Stack Overflow Developer Survey

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OUTLINE

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EXECUTIVE SUMMARY

- StackOverFlow conducted a survey of software developer. It is great resource to get insight about technology industry
- Methodology used in this analysis
  - Data gathering
  - Data analysis
  - Data visualization
- Opensource language, database and platfrom will gain more popularity
- There might be global polarization in developer location, gender and age
- Training program for middle aged and woman might be good business if they are interested in it

INTRODUCTION

- Stack Overflow conducted an online survey of about 90,000 software professionals across the world
- It is great resource to analyze the trend in software professionals
- Three different subjects are analyzed and visualized here
  - Current technology usage
  - Future technology trend
  - Demographics of survey respondents

METHODOLOGY

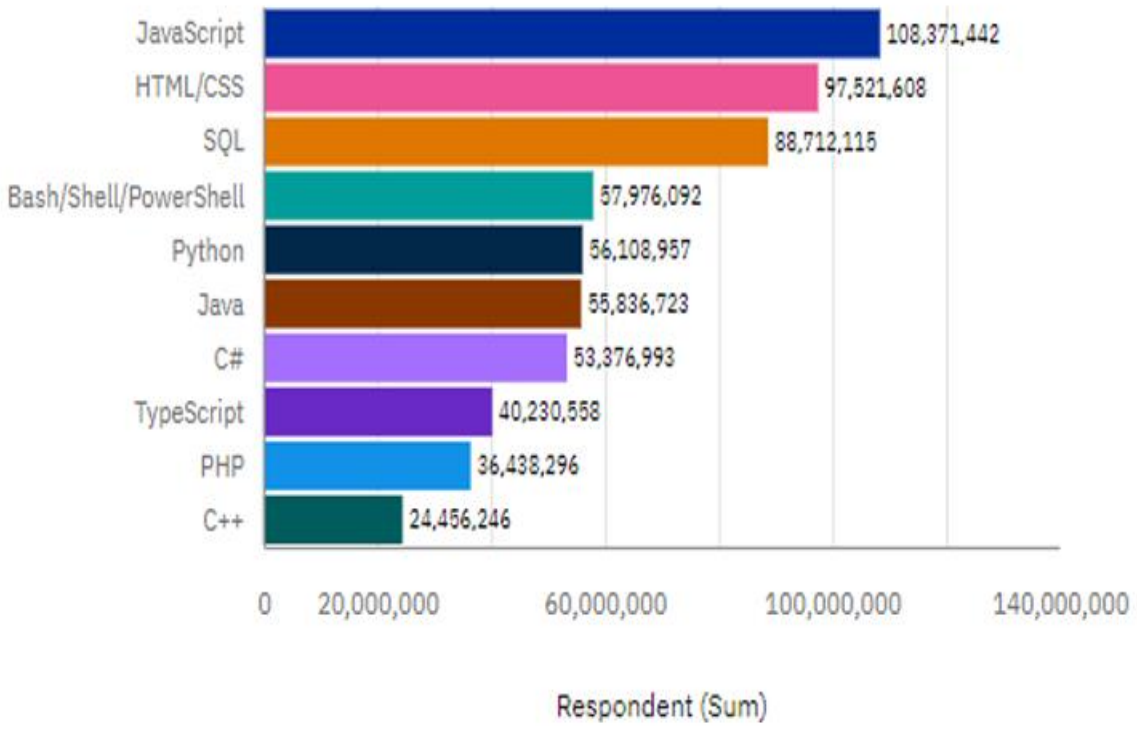
- Collecting survey data
  - API
  - Web scraping
  - Python request library
- Data wrangling
- Exploring data using statistical method
- Data visualization
- Dashboard preparation

RESULTS

PROGRAMMING LANGUAGE TRENDS

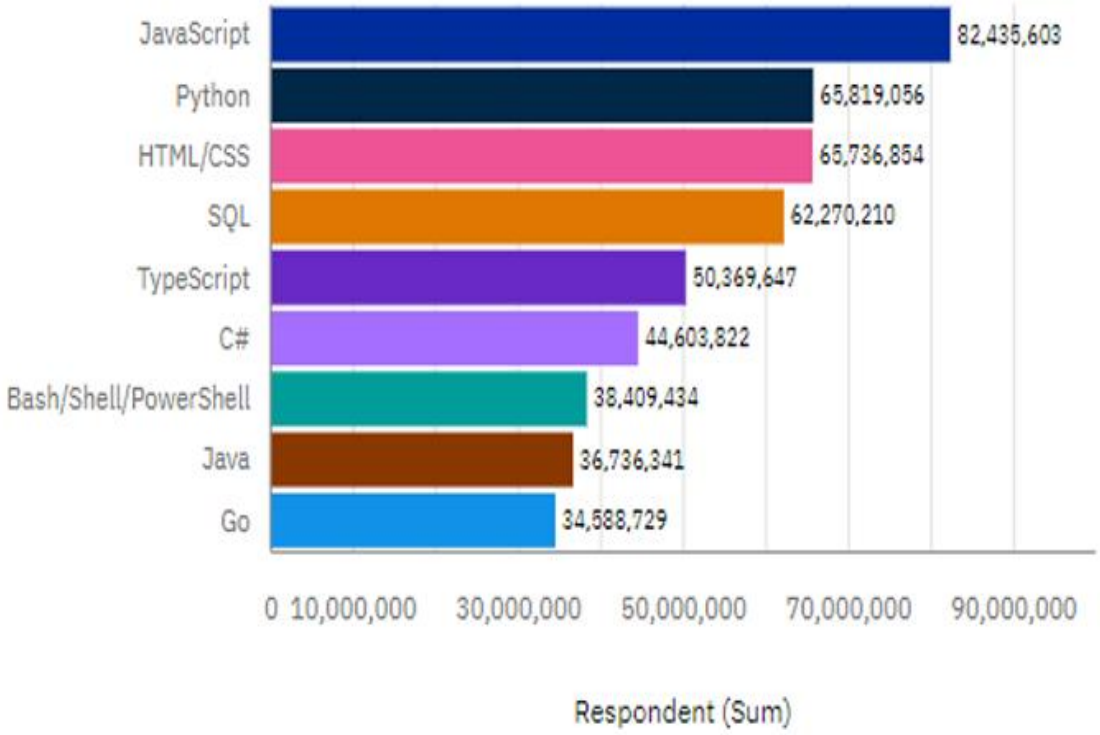
Current Year

Top 10 language used



Next Year

Top 10 language desired to learn



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript is the most used language
- Python and Typescript are getting popularity
- C++ is losing their popularity

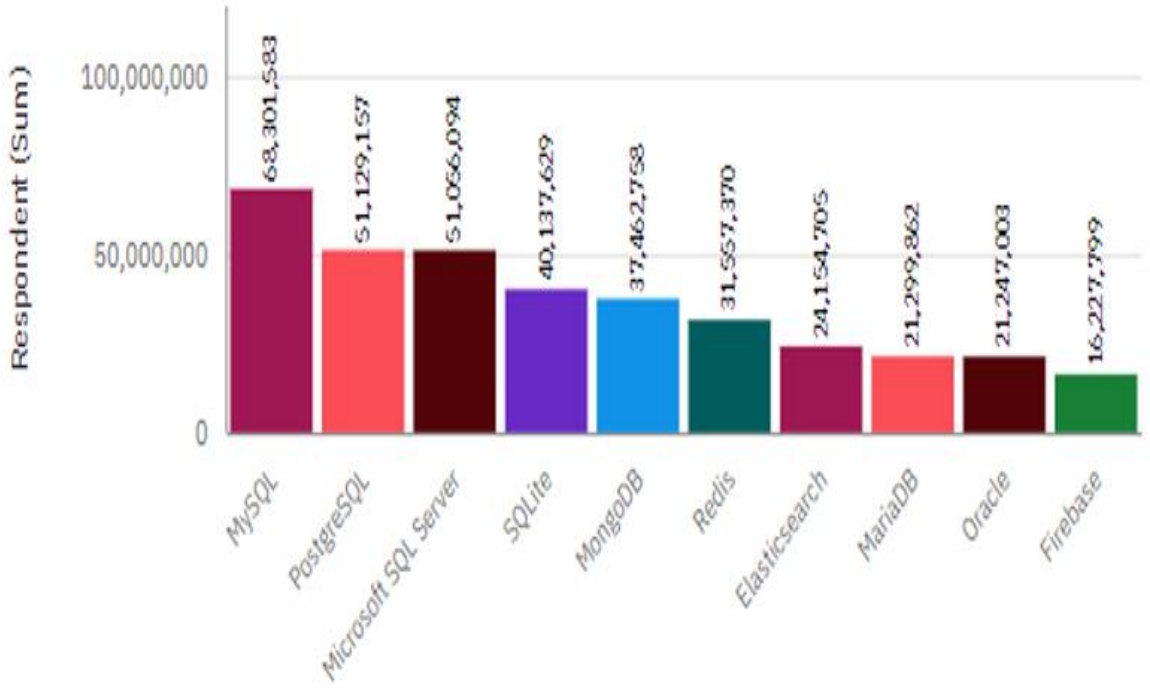
Implications

- Web developing will still be popular
- Usage of python will keep going up
- Javascript, html, css, sql, python might be go-to language in current market

DATABASE TRENDS

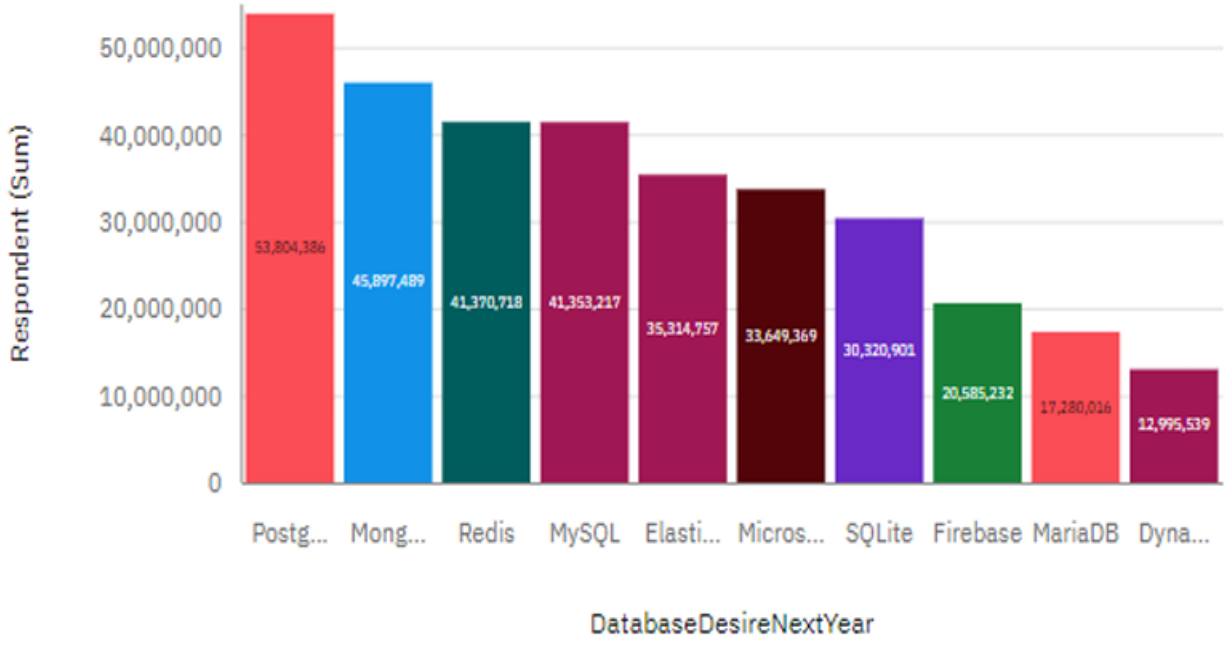
Current Year

Top10 database used



Next Year

Top10 database desired to learn



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used databases in current year
- Oracle seems like losing their popularity
- Opensource databases are dominant

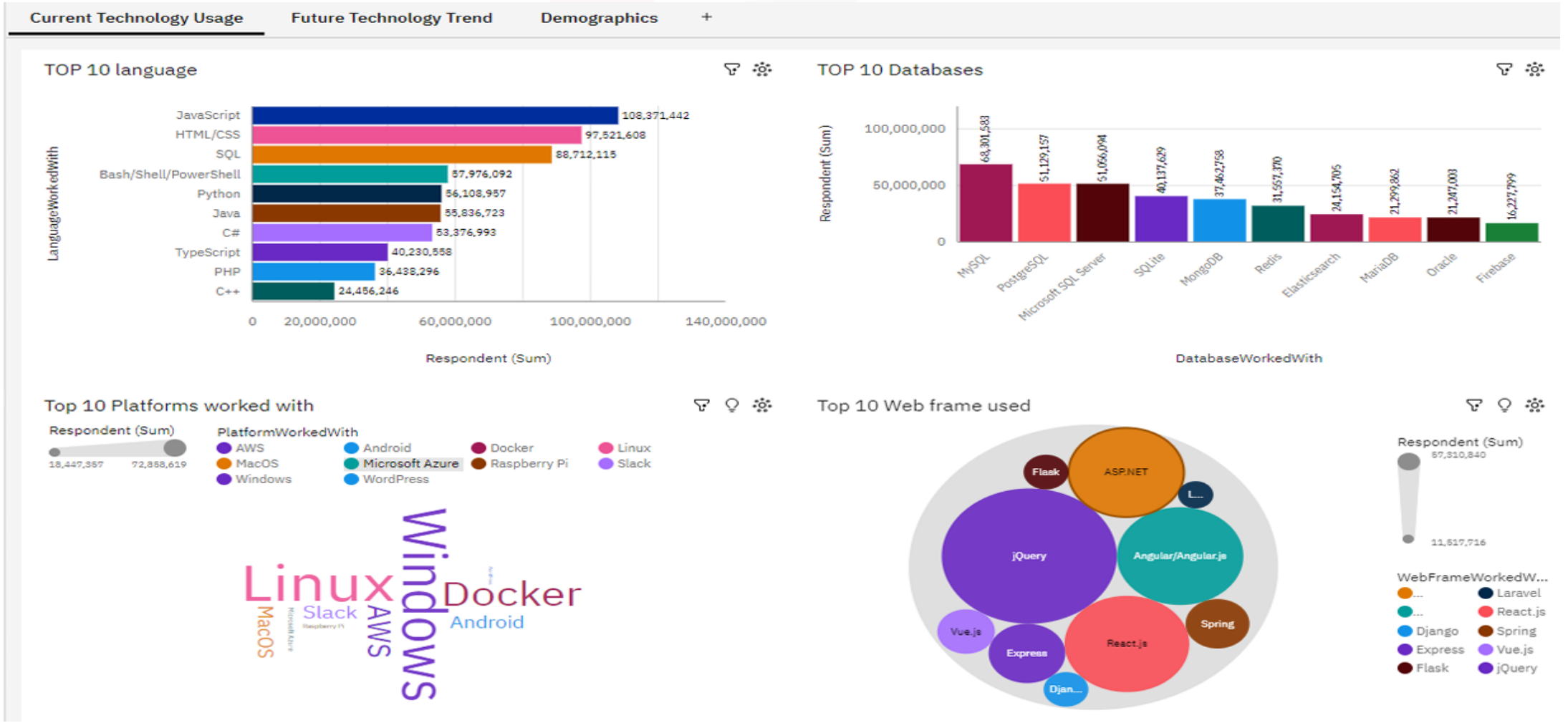
Implications

- PostgreSQL will be the most popular database later
- There is interest in NoSQL database like MongoDB
- Open source database dominance will keep going

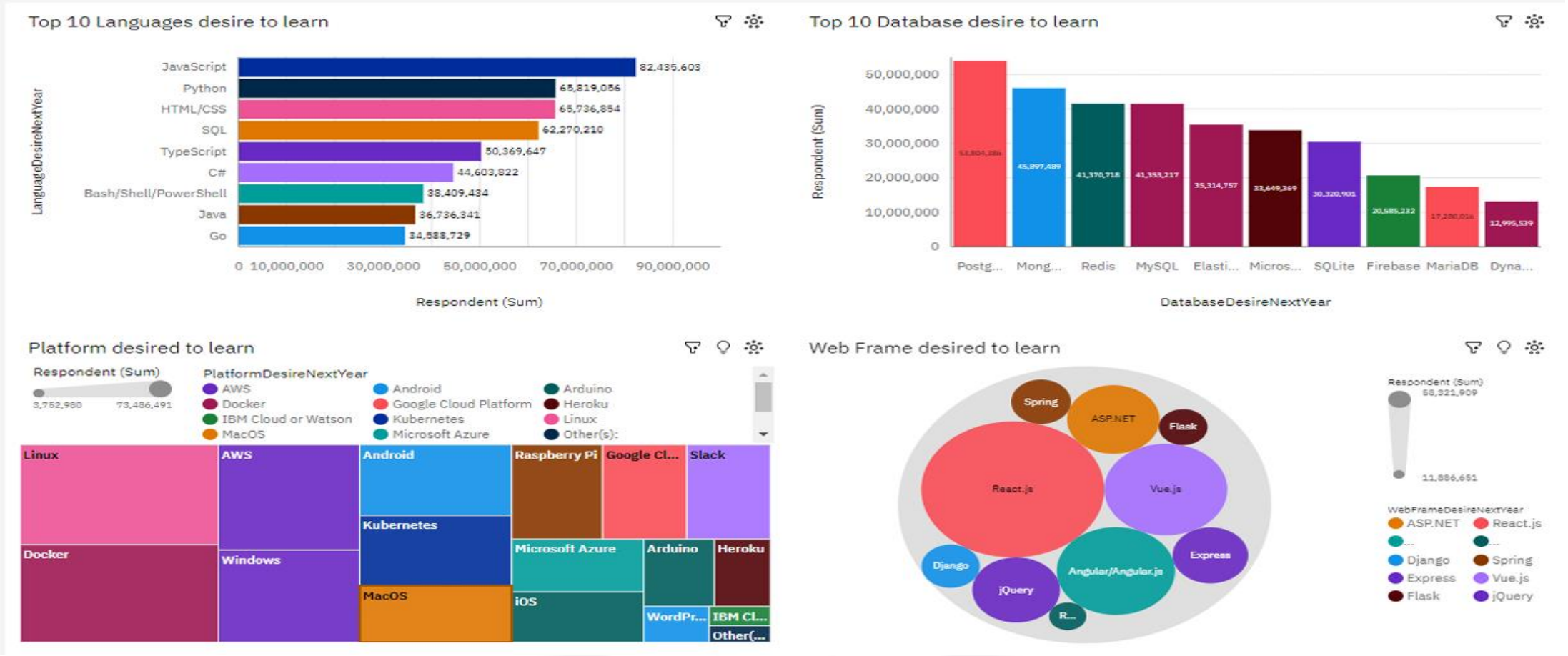
DASHBOARD

https://github.com/drspchoi/testrepo/blob/main/Week5-cognos%20dashboard.pdf

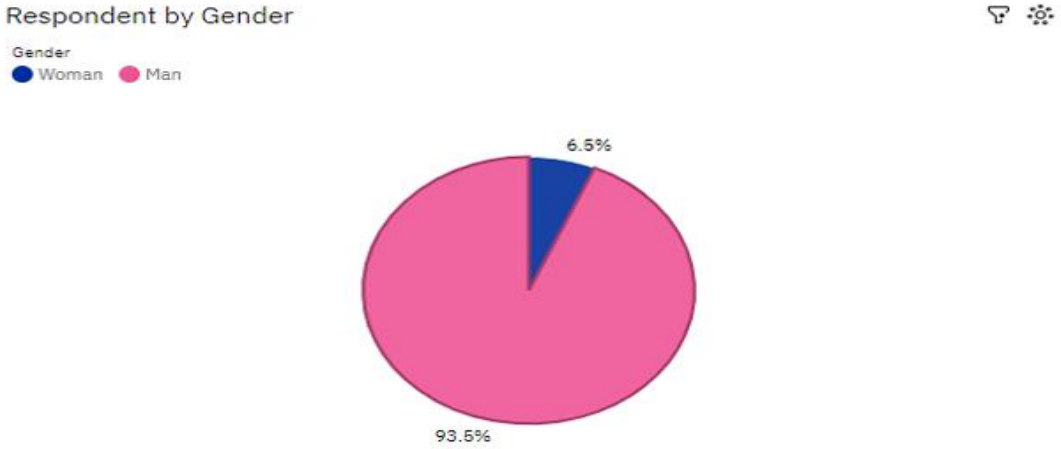
Current Technology Usage

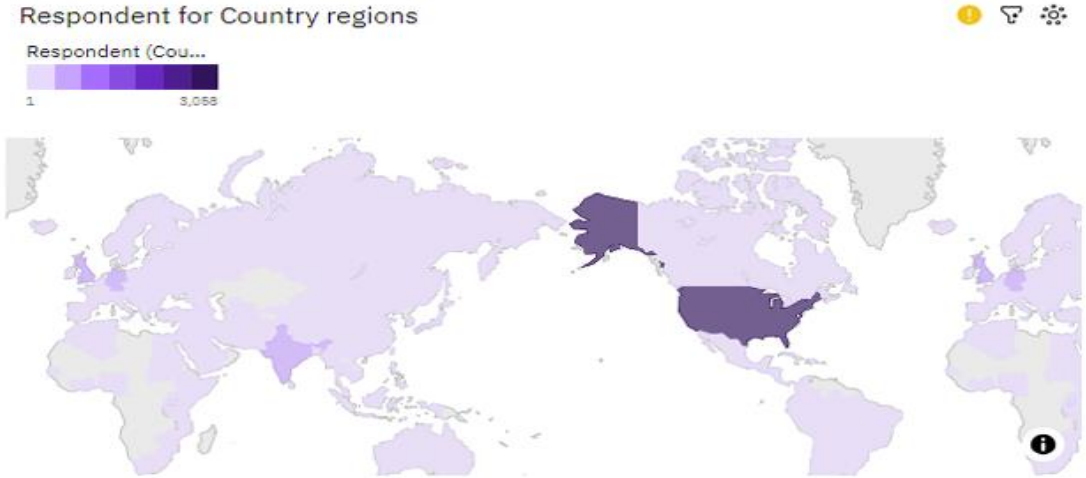


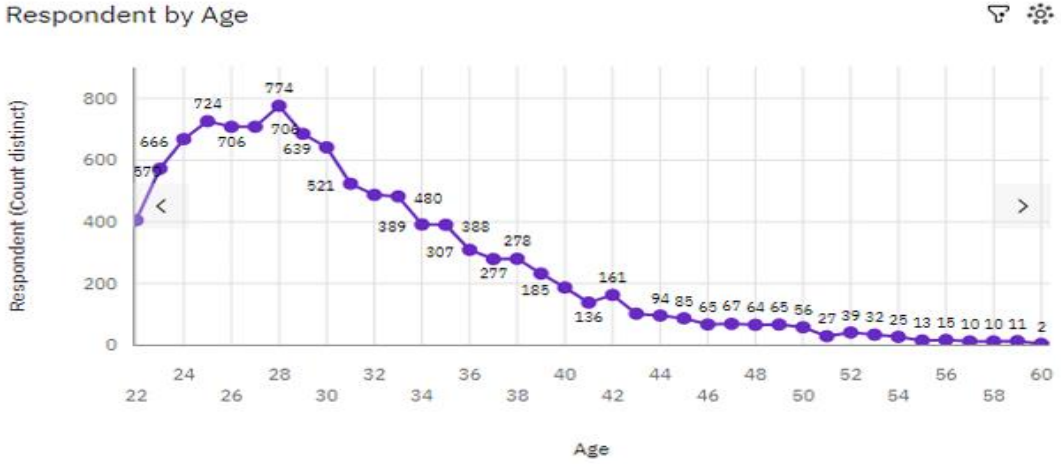
Future Technology Trend

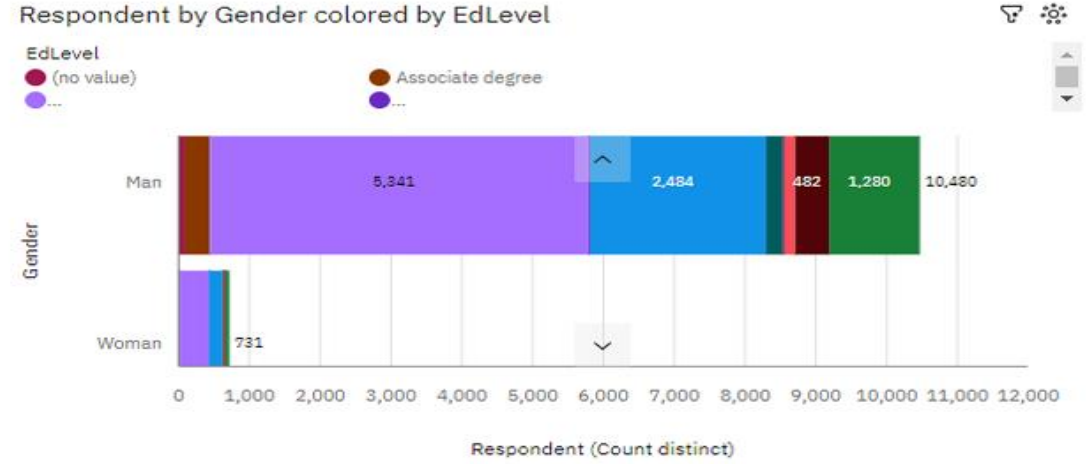


DASHBOARD TAB 3









DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript and python are popular language
- Opensource database are selected by many developers
- Still, male dominant in developer
- Most of responders are from USA
- Youth dominant

Implications

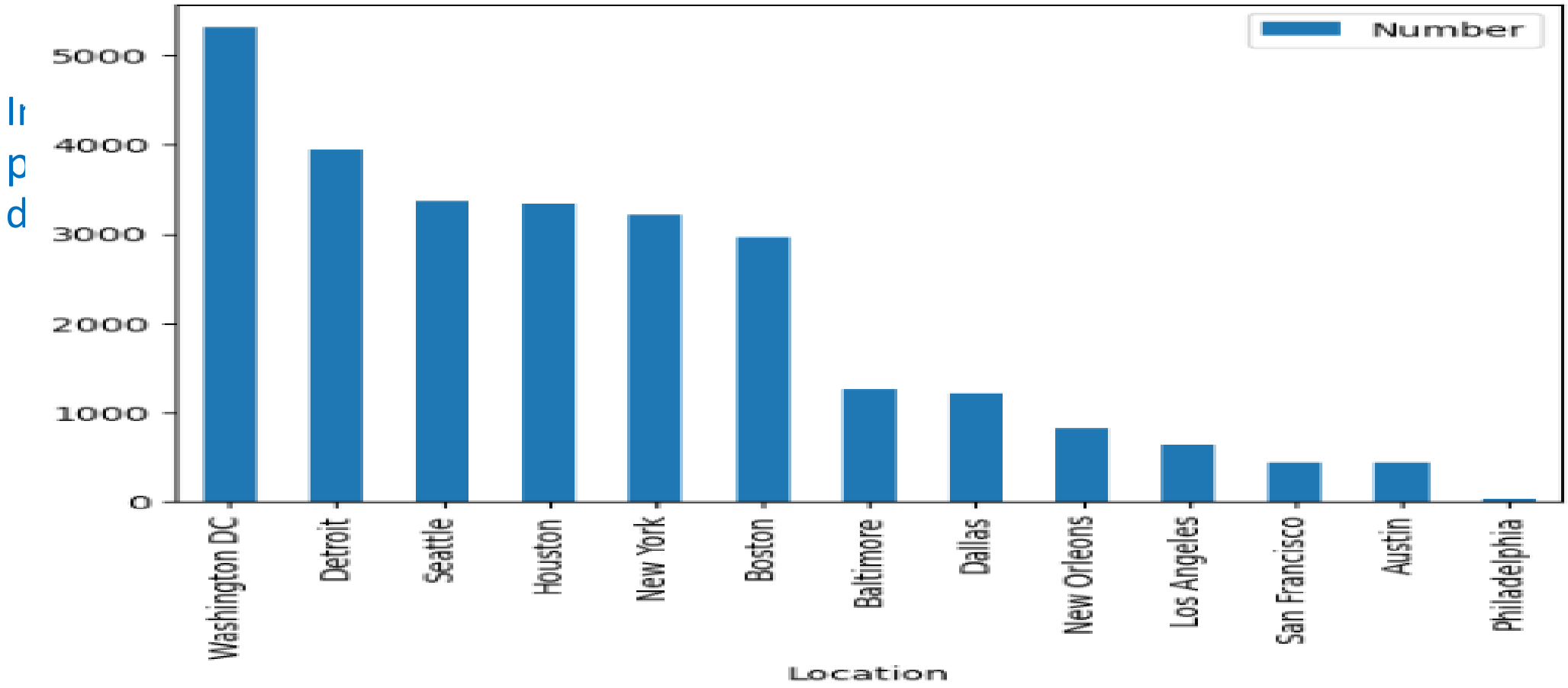
- Those responses might not represent the prospects of whole developer in whole of the world
- Open source will keep gaining popularity
- Javascript library will keep their dominance
- Possibly global polarization of developers location and gender

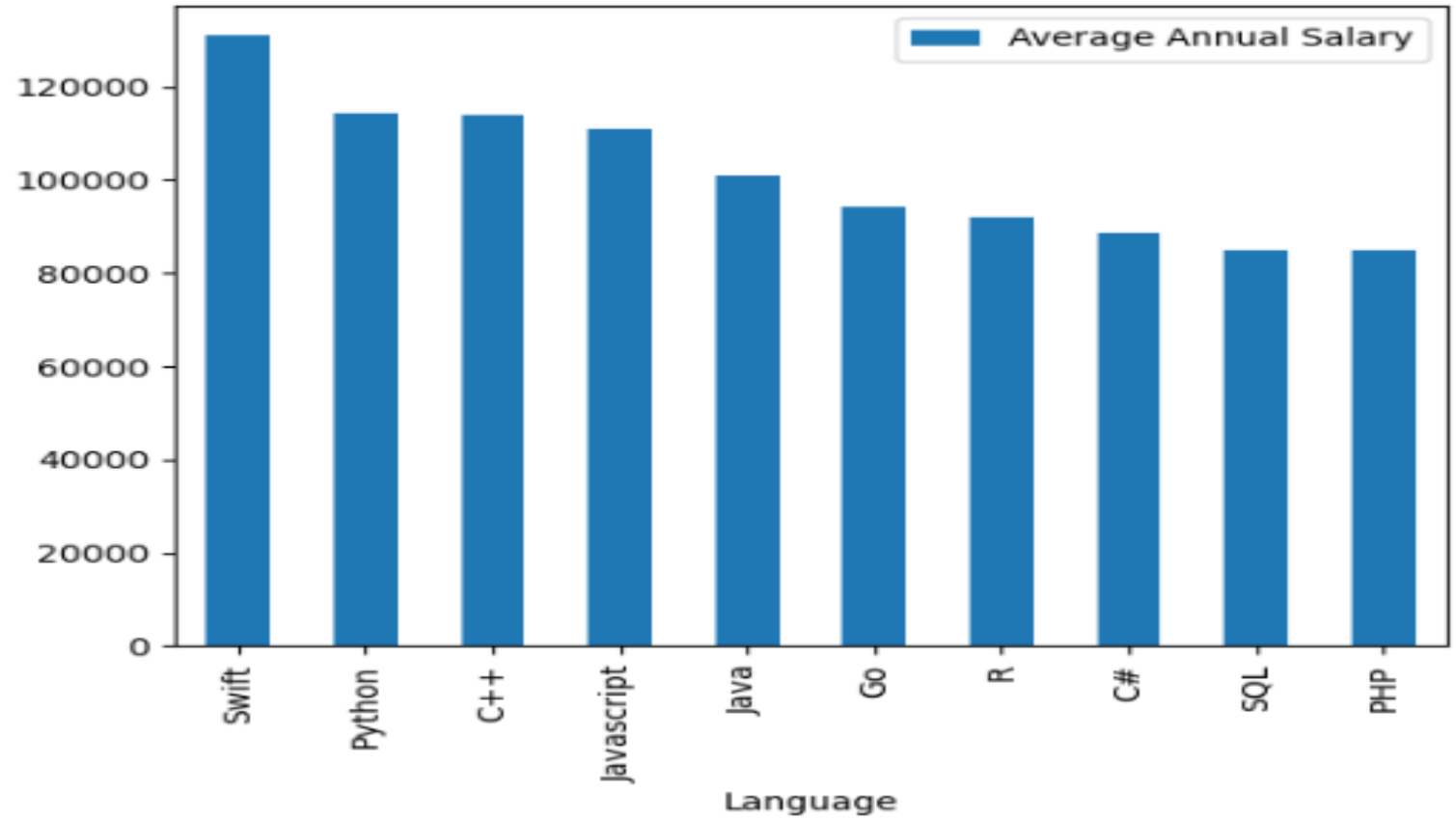
CONCLUSION

- Open-source platform, language, database will not lose their dominance
- Some efforts to attract female developer might be required
- Need to check if the popularity of Stack Overflow is from a whole world or from USA only
- Need to check if the middle aged is interested in gaining developer skills

APPENDIX

JOB POSTINGS



POPULAR LANGUAGES

In Module 1 file named "popular-la e bar chart in the descend