Stack Overflow Developer Survey 2019

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OUTLINE

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EXECUTIVE SUMMARY

- Analysis of recent data collected from diverse demographic groups within the technological professional community sheds light on both current and future trends in **programming languages**, **databases**, **web frameworks**, and **platforms**.

- Current Trends:
    - Dominance of Python, HTML/CSS, and JavaScript in programming languages.
    - Prevailing use of mySQL, with Windows, Linux and Docker leading in platform choices.

- Future Aspirations:
    - Growing interest in Kotlin and Go for programming languages.
    - Emerging curiosity in PostgreSQL, MongoDB and Redis for databases and React.js for web frameworks.

INTRODUCTION

- Explore current data trends using visualizations

- Uncover patterns for future trends

- Spotlight on respondent demographics for a nuanced perspective.
  - Age
  - Gender
  - Country
  - Education Level

METHODOLOGY

- Data Collection
  - Web scraping
  - APIs
  - Request library
- Data Wrangling
- Exploratory Data Analysis
  - Data distribution
  - Outliers
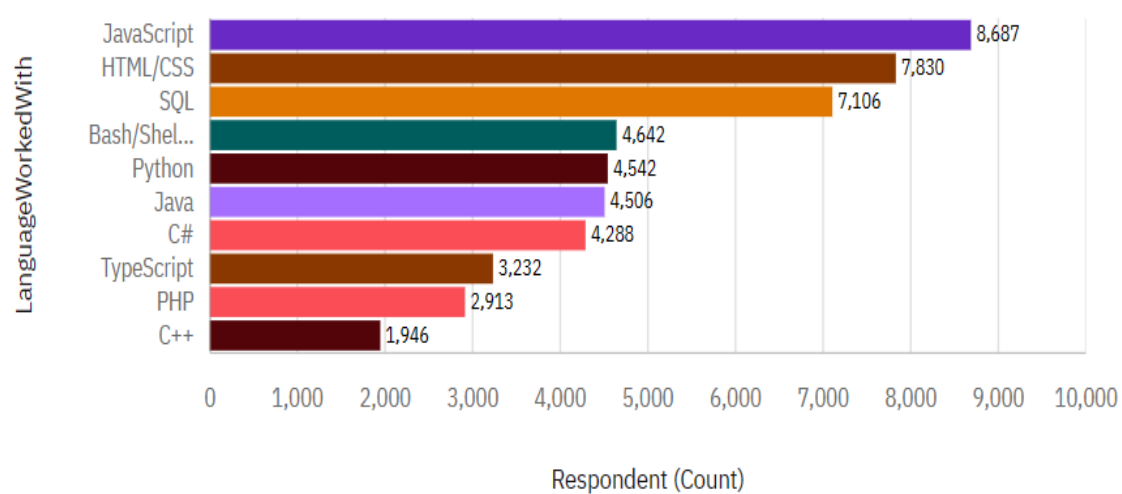 - Correlations
- Data Visualization
  - Graphs

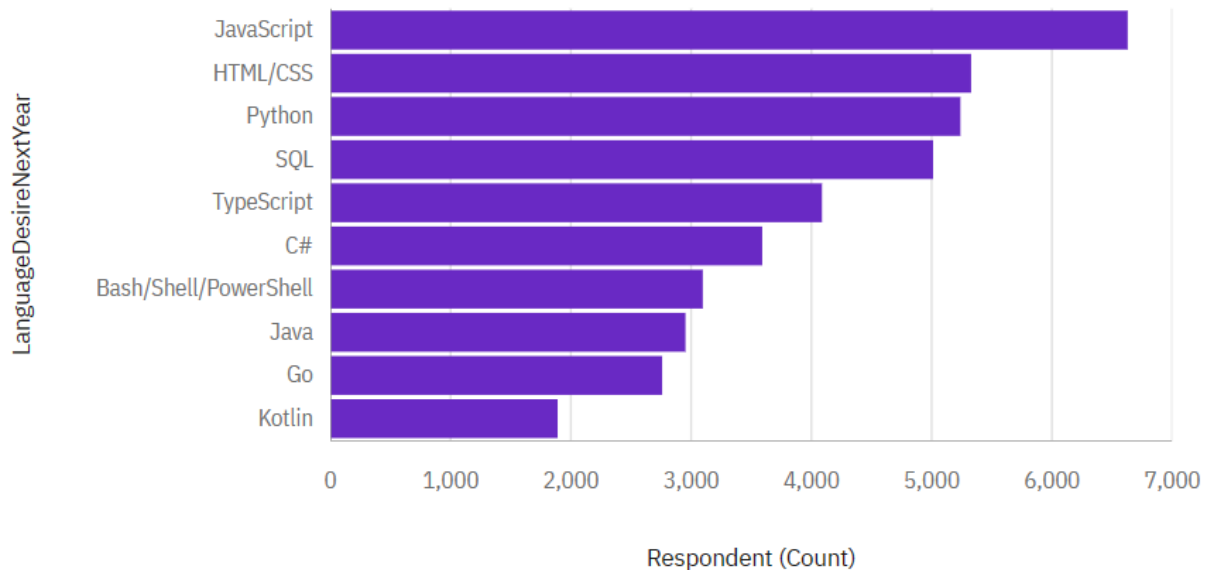# RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript and HTML/CSS maintain their top positions, albeit experiencing a slight decline.

- Decline in Java and PHP.
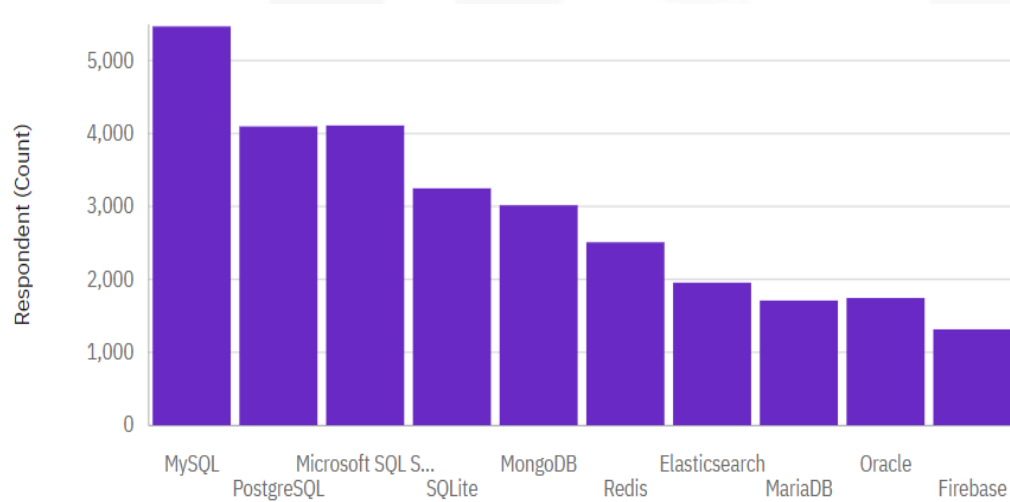
- Uprising Kotlin and Go languages
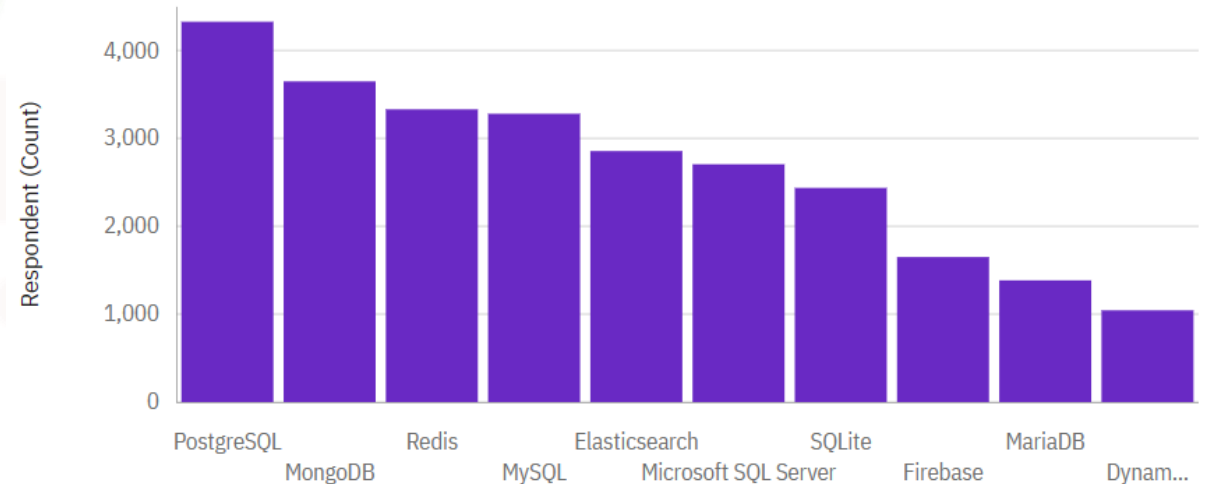
Implications

- Programmers shifting to newer languages.

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DATABASE TRENDS

Current Year

Next Year

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Decline in mySQL

- Huge rise in PostgreSQL and MongoDB

- Slight rise in Redis

Implications

- Databases trend shift.

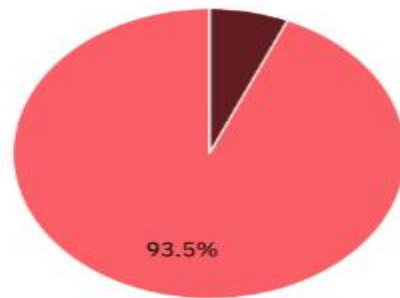- Establishment of PostgreSQL and MongoDB in the market.

DASHBOARD

https://drive.google.com/file/d/1Z75XlH2adF4QDrmnHR7lVjKNGol4vh27/view?usp=sharing

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DASHBOARD
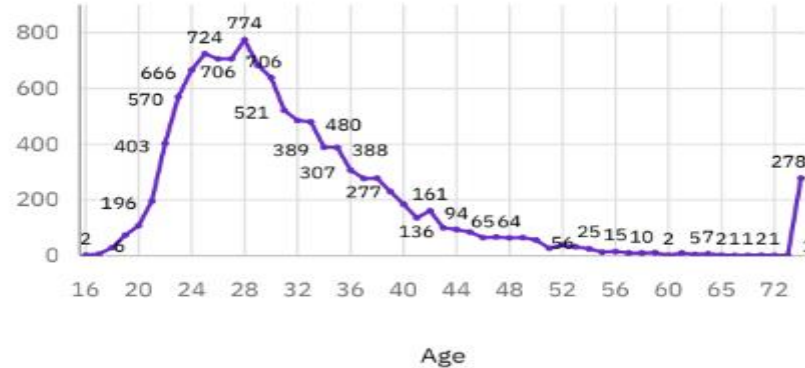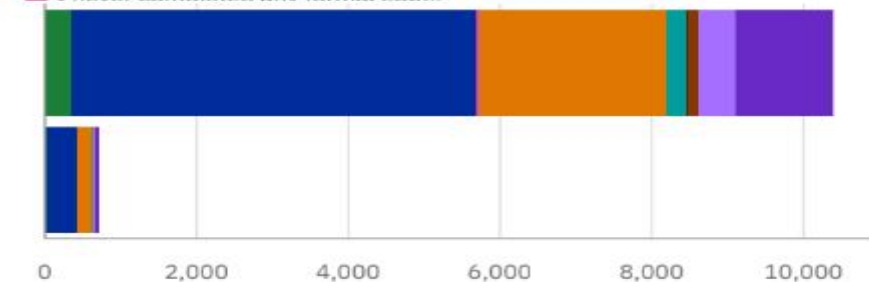
DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript and HTML/CSS persist at the forefront but show a slight decline.
- MySQL usage sees a decline.
- Kotlin, Go and Redis are on the rise.

Implications

- Programmers are adapting to newer languages.
- Organizations may need to consider the evolving landscape for skill requirements.
- Significant shifts in database preferences call for industry adaptation.

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CONCLUSION

- Evolving Landscape: The findings reflect a dynamic and evolving landscape in both programming languages and databases, underscoring the industry's responsiveness to emerging technologies.

- Adaptation Imperative: Professionals and organizations must adapt to the changing trends, embracing newer languages and databases to stay relevant and competitive in the ever-evolving tech ecosystem.

- Strategic Considerations: The identified trends provide valuable insights for strategic decision-making, guiding individuals and businesses in aligning their skills and infrastructure with the current and future demands of the tech industry.
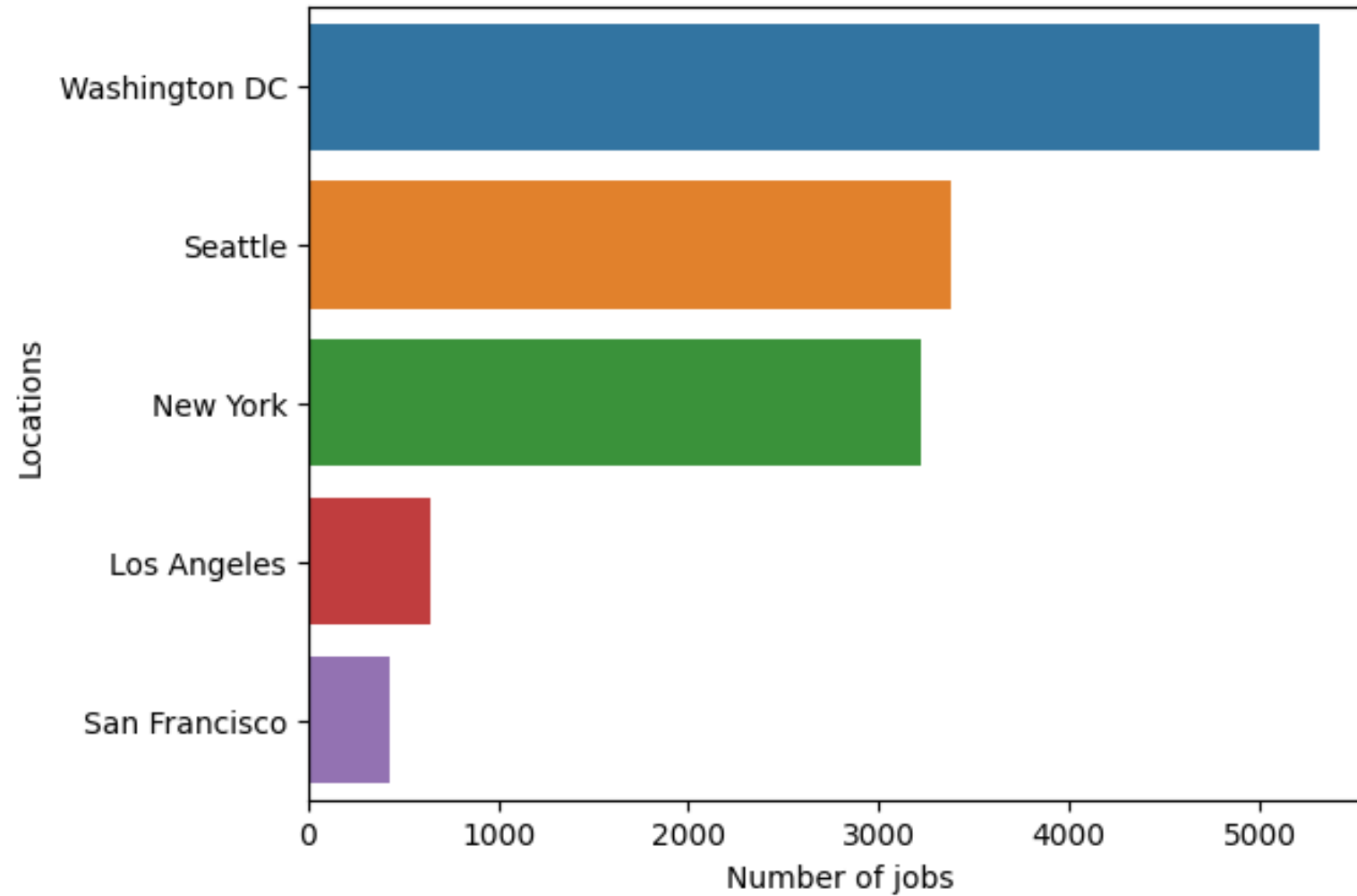
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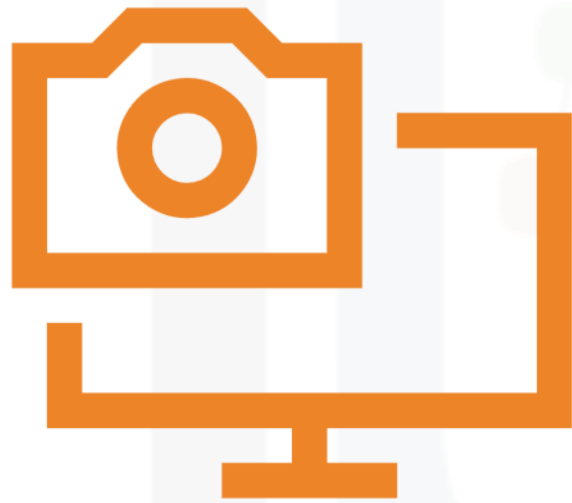
JOB POSTINGS

POPULAR LANGUAGES