

Trends in Tech by Survey Results

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OUTLINE



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

EXECUTIVE SUMMARY



- Recent Trends in Programming languages
- Recent Trends in Databases
- Gender Gap in Tech Jobs
- Technological Differences in Countries
- Demographics Survey
- Predictions in usage in Next Year

INTRODUCTION



Analyzing Trends in Software Development

Purpose:

- Identify trends in skillsets used in tech jobs
- What are the most in demand Programming languages?
- What are the top Database Skills in demand?

METHODOLOGY



- **Data Collection Sources** Stack Overflow Developer 2019 Survey **Programming Languages Annual Salary** GitHub Job Postings 2019
- Data Exploration
- **Data Cleaning**
- **Data Visualization**
- Presentation

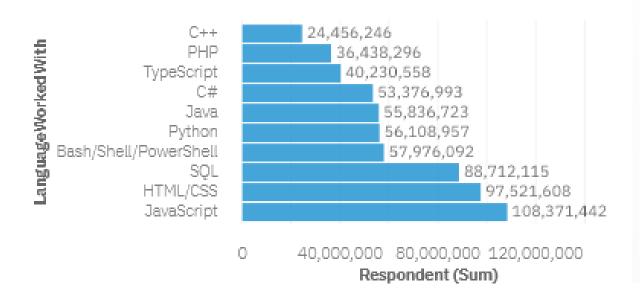
RESULTS

	Respondent	LanguageWorkedWith	LanguageDesireNextYear	DatabaseWorkedWith	DatabaseDesireNextYear
1.	25142	R			
2.	25142	Python			
3.	25142	С	С		
4.	25142	Go	Python		
5.	25142	C++	C++		
6.	25142	HTML/CSS	R		
7.	25142	PHP			
8.	25142	Bash/Shell/PowerShell	Bash/Shell/PowerShell	PostgreSQL	PostgreSQL
9.	25141	CII	F#		Microsoft SQL Server
10.	25141	JavaScript			
TIL.	25141	TypeScript			
12.	25141	HTML/CSS			Redis
13.	25141	Java			
14.	25141	Python			
15.	25141	SQL			

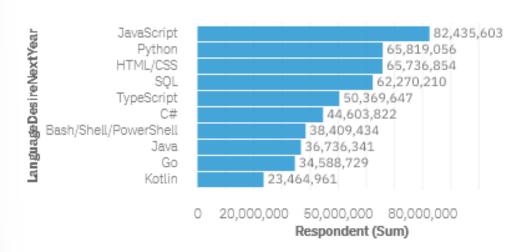


PROGRAMMING LANGUAGE TRENDS

Top Ten Languages Worked With



Top Ten Languages Desired Next Year





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PROGRAMMING LANGUAGE TRENDS - FINDINGS & **IMPLICATIONS**

Findings

- Python and Typescript are rising in popularity Next year.
- JavaScript, HTML/CSS, SQL are the top 3 Languages this year.
- Powershell loses popularity next year

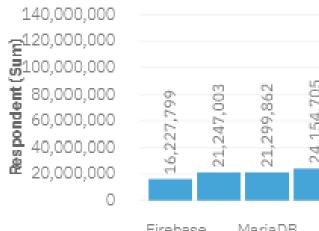
Implications

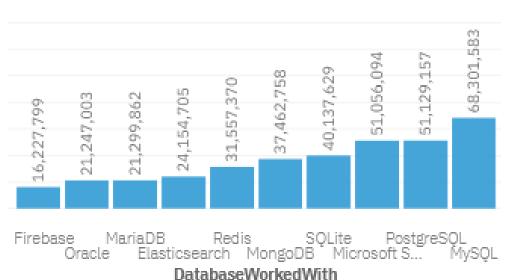
- Web Development continues to be in demand
- Python is preferred with the rising demand of AI and ML
- SQL is preferred with business and still used for big data



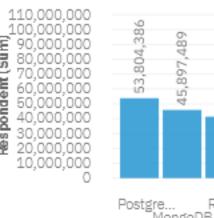
DATABASE TRENDS

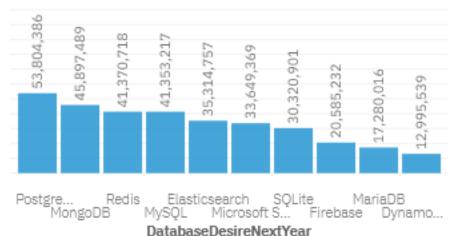
Top Ten Databases Worked With





Top Ten Databases Desired Next Year





DATABASE TRENDS - FINDINGS & **IMPLICATIONS**

Findings

- MYSQL is most popular
- Microsoft SQL is second
- Predictions show PostgreSQL and MongoDB move to top

Implications

- Open Source databases are preferrable to companies
- Enterprise software losing popularity

DASHBOARD

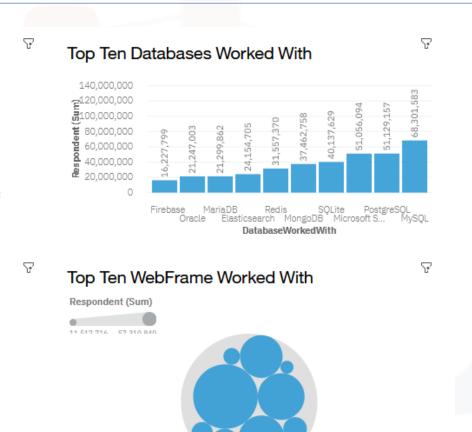


https://dataplatform.cloud.ibm.com/dashboards/cb8cf31e-4d77-4269-af68-

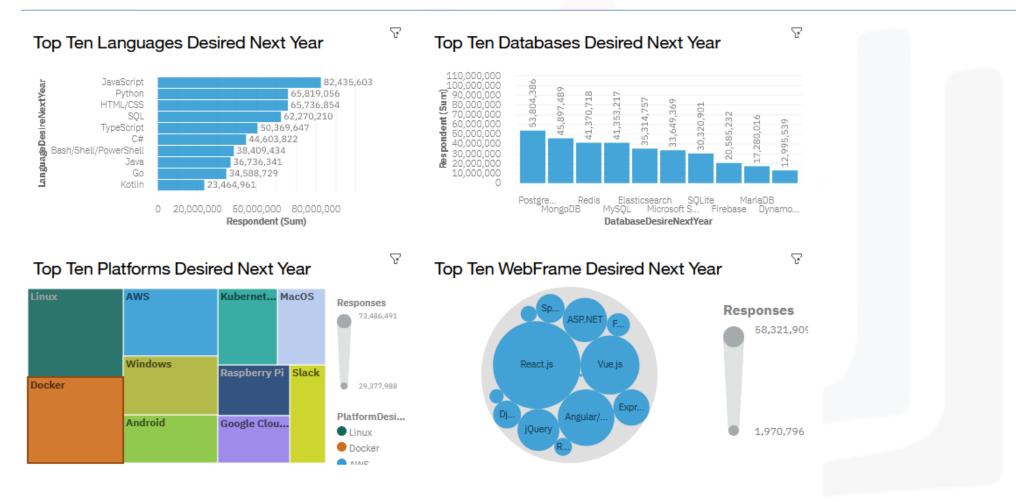
16d5e7f7bc3a/view/6532ca23278963ca09ded0e4079d7852 7532710be3bb870385847b4906677797f36a42c7c82b4858d d45066aa7e8430bca

DASHBOARD TAB 1

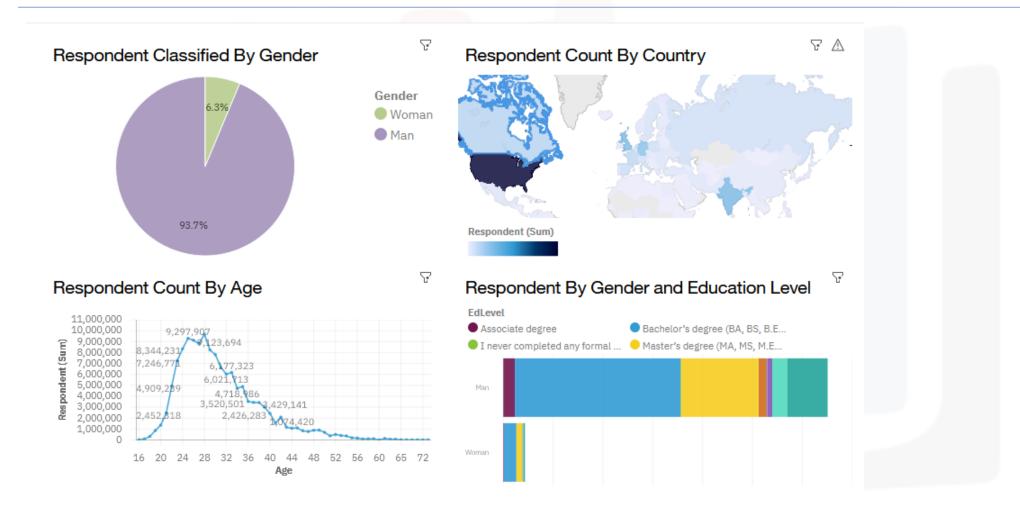
Top Ten Languages Worked With C++ PHP TypeScript C# Java Python 56,108,957 Bash/Shell/PowerShell 57,976,092 SQL HTML/CSS 97.521.608 JavaScript 40,000,000 80,000,000 120,000,000 Respondent (Sum) Respondent (Sum) 2,532,293 72,858,619



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- Current and Predicted Technology trends
- Plans for training employees
- Differences in Age and Gender in business and plans going forward

OVERALL FINDINGS & IMPLICATIONS

Findings

- Tech field ever changing
- Many workers concentrated in **USA** and India
- Large gender gap in workforce
- Shift toward platforms in cloud

Implications

- Companies need to be more flexible
- Other countries are falling behind in tech work
- Hiring process needs to focus on representation if possible
- Cloud platforms are more popular

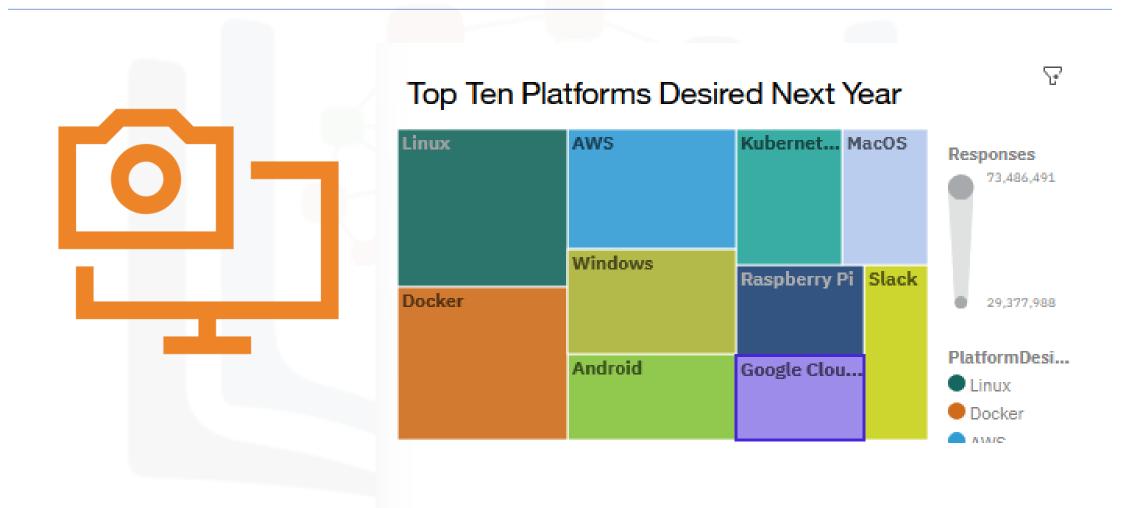


CONCLUSION

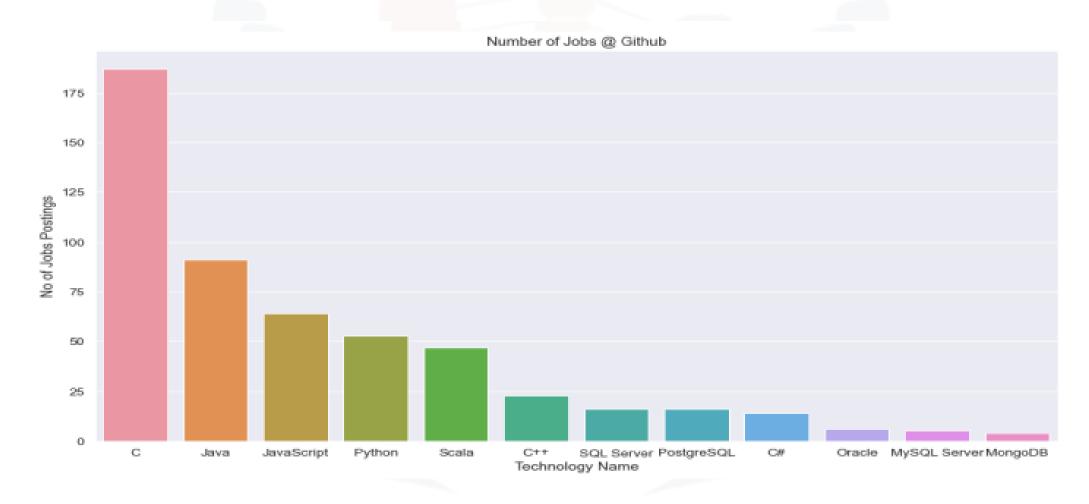


- Technology Trends for current and next year
- Programming Languages, Database and Platform overview
- Demographics summary
- Possible actions to be taken
- Further methods and predictions to be made for other forecast

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

