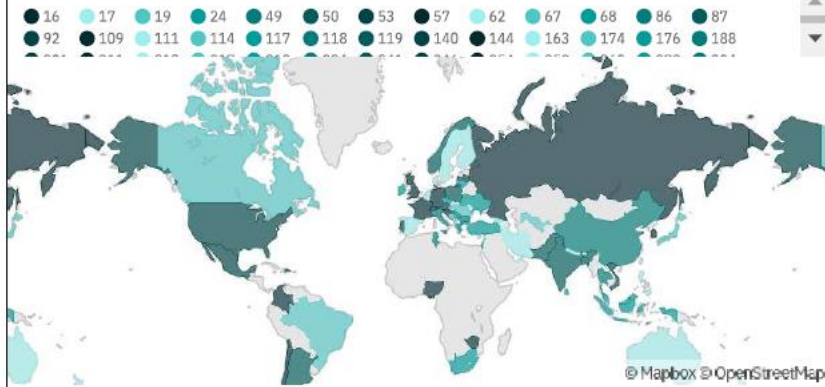
Respondent by Gender

Gender
● Woman ● Man

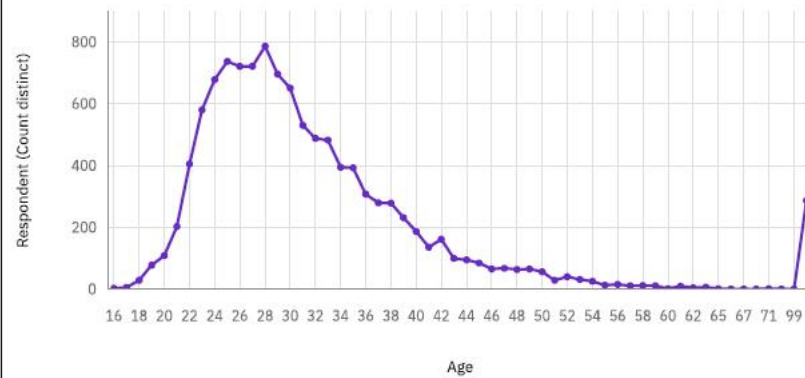


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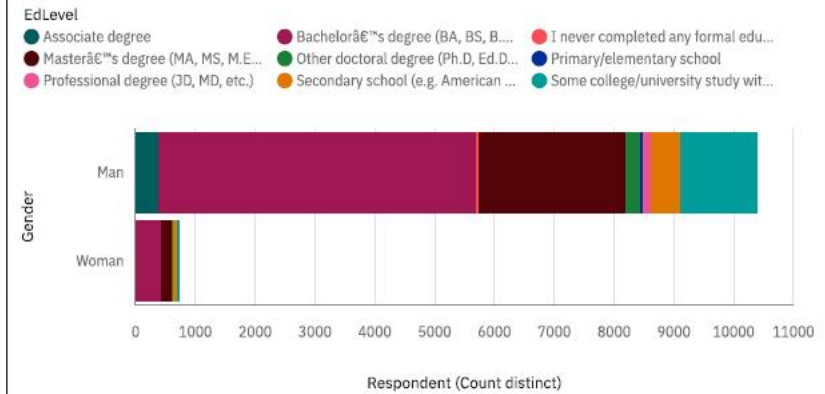
Respondent by Country



Respondent by Age

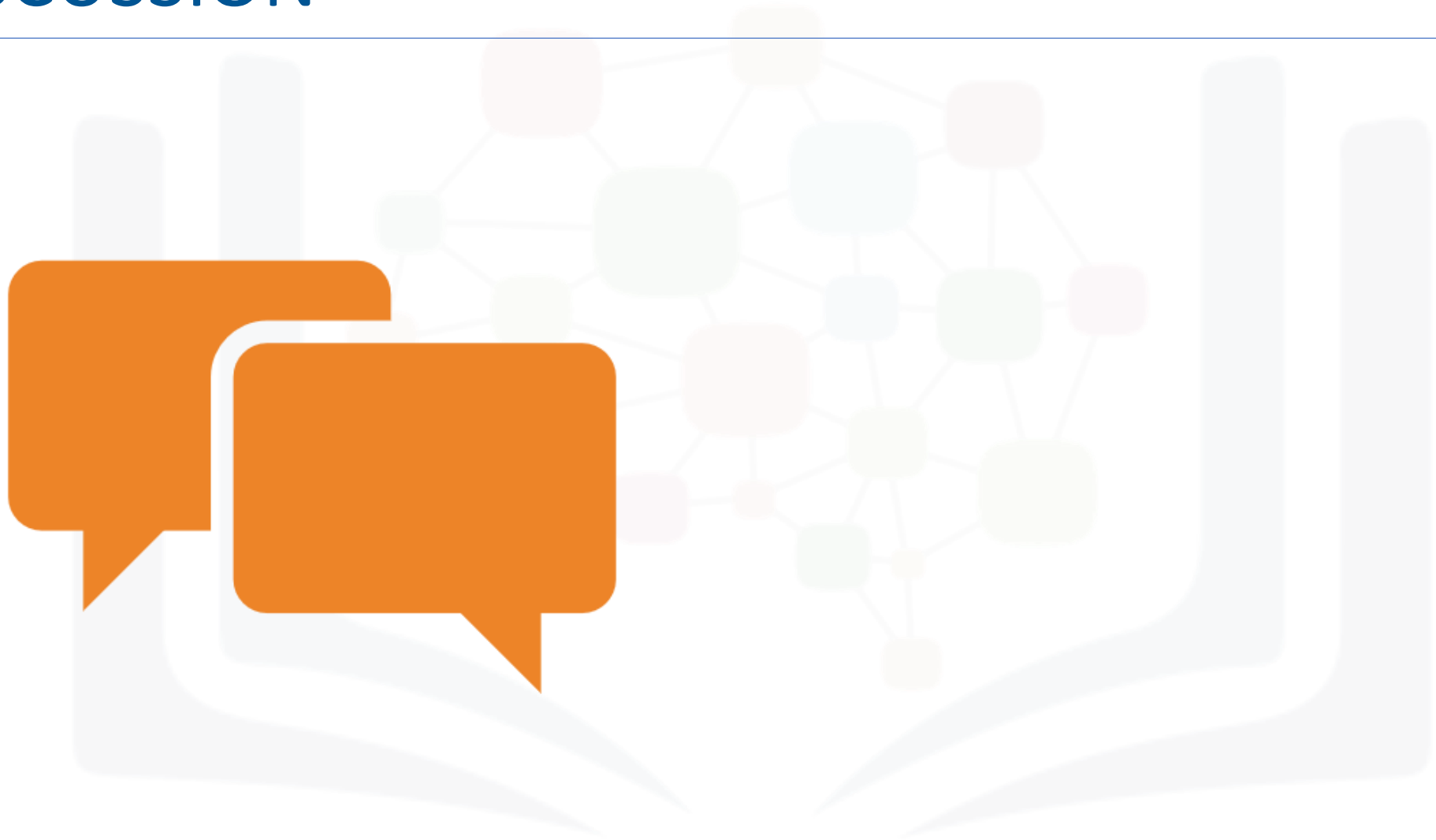


Education Level By Gender



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DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is widely used and TypeScript getting popular.
- In terms of databases, MySQL and PostgreSQL are highly popular
- Over 90% young male developers and most developers are located in developed countries

Implications

- JavaScript and PostgreSQL will be in high demand in the future
- Global polarization of developers in terms of location and gender.
- Young developers without a Master's degree are a majority

CONCLUSION



- Developers are mostly young males with a Bachelor's degree
- Javascript leads in terms of popular languages while MySQL leads in terms of popular databases
- Accessibility of programming languages and databses should be spread across developing countries too