



<To Analyse and Create  
Dashboard from Stack  
Overflow Developer Survey  
2019 >

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix
- Bar Plot- Job Posting and Popular Language

# EXECUTIVE SUMMARY

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- Data analysis and visualization on IBM Cognos Analysis
- Methodology Description
  - Data gathering
  - Data analysis
  - Data visualization
- Results are showed base on graph and trends
- Discuss the results based on findings
- Conclusion have been presented here based on findings

# INTRODUCTION

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- The people who are like to code Stack Overflow's Annual Developer survey is the most popular one
- Almost 90,000 developers
- There is lack of trend for analysis the developer trend
- Need to find out where this trends going on
  - Next popular programming language and database
  - Characterization around the globe

# METHODOLOGY

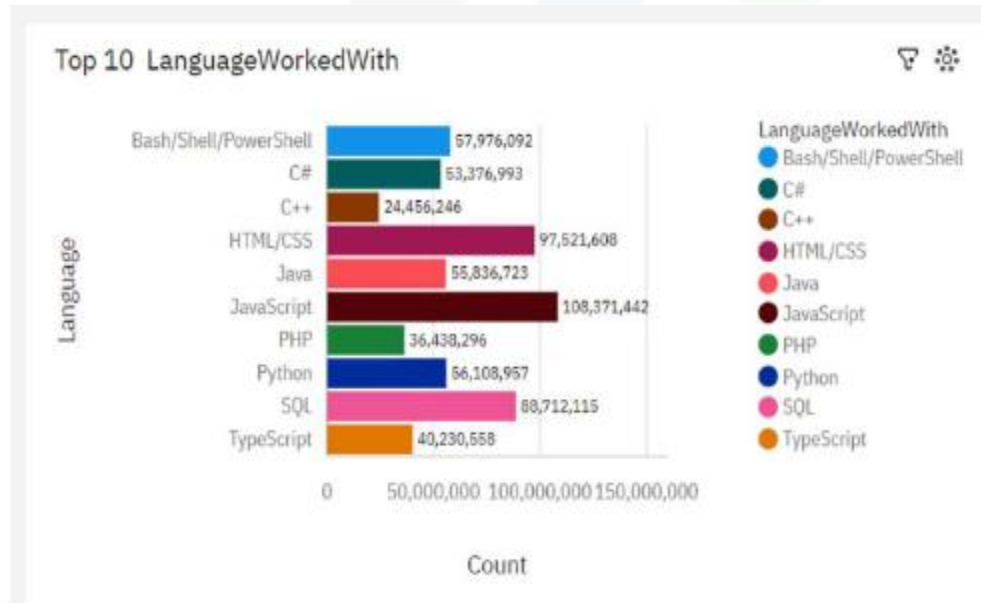
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- Collection of survey data and explore the feasibility
  - Web Scraping
  - APIs
  - Request library-Pandas, Seaborn,Matplotlib, Numpy
- Data wrangling
- Exploratory data analysis
- Data visualization
  - IBM cognos analysis create dashboard
  - Make 3 individual tabs for display data according to requirements

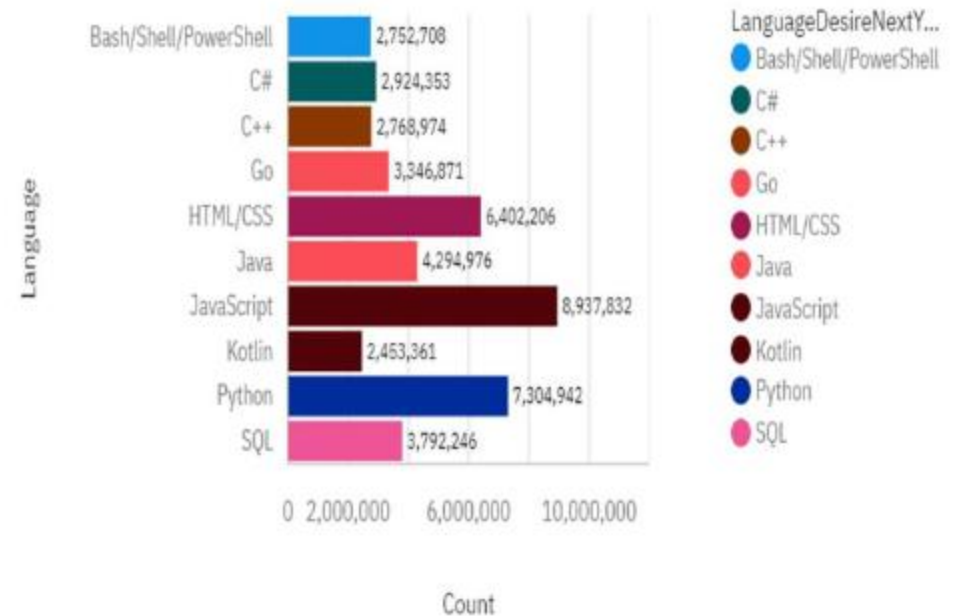
# PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year

Top 10 LanguageDesireNextYear



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

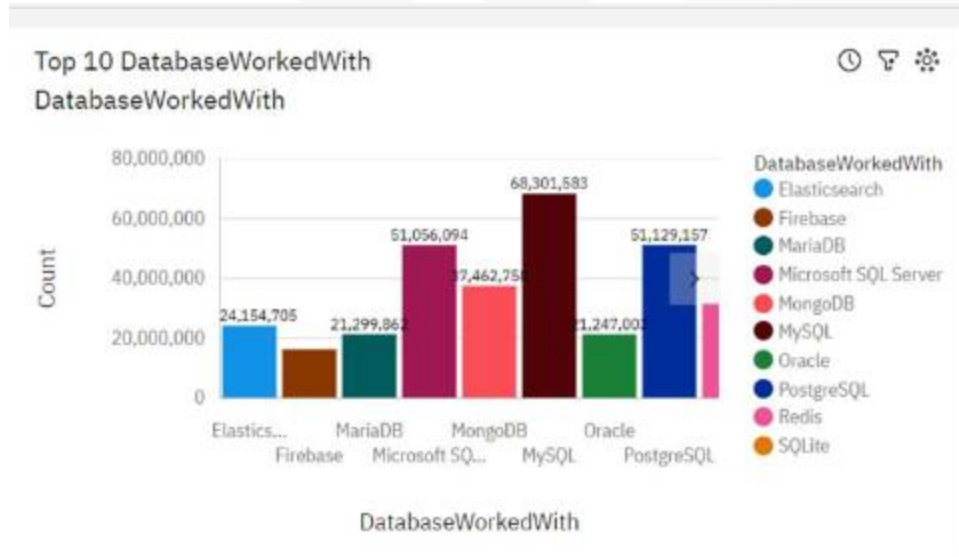
- The most popular programming language - JavaScript
- 2nd programming – HTML /CSS
- Lowest for C++

## Implications

- 1st increasing trend for JavaScript
- Most popular will be Python
- 3rd increasing trend -HTML/CSS

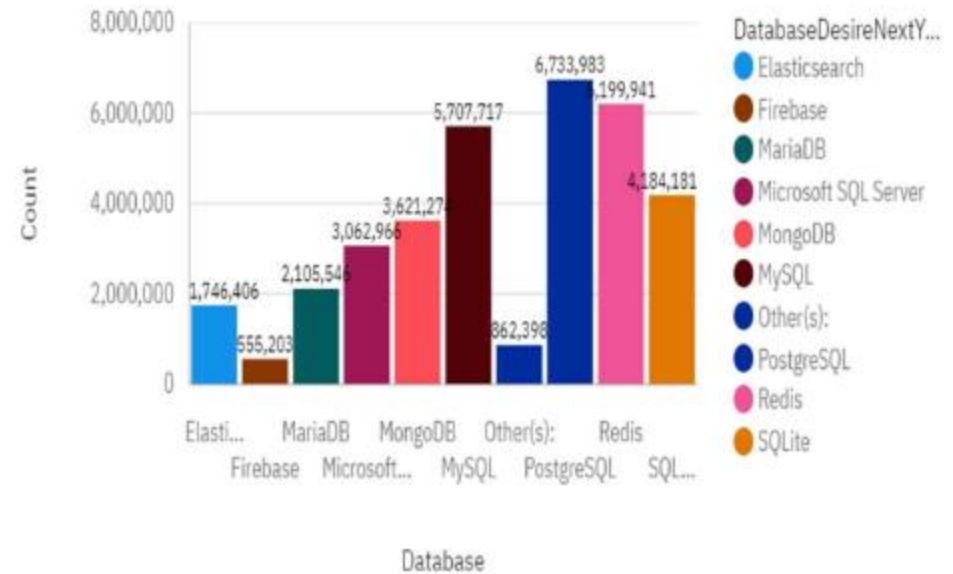
# DATABASE TRENDS

## Current Year



## Next Year

Top 10 DatabaseDesireNextYear colored by DatabaseDesireNextYear





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Most used database-MySQL
- Growing interest-PostgreSQL
- Less interest-Oracle

## Implications

These three databases will be popular on next year

- PostgreSQL
- Redis
- MySQL

# DASHBOARD

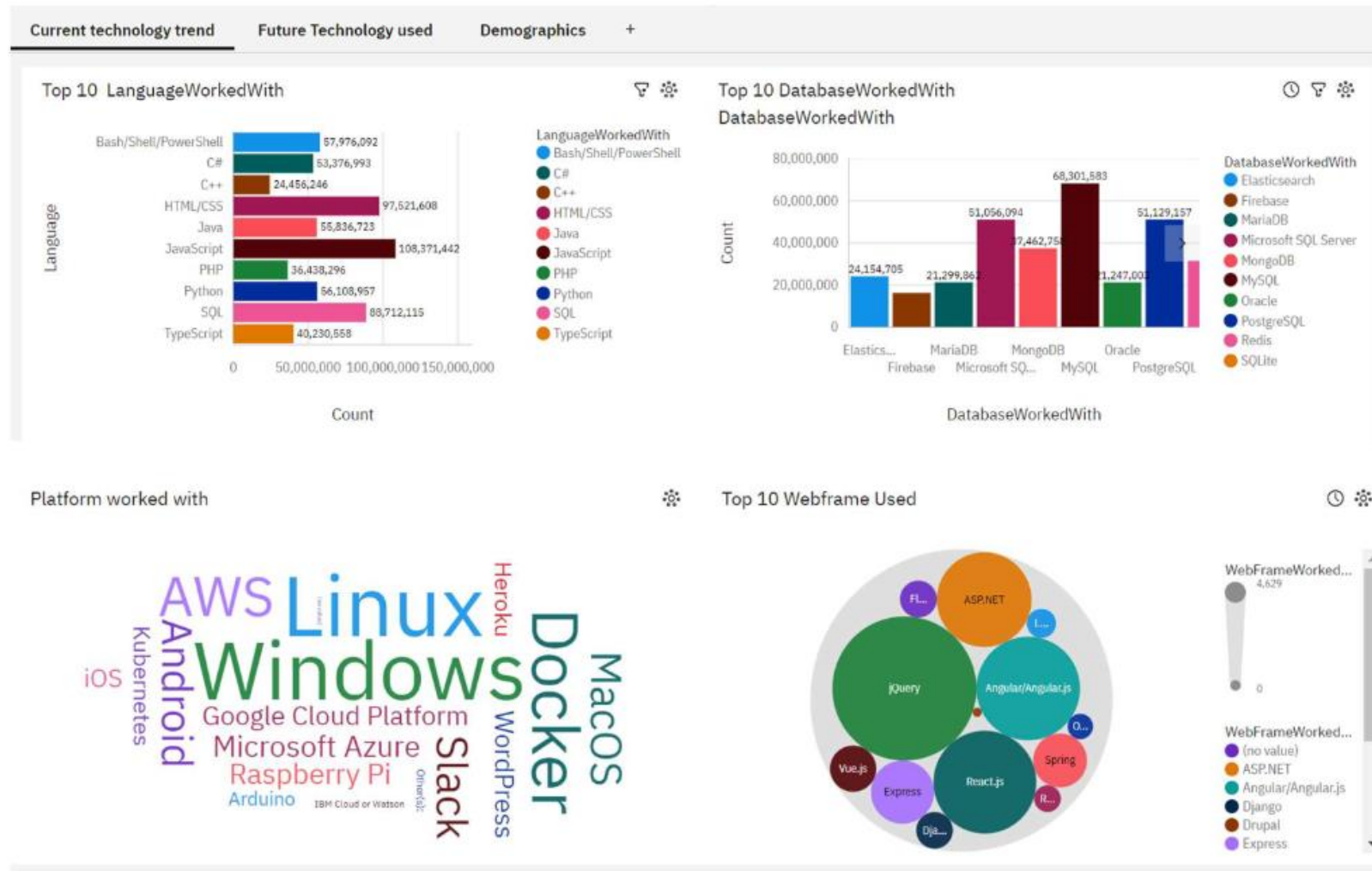
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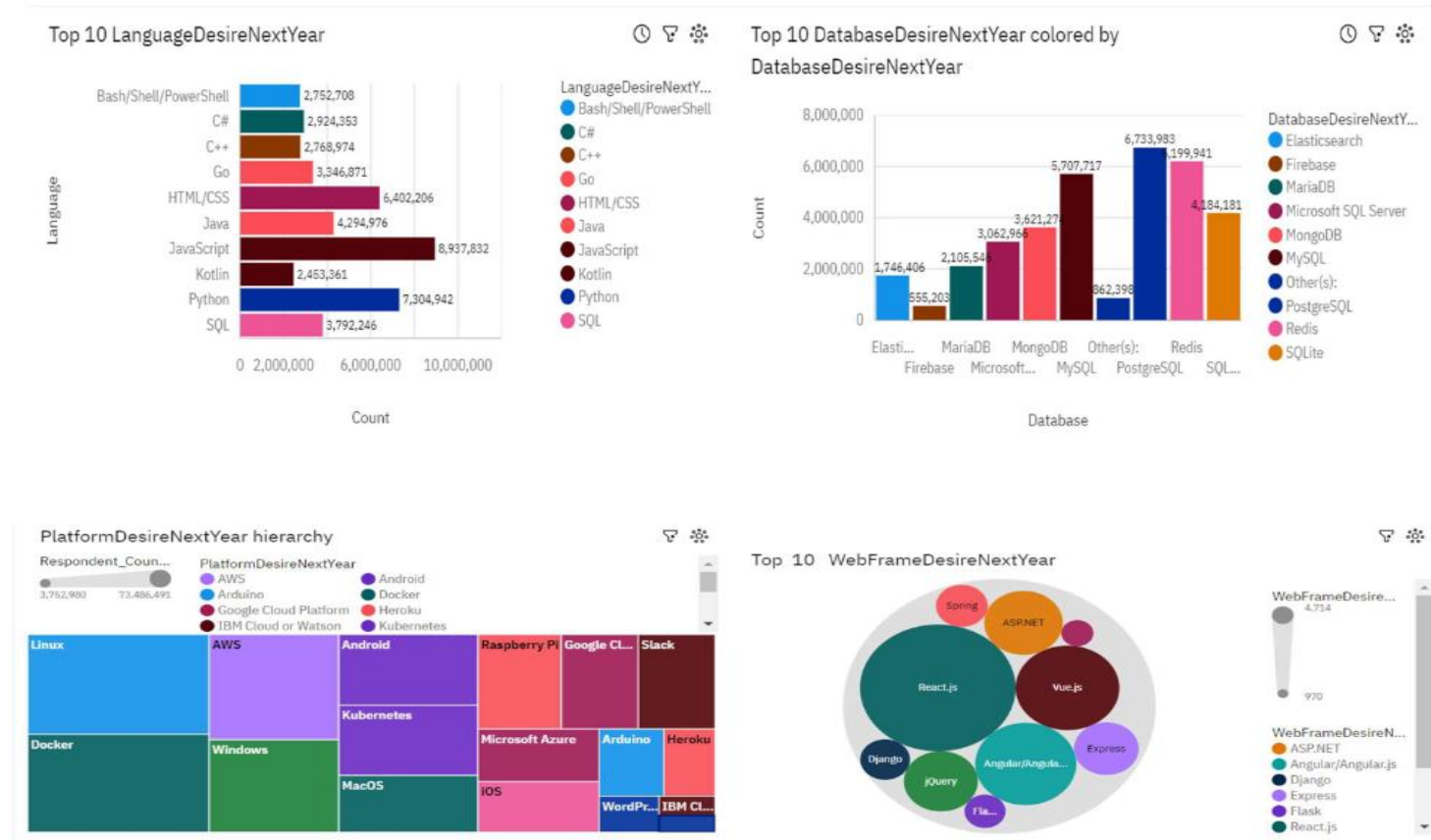
The GitHub link of the Cognos dashboard

<https://github.com/Ruksana22/IBM-Data-Analysis-Capstone-project/blob/main/IBM%20Week-5%20Peer%20graded%20assignment.pdf>

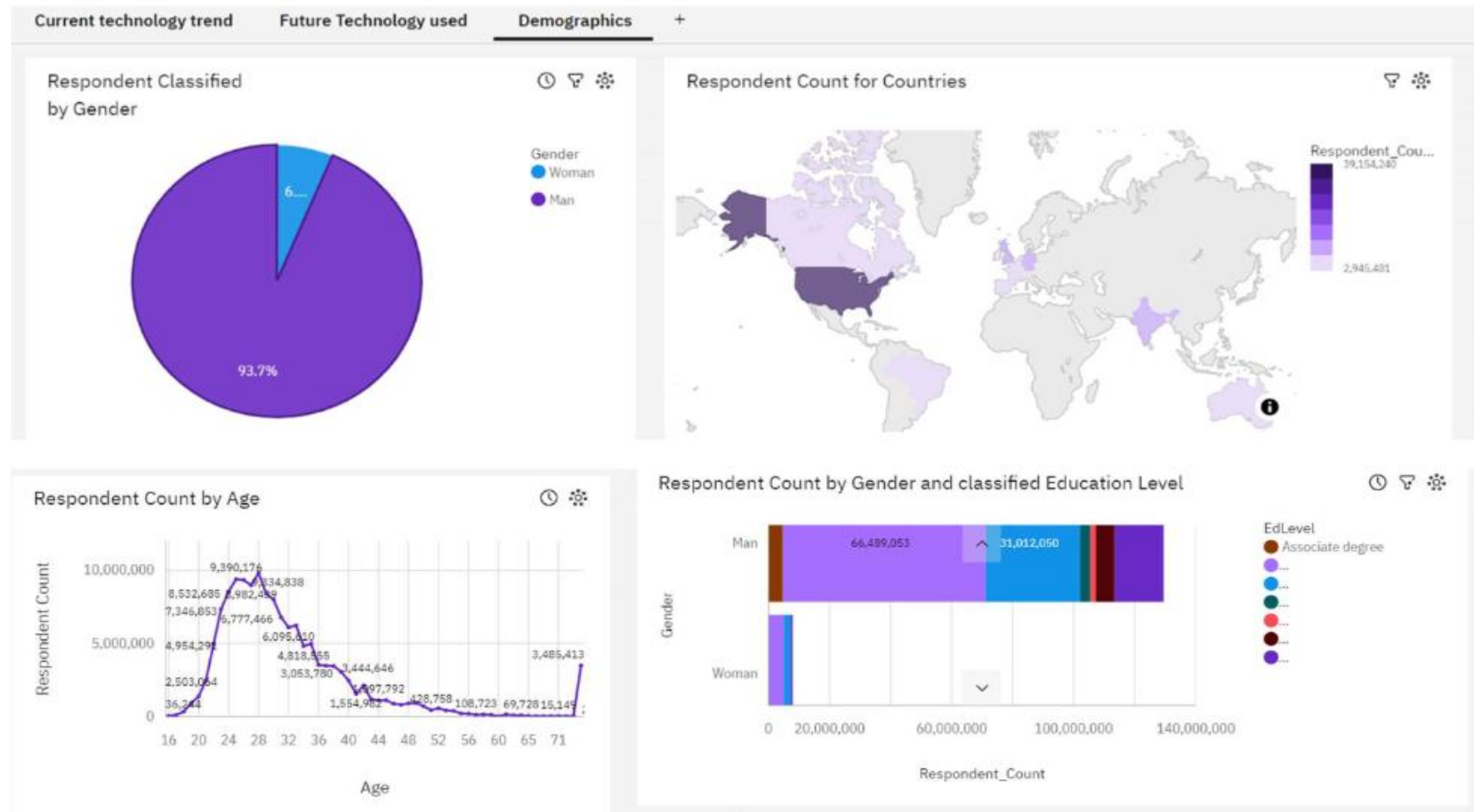
# DASHBOARD TAB 1



# DASHBOARD TAB 2



# DASHBOARD TAB 3



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- The most popular programming language - JavaScript
- The most popular database-MySQL
- 93% developer -Male

## Implications

- Need to create environment to learn JavaScript for making more developers
- Need to increase more job opportunity for MySQL developers
- Increase opportunity to learn programming for female

# CONCLUSION

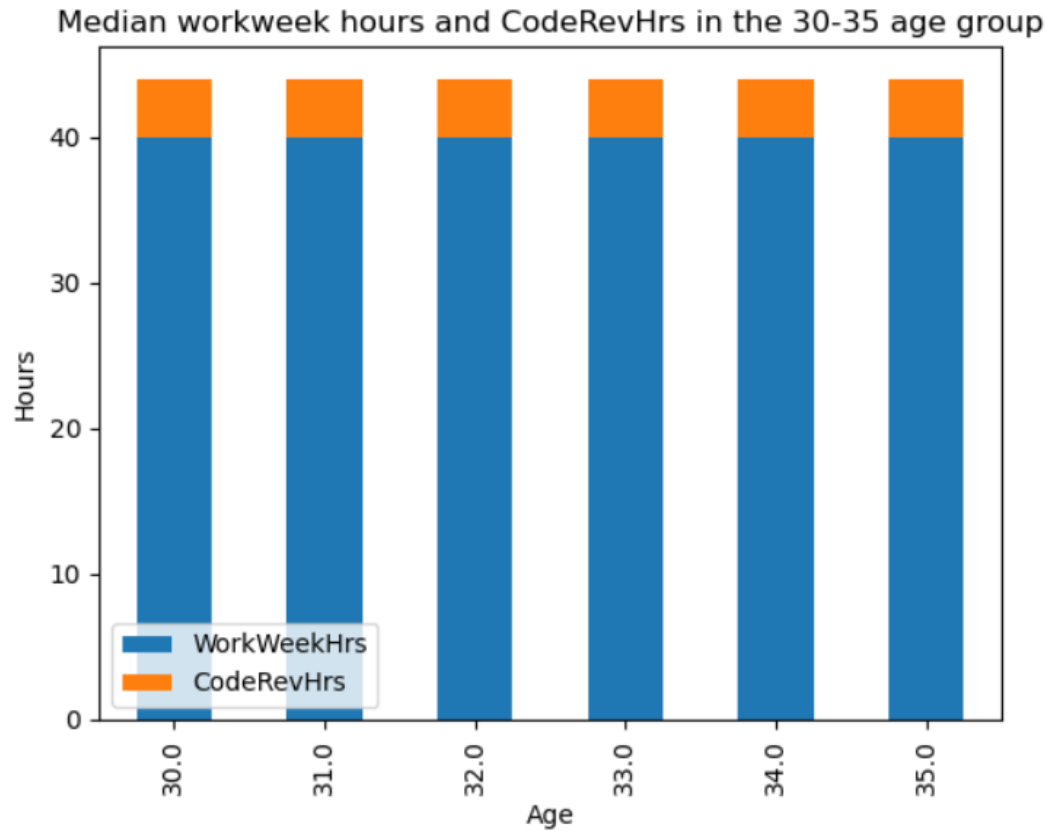
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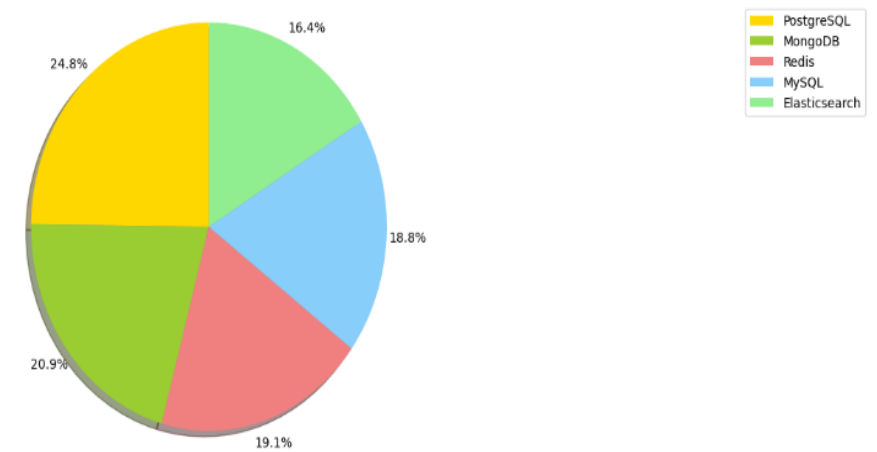
- To create more developer for programming
- To create more job market for JavaScript developers
- To spread the language popularity trends to next generation
- To encourage female to learn programming



# APPENDIX

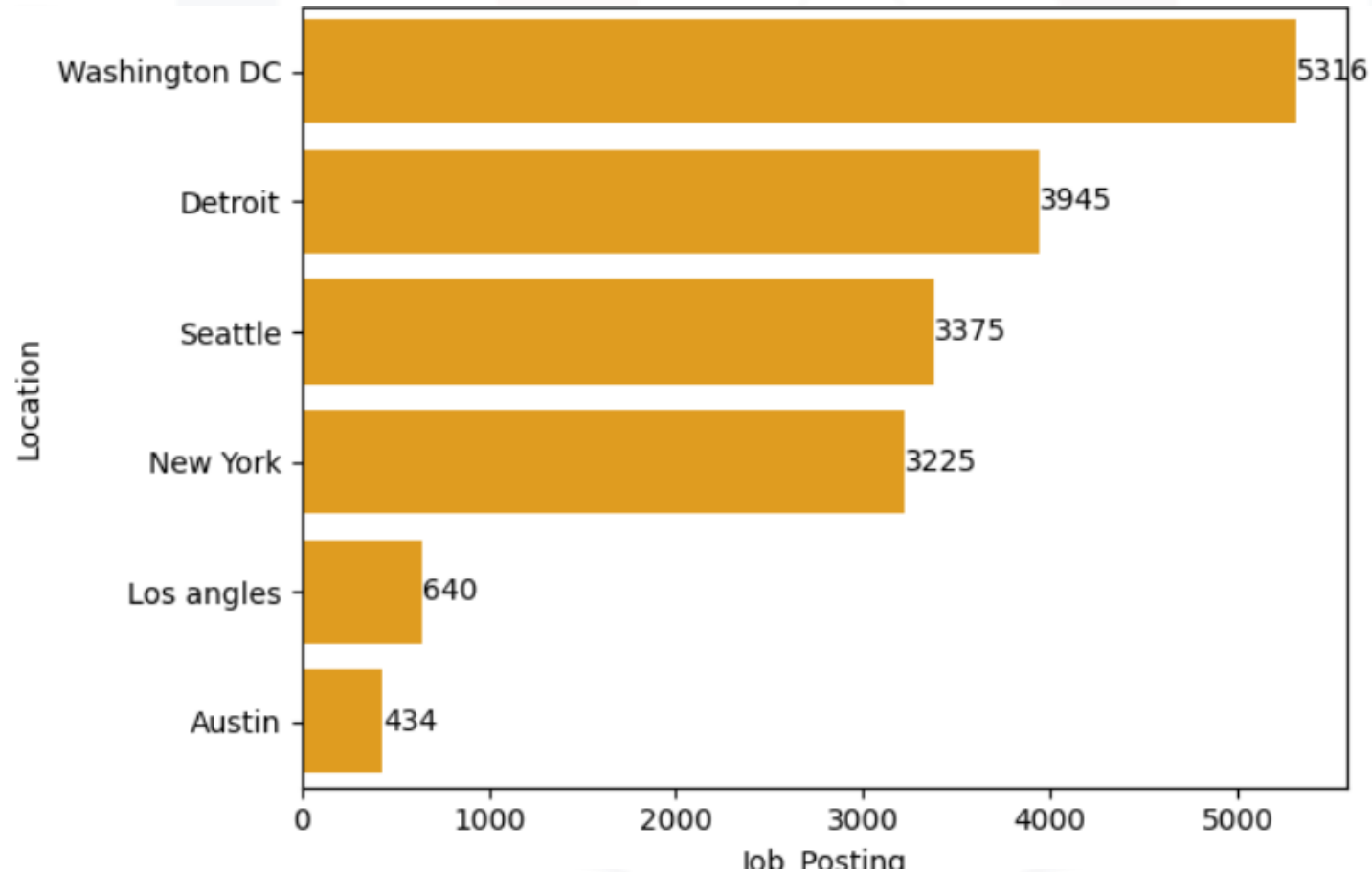


Top 5 Databases Respondents Wish To Learn



# JOB POSTINGS

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# POPULAR LANGUAGES

