Capstone Final Project

2019 Developer Survey

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IBM Developer

SKILLS NETWORK

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EXECUTIVE SUMMARY

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  - Platforms
  - Top Ten Web Frames Worked With
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  - Top Ten Databases
  - Platforms
  - Top Ten Web Frames Worked With
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INTRODUCTION

- The data in this report reports the current coding trends and the projected future trends.
  - Including what programs, languages and web frames are most popular at the time and will be used in the future
- Data collected include
  - Demographics: Age, Country, gender and education level
  - Current & Future Technology Trends: Languages worked with, programs worked with and platforms use
- Questions to consider:
  - “What top ten languages for programmers use at work?”
  - “What level of education do programmers have and what effect does gender have on education level?”
  - “Do current programs, languages, and web frames worked with effect the desired programs, languages and web frames for next year?”

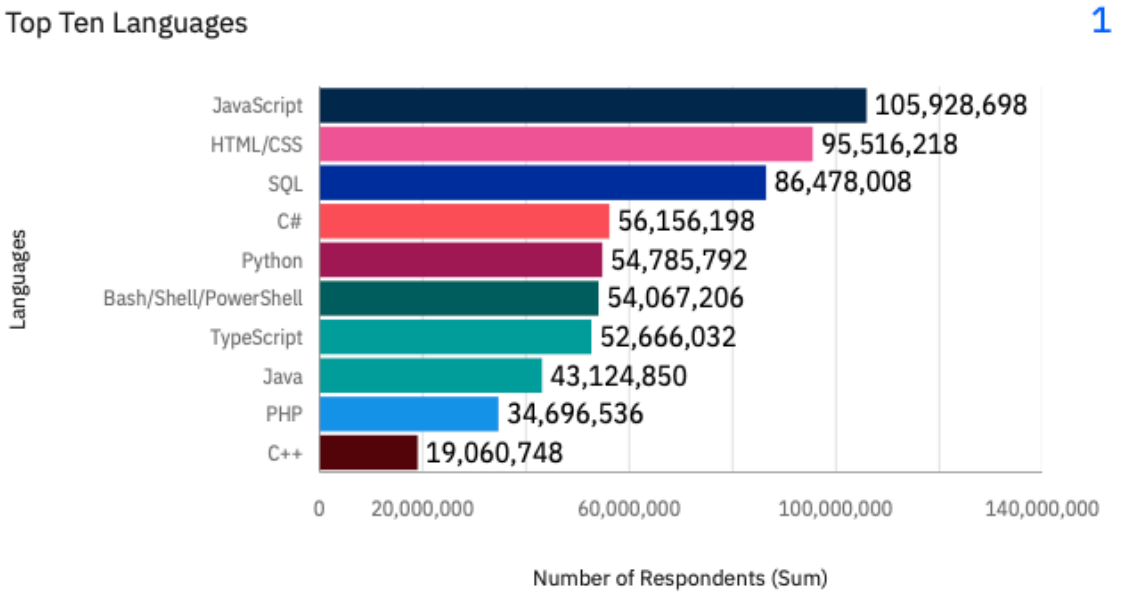
METHODOLOGY

- Data collected for the 2019 Developer Survey
- Collected data from nearly 90,000 developers for the site Stack Overflow
- Stack Overflow Developer Survey is the largest and most through survey of people who code in the world
- Respondents were contacted though different channels in Stack Overflow
- Respondents completed the survey though email, on site messages, blog post, social media sites, etc

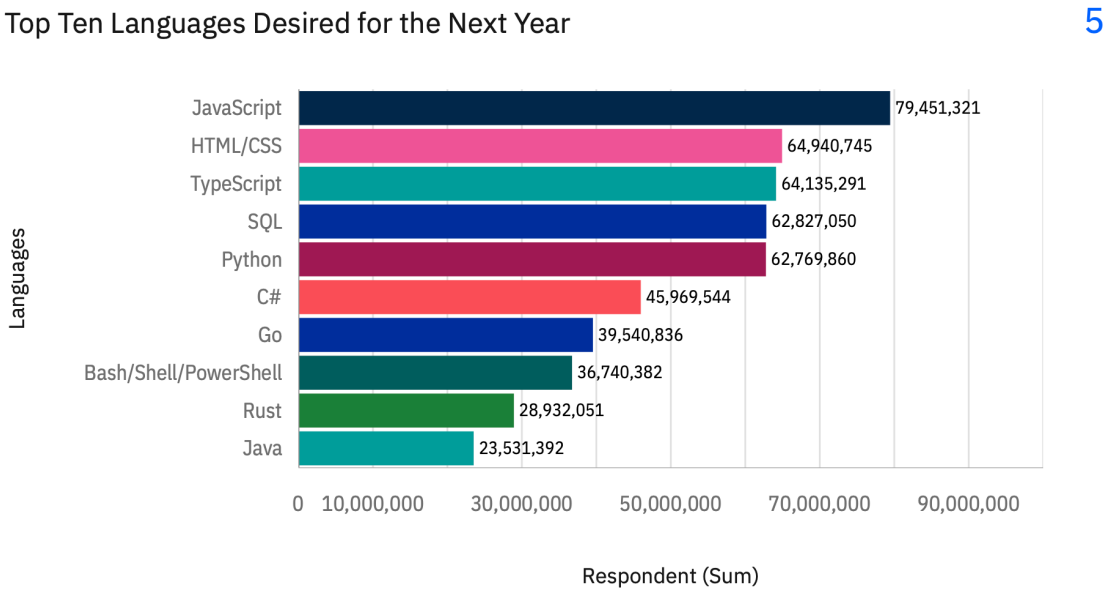
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

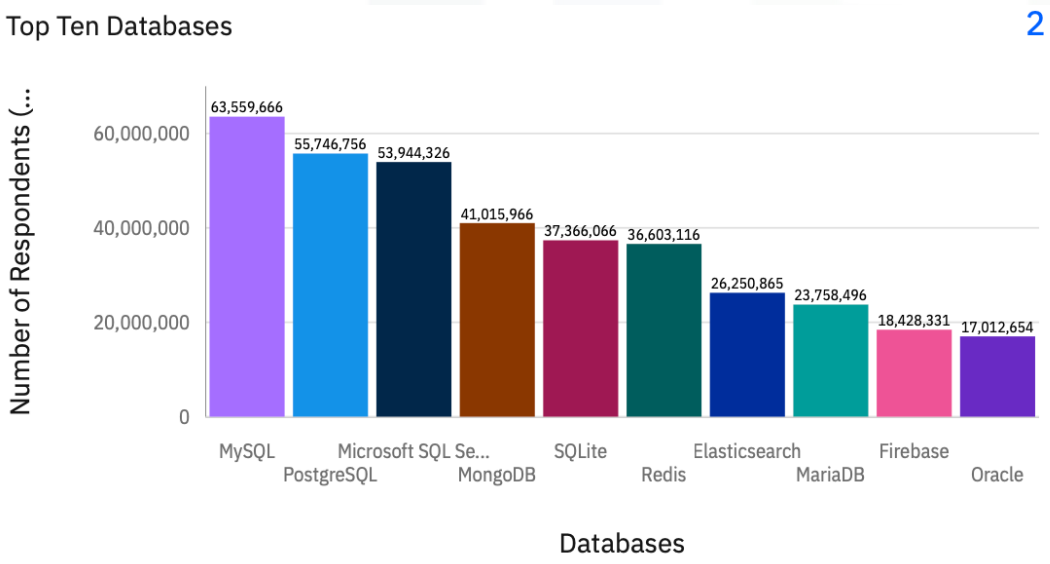
- JavaScript is the most use Language
- JavaScript is predicted to stay the most use Language through next year
- Python is growing more popular

Implications

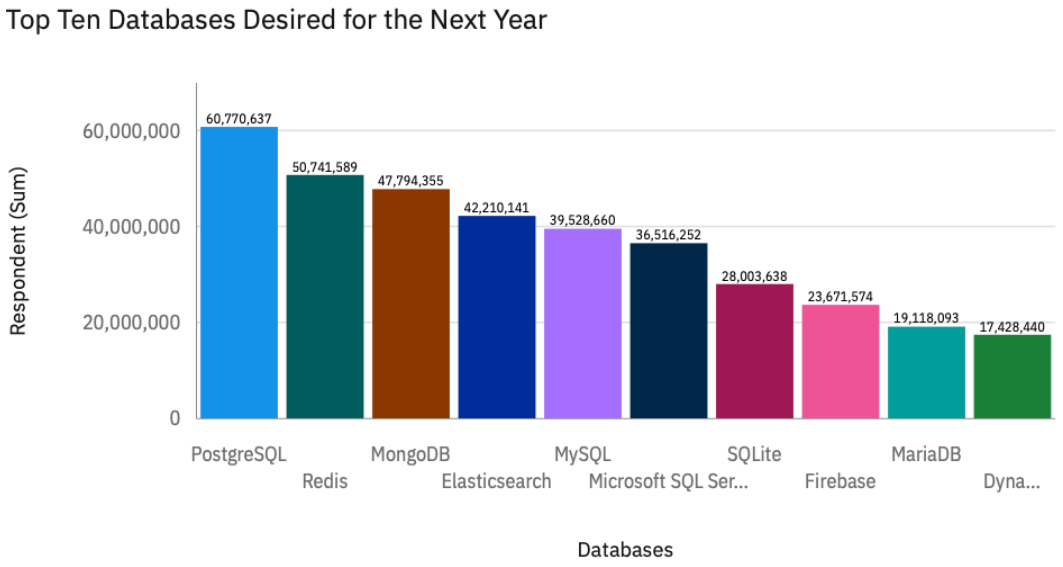
- JavaScript and HTML/CSS are predicted to remain desired
- Rust is predicted to be use more next year while not being in the top ten for this year
- Java, C#/ Bash/Shell/ PowerShell is on the decline

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL is predicted to be more use than MySQL
- Redis is predicted to gain popularity and be the second most popular database
- Oracle is not predicted to be among the top ten databases

Implications

- Different forms of SQL remain popular
- Elasticsearch is becoming most popular among programmers
- MongoDB is on the rise

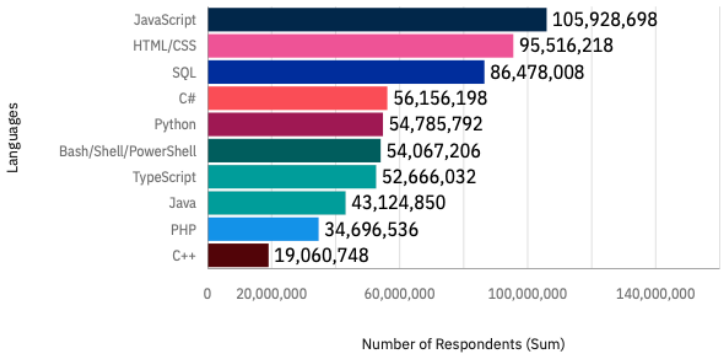
DASHBOARD

https://github.com/bimperati/CapstoneFinalProject/blob/main/_%20Final%20Project%20Part%201.pdf

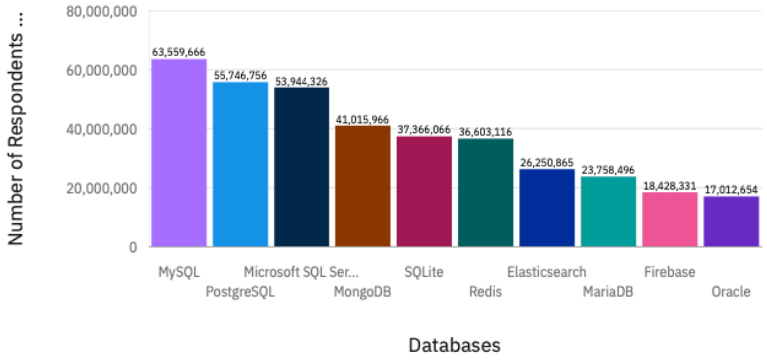
DASHBOARD TAB 1

Current Technology Usage

Top Ten Languages

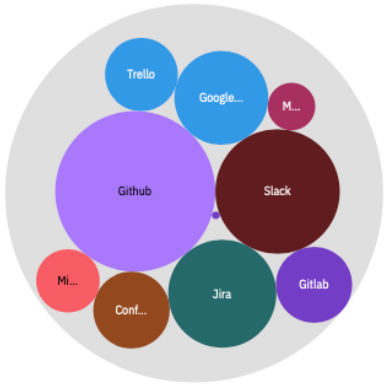


Top Ten Databases



Platforms

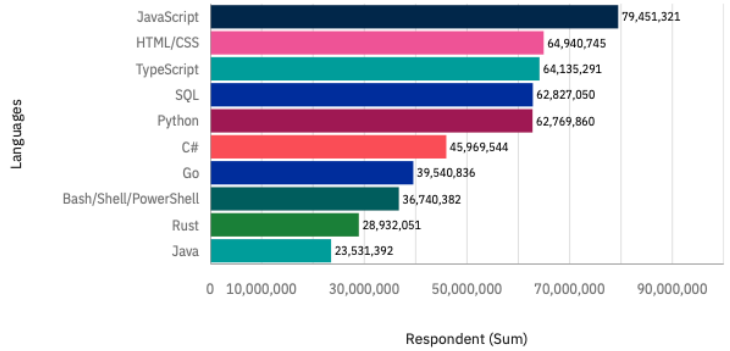
Top Ten Web Frames Worked With



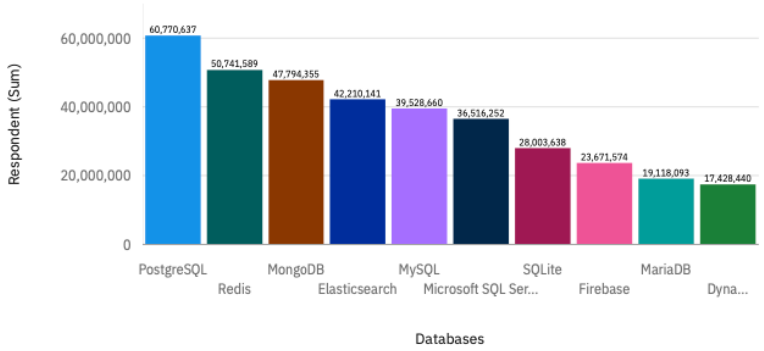
DASHBOARD TAB 2

Future Technology Trend

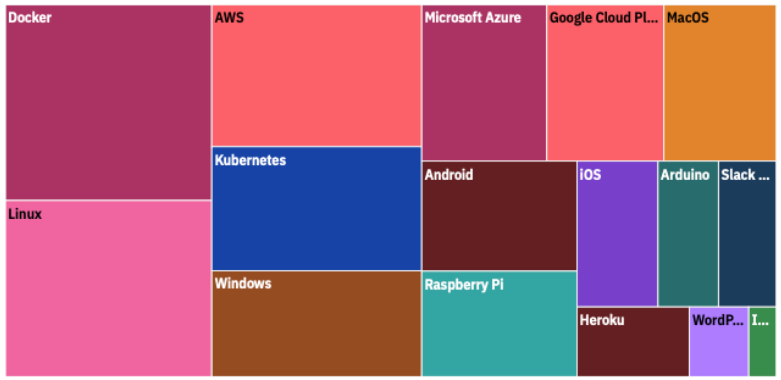
Top Ten Languages Desired for the Next Year



Top Ten Databases Desired for the Next Year



Desired Platforms for the Next Year

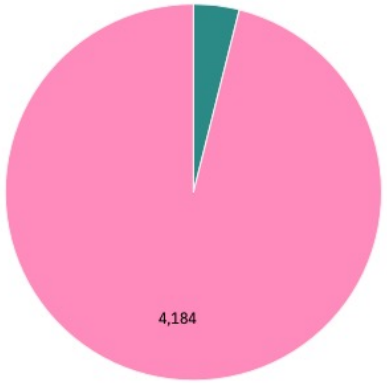


Top Ten Web Frames Desired Next Year

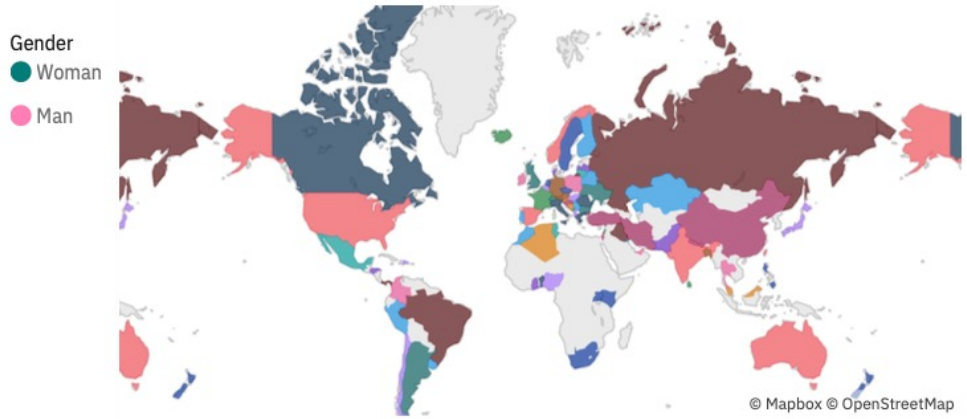
DASHBOARD TAB 3

Demographics

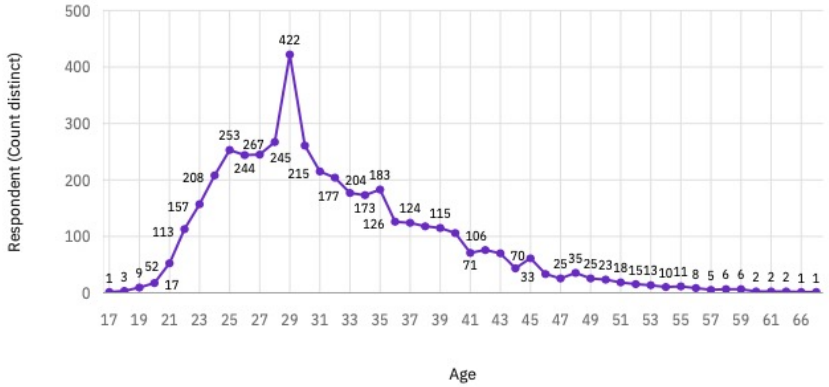
Respondent classified by Gender



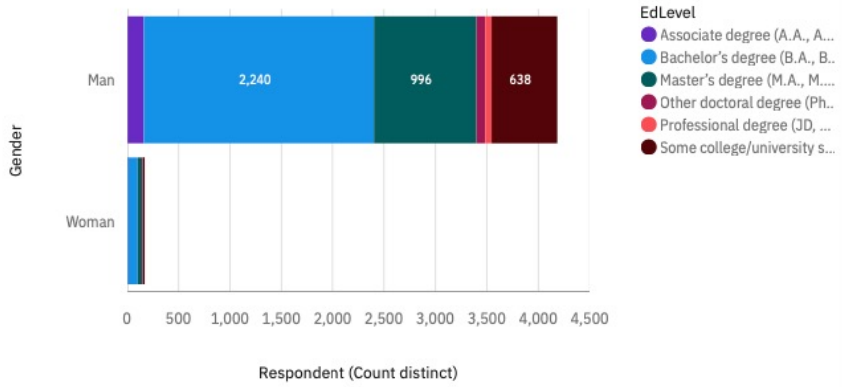
Respondent Count by Country



Respondent Count by Age



Respondent Count by Gender And Classified by Formal Education Level



DISCUSSION

- Why are SQL platforms the most common database?
- Women's role in programming
- What level of formal education is most important for new coders?

OVERALL FINDINGS & IMPLICATIONS

Findings

- Men are the majority gender among programmers
- Github is the most used Web Frame and is predicted to remain that way
- The majority of coders range from age 23 to 41

Implications

- Level of formal education matters
- JavaScript and HTML/CSS will remain the top languages
- Programmers live in many different countries

CONCLUSION

- The Data collected in the Development Survey help to understand the current and predicted future trends
- The top ten Languages, Databases and WebFrames help future programmers understand which programs to learn.
- Questions to consider:
  - “What top ten languages for programmers use at work?”
  - “What level of education do programmers have and what effect does gender have on education level?”
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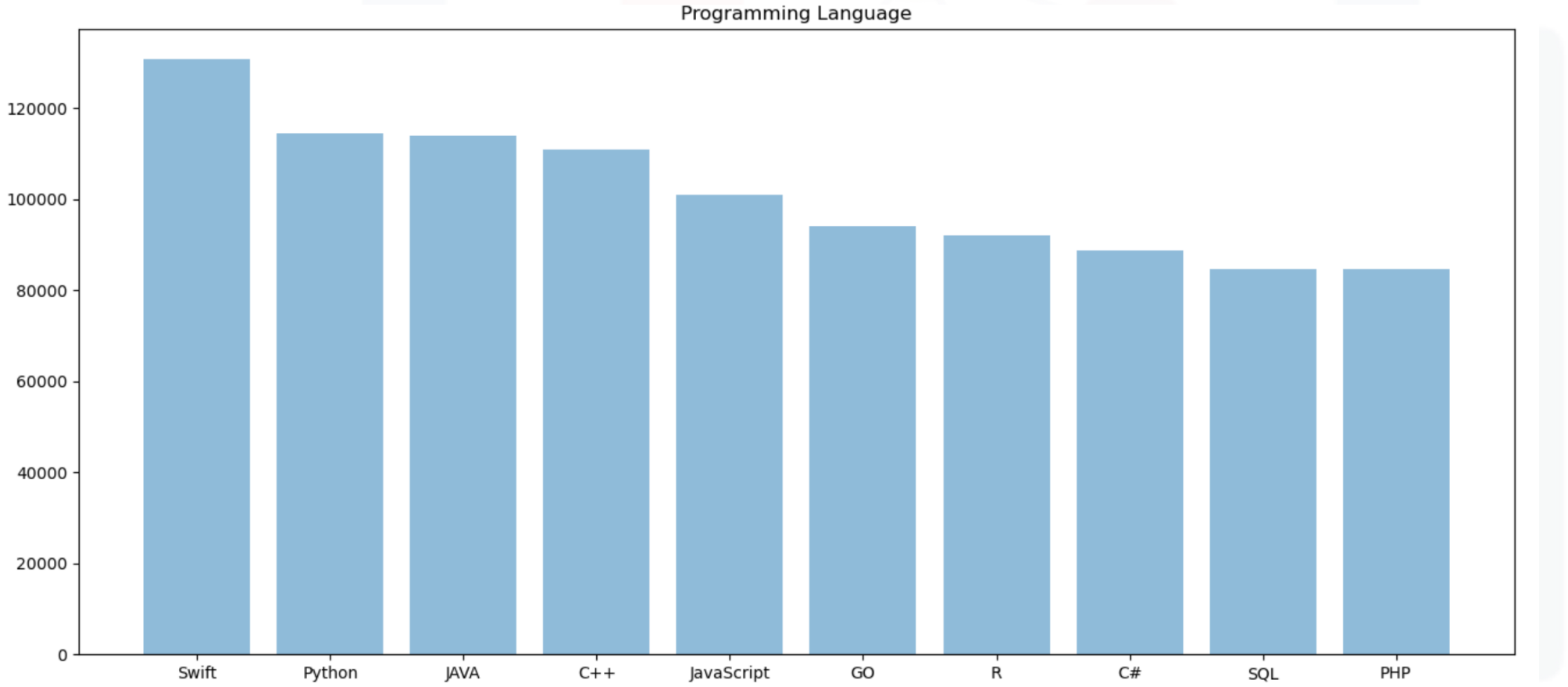
APPENDIX

POPULAR LANGUAGES