



Analysis of Developer Survey

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OUTLINE



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



- Trends in Programming Languages
- Conditions Of Tech market
 - Popular Technologies In use
 - Future Technologies that are most in Demand
 - Salaries in Tech jobs
- Tech Markets across the countries
- Gender Representation in Tech Jobs
- Demographics

INTRODUCTION



- Analysis Of Trends in Tech Market
- Purpose
 - What are the top programming languages in demand?
 - What are the top database skills in demand?
 - What are the popular IDEs?
 - Identify the Demographics in Tech
- Staying informed about the latest demands and skills/
- stay competitive and make informed decisions in Current Tech Job Market

METHODOLOGY



- Data Collection
 - Collecting Data Using APIs
 - Collecting Data Using Web scraping
 - Exploring Data
- Data Wrangling
- Exploratory Data Analysis
 - Distribution
 - Outliers
 - Correlation
- Data Visualization
 - Visualizing Distribution of Data
 - Visualizing Relationship, Composition, Comparison

RESULTS

Top Programming Languages in Demand:

Python: Continues to dominate due to its versatility and extensive libraries.

JavaScript: Essential for web development, with frameworks like React and Node.js.

Top Database Skills in Demand:

MySQL: Leading database in demand.

PostgreSQL: Second most desired.

Popular IDEs:

Visual Studio Code: Favored for its versatility and extensive extensions.

IntelliJ IDEA: Popular among Java developers.

Demographics in Tech:

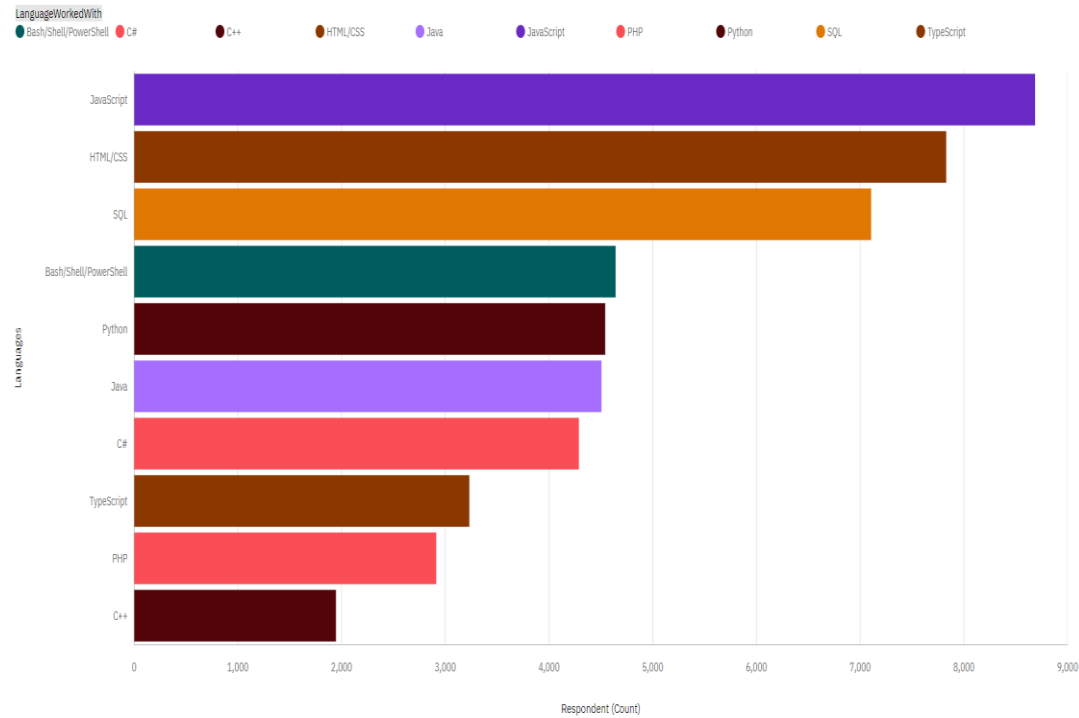
Gender Diversity: Majority of respondents are men (93.5%).

Age Distribution: Highest number of respondents are around 20 years old.

PROGRAMMING LANGUAGE TRENDS

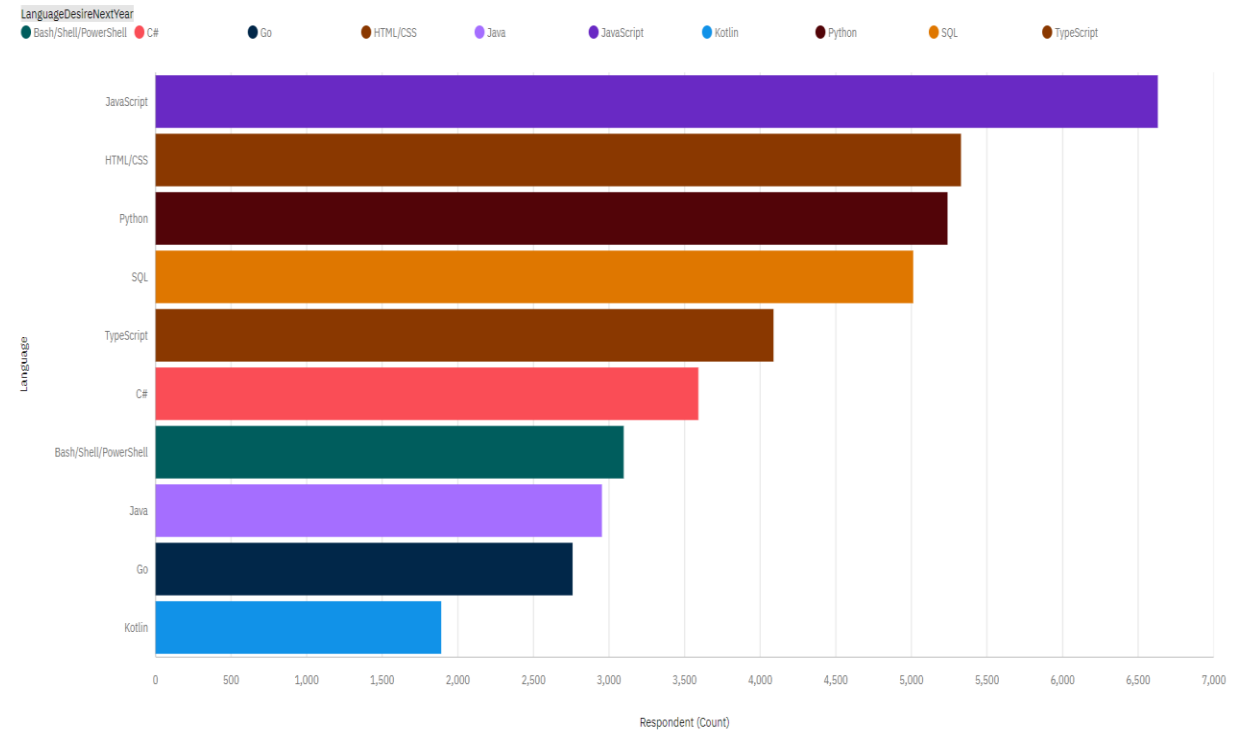
Current Year

Top 10 Language Worked With



Next Year

Top 10 Language Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

Languages In Trends:

- JavaScript: Most widely used programming language.
- HTML/CSS: Second most used.
- SQL: Third place.
- Python: Fourth place.
- Other languages include Java, Bash/Shell, C#, PHP, TypeScript, and C++.

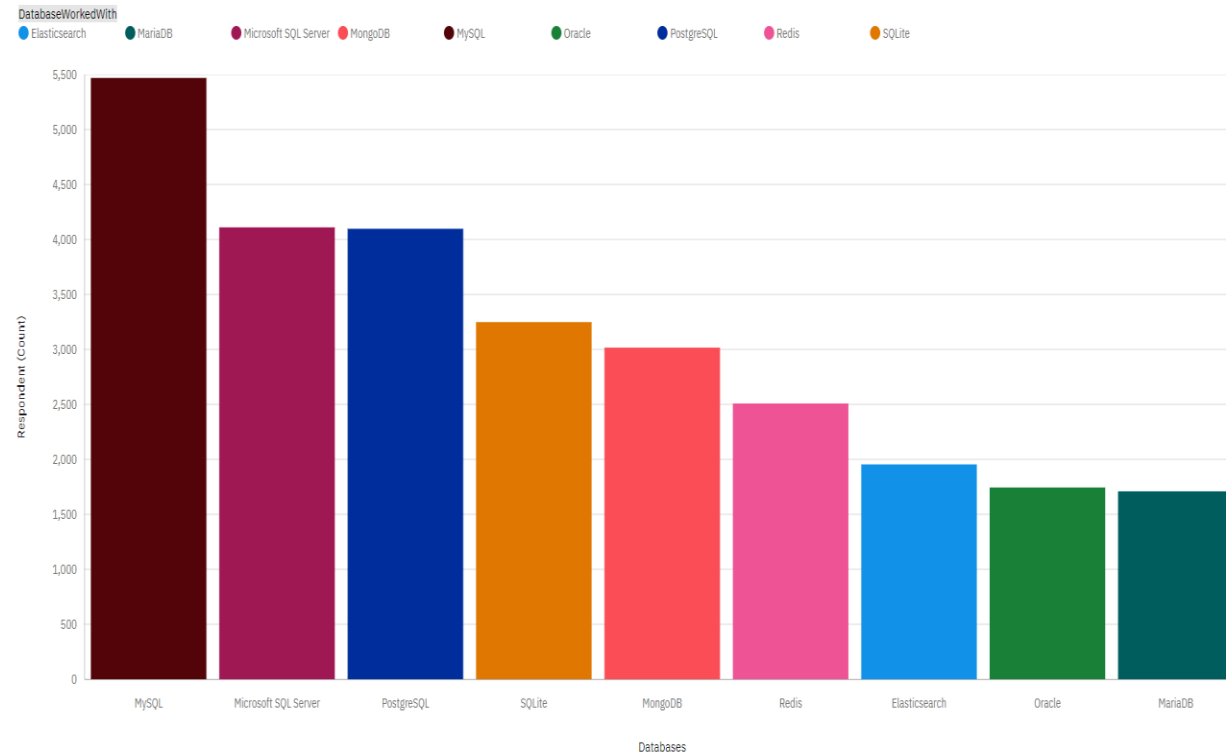
Implications

- JavaScript: Its widespread use underscores the importance of web development skills
- HTML/CSS: Essential for web design and development, indicating a continued need for developers who can create and style web pages effectively.
- SQL: High demand for SQL skills highlights the critical role of database management and data analysis in various industries, making it a must-have skill for data professionals.

DATABASE TRENDS

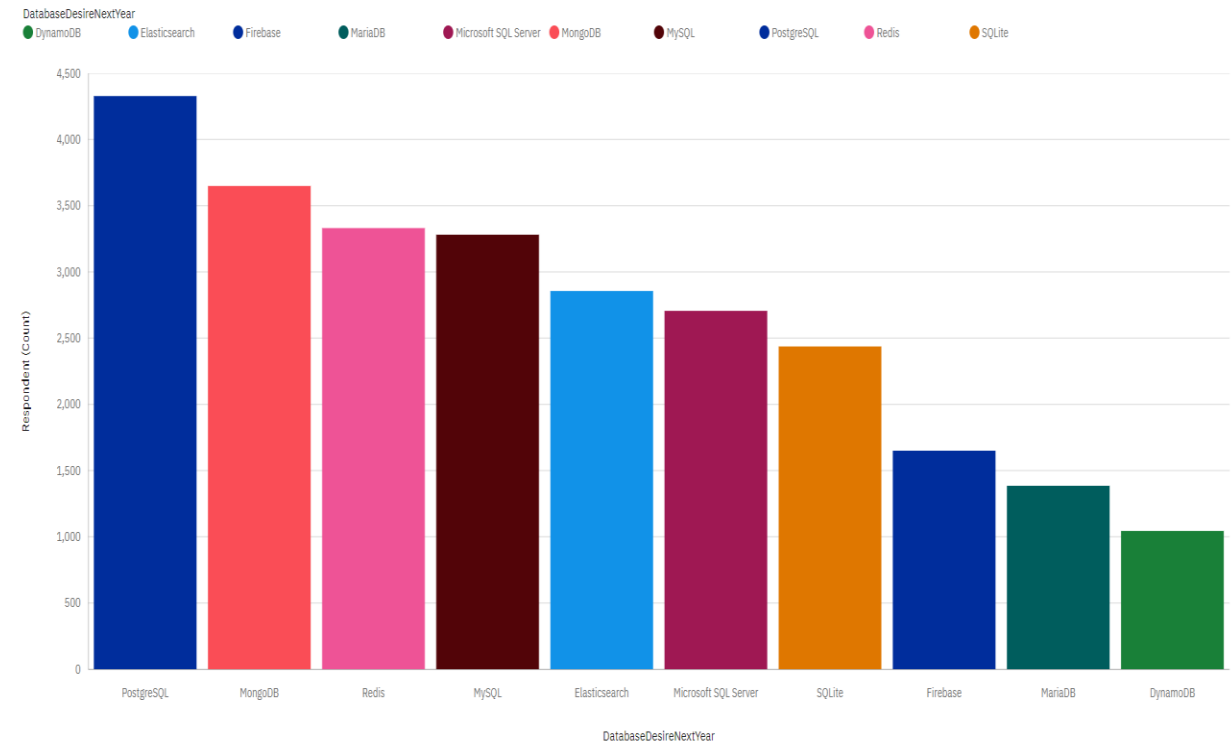
Current Year

Respondent by DatabaseWorkedWith colored by DatabaseWorkedWith



Next Year

Top 10 Database Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Databases Desired Next Year:
 - MySQL: Leading database in demand.
 - PostgreSQL: Second most desired.
 - Microsoft SQL Server: Third place.
 - SQLite: Fourth place.
 - Other databases include MongoDB, Redis, Firebase, Oracle, Elasticsearch, and MariaDB.

Implications

- MySQL:
 - High demand for MySQL skills, indicating its continued dominance in web development and data management.
- PostgreSQL:
 - Growing popularity suggests an increasing need for advanced database features and open-source solutions.
- Microsoft SQL Server:
 - Strong demand highlights its importance in enterprise environments and business applications.

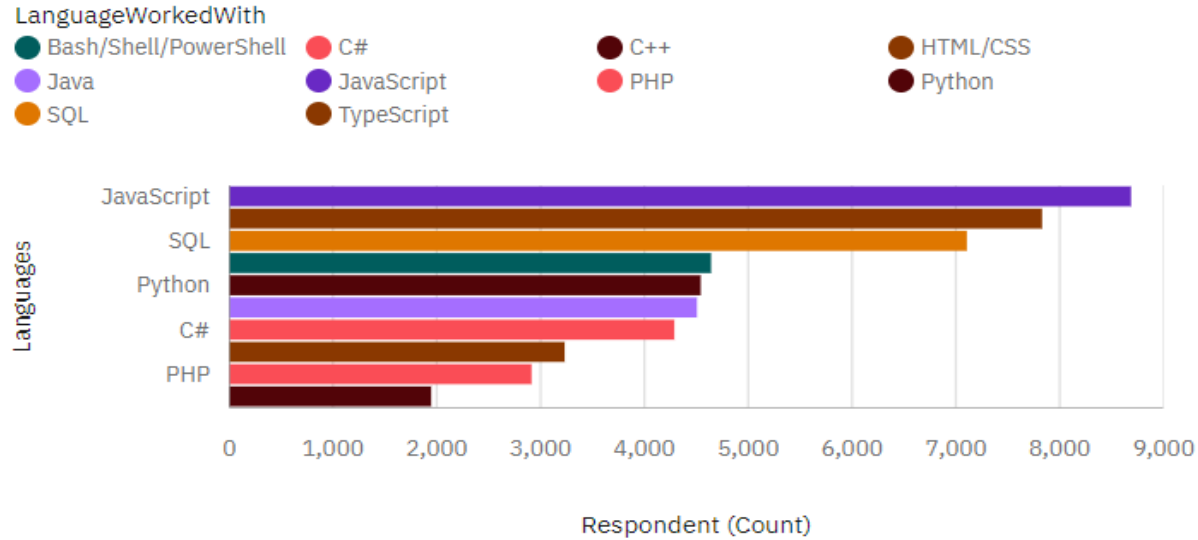
DASHBOARD



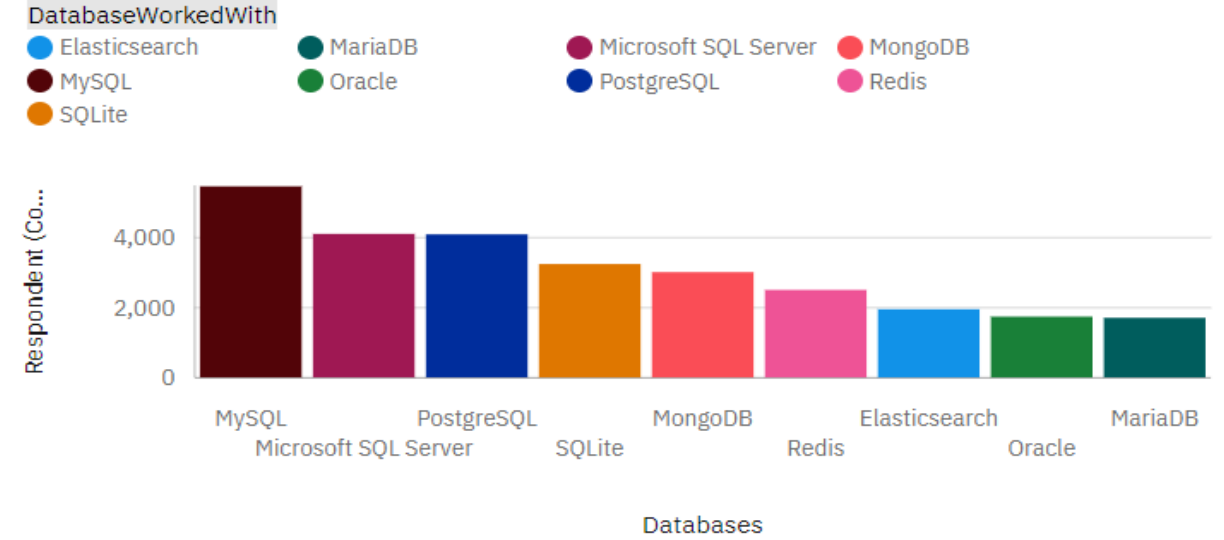
https://github.com/havalchinmay/IBM_Capstone_Project/blob/main/IBM_capstone_project.pdf

Current Trends

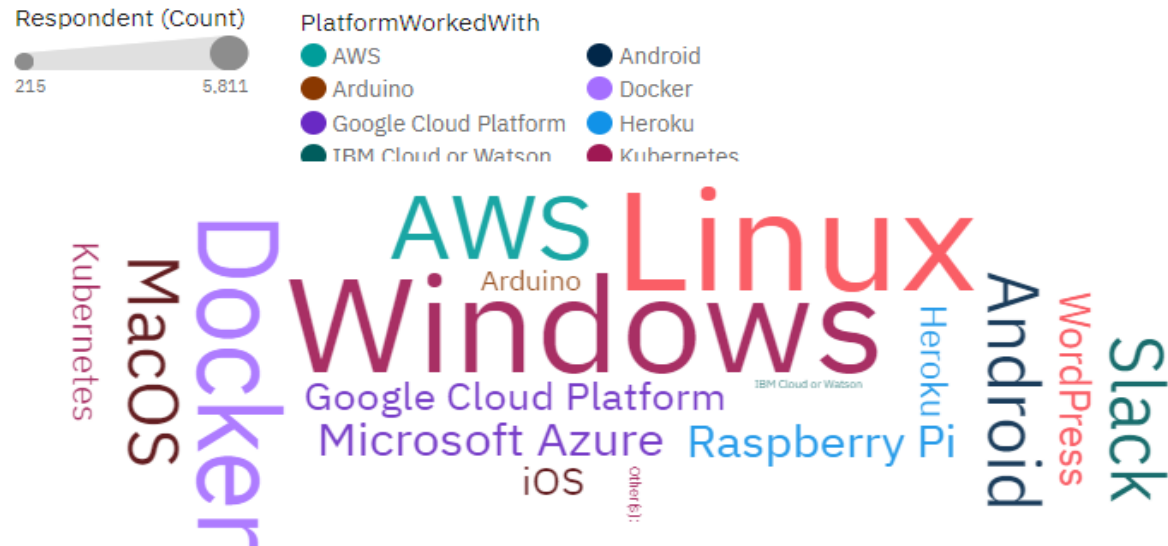
Top 10 Language Worked With



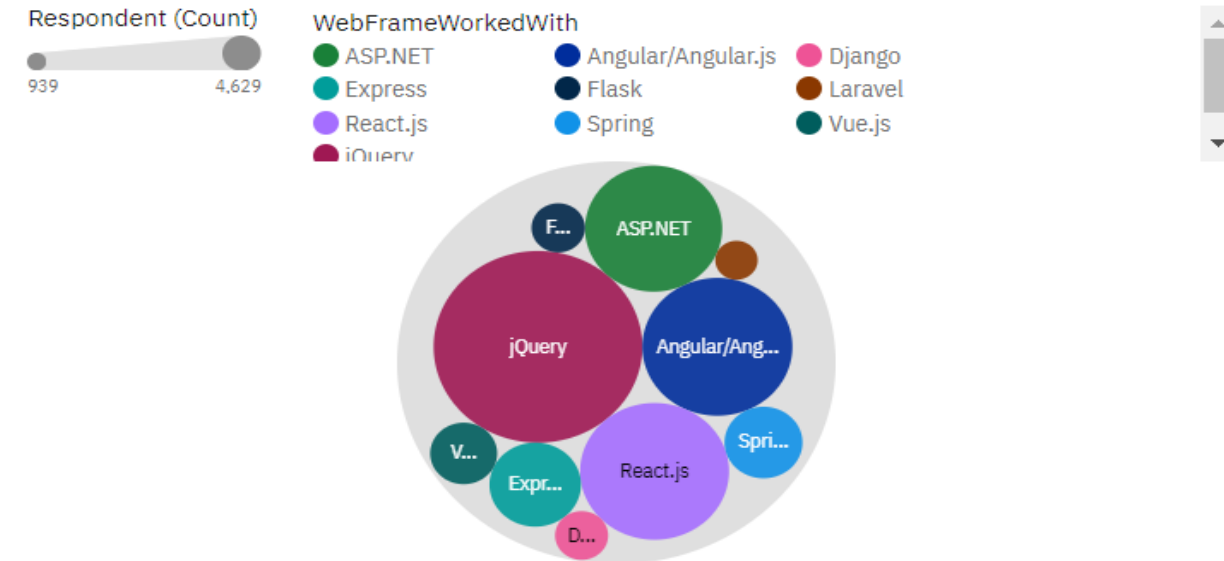
Respondent by DatabaseWorkedWith colored by DatabaseWorkedWith



Word Cloud for Most Popular Platforms

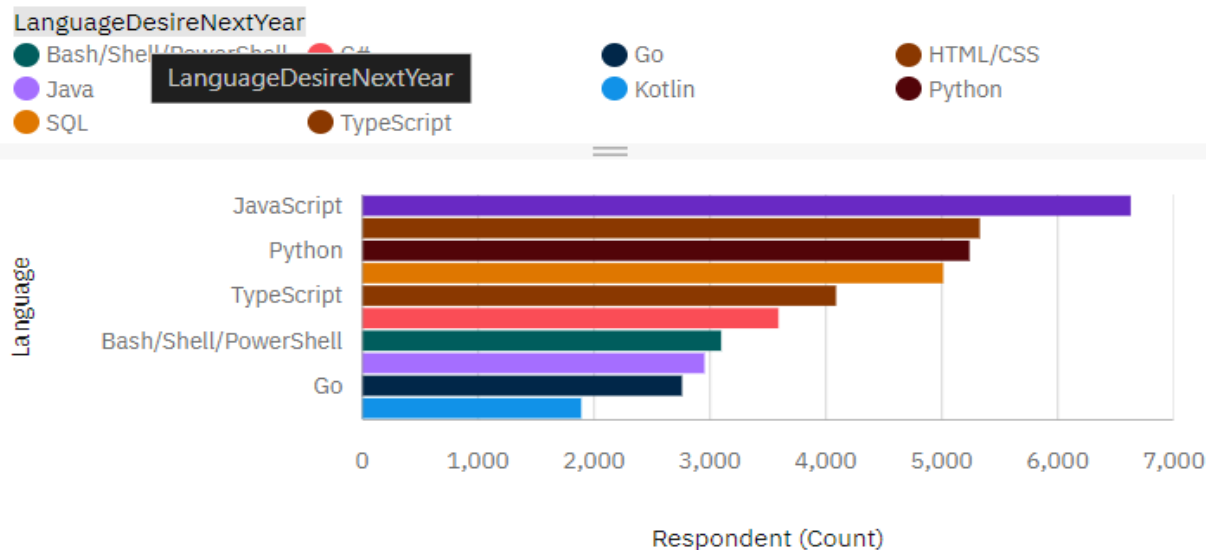


10 Web Frameworks Worked With

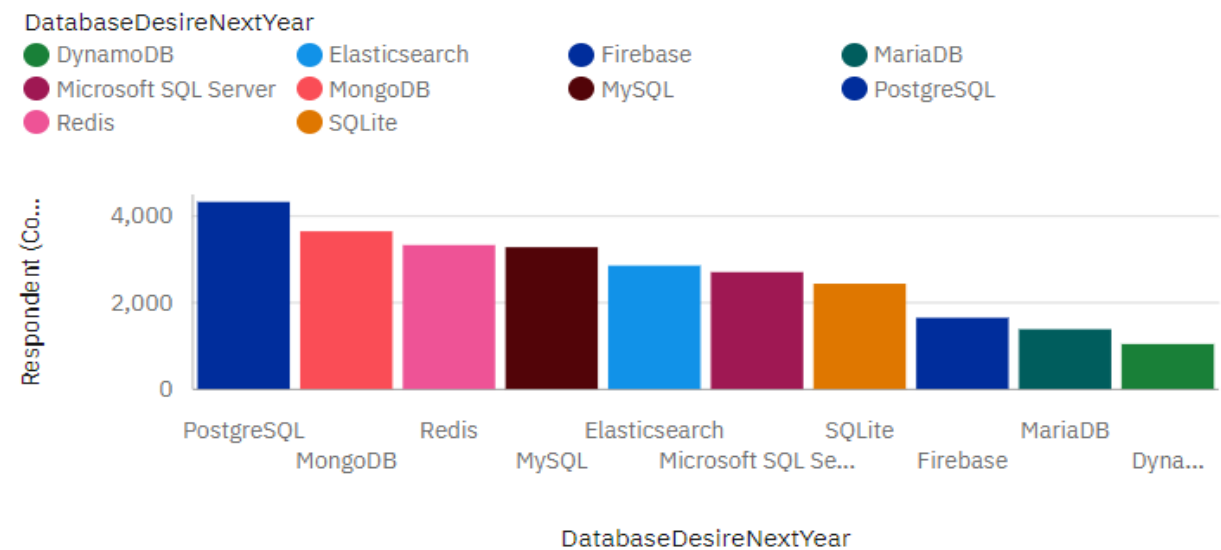


Future Trends

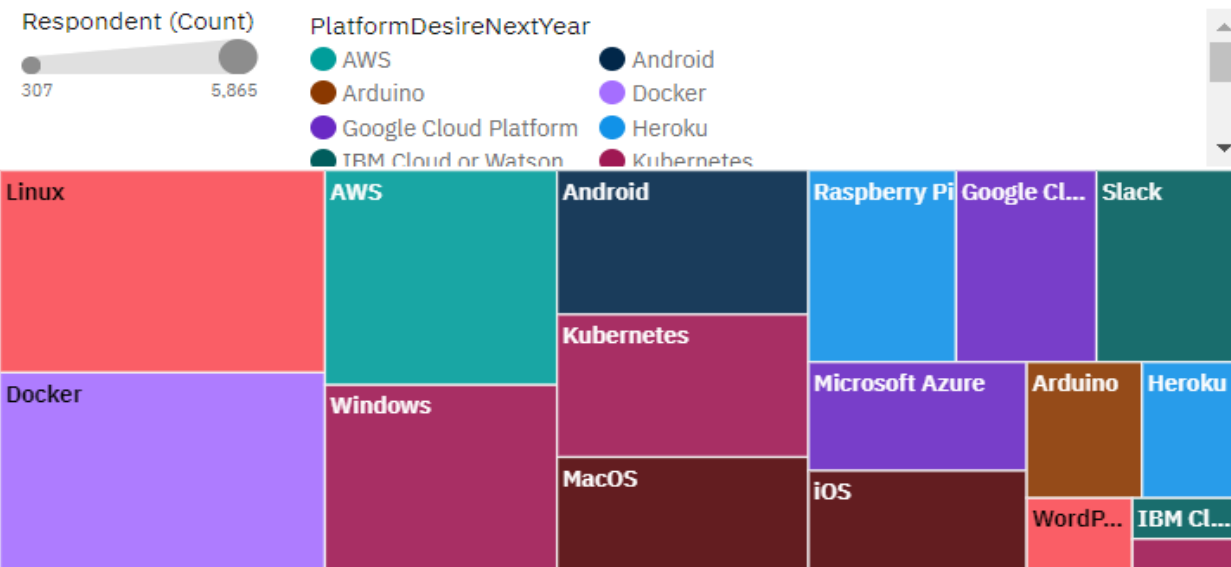
Top 10 Language Desired Next Year



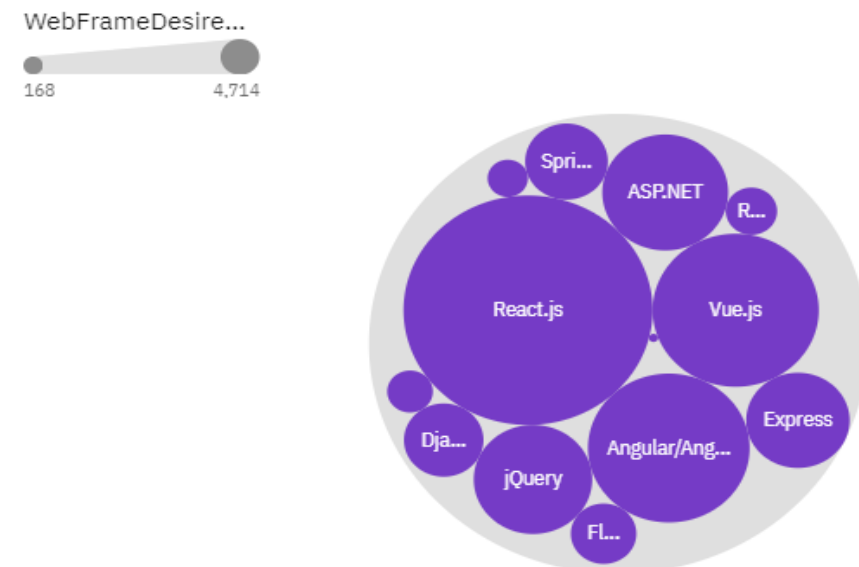
Top 10 Database Desired Next Year



Platforms Most in Desire



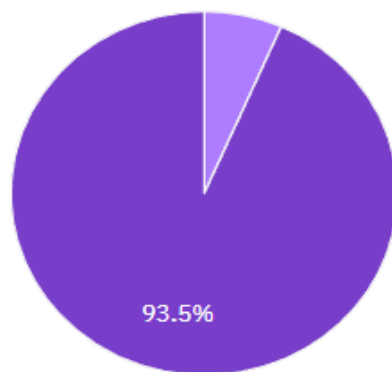
Web Frameworks Desired



Demographics

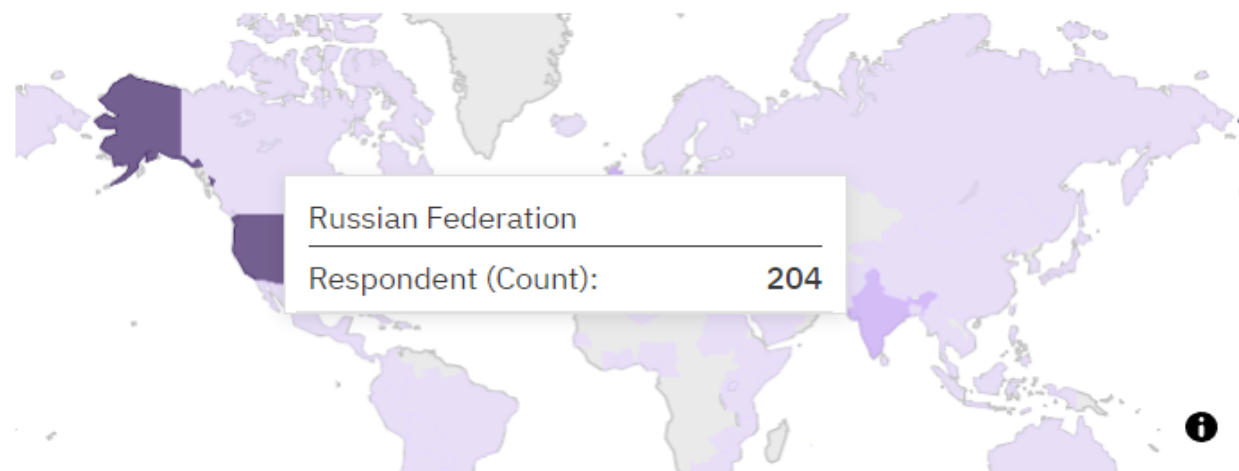
Respondent classified by Gender

Gender
Woman Man

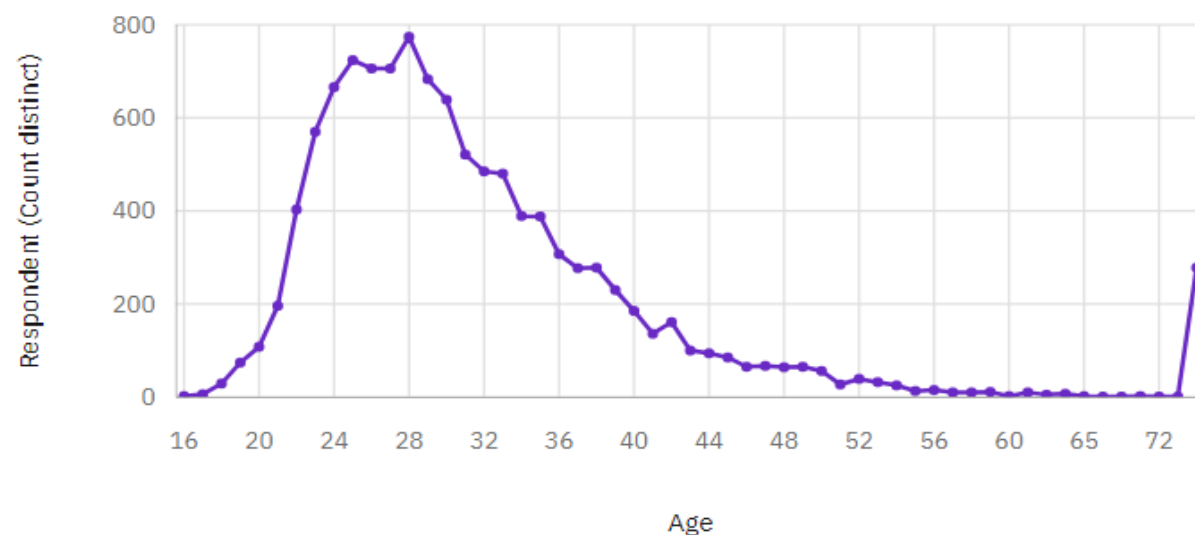


Respondent classified by Gender

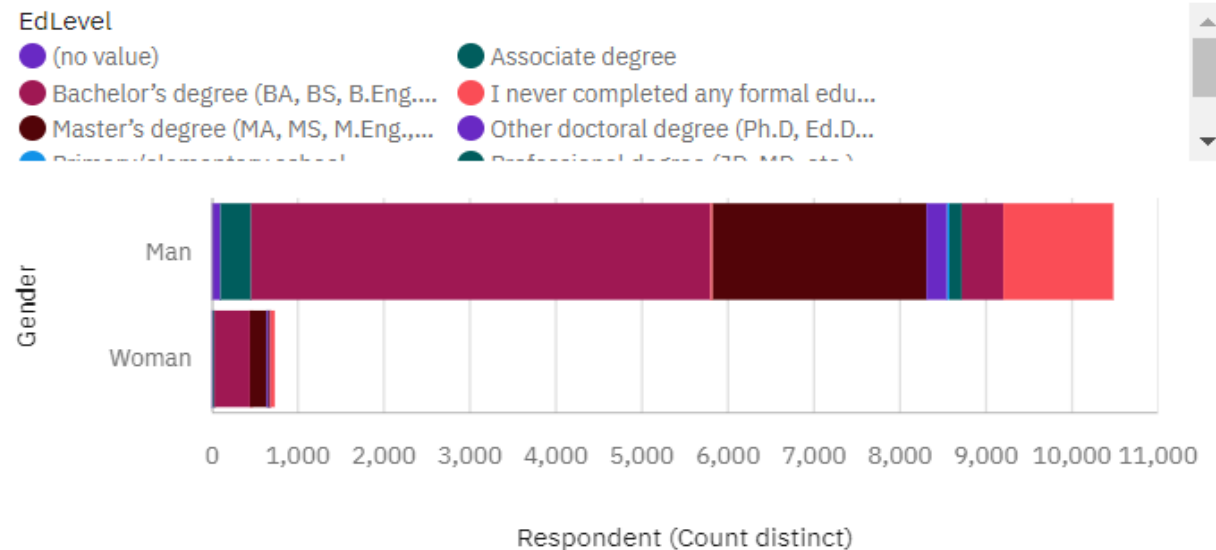
Respondent (Count)
1 3,058



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level



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OVERALL FINDINGS & IMPLICATIONS

Findings

- Platforms Most in Desire:
 - AWS: Most desired platform.
 - Docker: Second place.
- Web Frameworks Desired:
 - Node.js: Largest segment in demand.
 - React.js: Second place
- Languages Desired Next Year:
 - JavaScript: Most desired programming language.
 - Python: Second most desired.
- Databases Desired Next Year:
 - MySQL: Leading database in demand.
 - PostgreSQL: Second most desired

Implications

- AWS: High demand for cloud computing skills, leading to increased job opportunities and the importance of AWS certification.
- Docker: Growing importance of containerization and DevOps practices, enhancing cross-platform development and deployment.
- Node.js: Popular for server-side development and real-time applications, valued for its scalability and performance.
- React.js: Essential for front-end development, known for building dynamic user interfaces with a strong community and ecosystem.

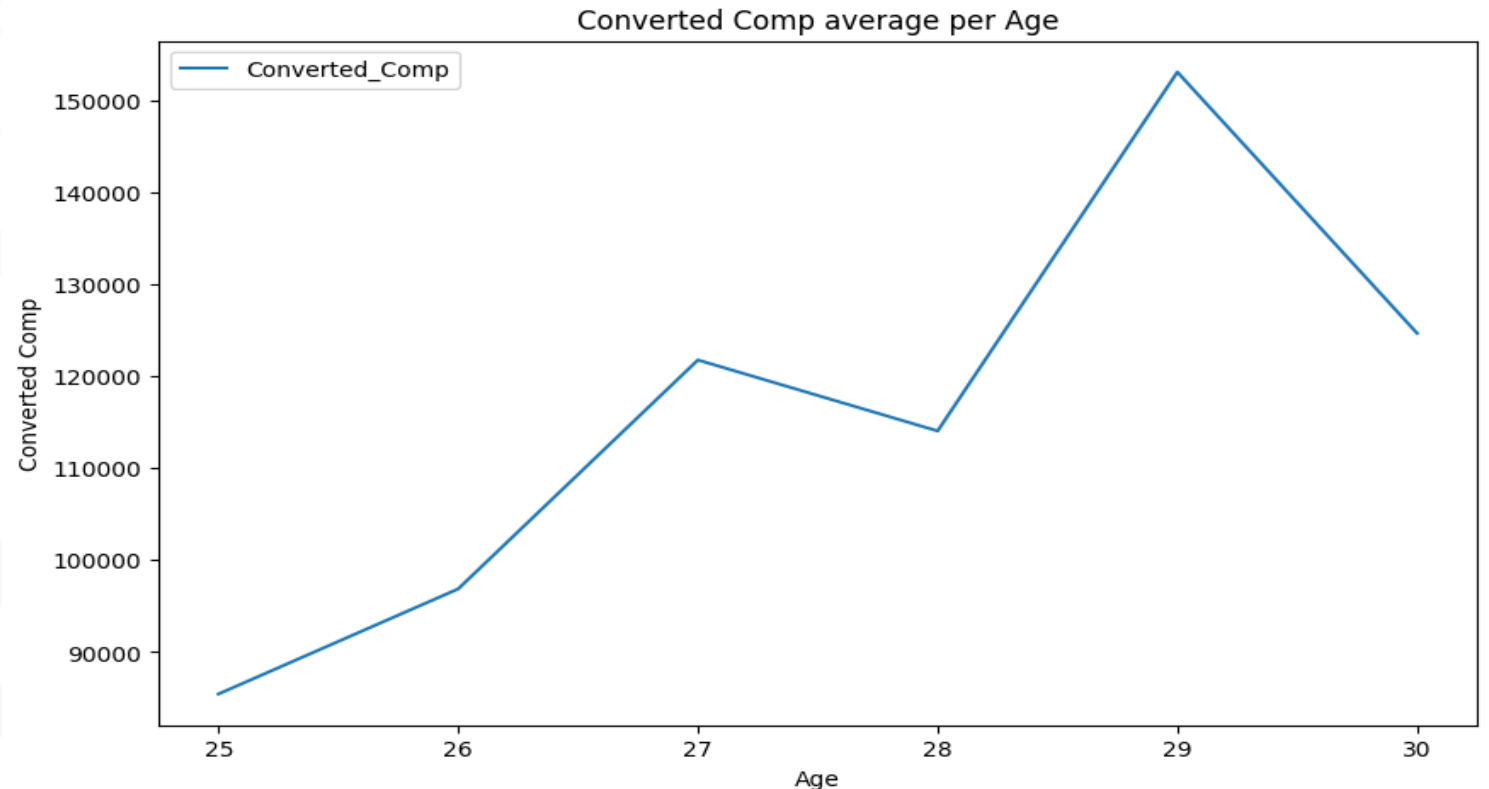
CONCLUSION



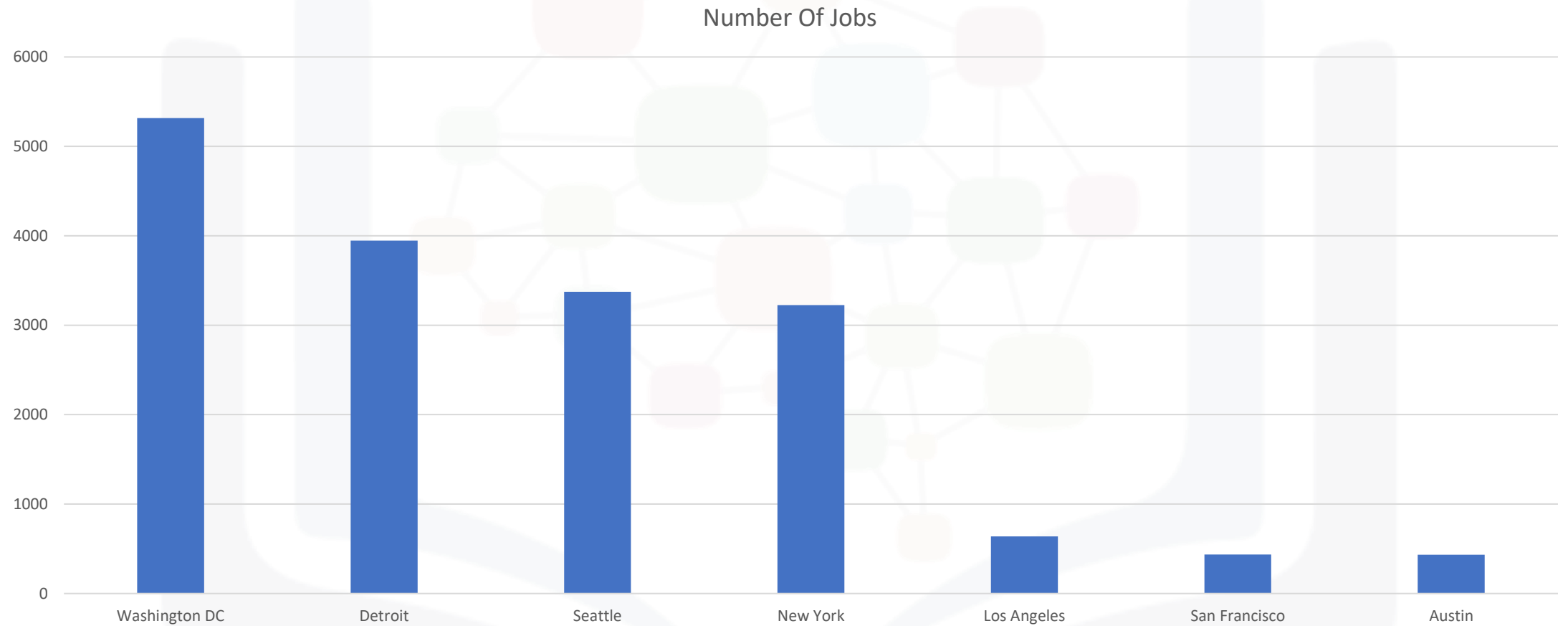
- **Summary of Trends:** JavaScript, HTML/CSS, SQL, and Python are the most widely used programming languages, while MySQL, PostgreSQL, and AWS are highly desired technologies.
- **Skill Demand:** There is a strong demand for web development, cloud computing, and data management skills.
- **Professional Growth:** Acquiring expertise in these areas can enhance career opportunities and marketability.
- **Organizational Focus:** Companies should invest in training programs to equip their teams with these in-demand skills.
- **Continuous Learning:** Staying updated with the latest trends and technologies is crucial for success in the rapidly evolving tech industry.

APPENDIX

- Annual Compensation with Respect to Age in Dollars



JOB POSTINGS



POPULAR LANGUAGES

