

# Technology Analysis Presentation

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# Executive Summary

Trends in programming languages and databases

Demographics survey

Technological gap in countries

Gender gap in jobs

# Introduction

## **About:**

- Analyzing the trends in software development

## **Purpose:**

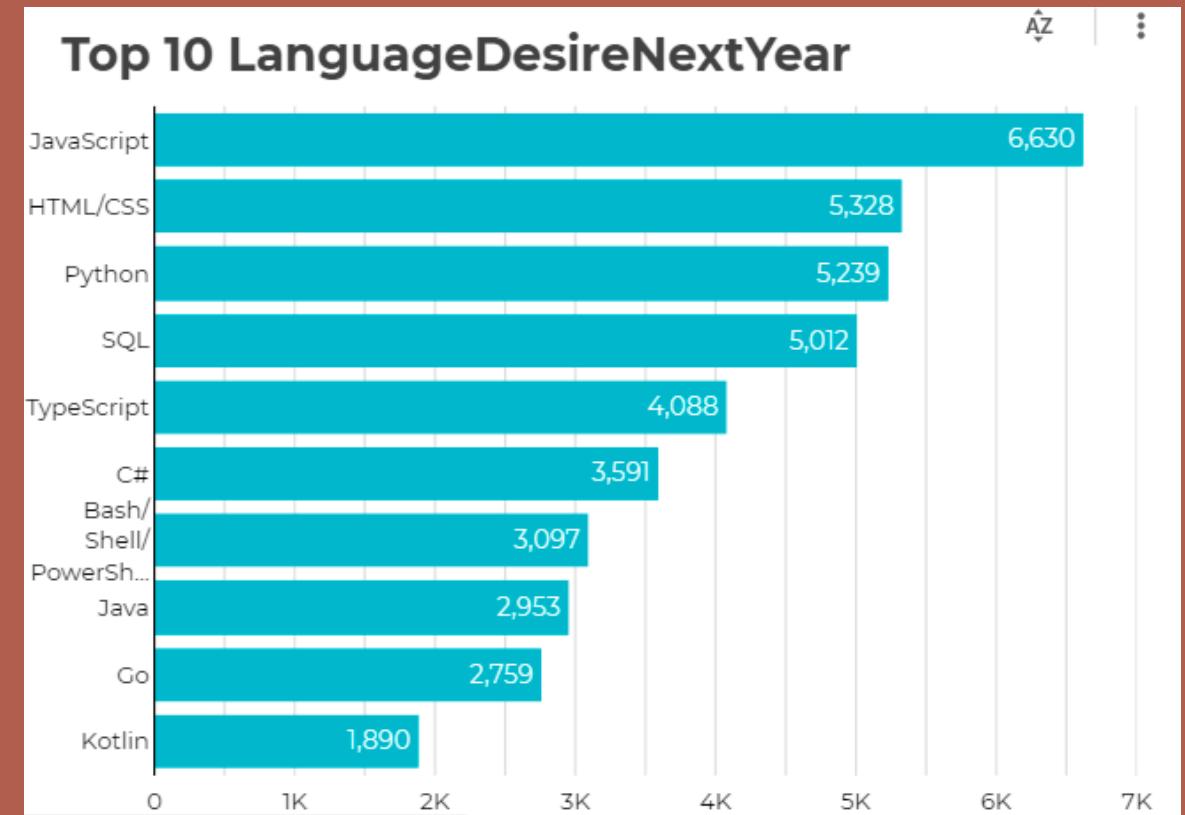
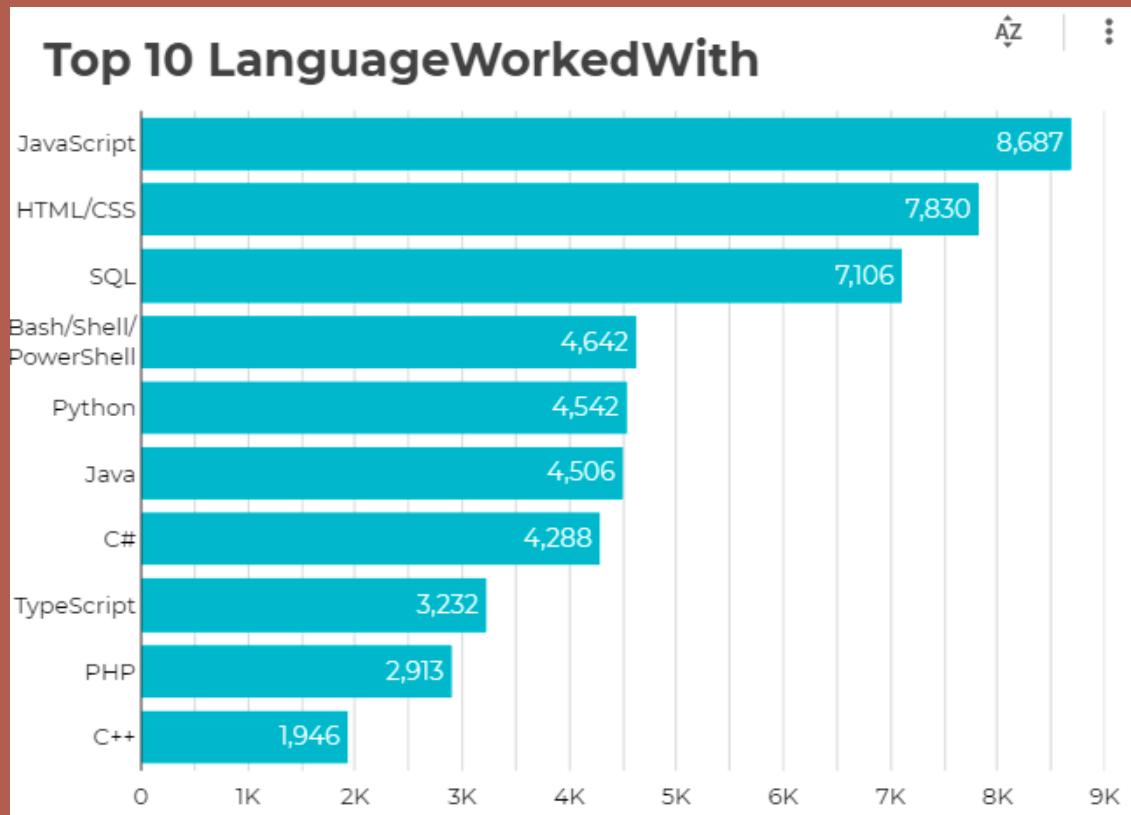
- Identify skill requirements for future
- What are the top programming languages in demand?
- What are the top database skills in demand?
- What are the popular IDEs

**Audience:** Human Resource and IT Head

# Methodology

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

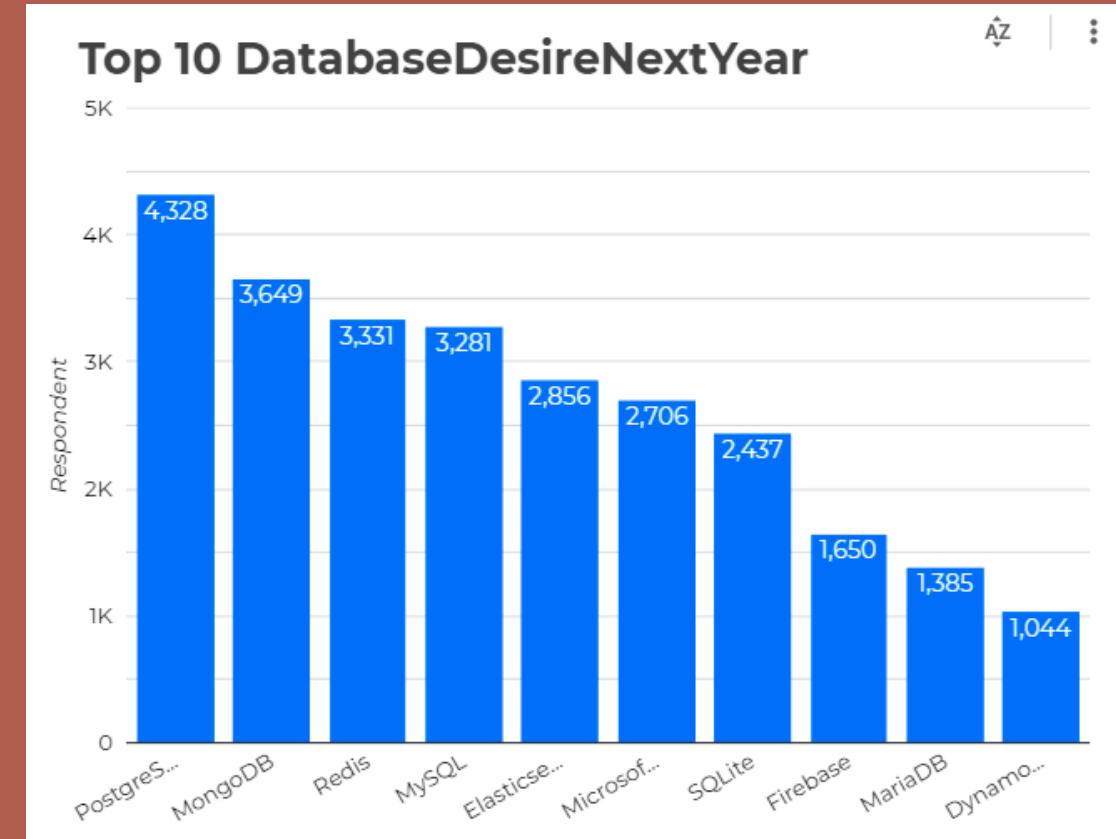
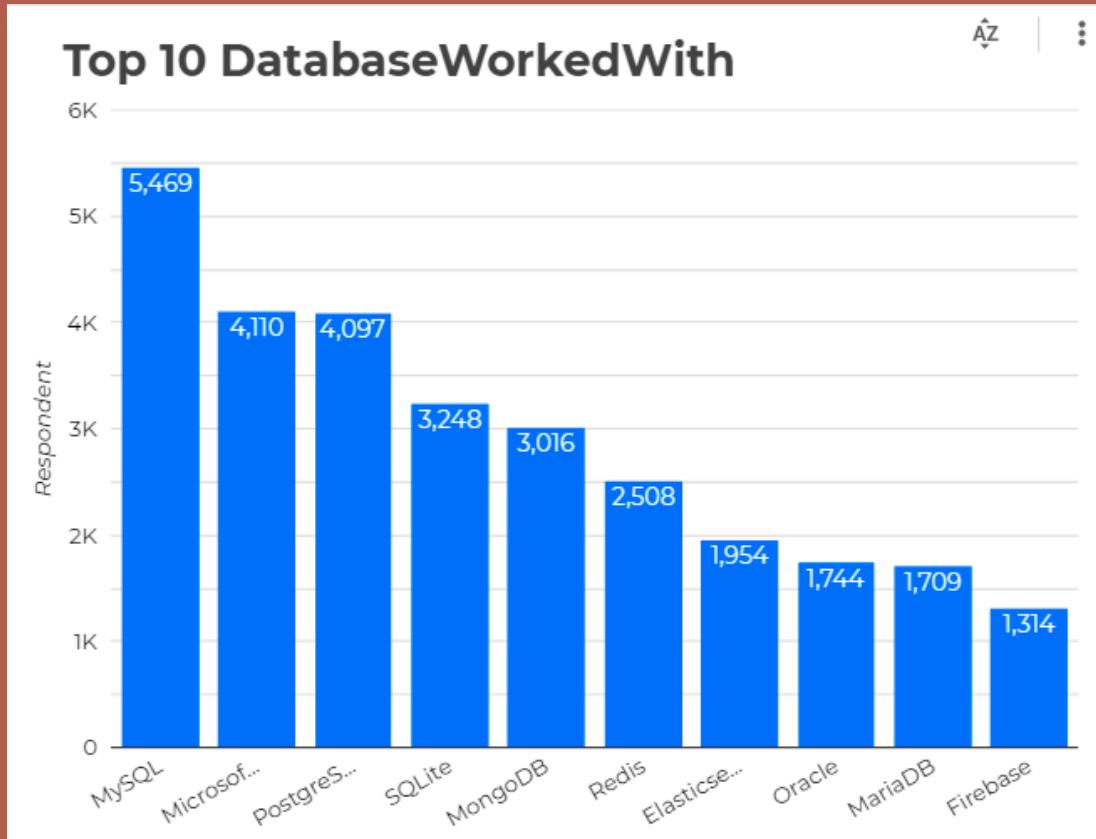
# PROGRAMMING LANGUAGE TRENDS



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

- **Findings**
  - JavaScript, HTML/CSS, SQL are top 3 this year
  - Python and Typescript becoming popular next year
  - PowerShell edged out in next year
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- **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

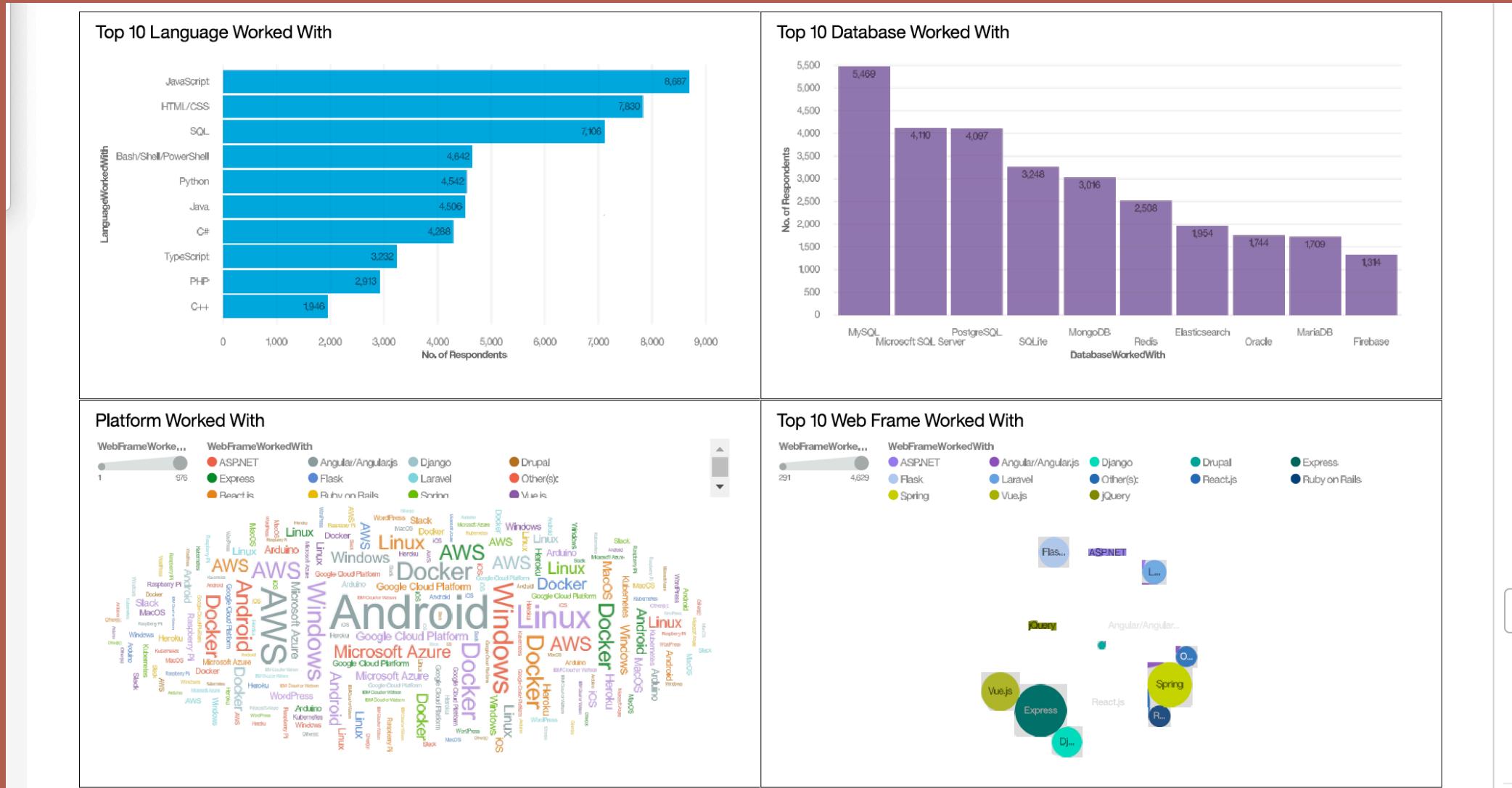


# DATABASE TRENDS -FINDINGS & IMPLICATIONS

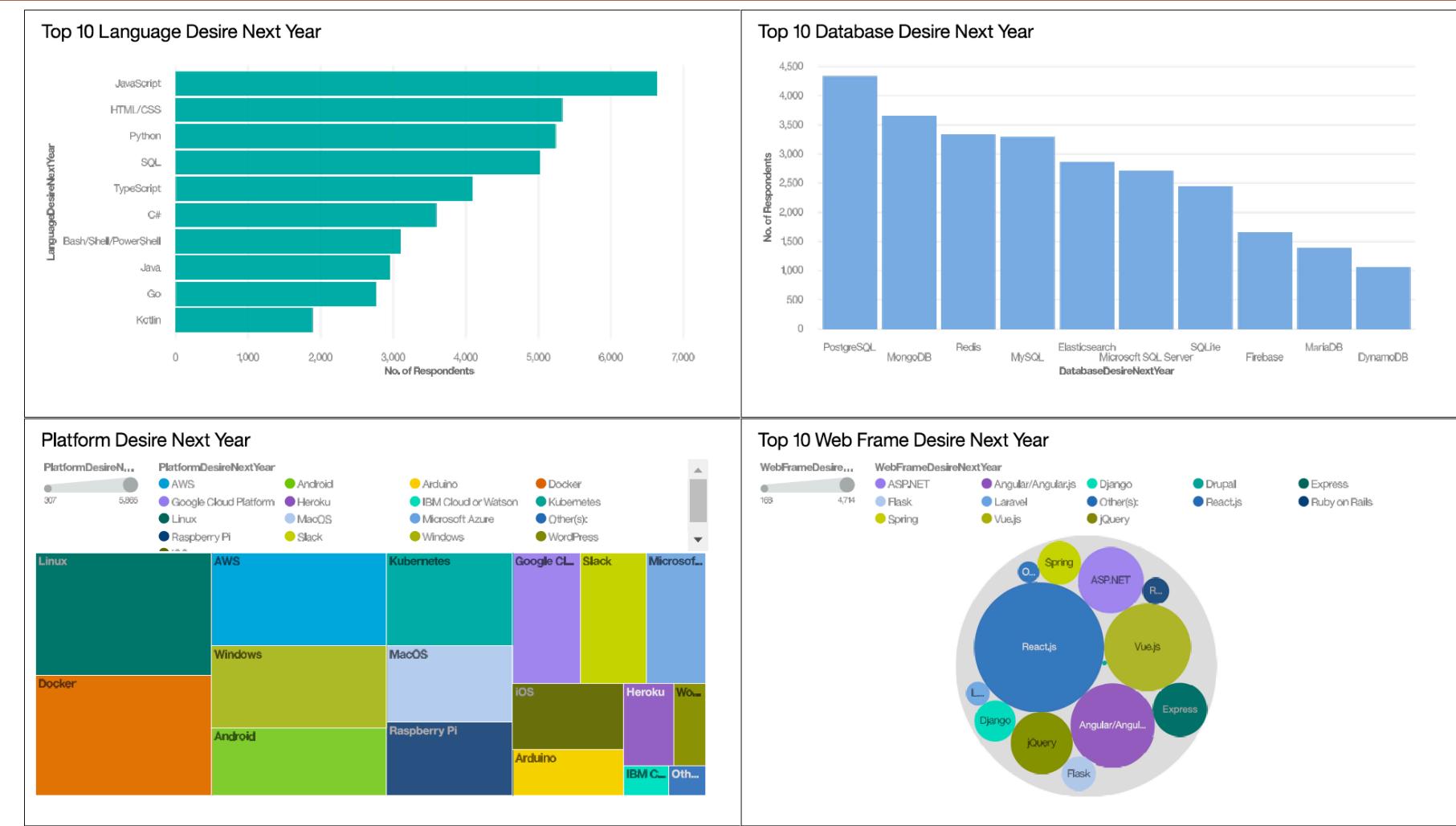
- **Findings**
- MySQL most popular
- Behind is Microsoft SQL
- MongoDB and Redis are upcoming favorites
- New kid on the block:Elasticsearch
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- **Implications**
- Open source databases are still preferable in companies
- NoSQL databases will make an impact for storing non relational data
- Redis supports abstract datatypes
- Pre tuned search to website, app, or ecommerce store

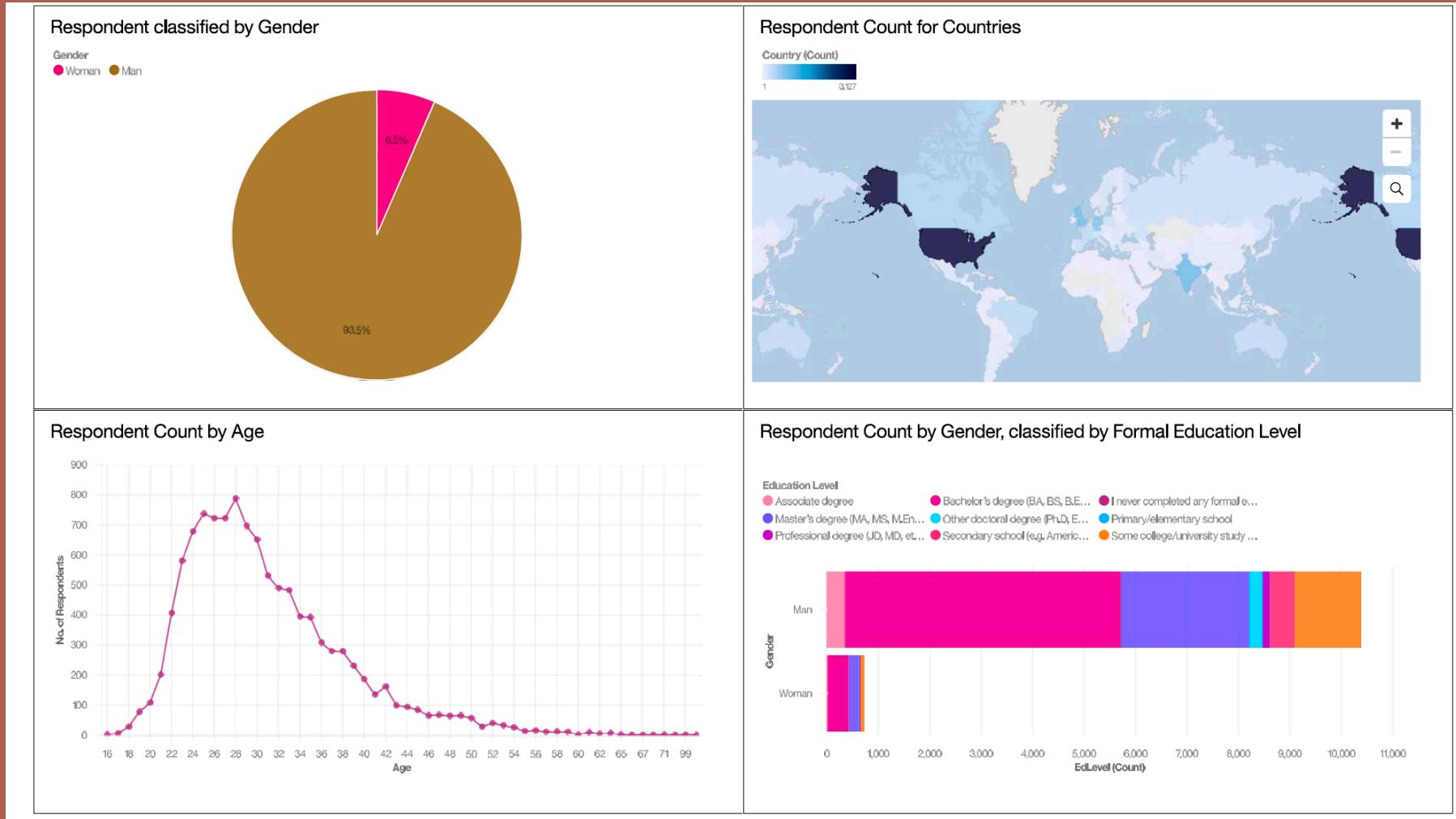
# DASHBOARD TAB 1



# DASHBOARD TAB 2



# DASHBOARD TAB 3



# Discussion

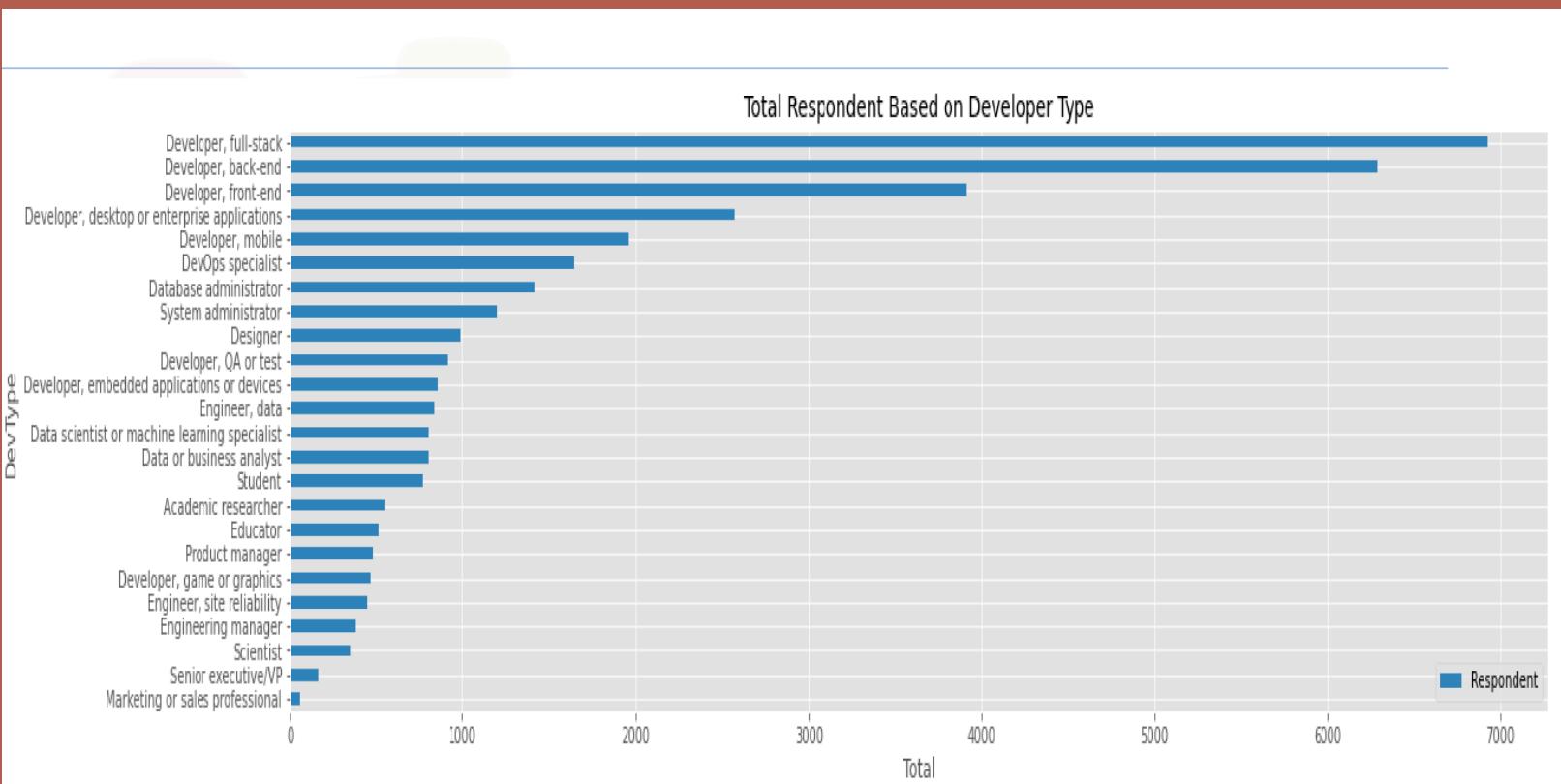
- **Findings**
- Fast changing technology every year
- Concentration on several countries like USA and India
- Gender gap in technology jobs
- Platforms like Docker and AWS are growing
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- **Implications**
- Companies need to be flexible and adjust to rapid changes
- Need to spread technology out to lagging countries
- Impact of job hiring's
- Shift to faster app deployments and cloud services in future

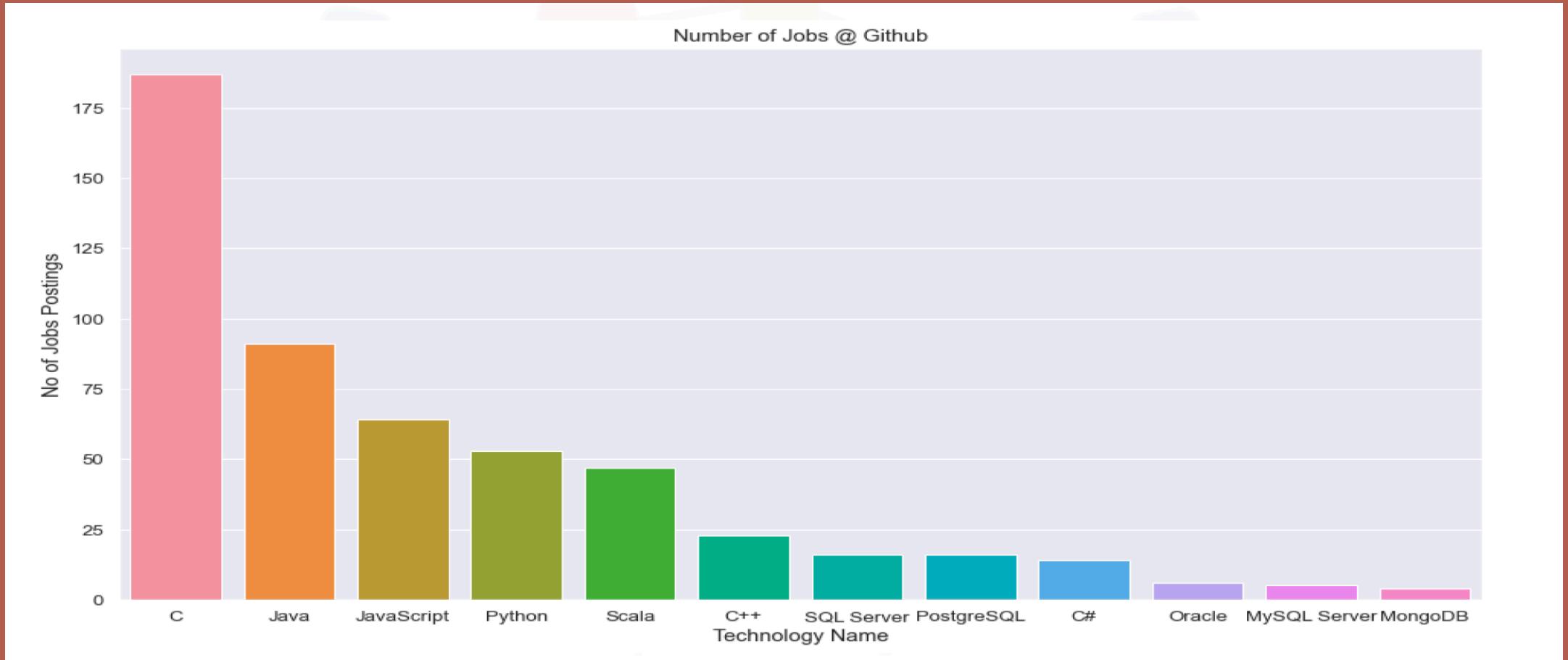
# Conclusion

- Technology Trends for current and next year
- Programming Languages, Database and Platform overview
- Demographics overview
- Actions to be taken
- In future, incorporate Machine Learning to predict trends and salaries

# Appendix



# GITHUB JOB POSTINGS



# POPULAR LANGUAGES

