



Trends & Analysis in Software Developer Technologies

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January 7th 2024

OUTLINE



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

EXECUTIVE SUMMARY



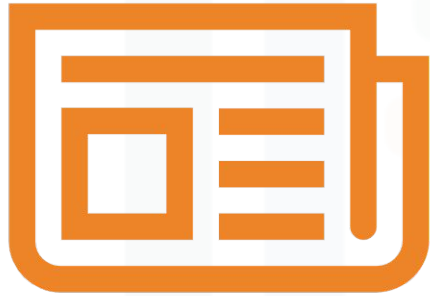
- Objective: Contextualizing and Analyzing Data
- Methodology of the Research:
 - Collecting Data
 - Analyzing Data
 - Creating Data Visualizations
- Presenting Results with Graphs and Trends
- Discussing Key Findings and Their Implications
- Concluding the Research Study

INTRODUCTION



- Stack Overflow's annual Developer Survey: The largest and most comprehensive global survey of coders.
- Survey results may not fully represent the entire developer community.
- Participation from nearly 90,000 developers.
- Provides insights into predicting developer trends.
- Offers a characterization of developers worldwide.

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

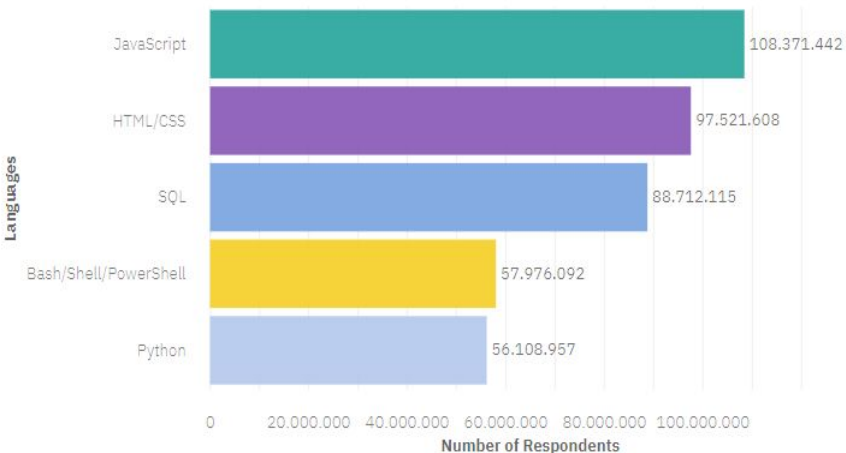
RESULTS



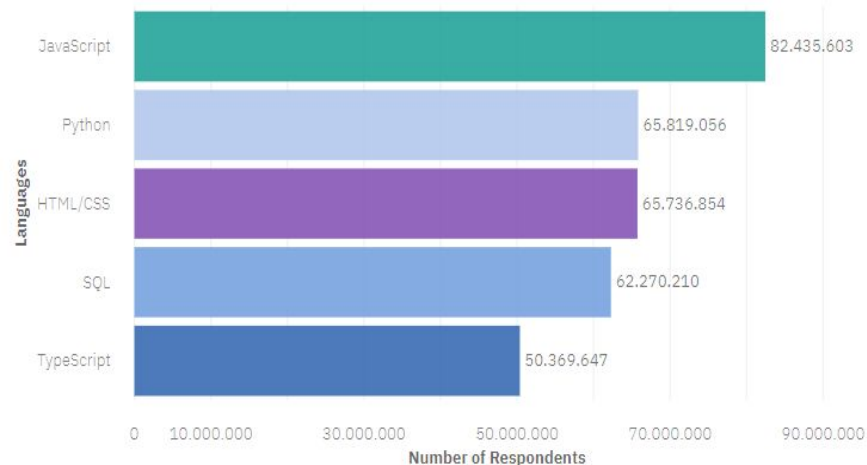
PROGRAMMING LANGUAGE TRENDS

Current Year Next Year

Top 5 Programming Language Experience



Top 5 Desired Language to Learn



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Implications Extracted:

- JavaScript is the leading language.
- Python fastest-growing language .
- TypeScript has a growing interest
- Possible migration from JavaScript to TypeScript.

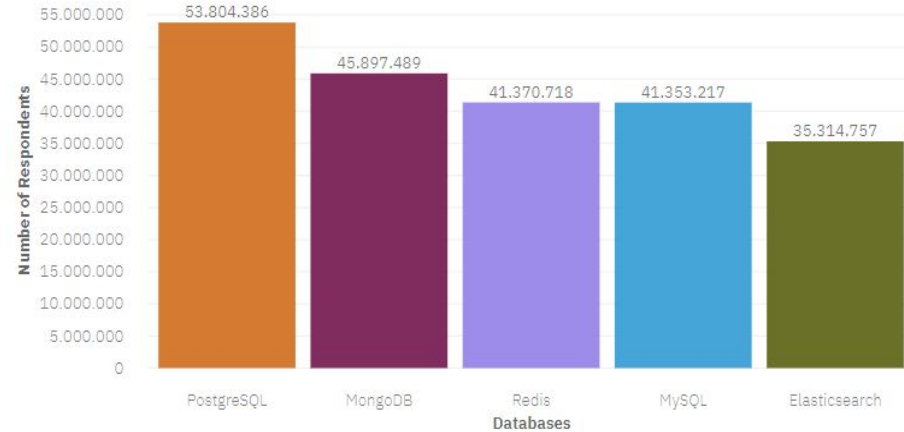
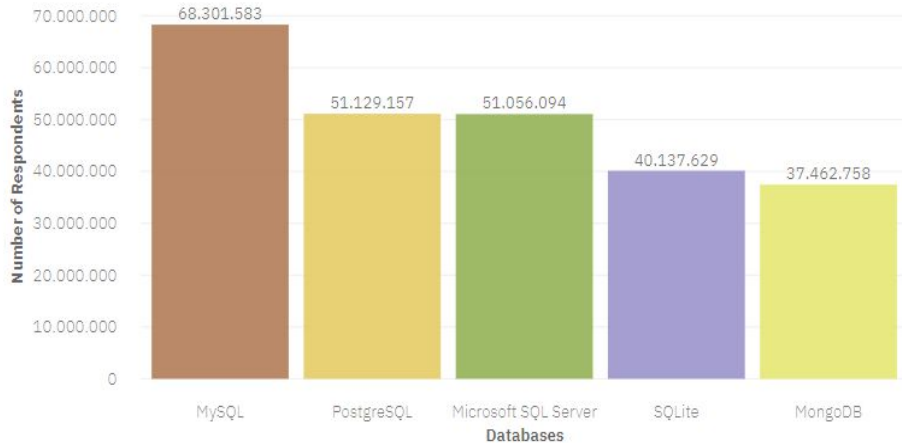
DATABASE TRENDS

Current

Next

Top 5 Databases Worked with

Top 5 Desired Database to Learn



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Implications Extracted:

- Prevalence of MySQL as the Top Database Choice
- Limited Enthusiasm for Microsoft SQL Server and SQLite
- Growing Interest in PostgreSQL and MongoDB
- Declining Popularity of Microsoft SQL Server and SQLite
- The Ascendance of PostgreSQL and MongoDB in the Market

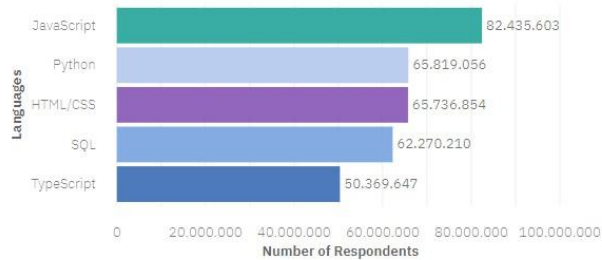
DASHBOARD



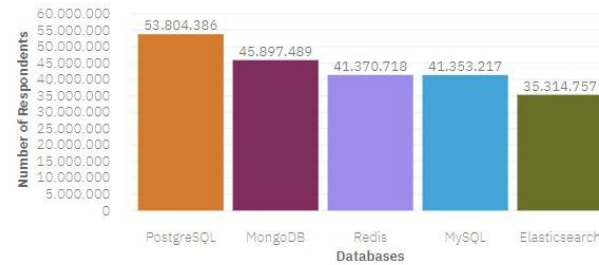
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FUTURE TECHNOLOGY TREND

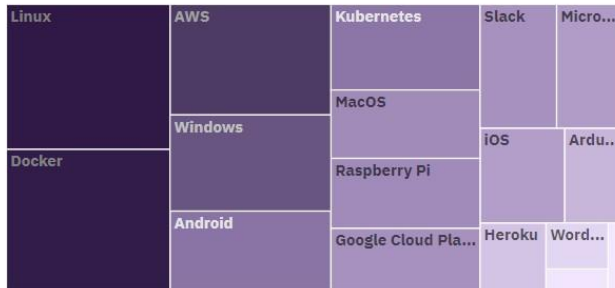
Top 5 Desired Language to Learn



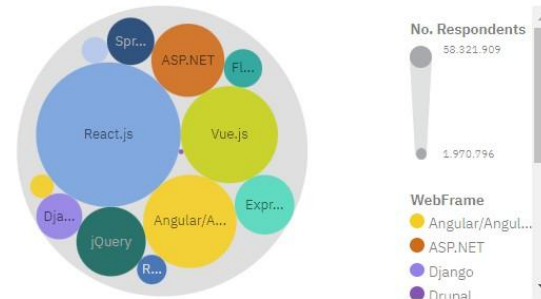
Top 5 Desired Database to Learn



Platform Next Year

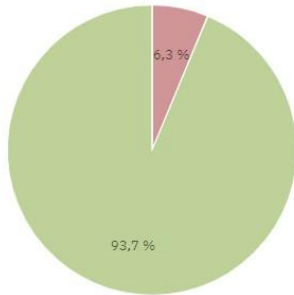


Top 10 WebFrame Next Year

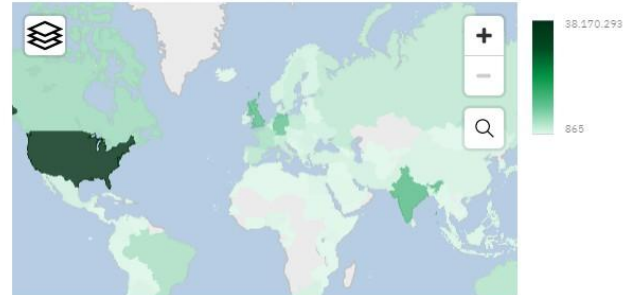


DEMOGRAPHICS

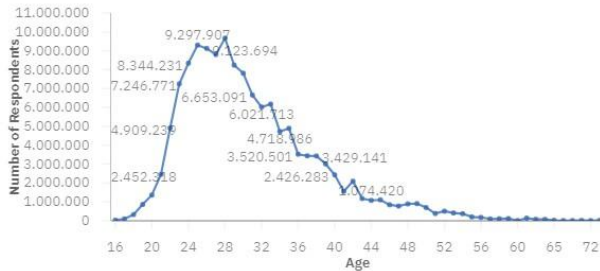
Respondent by Gender



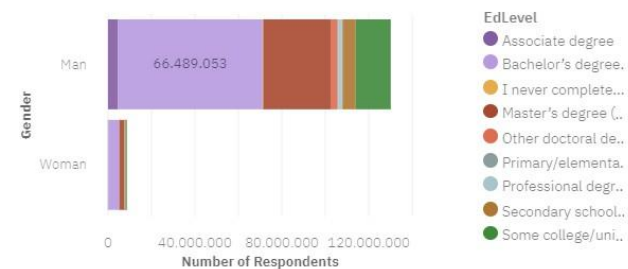
Respondent Locations



Respondent by Age



Formal Education Level / Gender



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Implications Extracted:

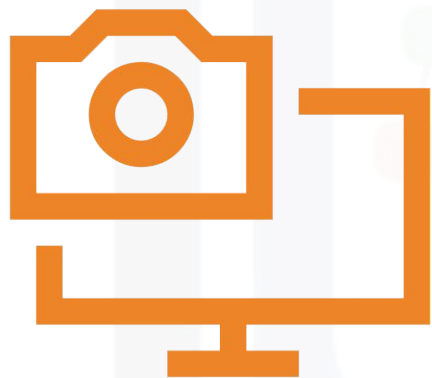
- Extensive Usage of JavaScript with a Rising Trend in TypeScript Adoption
- Predominance of Young Male Developers, Representing Over 90%
- Concentration of Developers Mainly in Developed Countries
- Growing Popularity of JavaScript and TypeScript Web Frameworks
- A Global Divide in Developers' Location and Gender Distribution
- Majority of Young Developers Lacking Postgraduate Studies

CONCLUSION

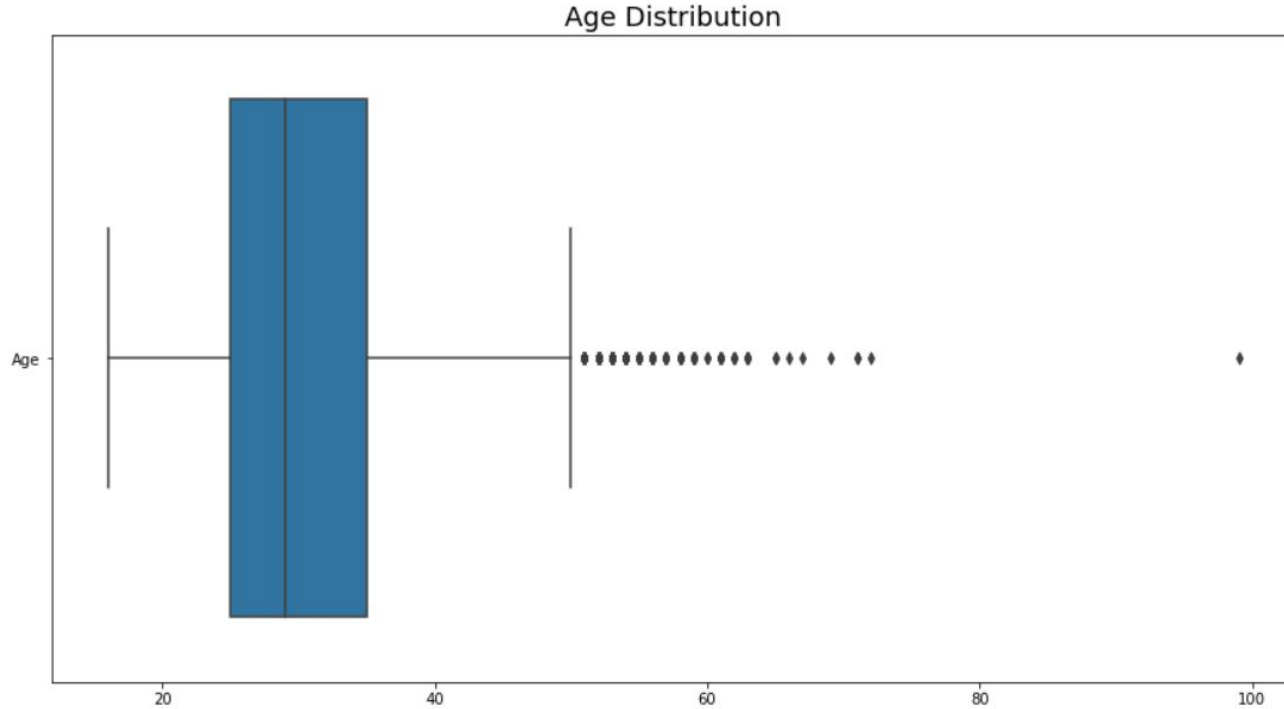


- Developers Exhibit Distinctive Traits and Qualities
- Analyzing Trends Provides Valuable Insights into the Popularity of Various Tools, Platforms, and Languages
- There is an Opportunity to Promote Accessibility to the Job Market in Developing Countries

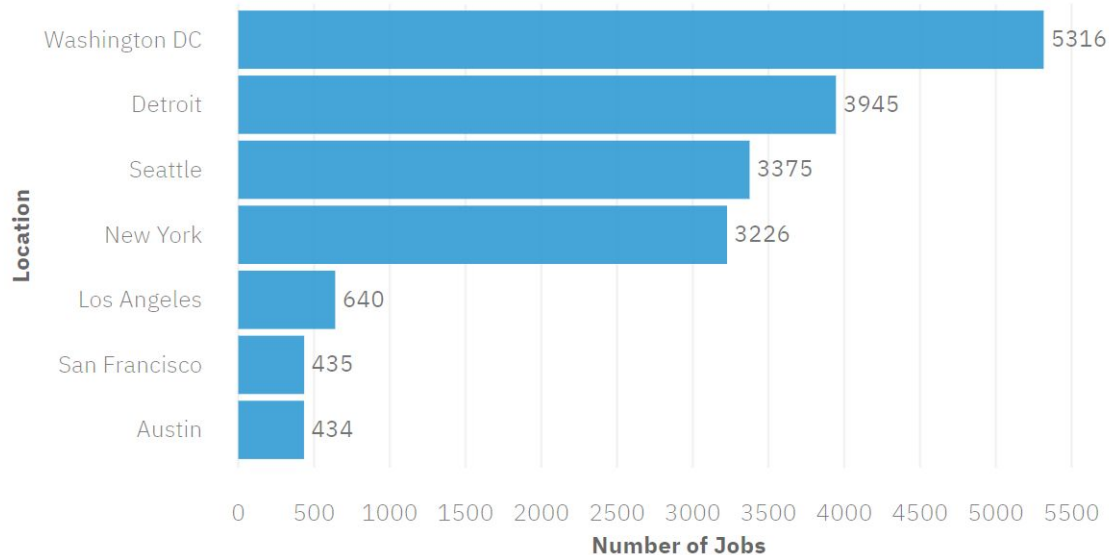
APPENDIX



AGE DISTRIBUTION BOXPLOT



JOB POSTINGS



POPULAR LANGUAGES

