Technology Trends from year 2024-2025

Michael Bryant

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OUTLINE

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

EXECUTIVE SUMMARY

- Analyzing Trends in Software development through graphs and data collection.
- Overall Findings and Results
- Conclusions and Appendix

- Audience: Hiring Managers and Stake holders.

INTRODUCTION

- Problem:
  - People are changing their areas of focus when it comes to languages and databases so we need to adapt to stay relevant next year.
- Questions to be answered:
  - Popularity in languages from this year to next year.
    - Are there any changes?
    - Which are gaining/losing popularity?
  - Popularity in Databases from this year to next year.
    - Are there any changes?
    - Which are gaining/losing popularity?
  - Demographics of Men and Women in the Technology industry.

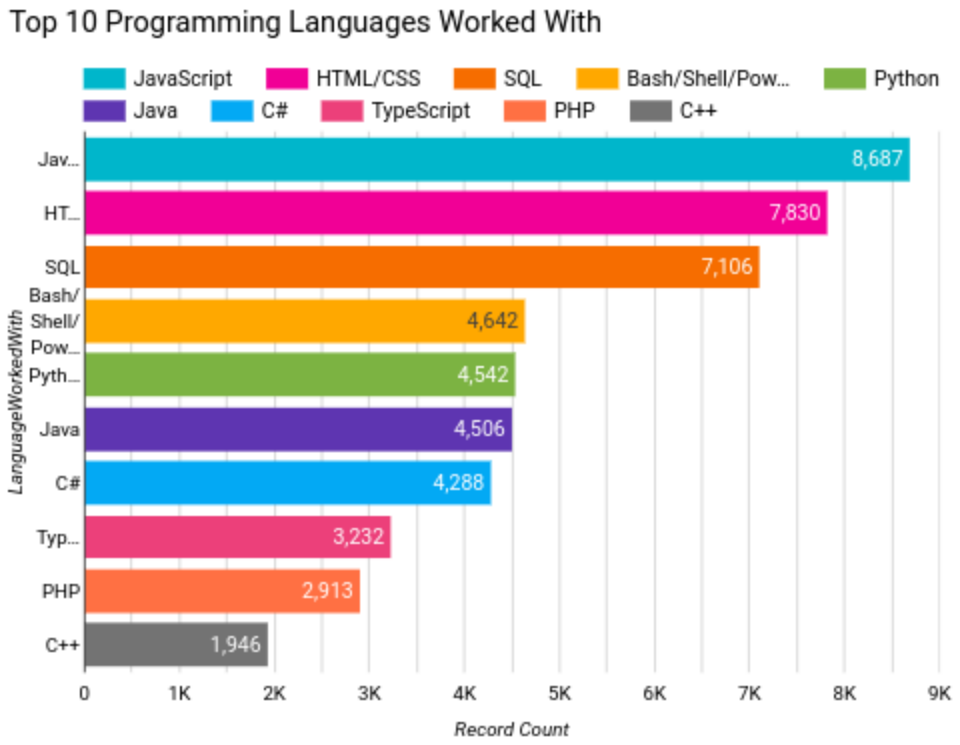
METHODOLOGY

- Collecting Data
  - API's
  - Web Scrapping
  - Data Wrangling
- Data Analysis
- Data Visualizations
  - Graphs/Charts
  - Dashboards

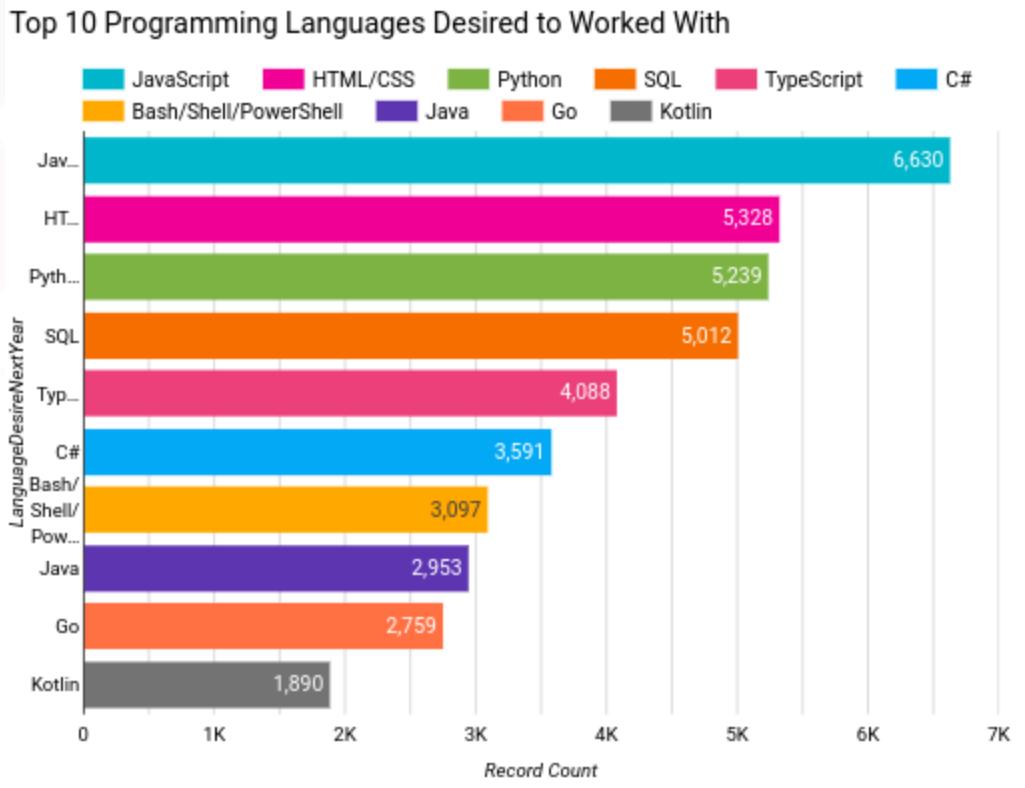
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

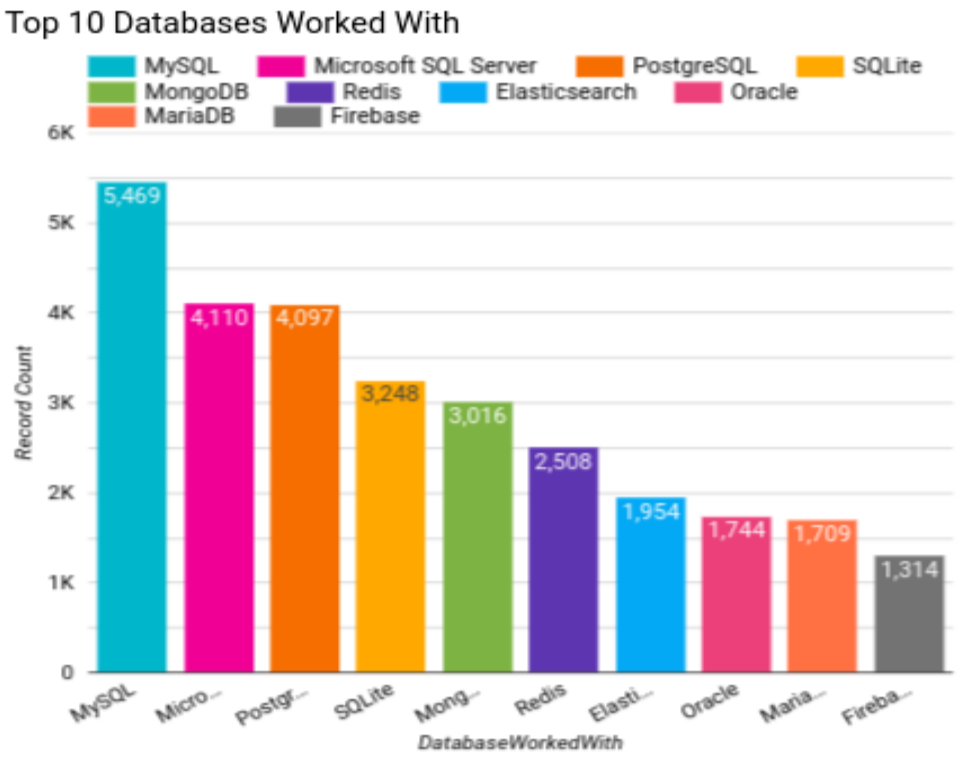
- JavaScript and HTML are the most popular languages being used this year.
- Python is growing in Popularity.
- PHP and C++ are losing popularity and people do not want to continue learning them.

Implications

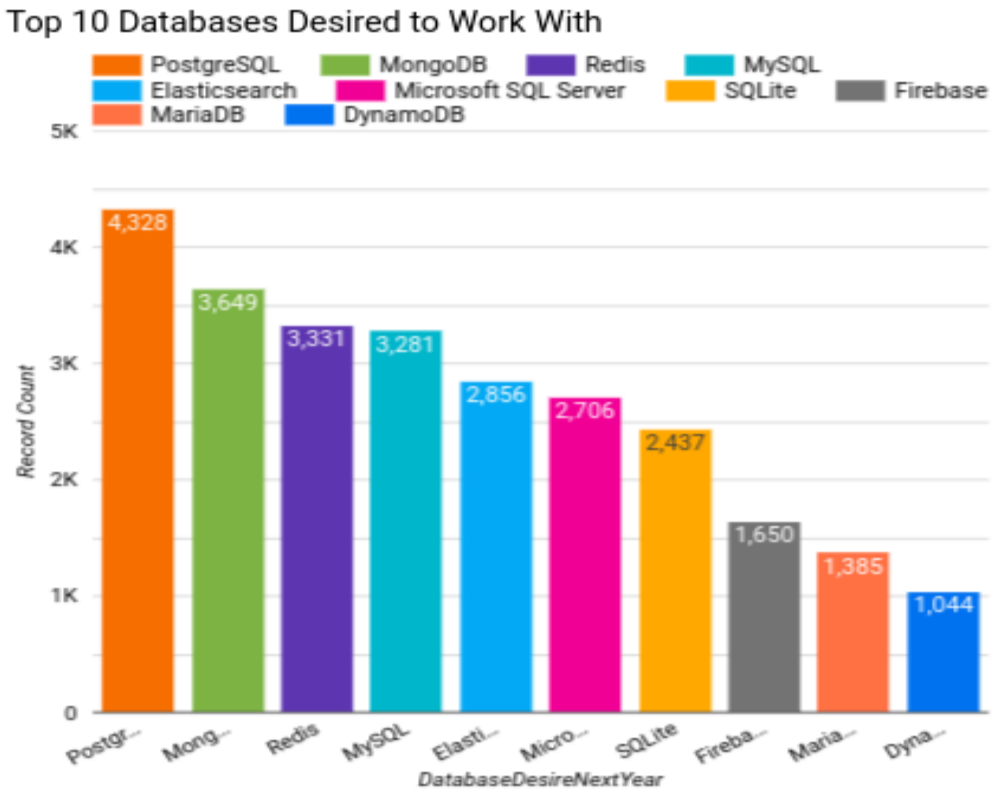
- More jobs are requiring Python and more people are actively seeking out to learn more of that specific language.
- Popularity of these languages are not declining much with additions of AI technology.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is by far the most popular Database.
- Microsoft SQL and PostgreSQL are following MySQL.
- PostgreSQL is growing in popularity next year.

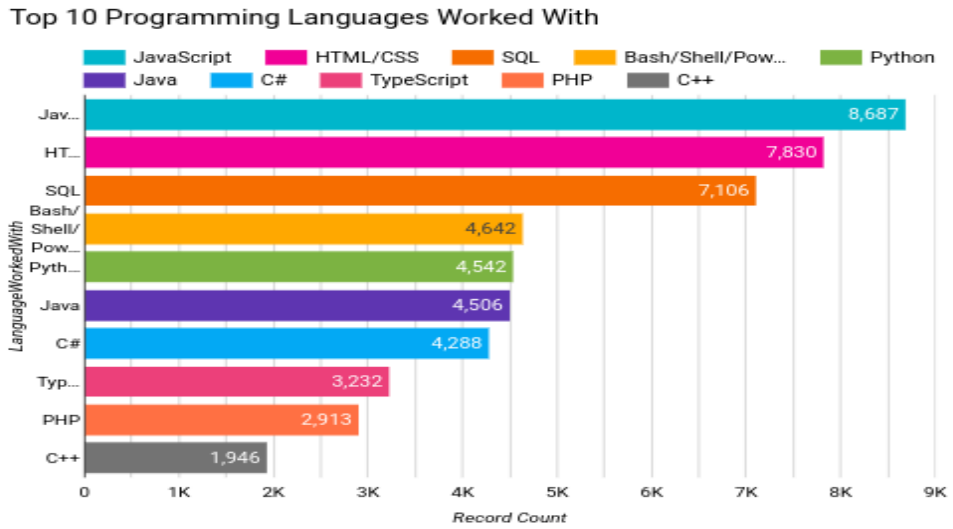
Implications

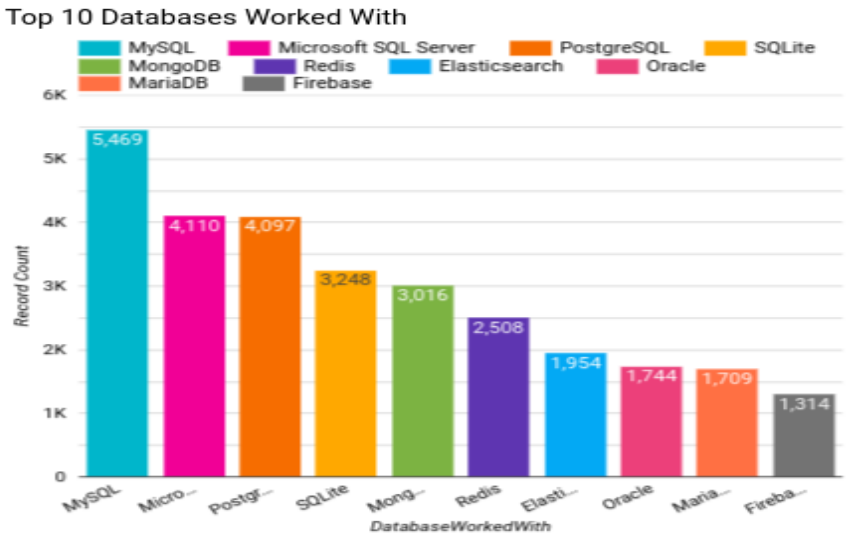
- SQL databases are still popular year over year.
- MySQL will no longer be the most popular next year and other databases are growing in popularity.
- Companies prefer open source databases.

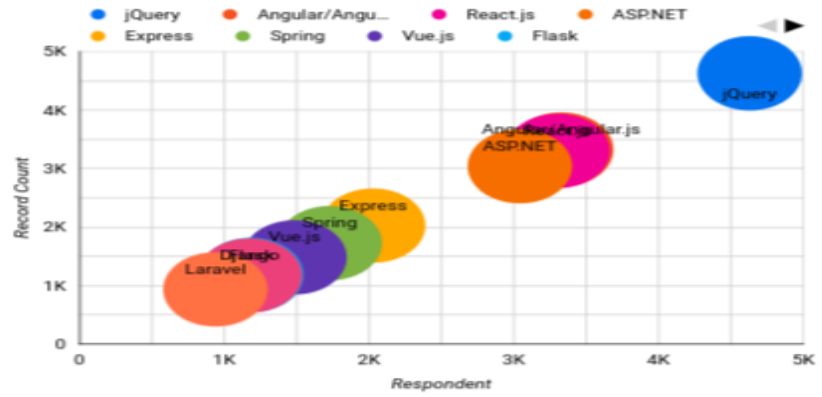
DASHBOARD

https://github.com/mibr2332/Coursera_Final_Project/tree/main

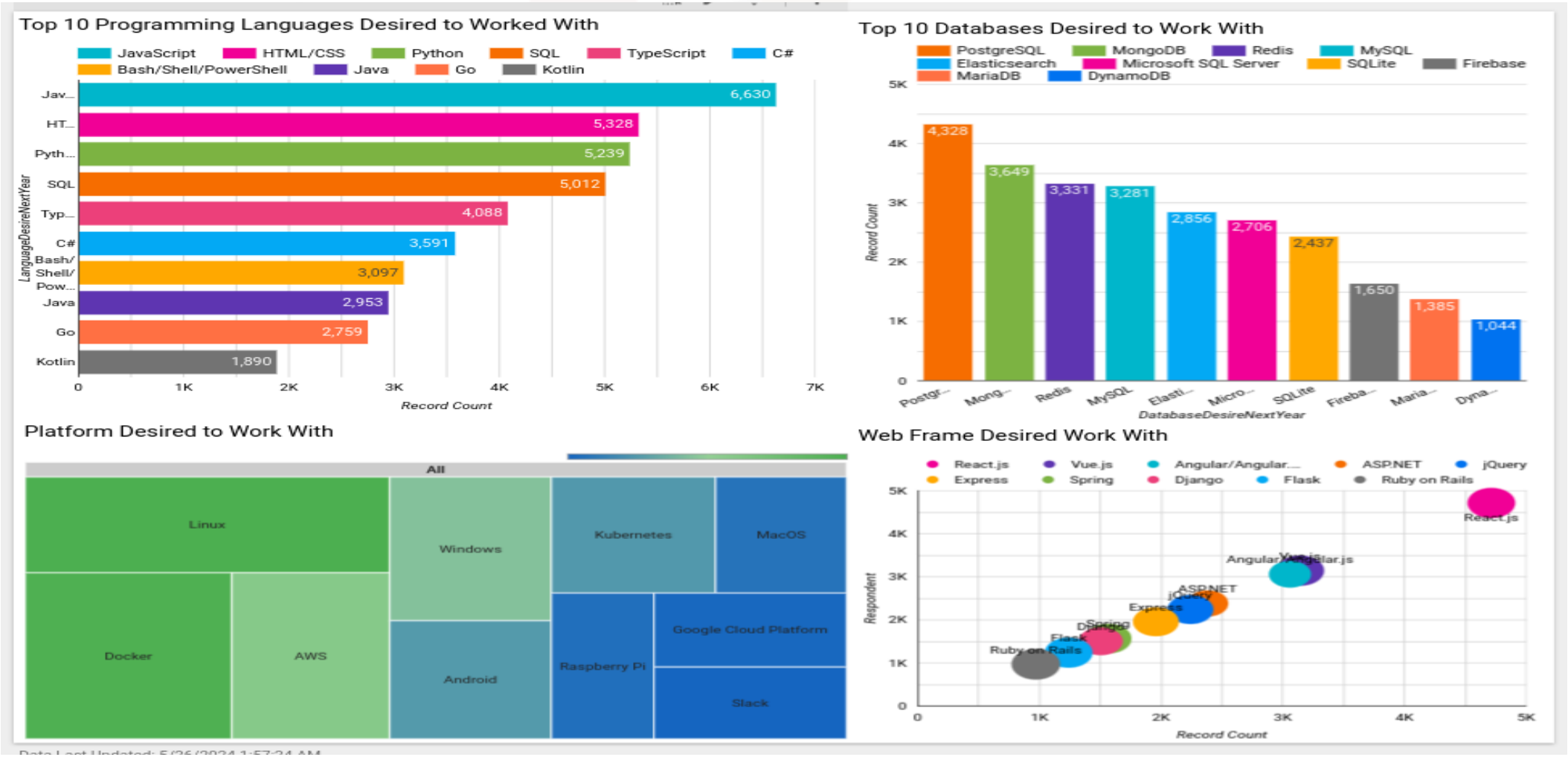
DASHBOARD TAB 1



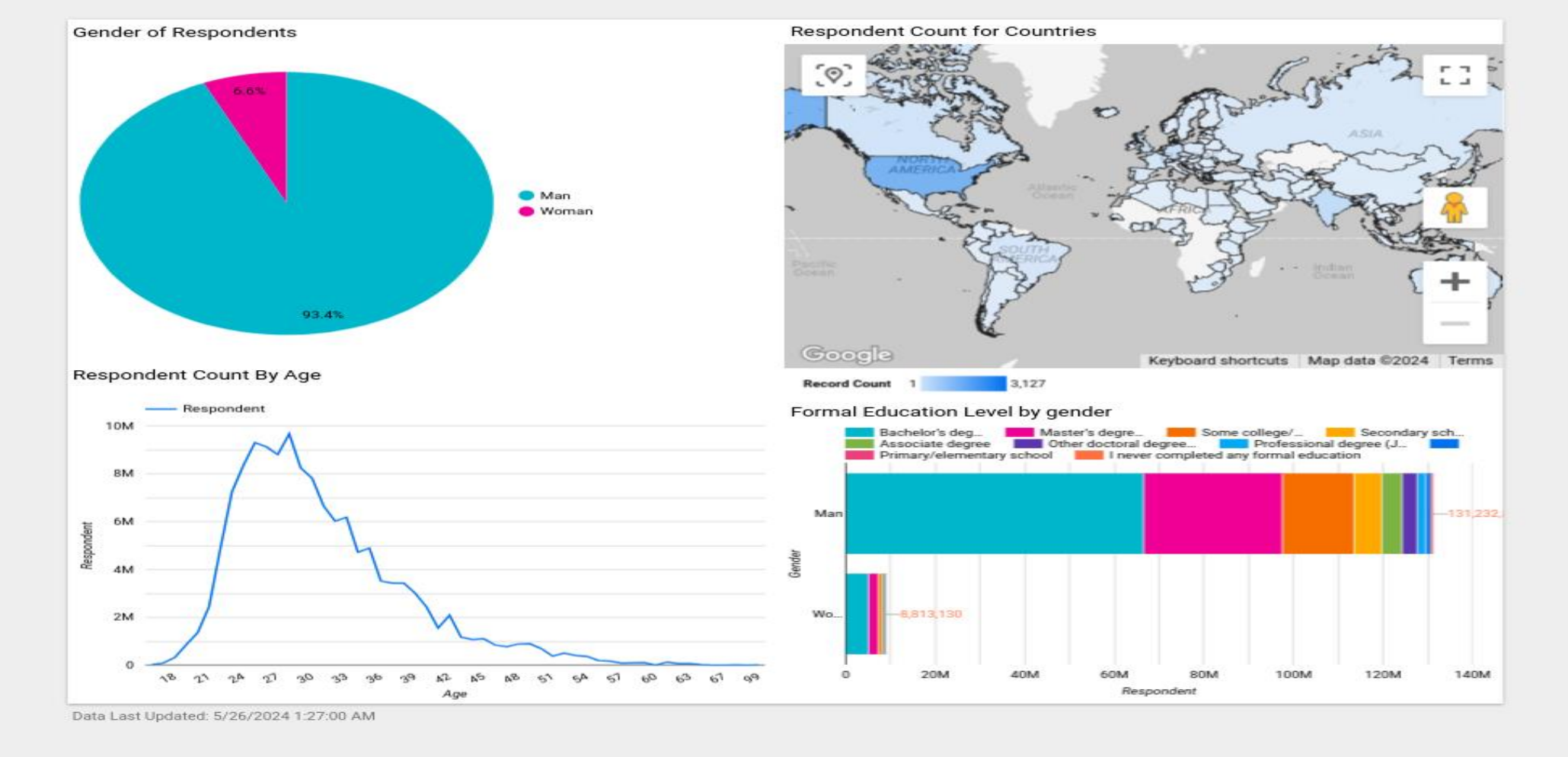




DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Python is growing in popularity across the group of respondents.
- Most developers come from 1st world countries such as U.S. and parts of Europe.
- The majority of Developers are young males in the industry from 24 to 35.

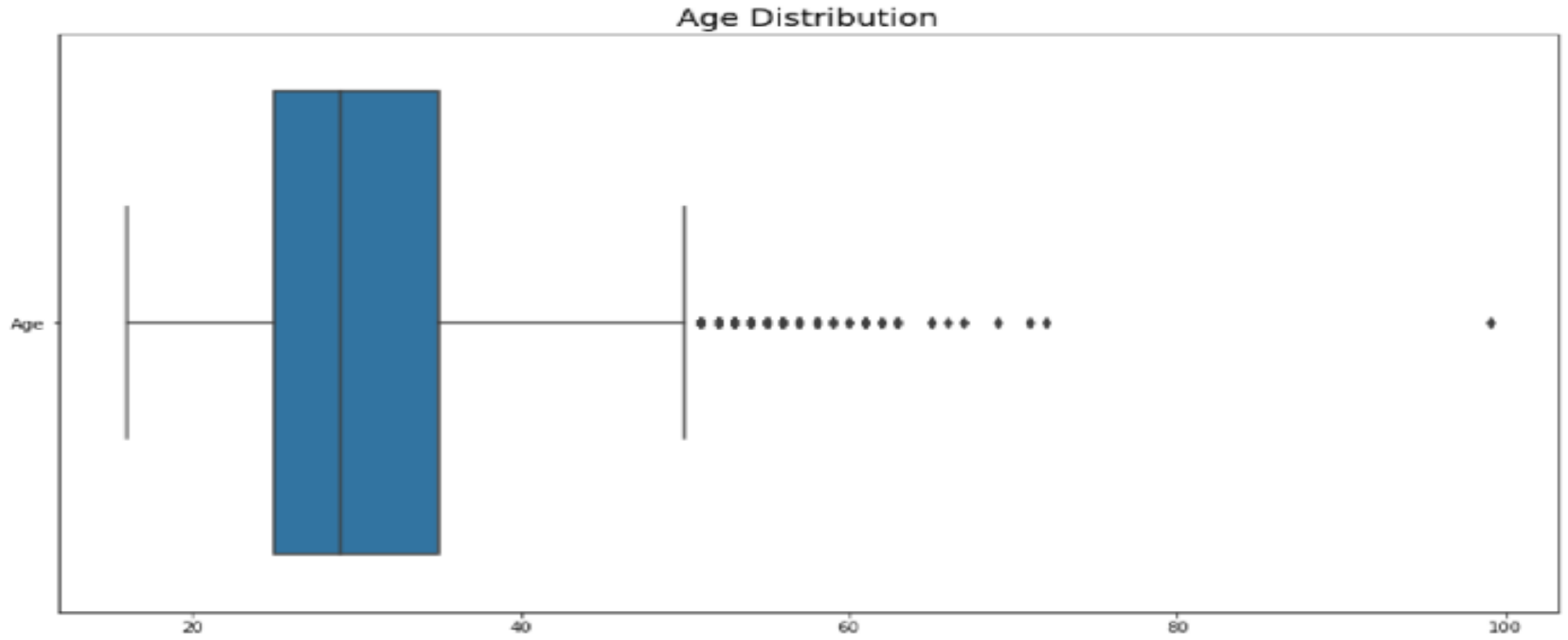
Implications

- More people are studying Python to use in the coming year.
- Most developers are concentrated in certain parts of the world and are of a easy demographic to target.

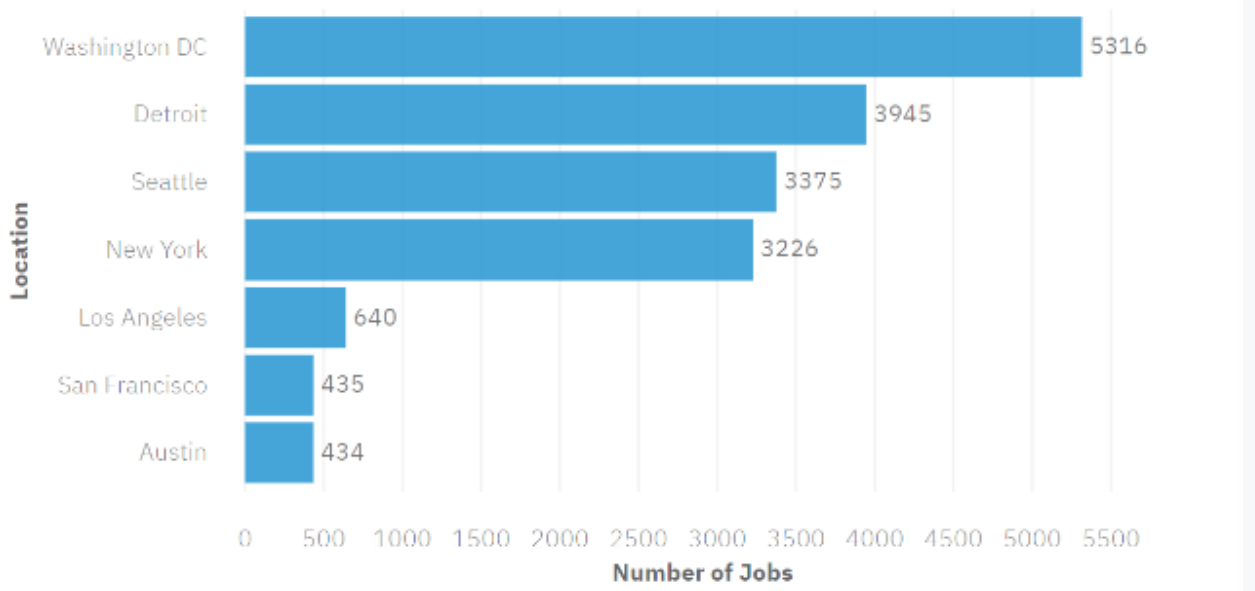
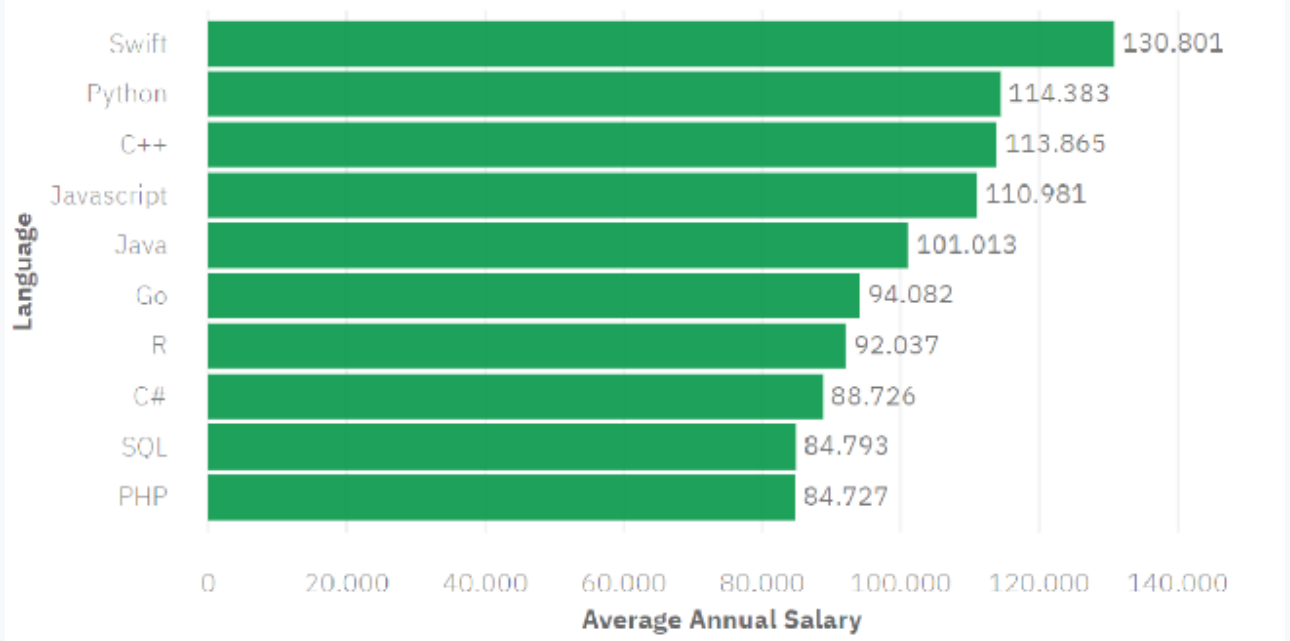
CONCLUSION

- Popularity among programming languages and databases changes year to year and it is very important to keep up on where the trends are moving.
- They seem to be moving toward Python language and open source Databases.
- Most developers are of a very specific demographic that is easily targetable.
- There is a lot of room to expand the market of people that are developing.

Age Distribution Plot



JOB POSTINGS



POPULAR LANGUAGES