

Technology Trends & Analysis Presentation



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OUTLINE



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EXECUTIVE SUMMARY



- **Current Technology Usage**

- Top 10 Languages Worked with
- Top 10 Database Worked with
- Platform worked with Word-Cloud
- Top 10 Web-frame Worked with

- **Future Technology Trend**

- Top 10 Languages Desired Next Year
- Top 10 Database Desired Next Year
- Platform worked with Desired Next Year
- Top 10 Web-frame Desired Next Year

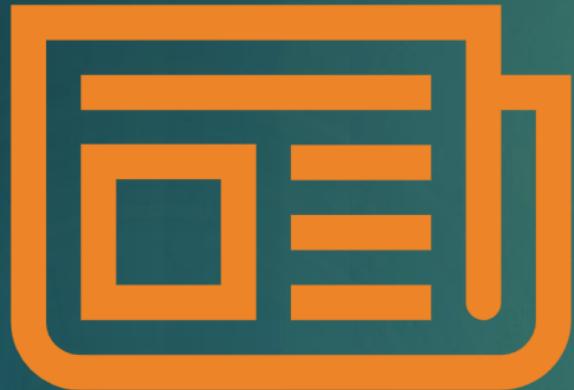
- **Demographic**

- Respondents Classified by Gender
- Respondent Count for Countries
- Respondent Count by Age
- Respondent Count by Gender by Formal Education Level

INTRODUCTION

- *This presentation report uses data analytics to highlight current and projected trends in the need for skills related to programming languages, databases, platforms and web frames.*
- *The following inquiries were investigated using the data:*
 - Which programming languages are most in-demand today?
 - What are the most in-demand database skills?
 - What popular IDEs or Web frames are there?
- *The target audience for this research are IT professionals, HR managers, and anybody else with an interest in the IT sector who wants to learn about the top on-demand IT skills in their respective sectors that will also be relevant in the future.*

METHODOLOGY



- Data Collection
- Data Exploration
- Data Cleaning
- Data Visualization
- Presentation

RESULTS

PROGRAMMING LANGUAGE TRENDS

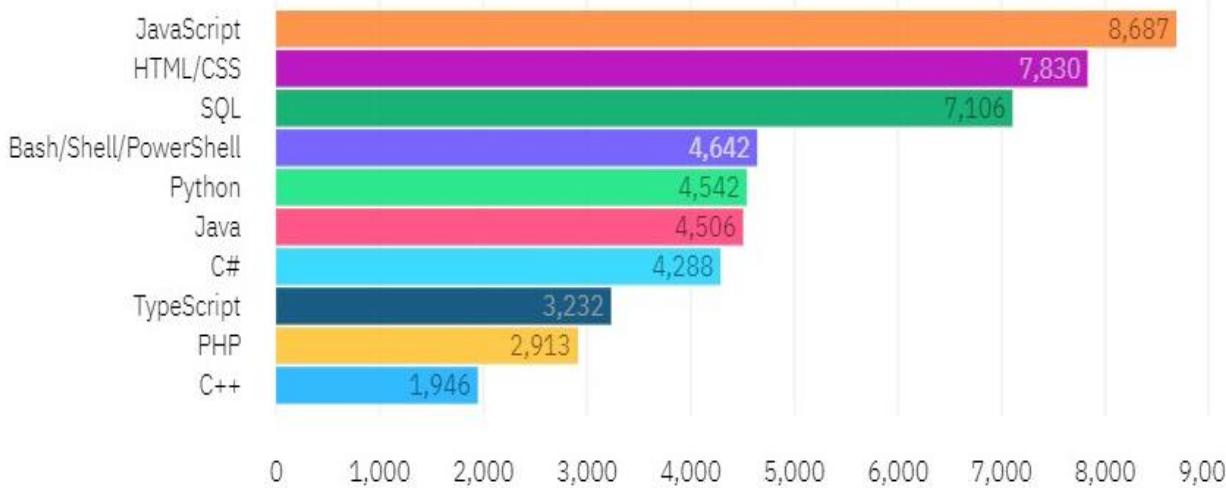
Current Year

Next Year

Top 10 LanguageWorkedWith

LanguageWorkedWith

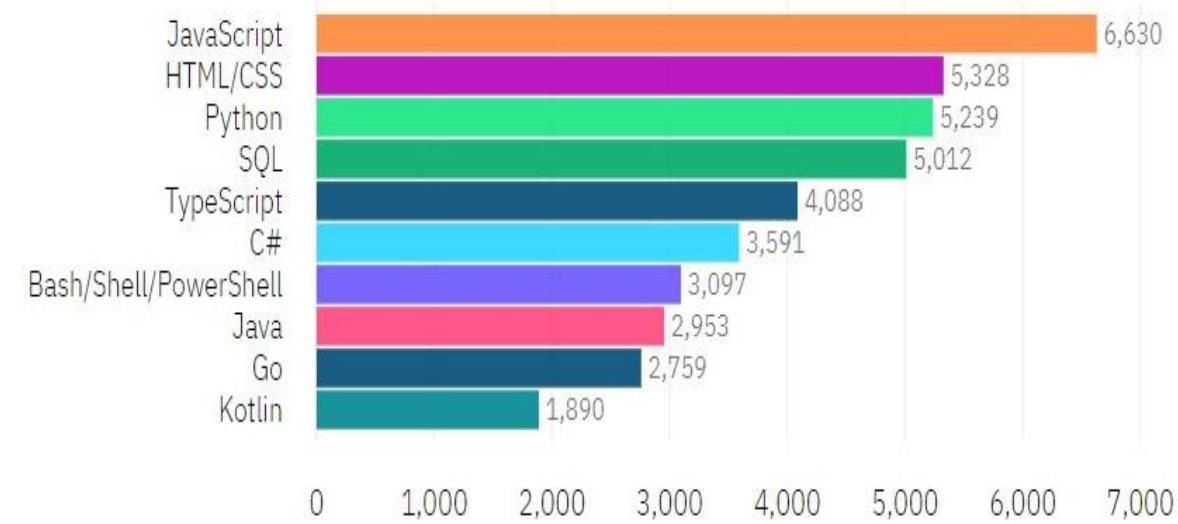
- Bash/Shell/PowerShell
- Java
- SQL
- C#
- JavaScript
- PHP
- C++
- TypeScript



Top 10 LanguageDesireNextYear

LanguageDesireNextYear

- Bash/Shell/PowerShell
- Java
- SQL
- C#
- JavaScript
- PHP
- HTML/CSS
- Python
- Go
- Kotlin
- TypeScript



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- ▶ Javascript and HTML/CSS are the most used programming languages.
- ▶ Python and Typescript are on the rise and will be the most used programming languages in the future.
- ▶ Python will have more demand than SQL next year.

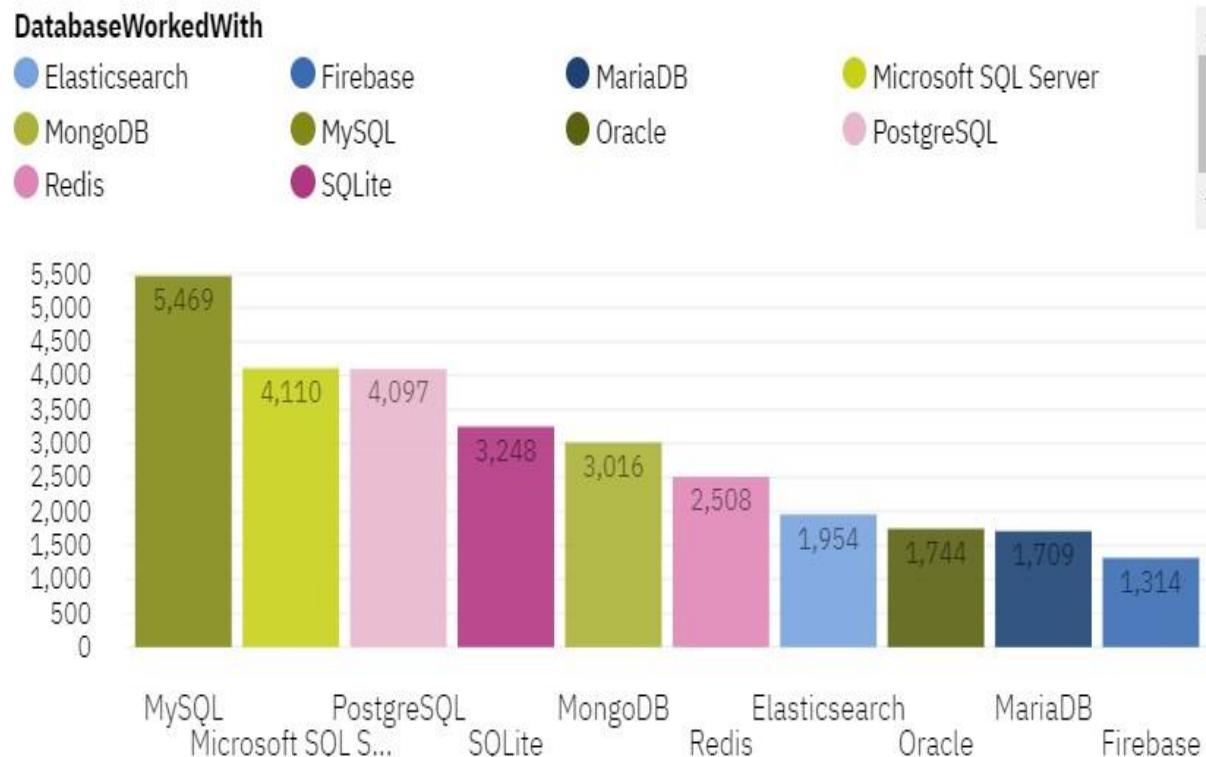
Implications

- ▶ Web development are still in high demand.
- ▶ Big Data technology in companies still requires SQL.
- ▶ With AI and ML in rising demand, Python is best choice.

DATABASE TRENDS

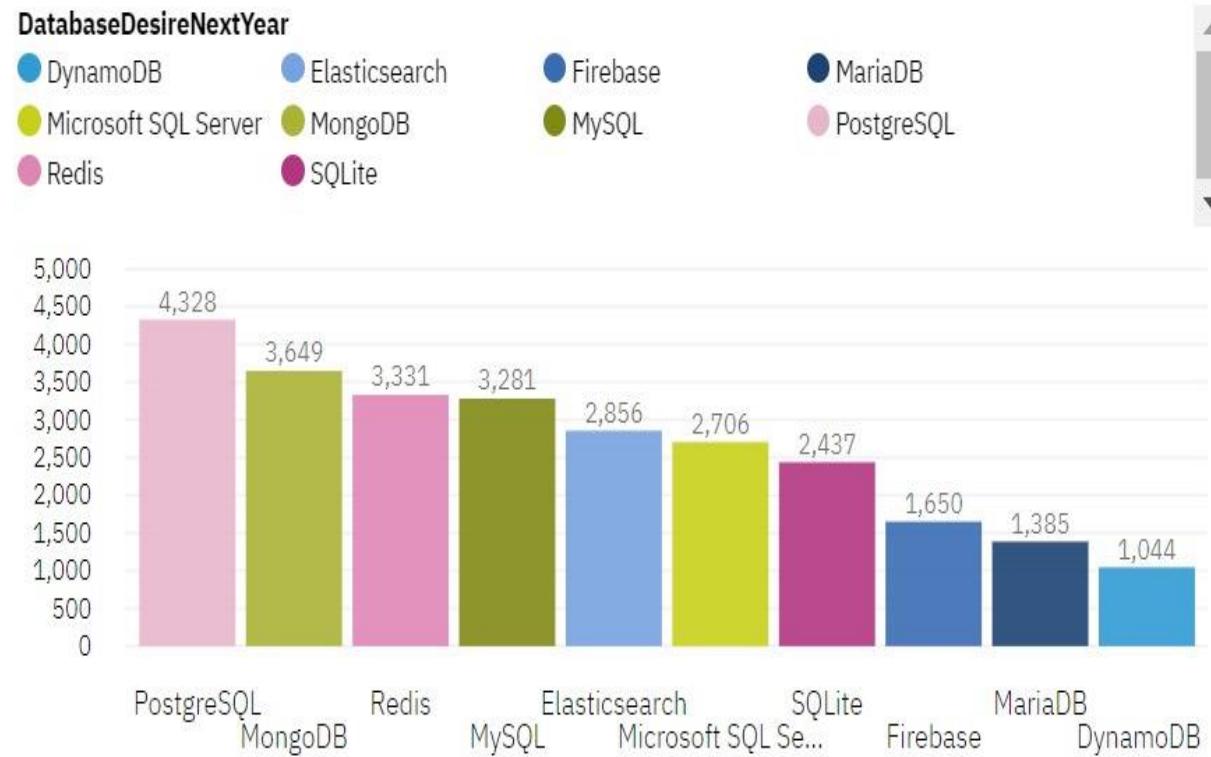
Current Year

Top 10 DatabaseWorkedWith



Next Year

Top 10 DatabaseDesireNextYear



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- ▶ MySQL and Microsoft SQL server are the most widely used databases.
- ▶ However, PostgreSQL and MongoDB are on the rise and will be the most used databases in the future.
- ▶ Redis and Elasticsearch are relatively new tools and are set to gain more traction in the IT sector.

Implications

- ▶ SQL is still a top tool to watch out for in data specialists.
- ▶ Companies still prefer open source databases.
- ▶ MySQL is losing their popularity as time passes.

DASHBOARD



The permanent link of the Cognos dashboard

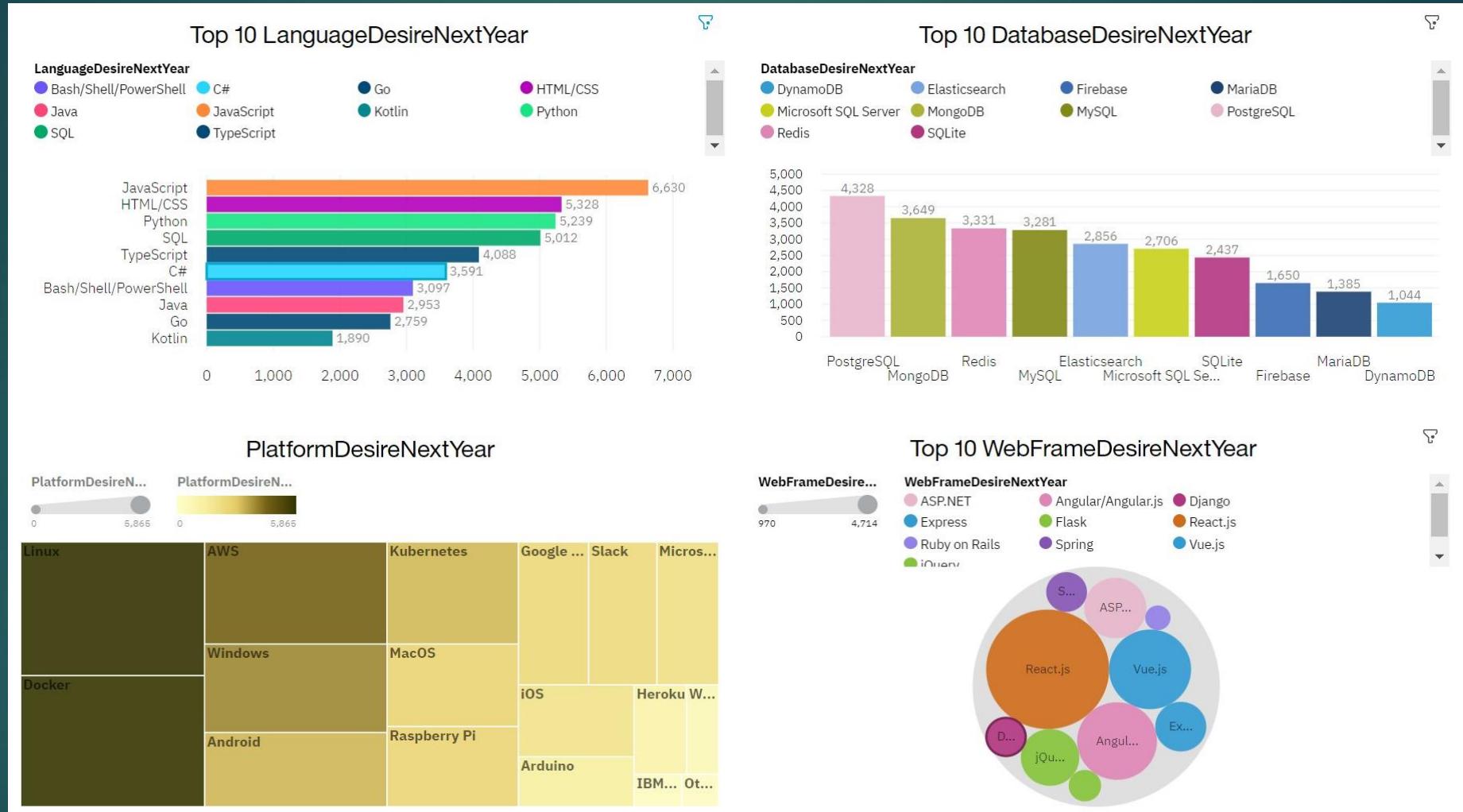


<https://dataplatform.cloud.ibm.com/dashboards/350fbccc-3009-4fc2-b0a4-81237bd2b4ef/view/4e18de2631e3148952cec8e4079f7d077b352d5ce4bb8b0b86d07b4909607397a96d14c5c829495edb110262a2b916519f>

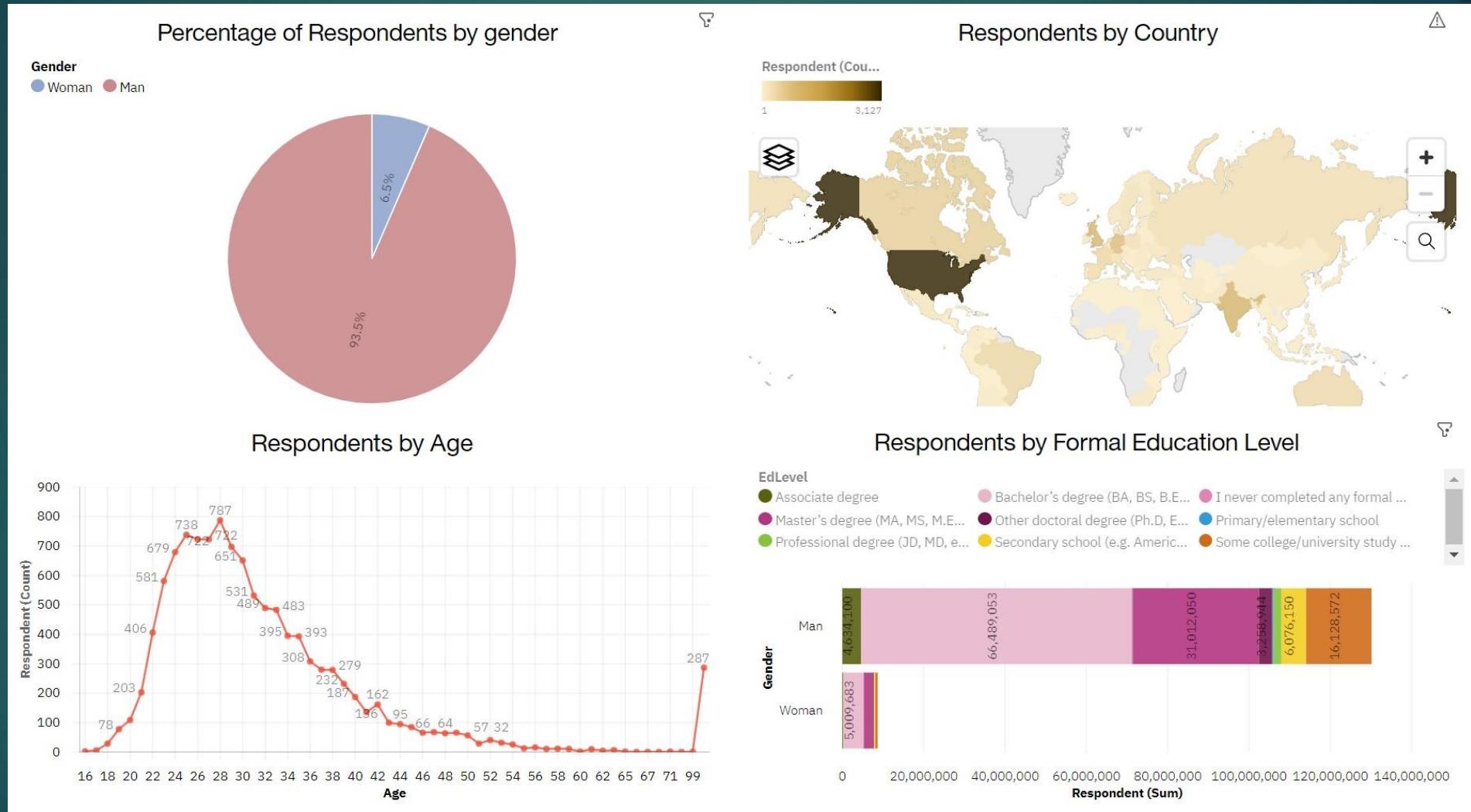
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- ▶ Which developer technologies are most in demand?
- ▶ How do we close the wide gender gap in the Technology sector?
- ▶ Which educational technology should educators focus on more in the next years?
- ▶ How is the annual distribution of developer remuneration structured?

OVERALL FINDINGS & IMPLICATIONS

Findings

- ▶ Web development languages are the most popular and on-demand tools in the IT field currently.
- ▶ Most respondents want to learn PostgreSQL and React JS next year.
- ▶ Most people in the IT field have a Bachelors degree.

Implications

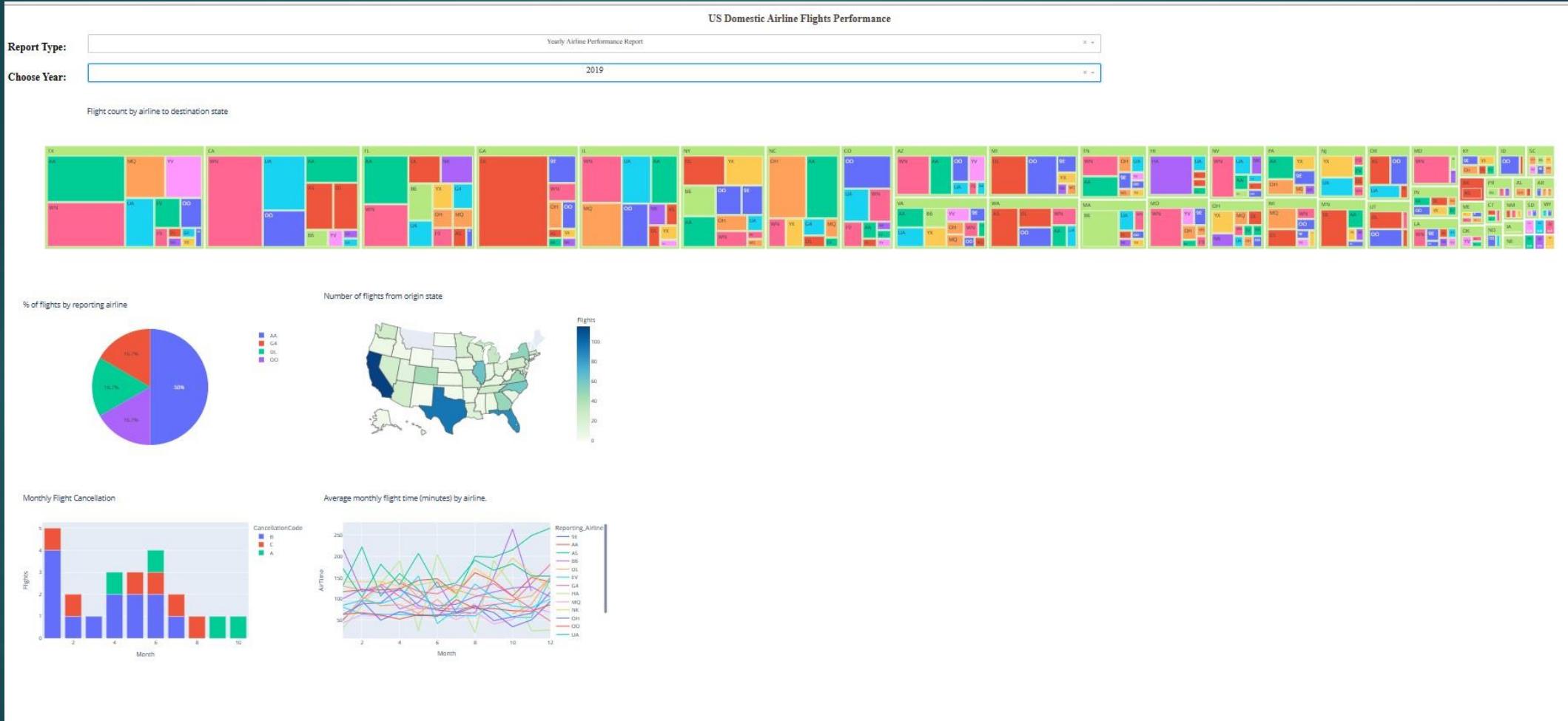
- ▶ Web development is still a very lucrative skill.
- ▶ People are looking for advanced programming languages with easy learning in focus.
- ▶ Less developed countries need more access to tech trainings and education.

CONCLUSION

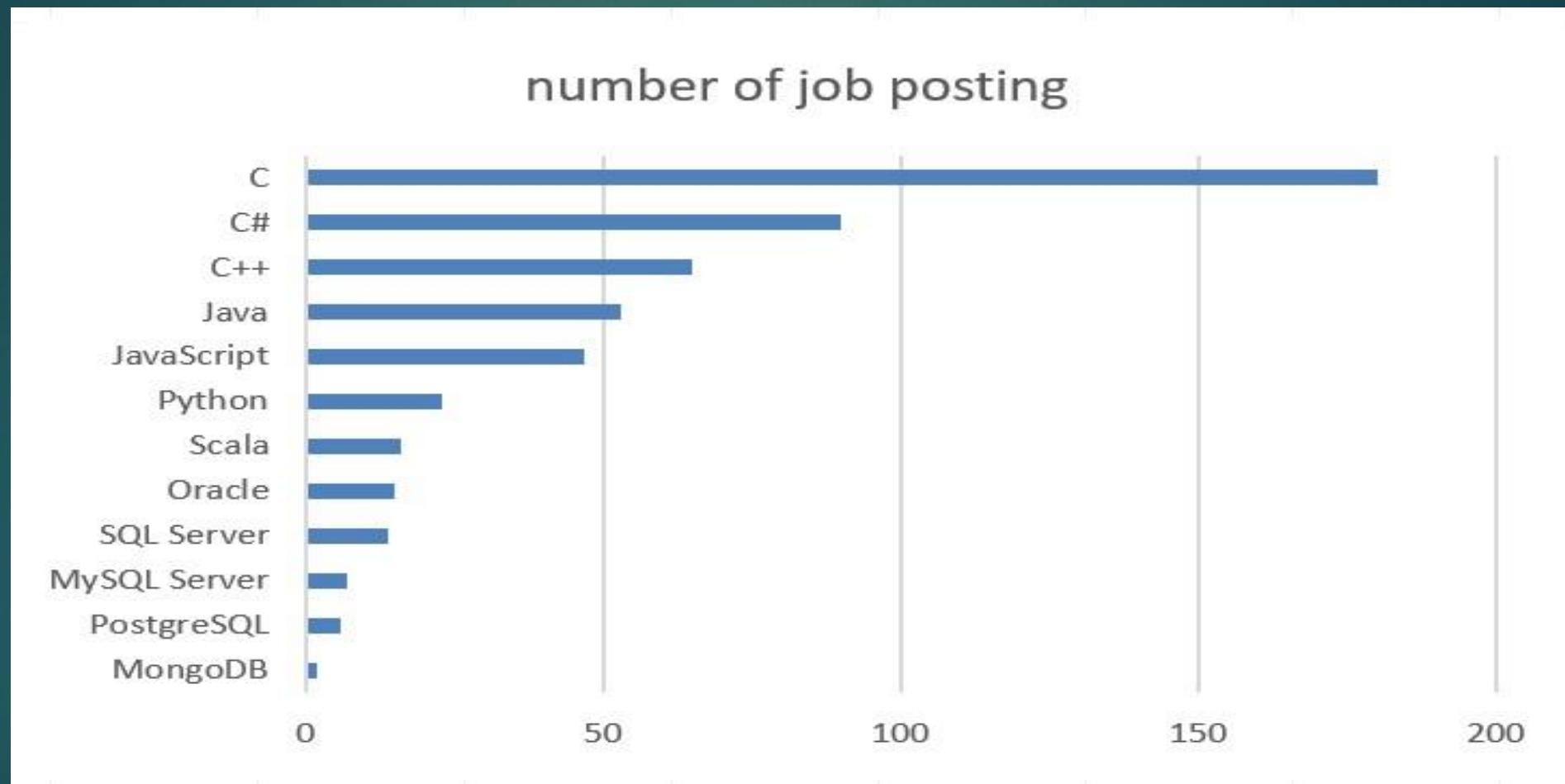


- ▶ The top programming language in demand Present & Future- Java-script.
- ▶ The top database skills in demand Present – MySQL ; Future – PostgreSQL.
- ▶ Popular Platform Present – Windows ; Future – Linux Docker
- ▶ The top Web-frame in Demand Present – jQuery ; Future – React.js

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

