Technological Trends

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Skills Network

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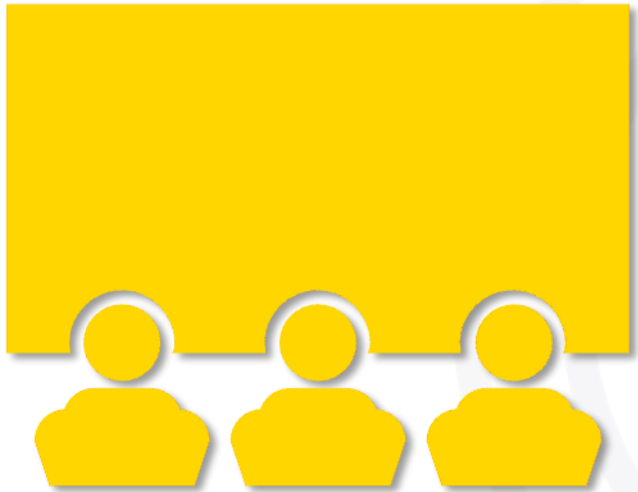
- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
 - Findings & Implications
- Conclusion
- Appendix

EXECUTIVE SUMMARY

- JavaScript is still the most popular coding language, but HTML/CSS and SQL are catching up.

- SQL related databases are the most popular.

- Amazon Web Services (AWS) will overtake Microsoft Azure.

- Respondents were generally:
  - Young
  - American
  - College educated

- Coders are showing a preference towards easier to code languages.
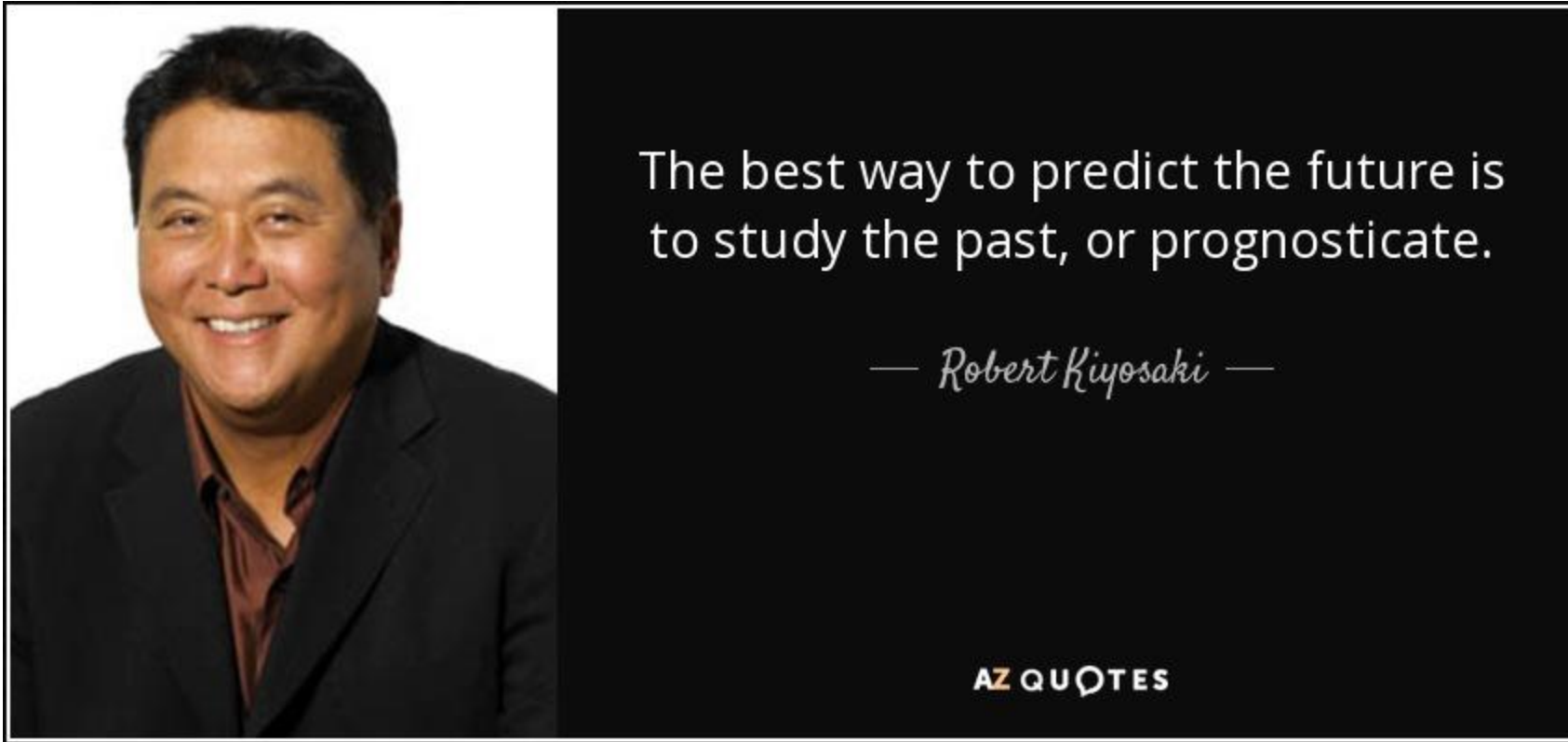
INTRODUCTION
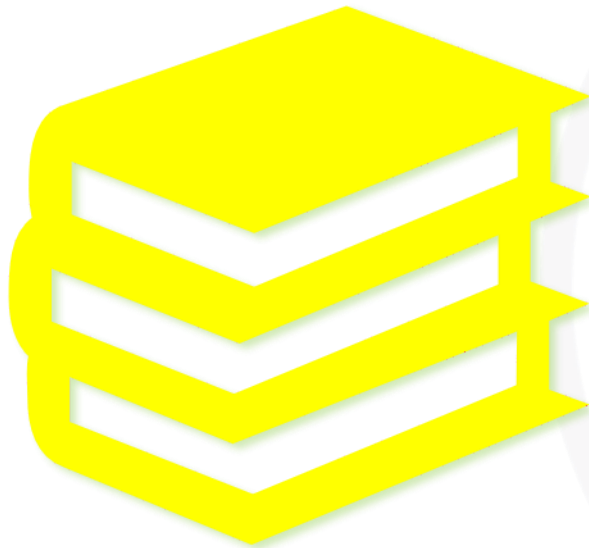
- Annual Stack Overflow Developer Survey is the most comprehensive survey of coders worldwide.

- It can be used to see what is popular now, or analyzed to see where trends may take coding in the future.

- Data can be used to determine what coding languages are the most important to learn.

- This is great information for those seeking a future in coding.
  - Salaries
  - Job Opportunities

METHODOLOGY
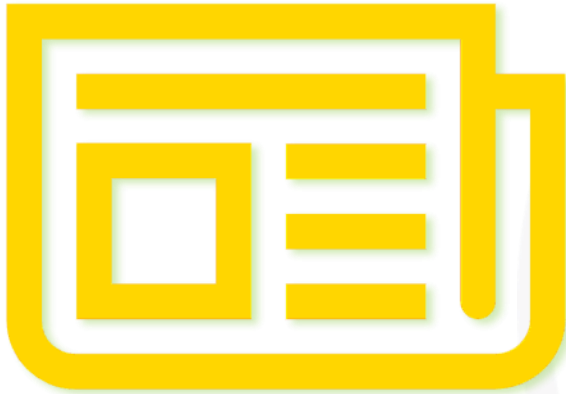
- Data Sources:
  - Jobs API (Kaggle)
  - Webscraping for job salaries
  - Stack Overflow Developer Survey

- The Stack Overflow Developer Survey was analyzed for trends.

- Respondents were allowed to select multiple languages in some categories. Data was modified so these languages are all counted individually.
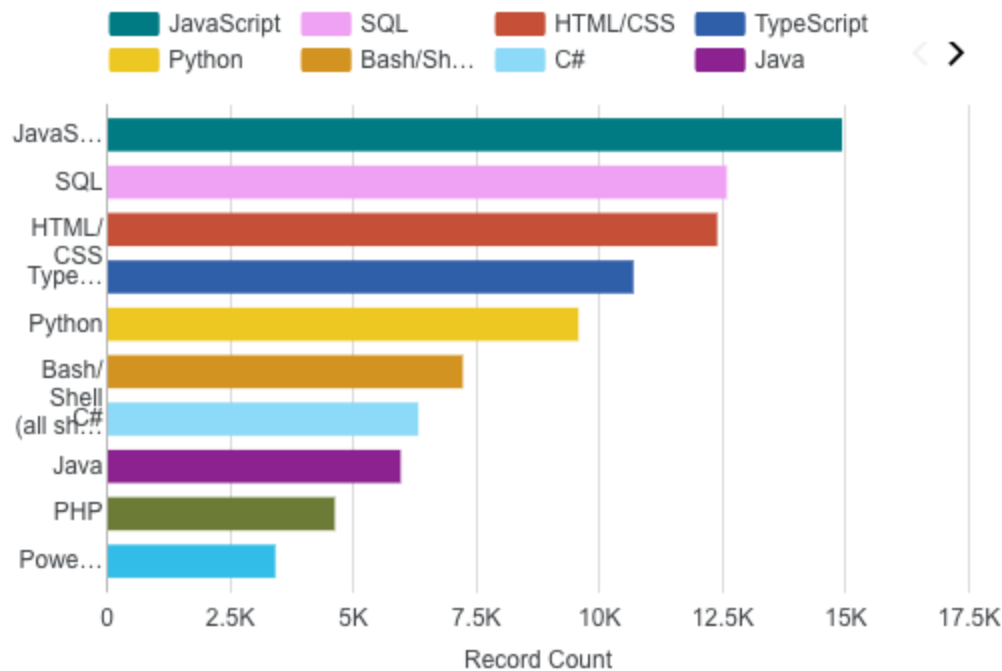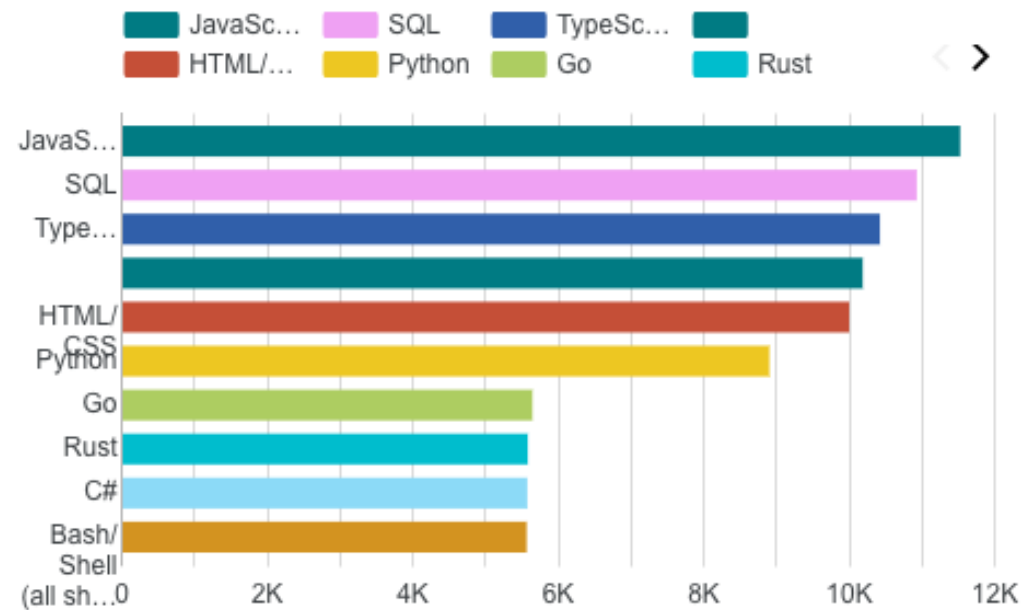
RESULTS

The best way to predict the future is to study the past, or prognosticate.

— *Robert Kiyosaki* —

AZ QUOTES

PROGRAMMING LANGUAGE TRENDS

Current Year

Most Popular Languages Used

Next Year

Languages Desired to Work With

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is currently the most commonly used language, followed closely by SQL and HTML/CSS.
- That lead is expected to drop, with languages like SQL and Python helping close the gap.
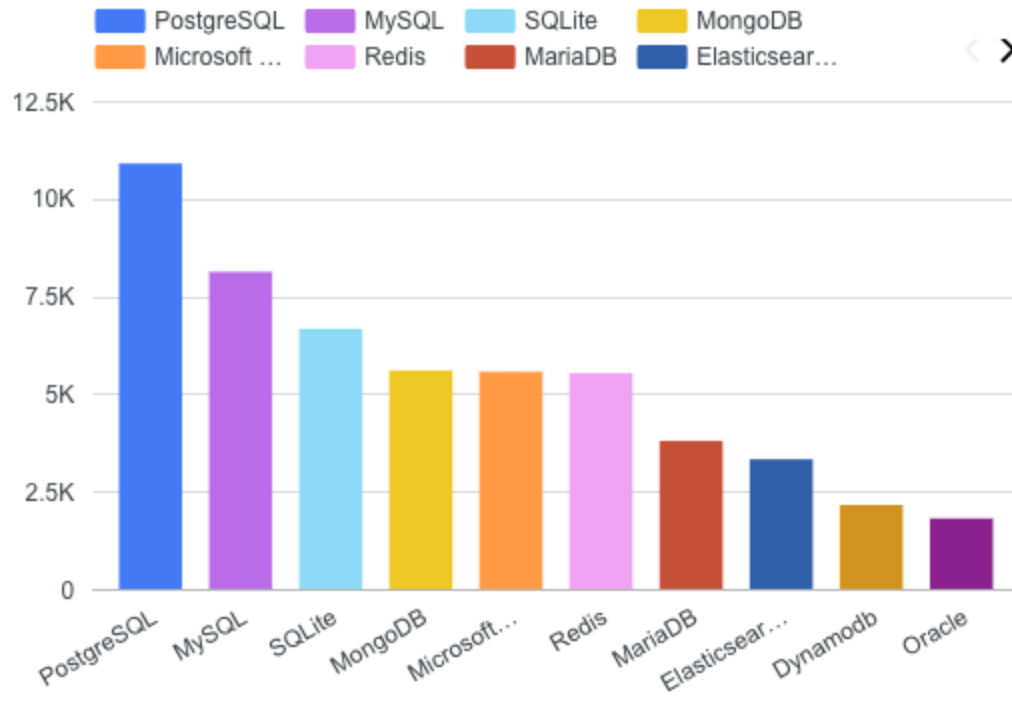
Implications

- Web programming languages are seeing the most usage.
- Some languages, such as PHP and Java, are expected to drop out of the top 10.
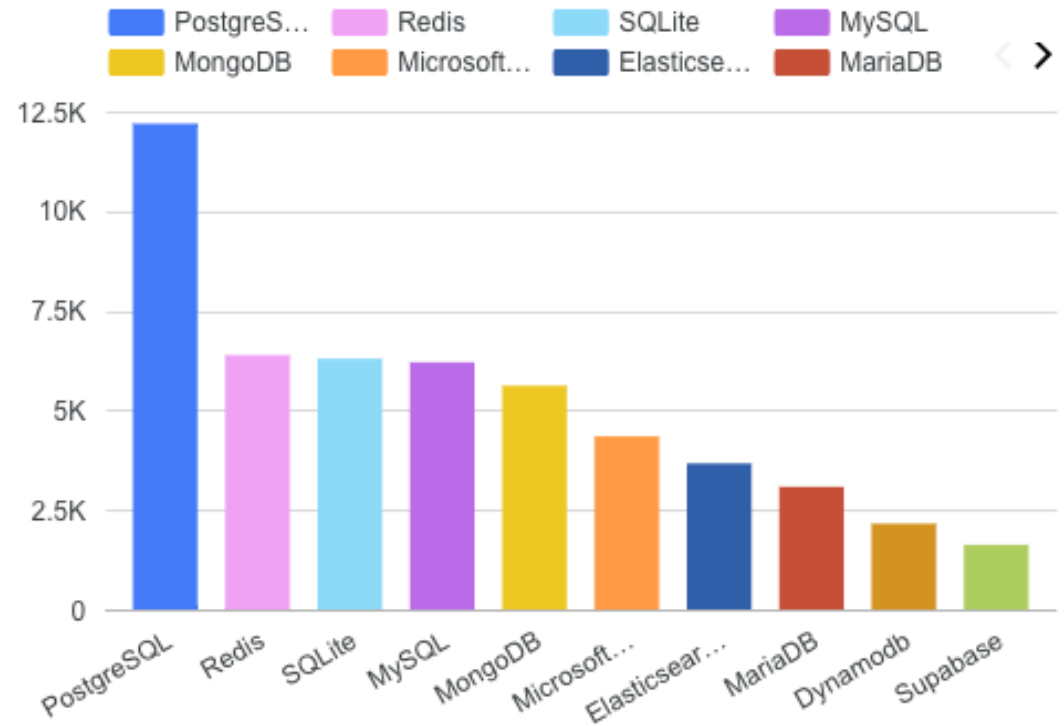
DATABASE TRENDS

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL is the most popular database language currently and is expected to be more popular.

- MySQL is finding its popularity dwindling.

Implications

- PostgreSQL is the way to go.

- The popularity of PostgreSQL and its easy integration with SQL is likely related to SQL's rise in use.
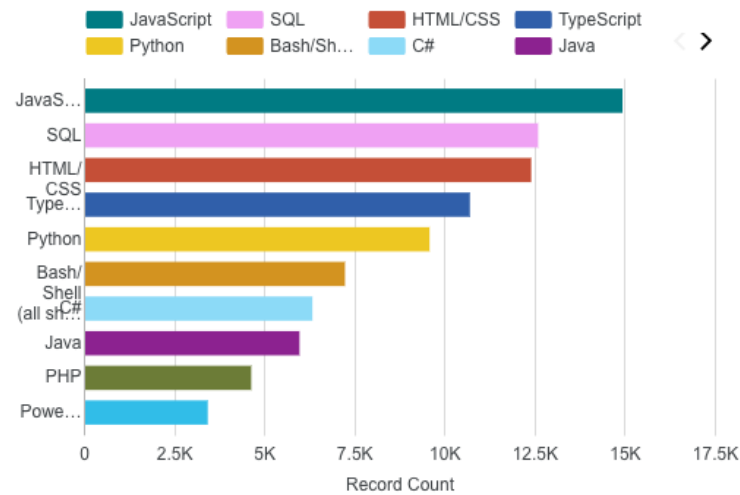
- Data Stores are increasing in demand.

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DASHBOARD

Link to Looker Dashboard:

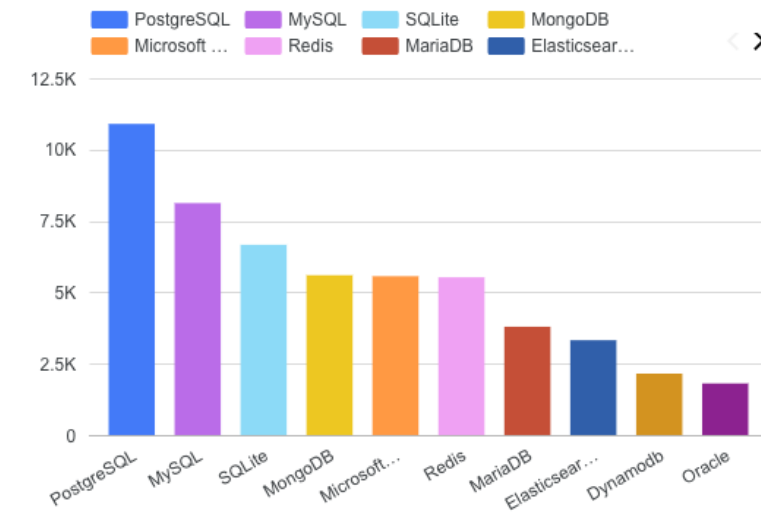https://github.com/jhamer85/Capstone/blob/main/Lab_26_Dashboard.pdf

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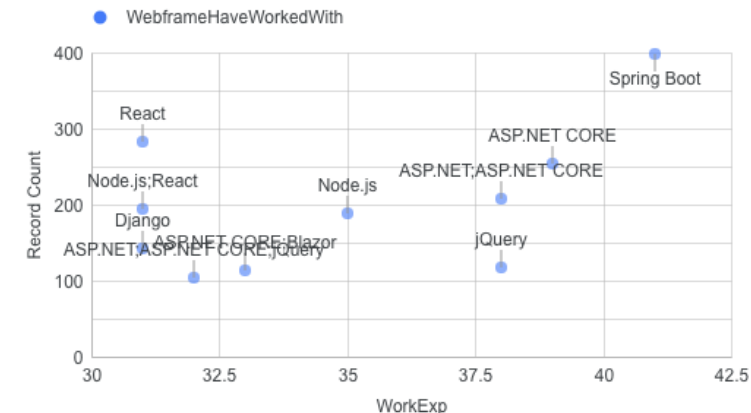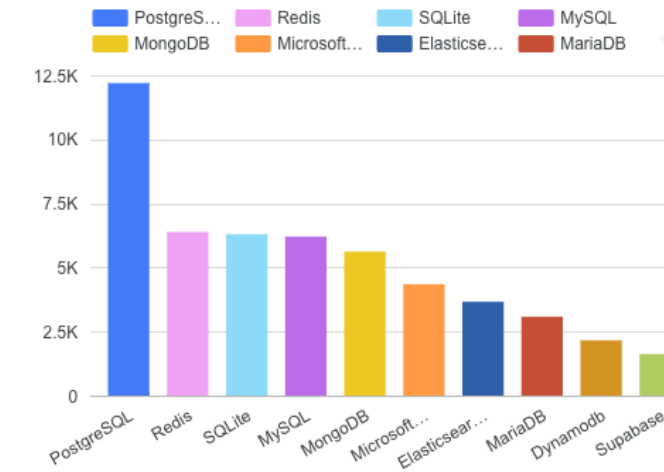# Current Technology Trends
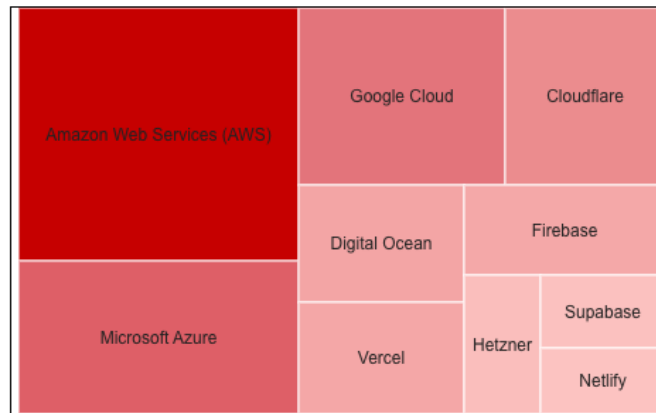
Future Technology Trends
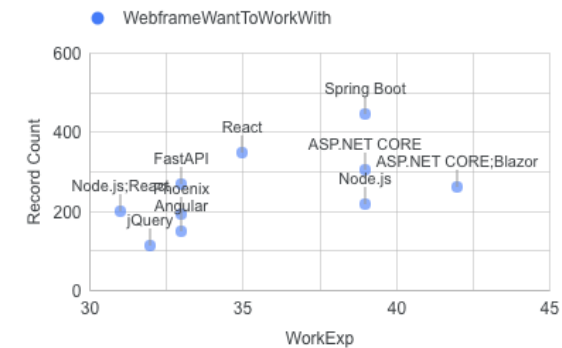

Languages Desired to Work With
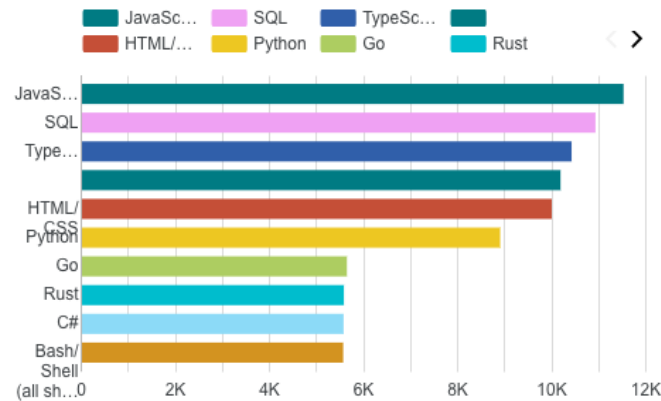
Databases Desired to Work With

Platforms Desired to Work With

Webframes Desired to Work With
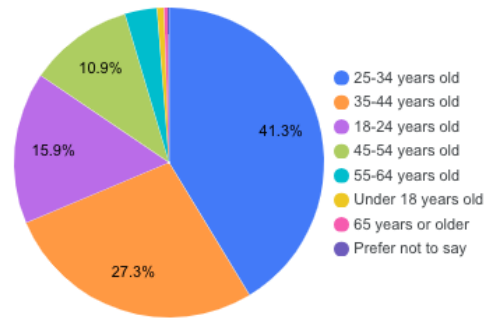
Respondent Demographics
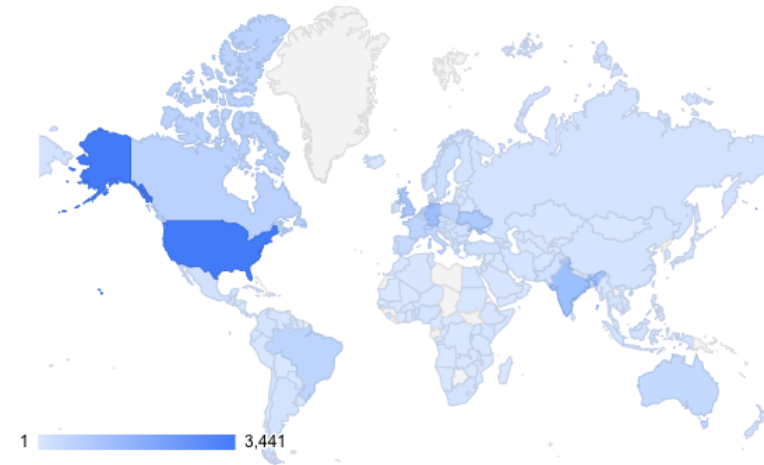
DISCUSSION

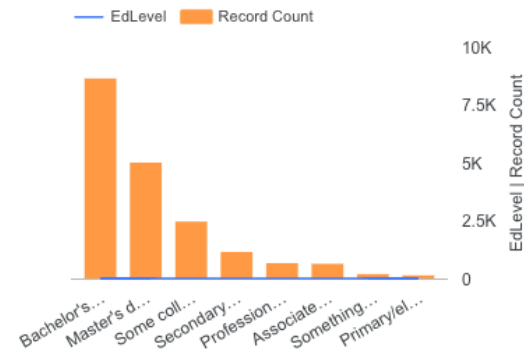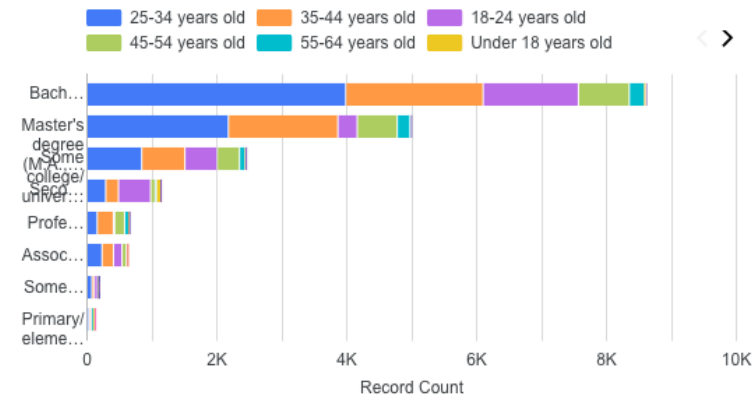- Do you know the coding languages of the future?

- Which languages do you need to learn to stay current?

- Disproportionally large amounts of respondents:
  - Were under 35 years old
  - Were from USA
  - Had a bachelor's degree

- As coding exists longer, do we see more respondents in the older age groups?

OVERALL FINDINGS & IMPLICATIONS

Findings

- Web-based coding is popular.
- The desire to learn and work with SQL is high.

Implications

- The popularity of SQL is reflected in the use of ProstgreSQL.
- The unpopularity of C has resulted in a large number of job openings

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CONCLUSION

- Based on popularity of the languages, job postings, and average salaries, Javascript and Python should be priorities for young coders.

- Easier to learn coding seems to be taking a preference.

- SQL and HTML/CSS are currently popular and will remain so.

- Learning coding languages is a good way for young graduates to earn a living.
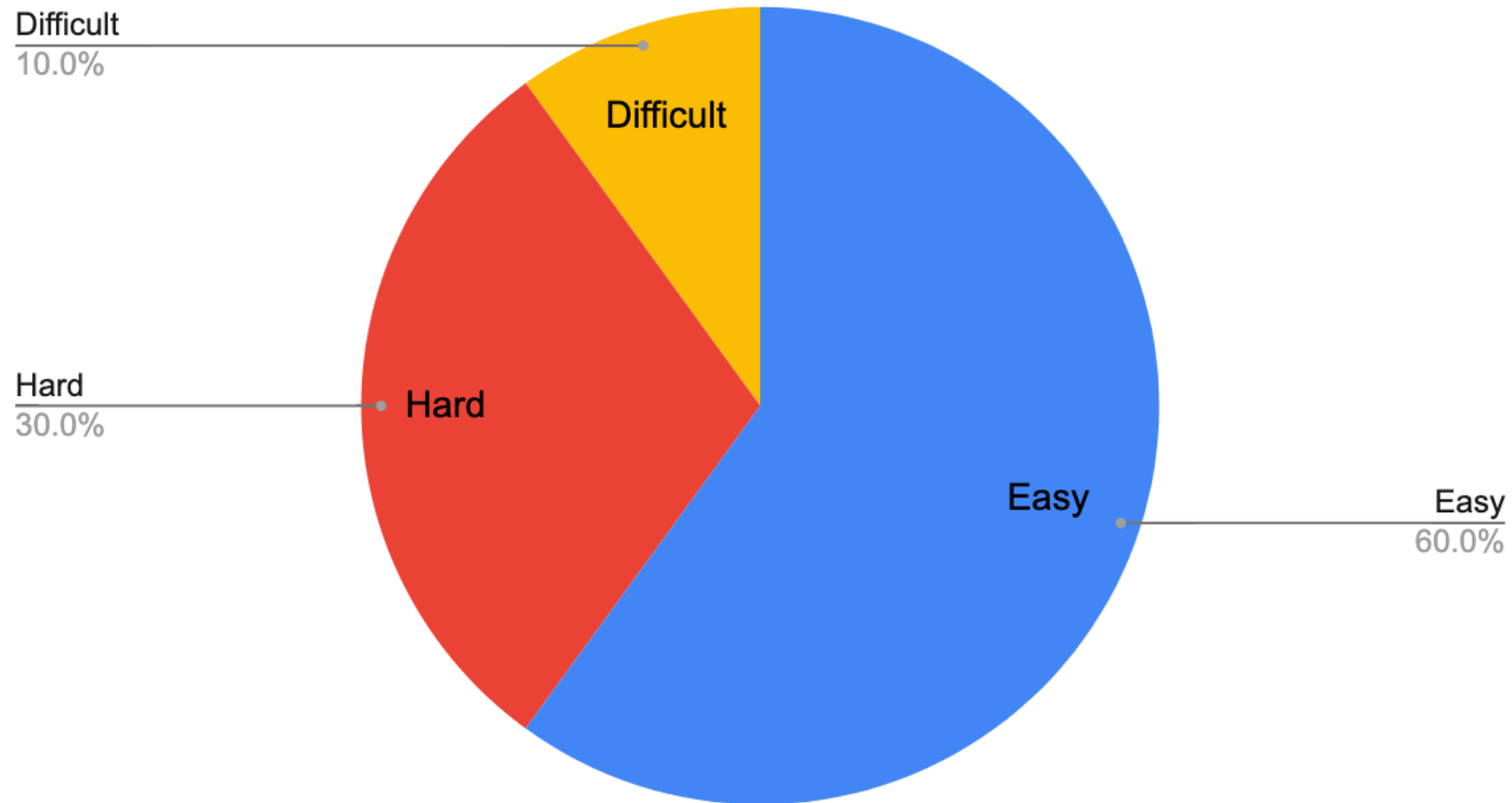
APPENDIX

SOURCES

- Stack Overflow Developer Survey (filtered and pre-processed)

- Sample job postings from Kaggle.com

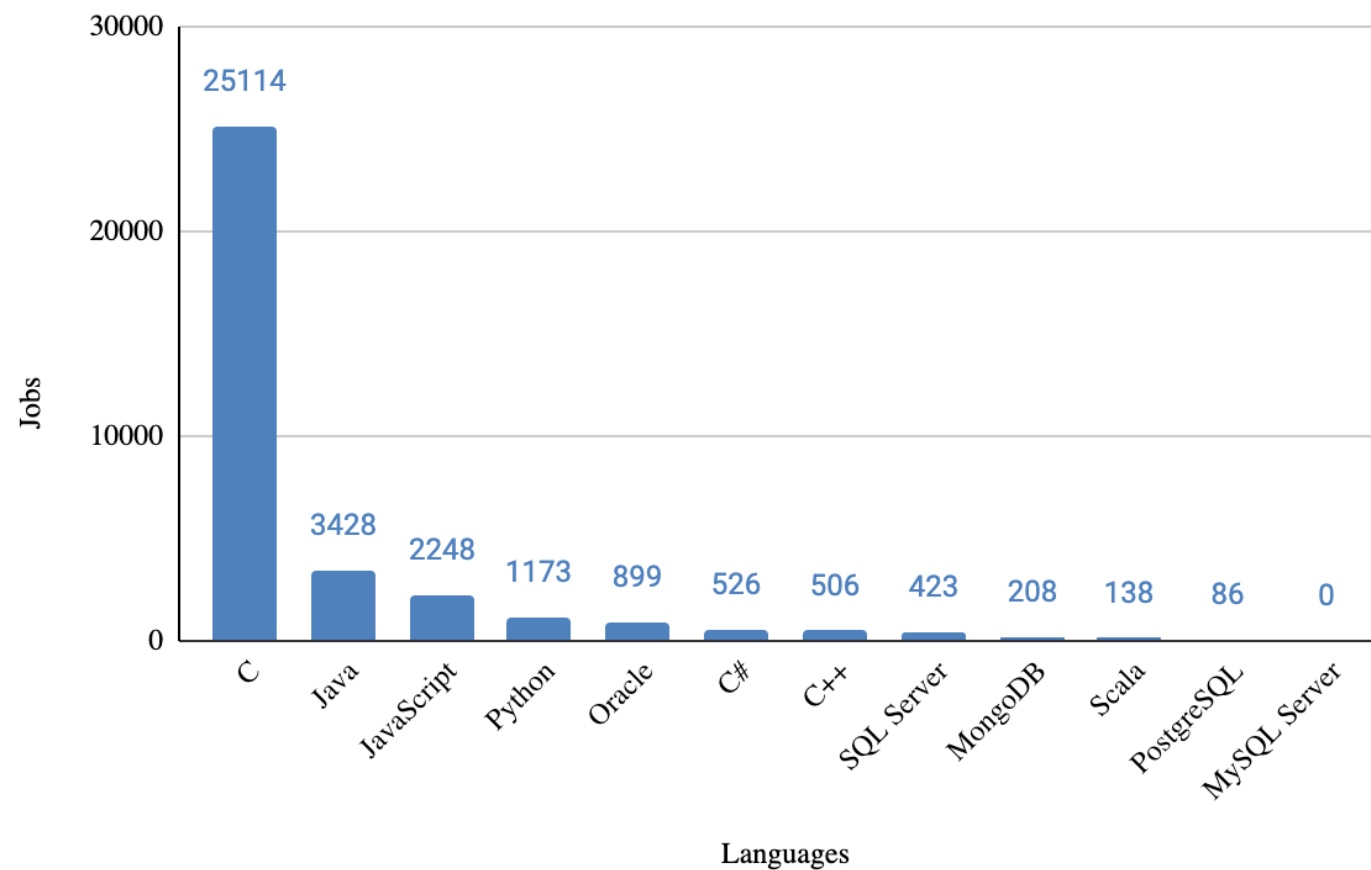- Salary data webscrapped from SkillsNetwork

DIFFICULTY OF LEARNING

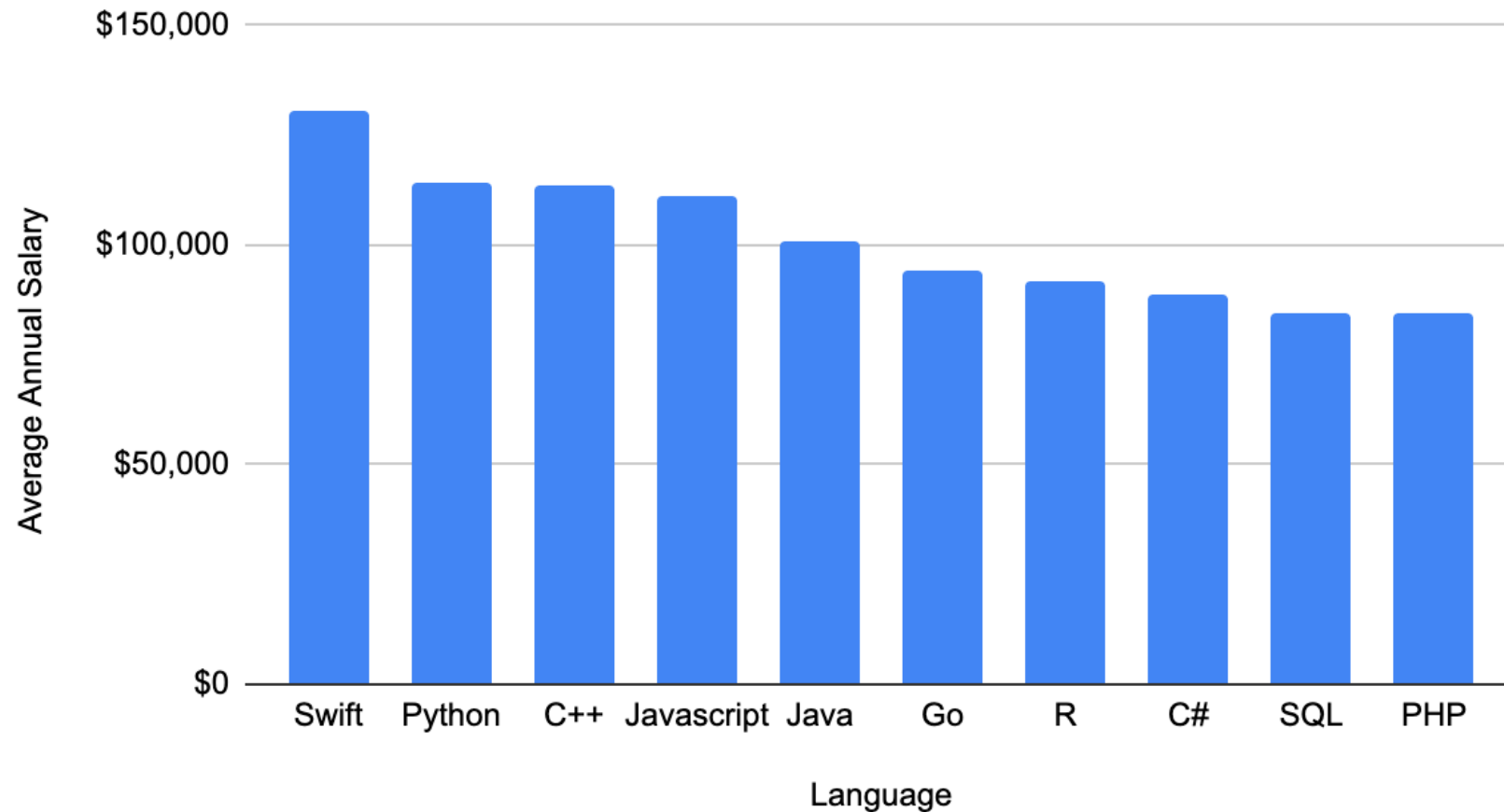Learning Difficulties of Top 10 Programming Languages

Difficult
10.0%

Difficult

Hard
30.0%

Hard

Easy

Easy
60.0%

JOB POSTINGS

Job Posings

AVERAGE SALARIES

Average Annual Salary by Language

COMPENSATION PER YEARS OF EXPERIENCE

Median Yearly Comp vs Experience Level