STACK OVERFLOW DEVELOPER SURVEY 2019

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October 3, 2024

OUTLINE

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

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EXECUTIVE SUMMARY

- Analysis goal

- Methodology
  - Data gathering
  - Data analysis
  - Data visualization

- Results

- Discussion

- Final conclusion

INTRODUCTION

- Analyze datasets to identify trends in emerging technologies

- Sources: Surveys, Job postings, Blog posts

- NB: Results do not represent everyone

METHODOLOGY

- Collecting survey data
  - Web Scraping
  - APIs
  - Request library

- Data wrangling

- Exploratory data analysis
  - Analysing data distributions
  - Handling outliers
  - Exploring correlations

- Data visualization
  - Distribution, relationship, comparison of data with charts
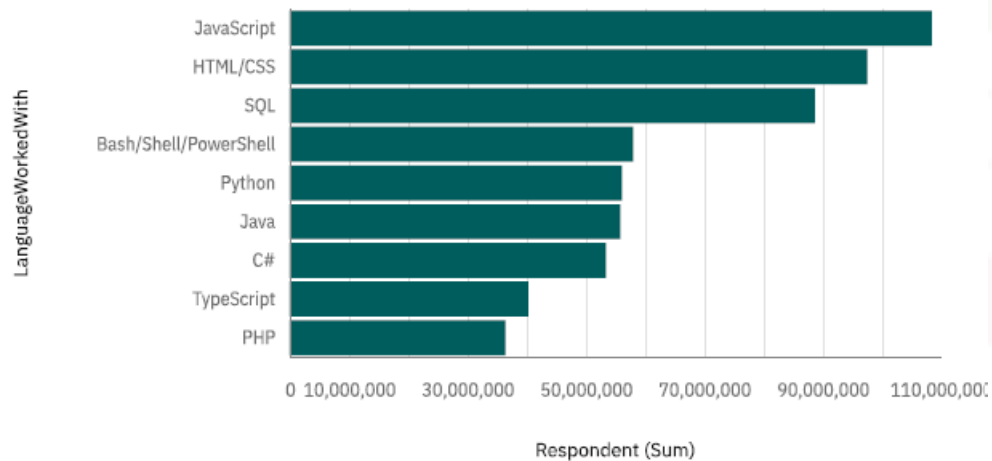 - Dashboard

RESULTS
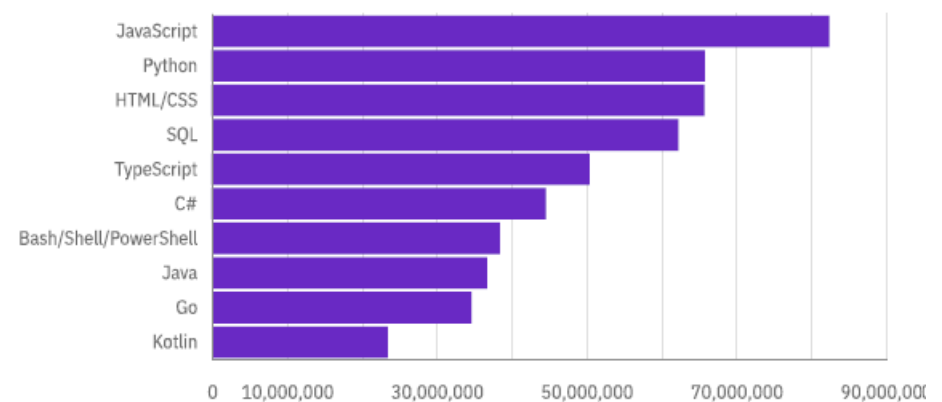
PROGRAMMING LANGUAGE TRENDS

Current Year

Top 10 Programming Language Worked With

Next Year

Top 10 Languages Desire Next Year

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript the most worked with programming language
- HTML/ CSS is the second most popular language
- SQL is the third one

Implications

- JavaScript and Python continued or growing demand for professionals
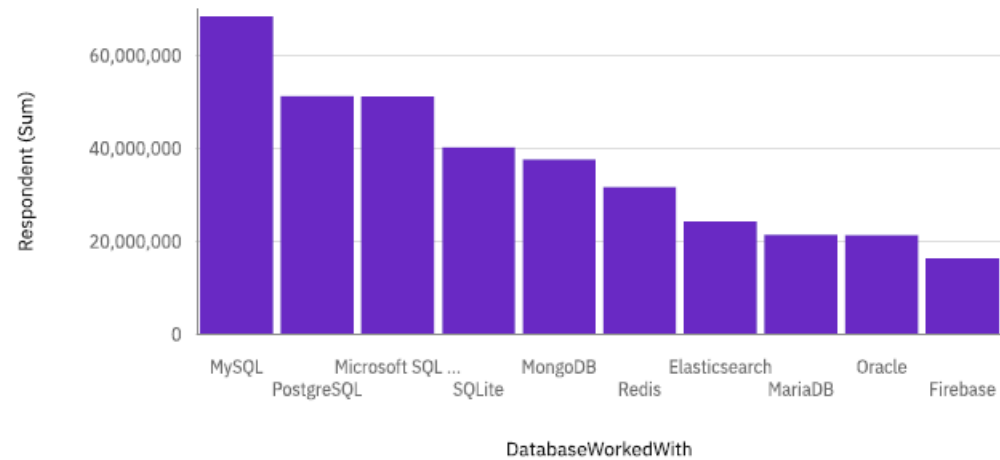- HTML/CSS slight decline in future interest
- SQL consistent demand suggest

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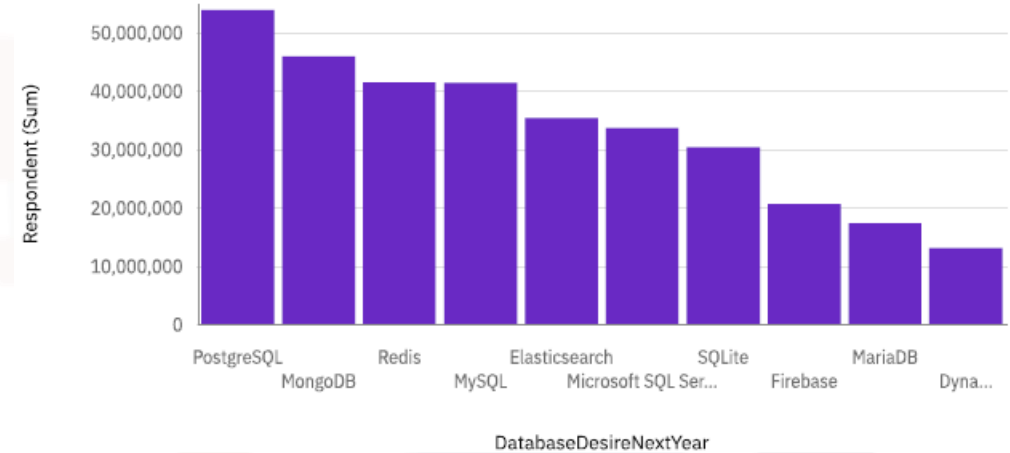# DATABASE TRENDS

Current Year

Top 10 Databases Worked With

Next Year

Top 10 Databases Desire Next Year

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most frequently worked with database

- Microsoft SQL in the top 3

- PostgreSQL and MicrosoftSQL has almost the same usage

Implications

- PostgreSQL's rising popularity

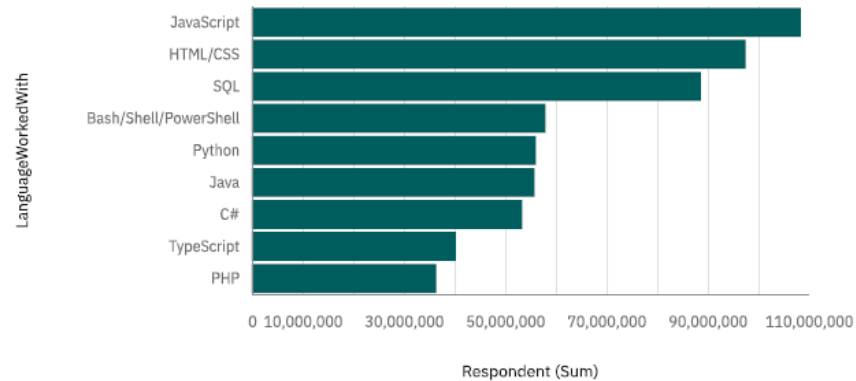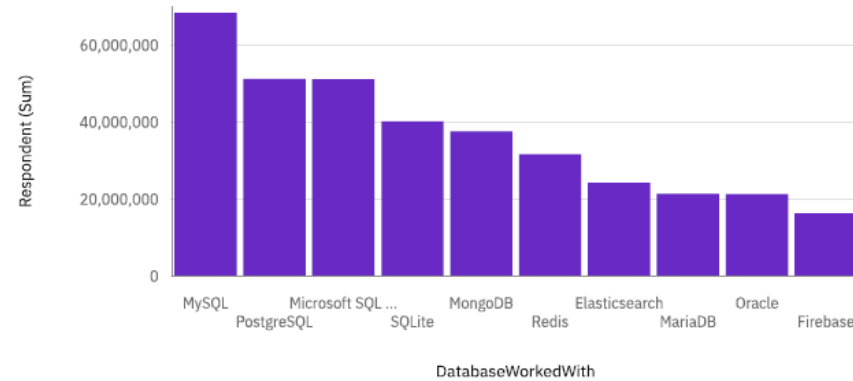- Decline in MySQL usage

- Steady demand for Redis and Mungo DB

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DASHBOARD

[GitHub link](#)

DASHBOARD TAB 1

Current Technology Usage

Top 10 Programming Language Worked With 1
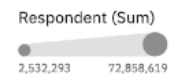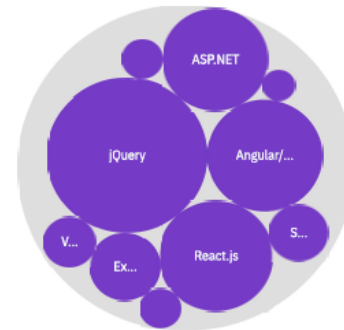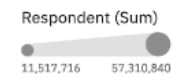

Top 10 Databases Worked With 2

PlatformWorkedWith sized by Respondent 3

Respondent (Sum)
2,532,293   72,858,619

WebFrameWorkedWith, Respondent 4

Respondent (Sum)
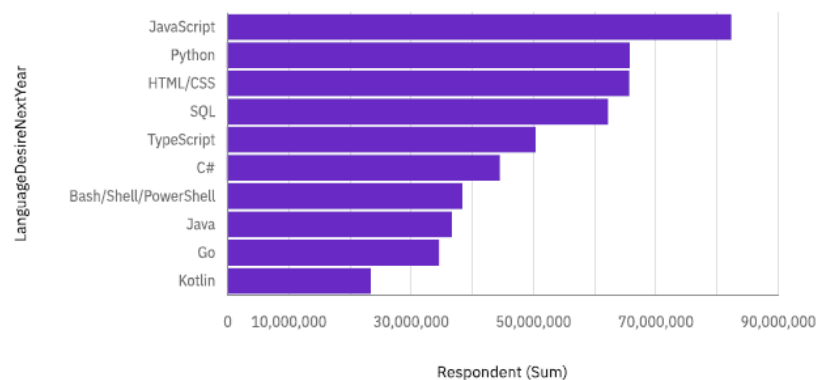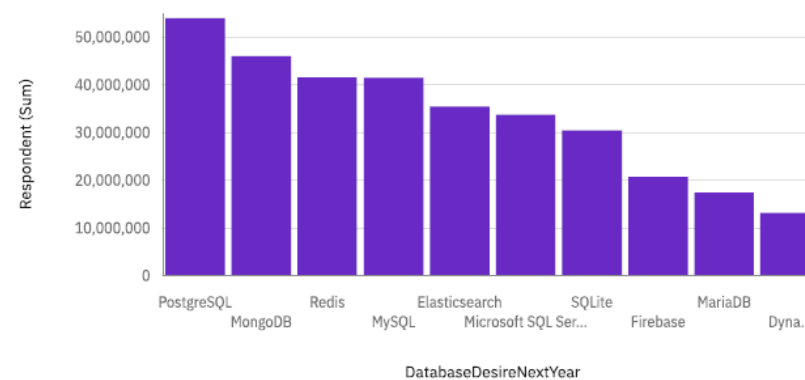11,517,716   57,310,840

DASHBOARD TAB 2

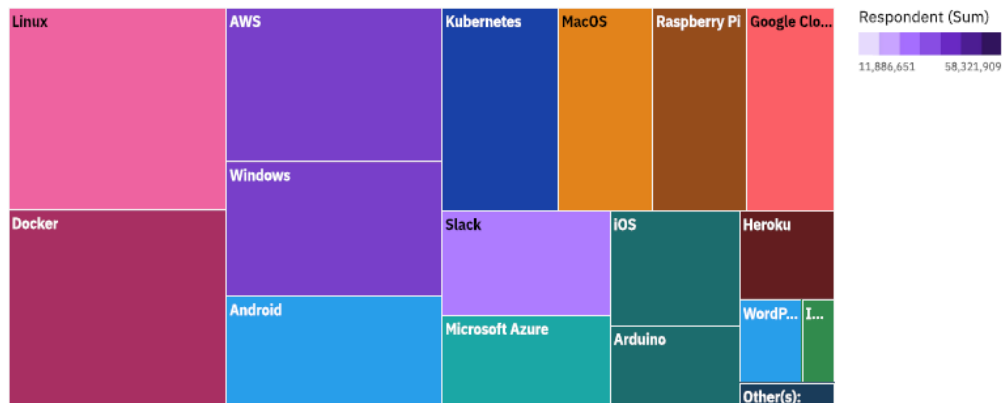Future Technology Trend

Top 10 Languages Desire Next Year

Top 10 Databases Desire Next Year

Platform Desire Next Year
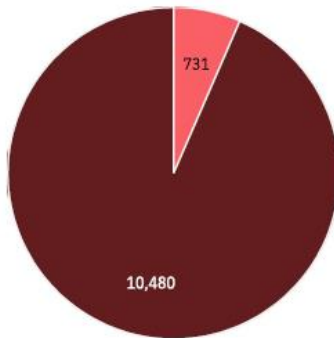

Top 10 Web Frame Desire Next Year
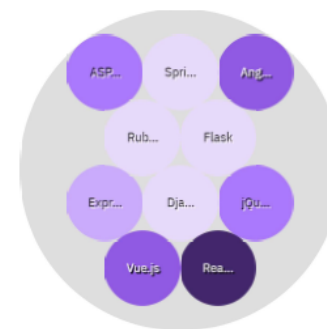
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DASHBOARD TAB 3
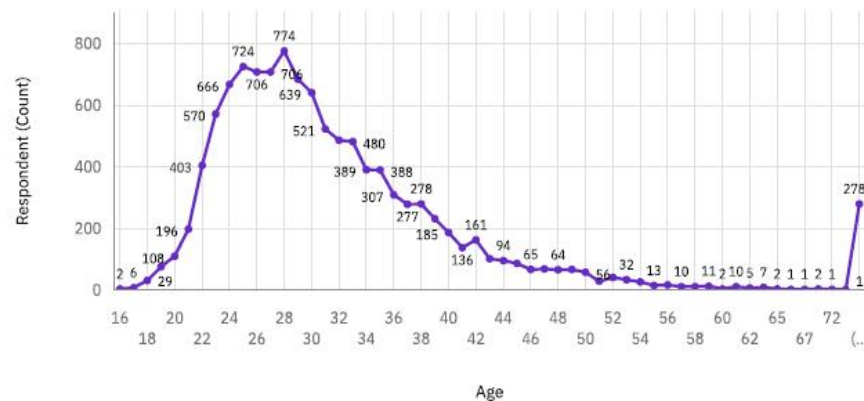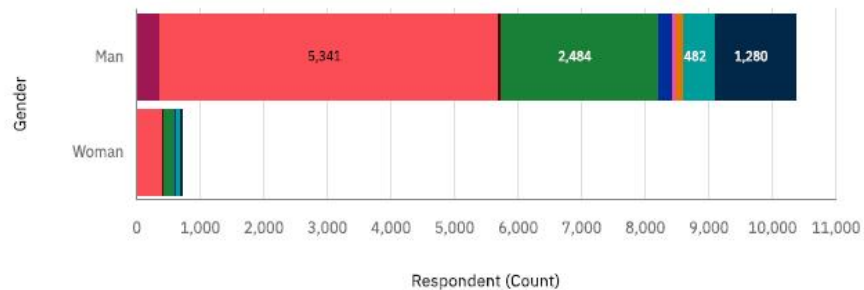
DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Increasing Linux dominance
- Mostly USA respondants
- Only 2% of the respondants are woman

Implications

- Rising popularity of Python
- AWS leading position
- Implication 3

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CONCLUSION

- JavaScript and Python: The high demand for JavaScript and Python indicates their critical roles in web development, data science, and automation, suggesting these skills will remain highly valuable.

- MySQL's Reliability: MySQL's strong presence as the most desired database highlights its reliability and continued importance in database management.

- Linux Expertise: The preference for Linux underscores its significance in server management and cloud computing, indicating a sustained need for Linux skills.

- Gender Imbalance: The significant majority of respondents from one gender category suggests potential gender imbalances, which could impact the generalizability of the findings and highlight the need for more inclusive practices.
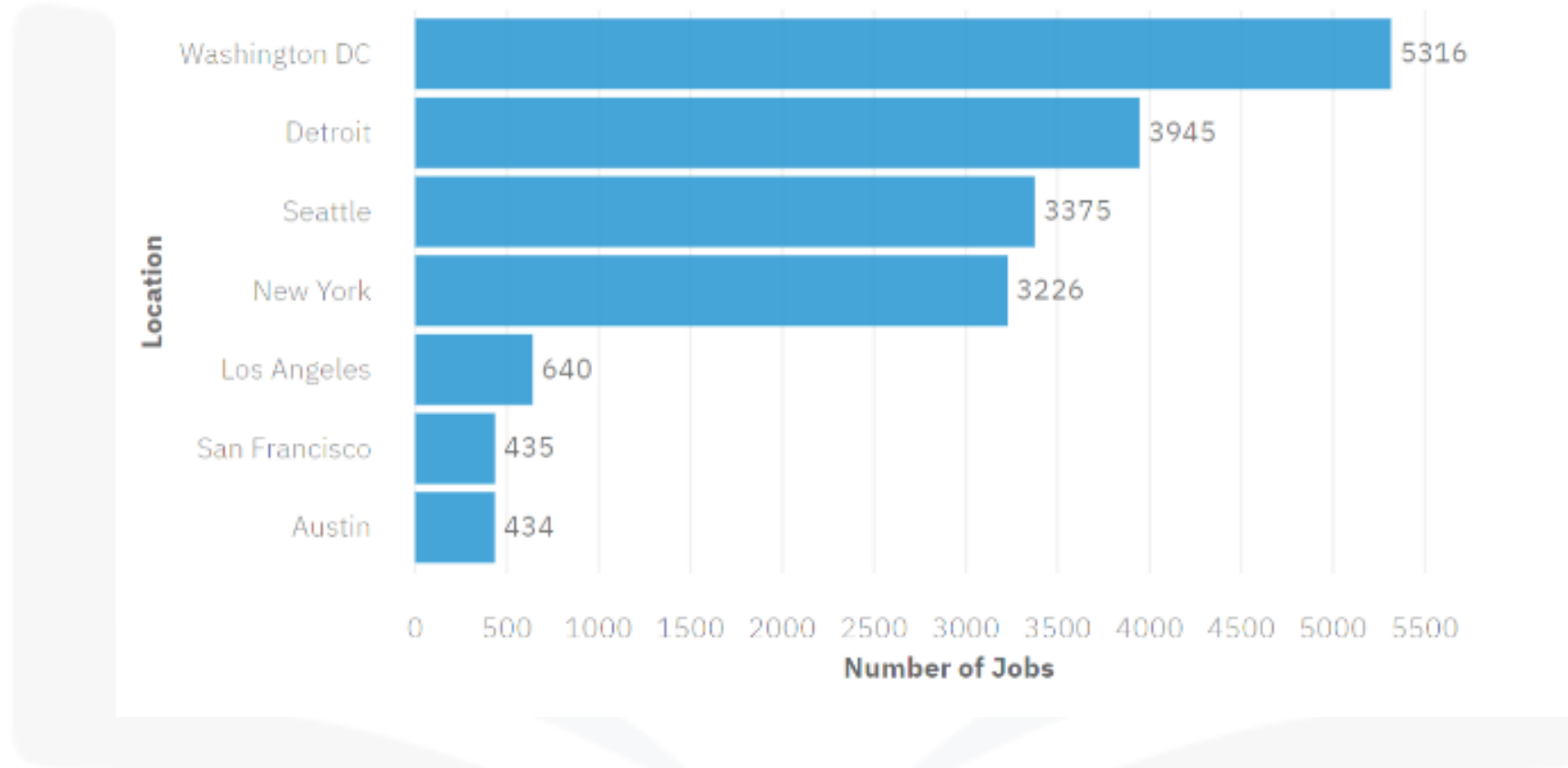
APPENDIX

JOB POSTINGS

POPULAR LANGUAGES

Bar chart titled "Average Annual Salary" by Language:

Language	Average Annual Salary
Swift	130.801
Python	114.383
C++	113.865
Javascript	110.981
Java	101.013
Go	94.082
R	92.037
C#	88.726
SQL	84.793
PHP	84.727