Findings from the 2019 Stack Overflow Developer Survey

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OUTLINE

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

EXECUTIVE SUMMARY

- Goal of Data Analysis & Contextualization
- An Explanation of Methodology
  - Collection of Data
  - Interpretation of Data
  - Visualization of Data
- Graphs and trends are used to assist the result presentation
- Overview of the result and their ramifications in relation to the previously disclosed data
- Final findings from the investigation that was conducted

INTRODUCTION

- The biggest and most thorough study of programmers worldwide is Stack Overflow's yearly developer study
- Not every member of the development community is equally represented in the results
- There are about 90,000 developers
- Patterns to forecast the direction of the developers
- The Global characterization of the developers

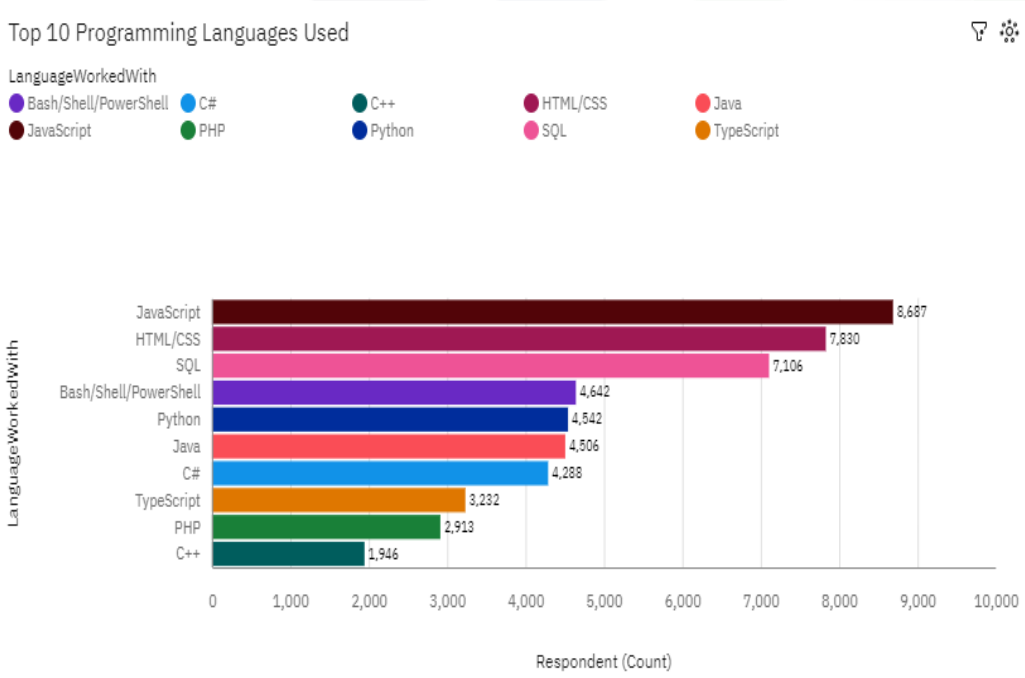
METHODOLOGY

- Gathering of survey information and examines its content using Web Scraping, APIs and Library Requests
- Data Cleaning
- Exploring Data
- Managing Anomalies
- Correlation
- Getting Data Insights
- Draw attention to the linkages, compositions, distributions and comparisons of the data
- Dashboards

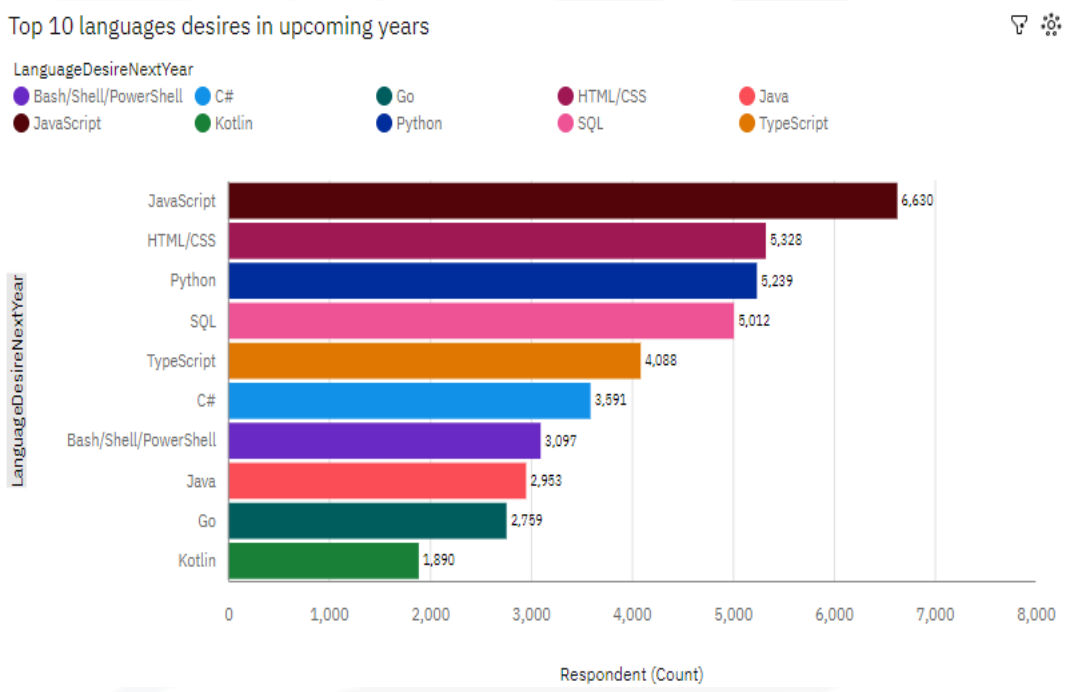
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

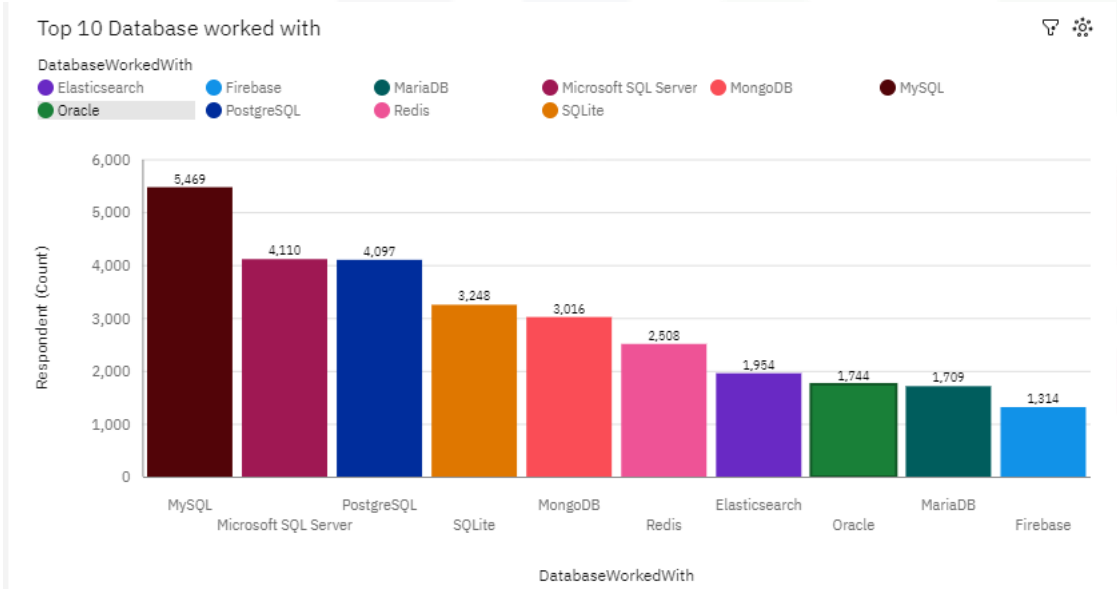
- Most of the popular programming languages are javascript, html/css and sql
- Power Shell prevailed next year

Implications

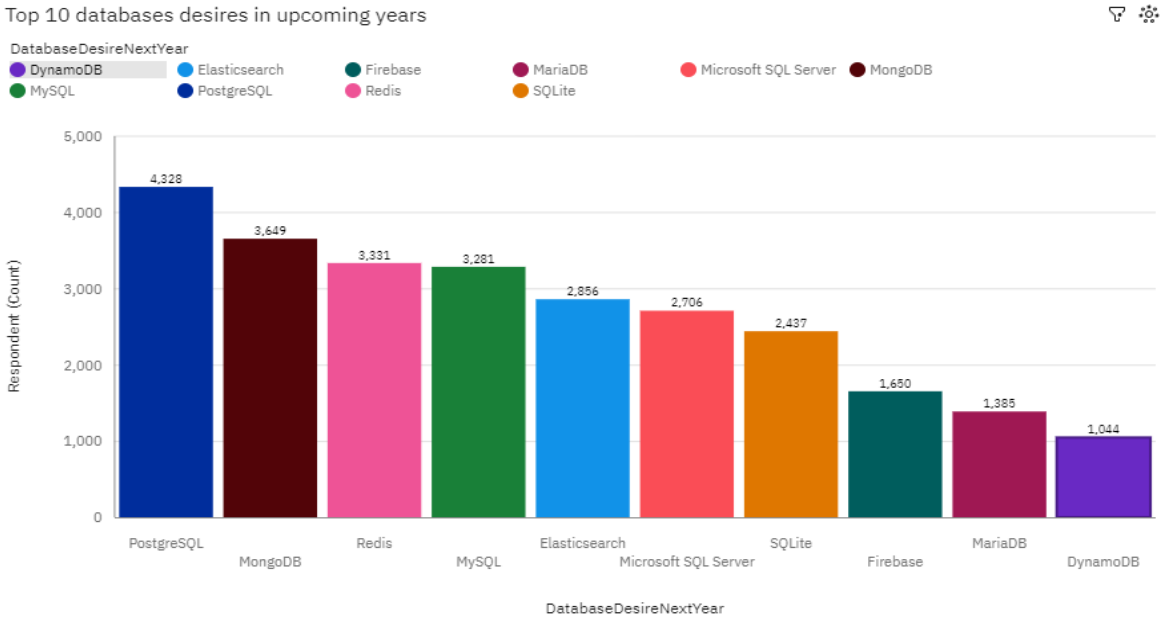
- Python is growing faster and it will be going to use in upcoming years
- Languages like Typescript are also introduced by developer to solve industrial issues
- Languages like Go and Kotlin are also introduced by developer to solve industrial issues

DATABASE TRENDS

Current Year



Next Year



IBM Developer

SKILLS NETWORK

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Most of the databases used by the developers are My SQL, My SQL Server and Postgres SQL but there might be a chance that in upcoming years Postgres SQL would beat the race and will be used by maximum number of developers

Implications

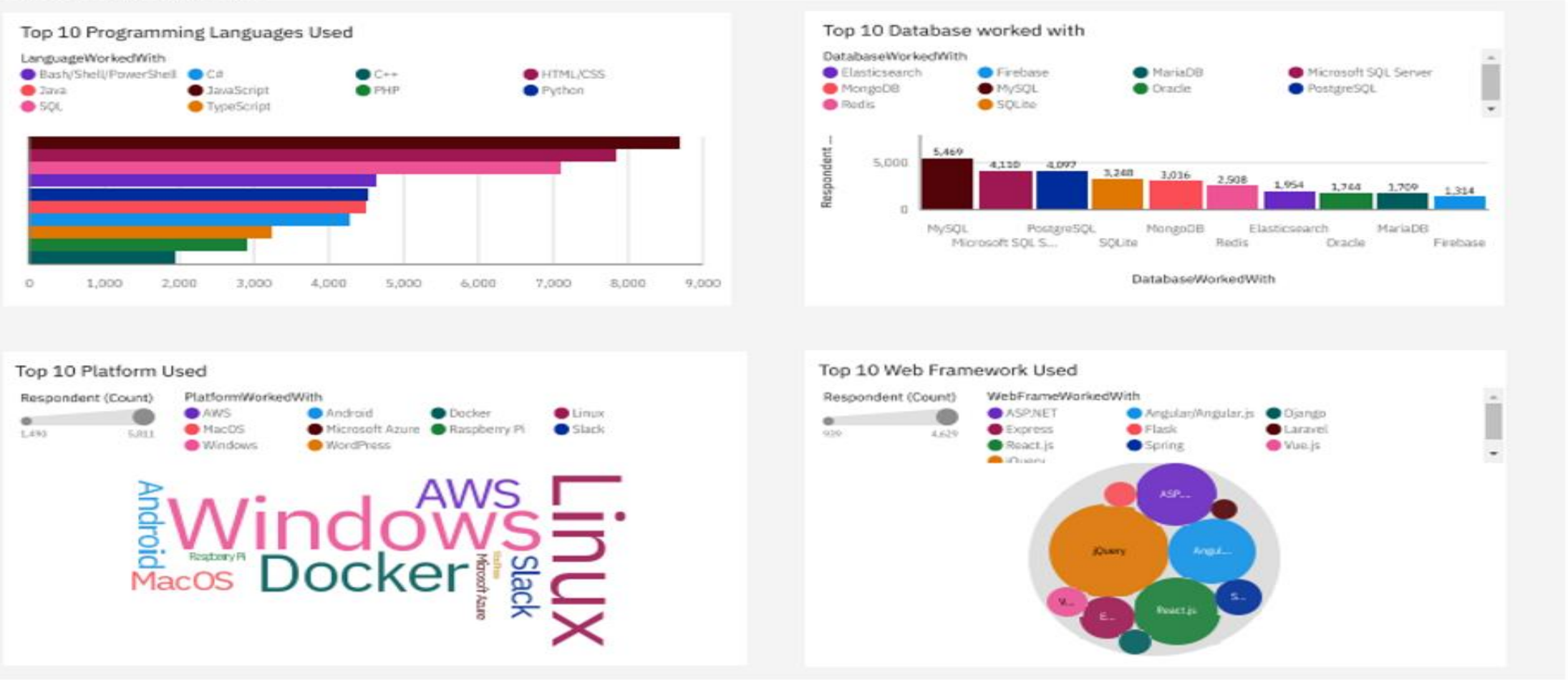
- **Mongo DB** is growing faster, and it will also be used in upcoming years
- Losing of interests on the other databases like SQLite, Redis and so on

DASHBOARD

https://github.com/PratikSingh120897/Assignments/blob/main/SurveyData.pdf

DASHBOARD TAB 1

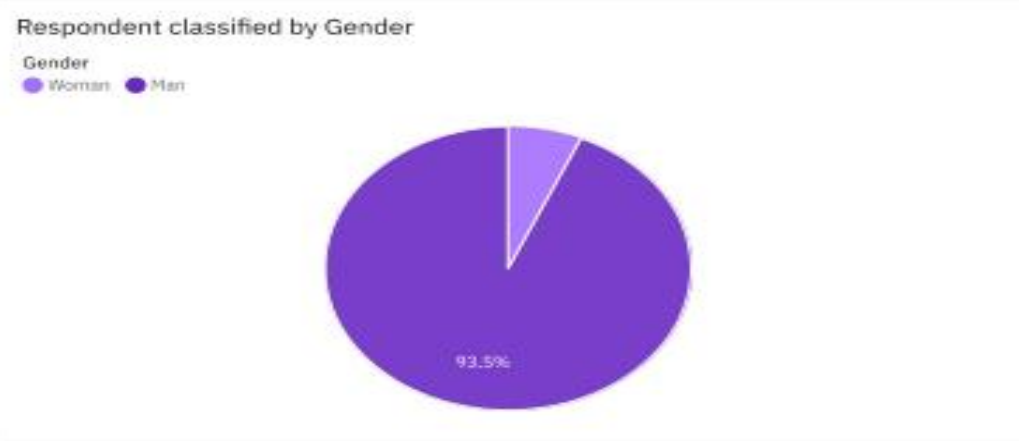
Current Technology Usage

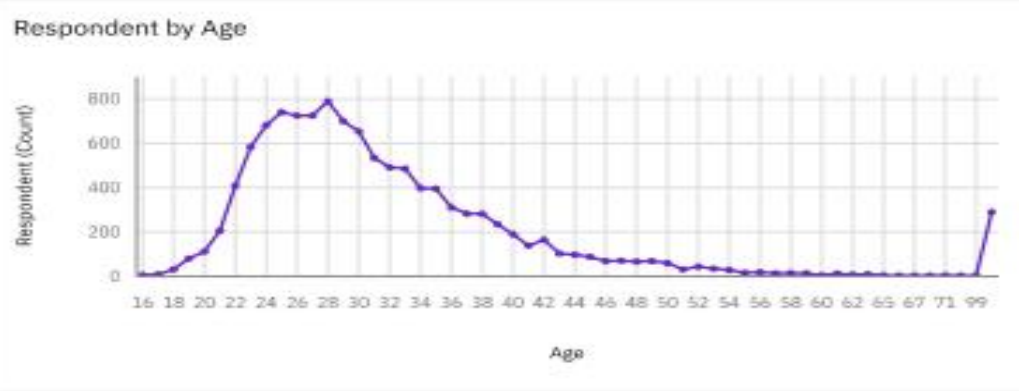


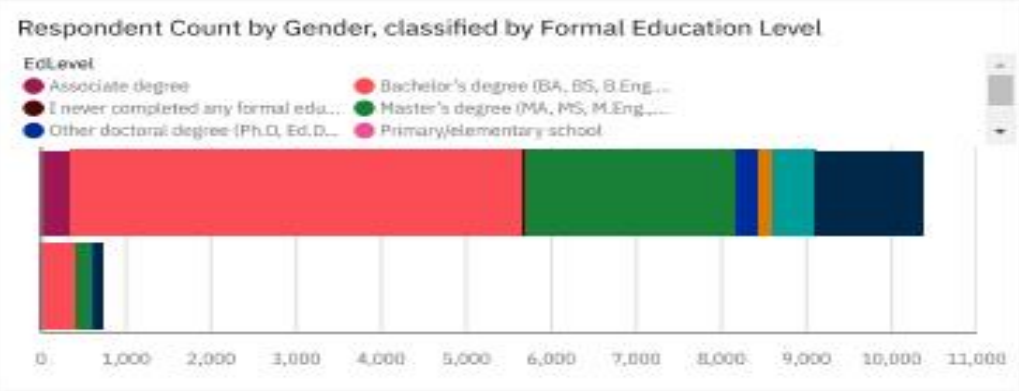
DASHBOARD TAB 2

DASHBOARD TAB 3

Demographics







DISCUSSION

- Trends in technology: Current & Future
- Female involvement in technology sector
- Get rid of age & education-based hiring discrimination age

OVERALL FINDINGS & IMPLICATIONS

Findings

- Most of the popular programming languages are javascript, html/css and sql
- Power Shell prevailed next year
- Most of the databases used by the developers are My SQL, My SQL Server and Postgres SQL but there might be a chance that in upcoming years Postgres SQL would beat the race and will be used by maximum number of developers
- Most of the platform are currently using and continue their legacy in upcoming years are Linux, Docker, AWS and Windows
- Most of the web framework used by developer are jQuery, Angular/Angular.js, React.js and ASP.NET, however in upcoming years Vue.js gain its popularity
- As per formal education level, men have more degree than women

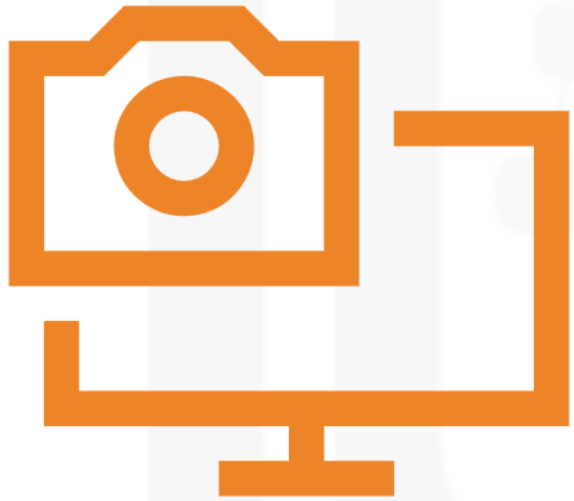
Implications

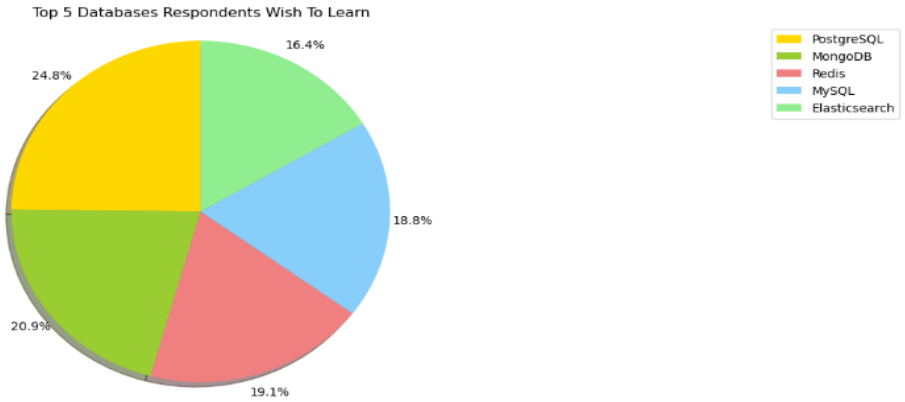
- Python is growing faster and it will be going to use in upcoming years
- Languages like Typescript are also introduced by developer to solve industrial issues
- Languages like Go and Kotlin are also introduced by developer to solve industrial issues
- Mongo DB is growing faster, and it will also be used in upcoming years
- Losing of interests on the other databases like SQLite, Redis and so on
- Most of the respondents are men

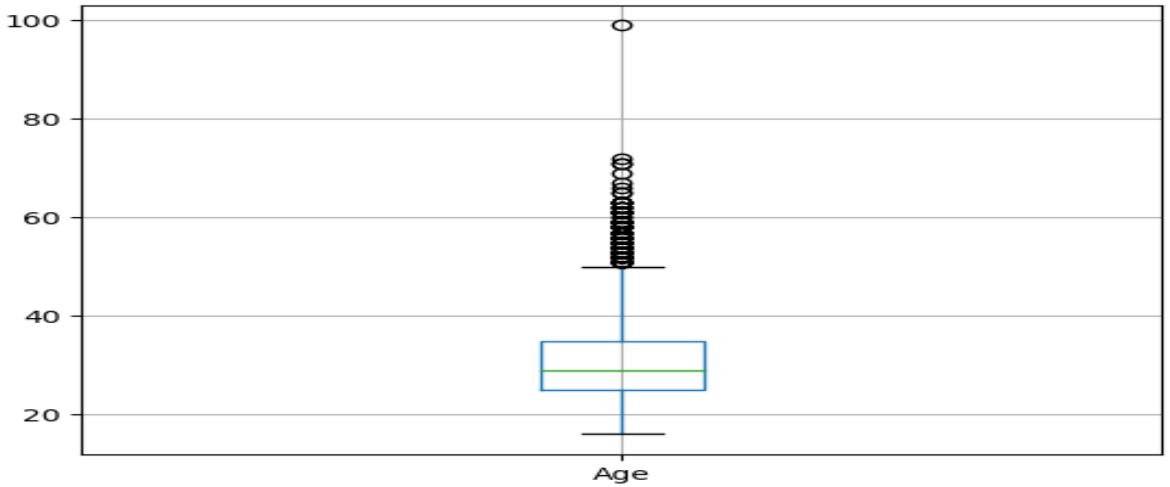
CONCLUSION

- It is possible to get decent notion of the popularity pattens of various tools, platforms and languages
- Works need to be done to expand this labor market's accessibility to developing nations
- More female respondents should be participated in survey

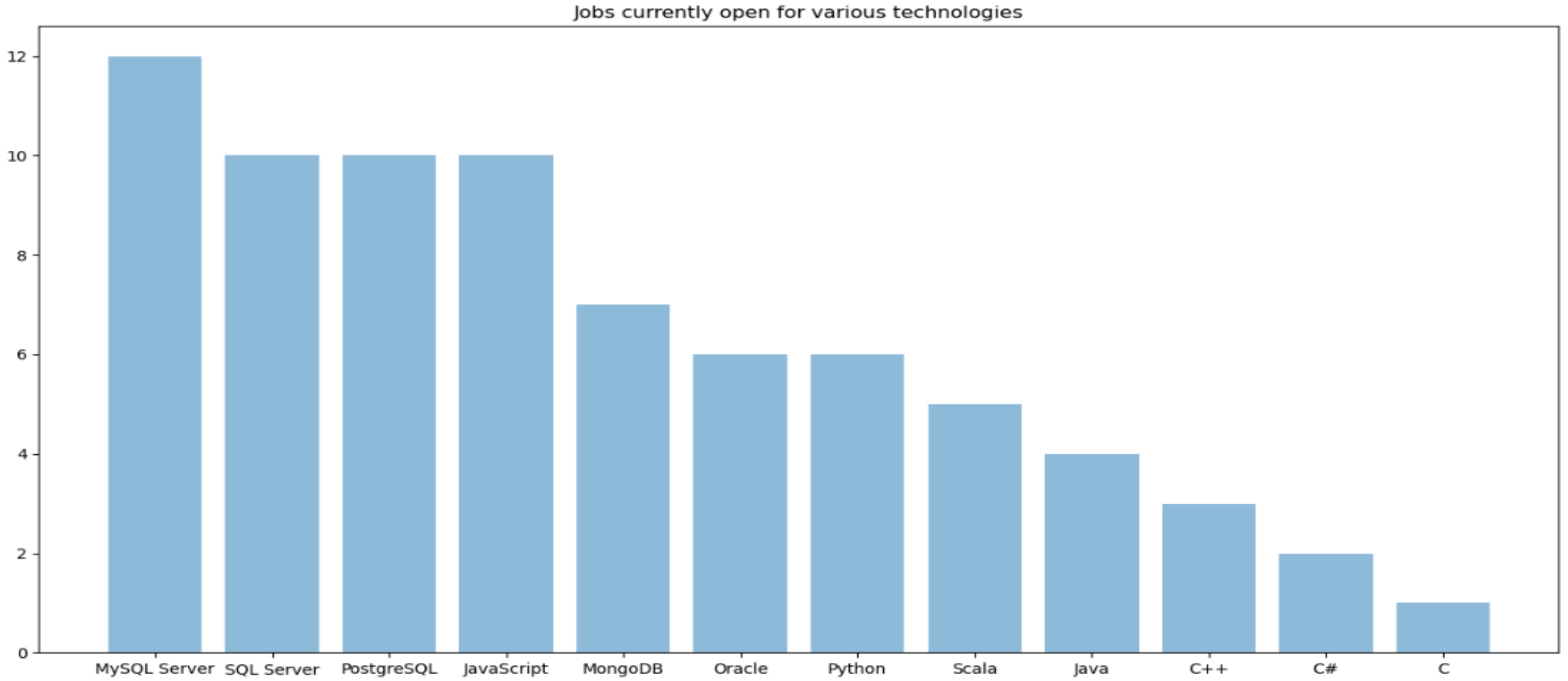
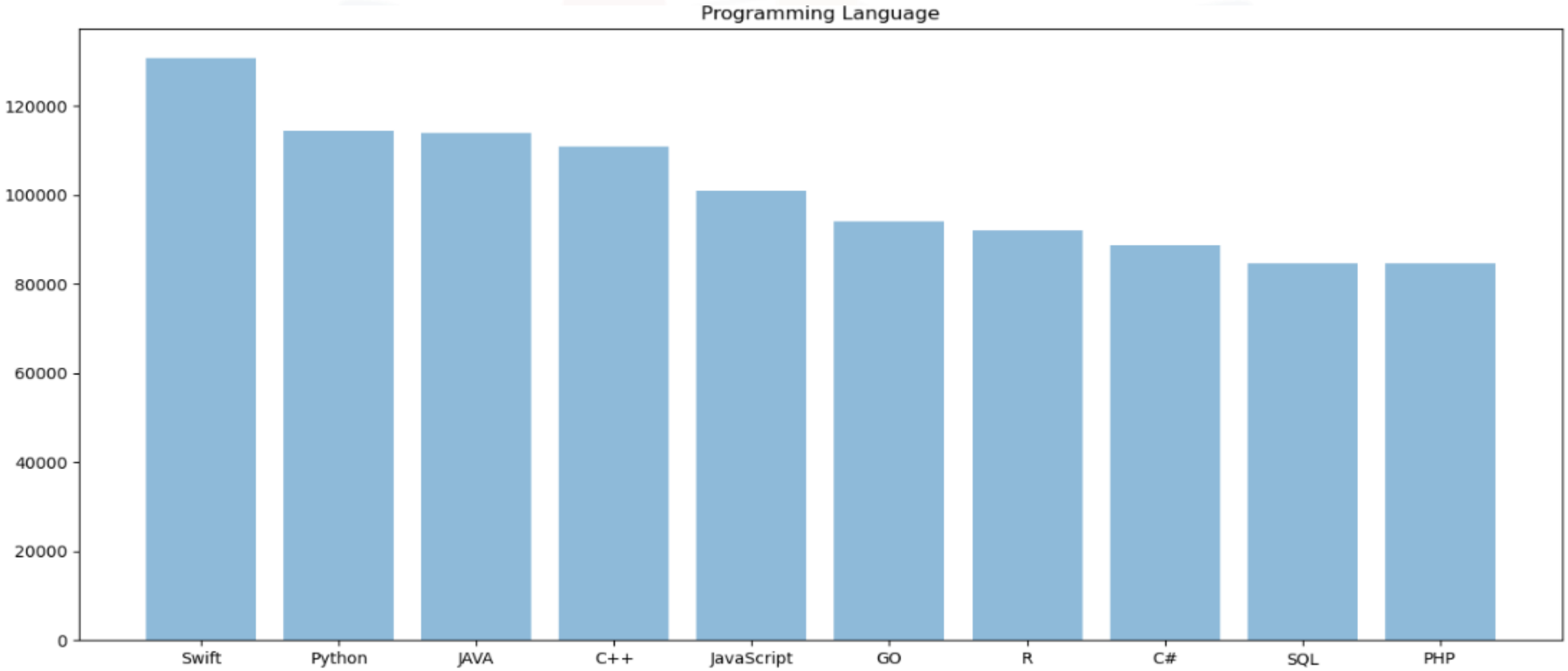
APPENDIX




Top 5 Databases Respondents Wish To Learn
16.4%
24.8%
18.8%
20.9%
19.1%
PostgreSQL
MongoDB
Redis
MySQL
Elasticsearch


100
80
60
40
20
Age

JOB POSTINGS



POPULAR LANGUAGES