



STACK OVERFLOW DEVELOPER SURVEY 2019

Sumaiya Tabassum
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OUTLINE



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

EXECUTIVE SUMMARY



- Data Collection & Analysis goal
- Data Collection methodologies used
 - Data Collection using APIs
 - Data Collection using Webscraping
- Data Wrangling and Cleaning Dataset
- Exploratory Data Analysis
- Creating Visualizations using graphs & trends
- Discussions and drawing conclusions on findings
- Final Conclusions

INTRODUCTION



- Annual Developer Survey is the largest survey who code around the world
- To find the top programming skills that are most in demand from various sources including:
 - Job postings
 - Training portals
 - Surveys
- After Collecting the data , to answer the following questions
 - What are the top programming languages in demand?
 - What are the top database skills in demand?
 - What are the popular IDEs?

METHODOLOGY



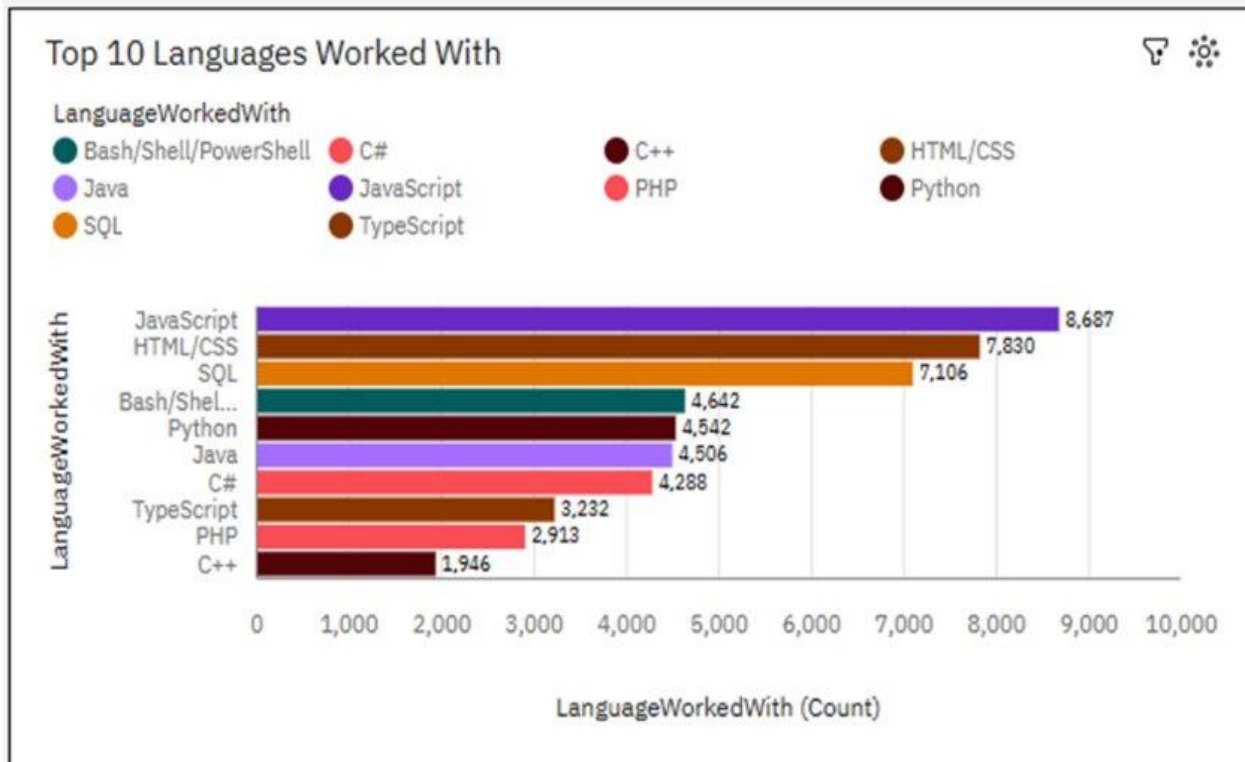
- Data Collection
 - Collecting Data Using APIs & Collecting Data Using Webscraping
- Data Wrangling
 - Finding Missing Values
 - Finding & Removing Duplicates
 - Normalizing Data
- Exploratory Data Analysis
 - Distribution , Outliers & Correlation
- Data Visualization
- Dashboard Creation
- Presentation of Findings

RESULTS

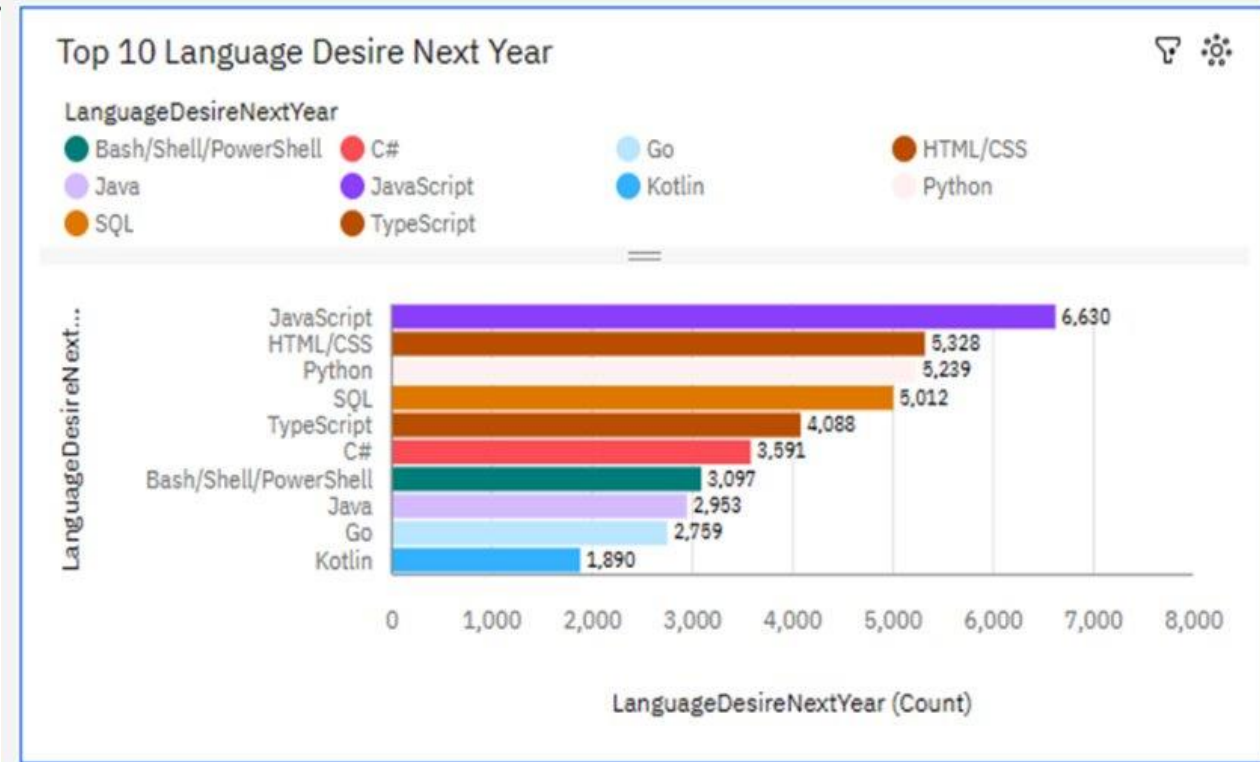


PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

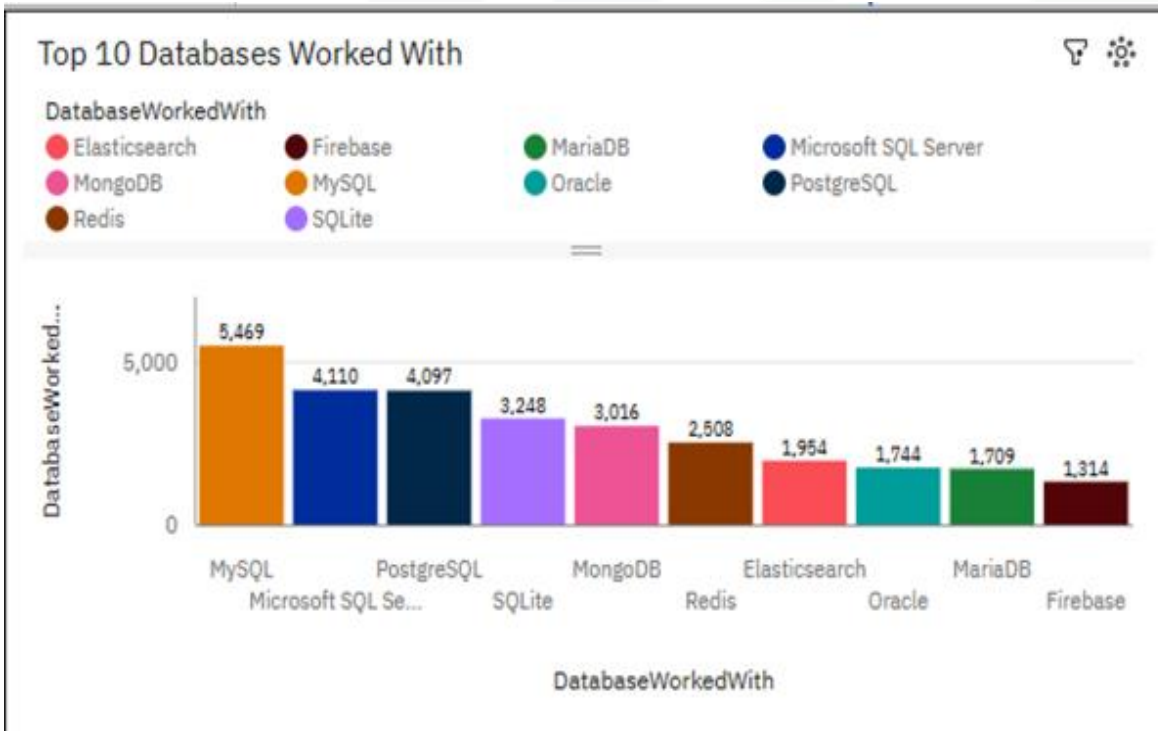
- JavaScript is most trending
- Python, SQL and HTML looks growing
- C++ , PHP is the least worked with

Implications

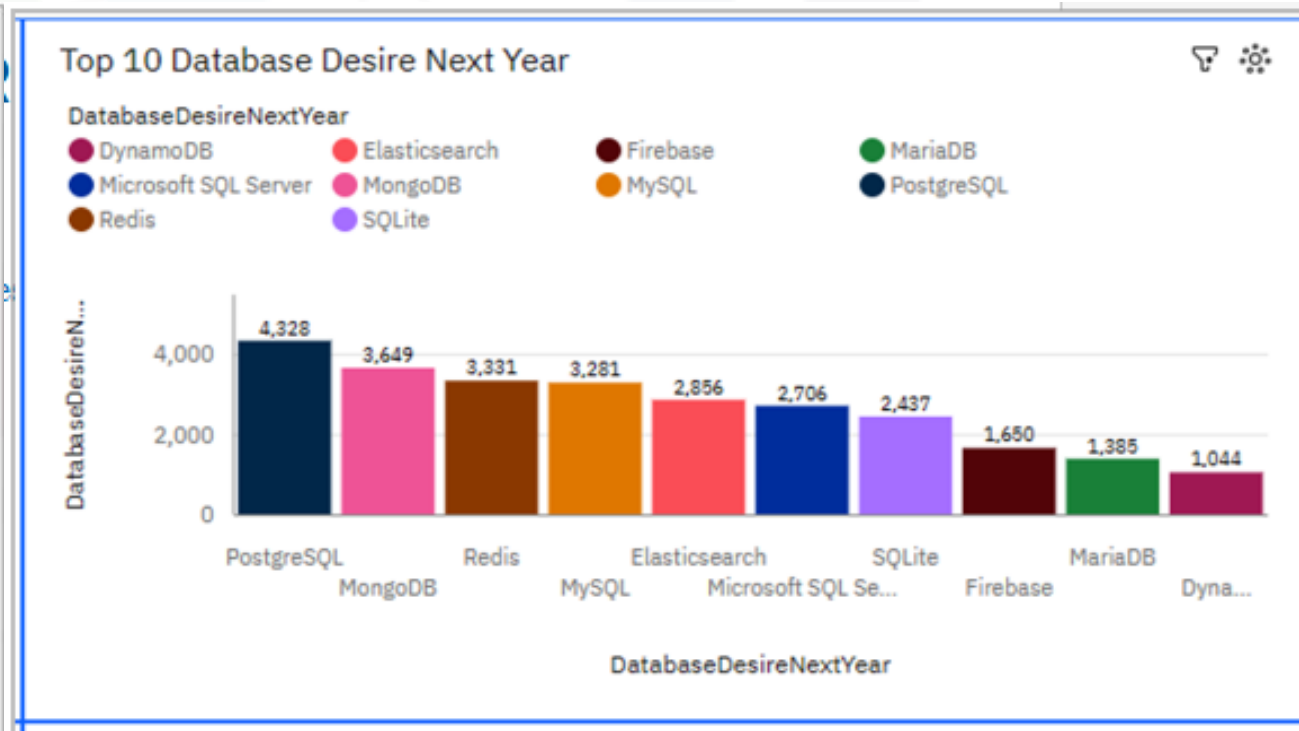
- Looks like Typescript will take the first place in the coming years to be used as
- SQL and Python looks trending and growing

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used Database
- PostgreSQL, SQLite, MongoDB are less used compared to MySQL

Implications

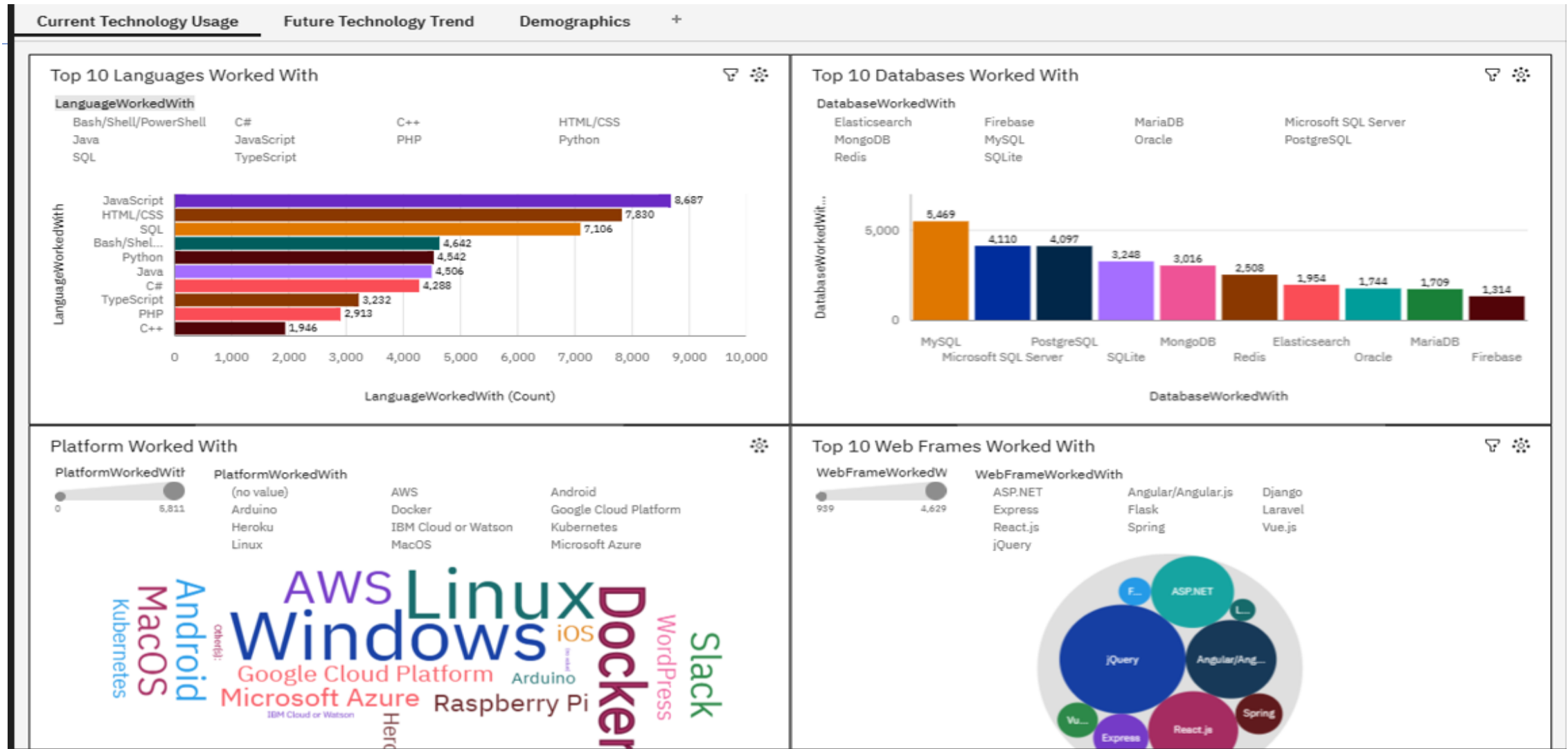
- PostgreSQL and SQLite have taken their place in the market
- Use of MySQL is slowly reducing and loosing the market

DASHBOARD

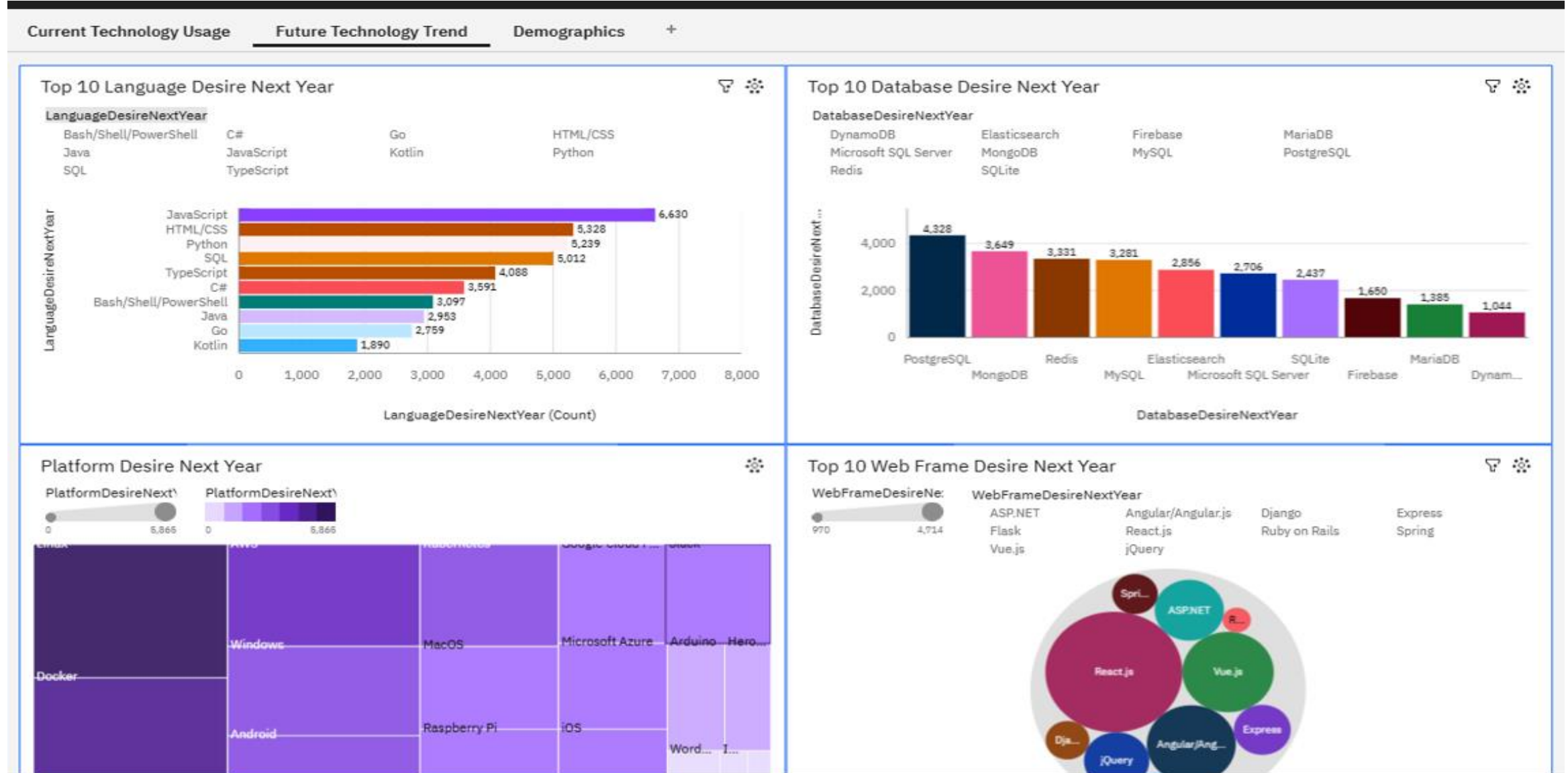


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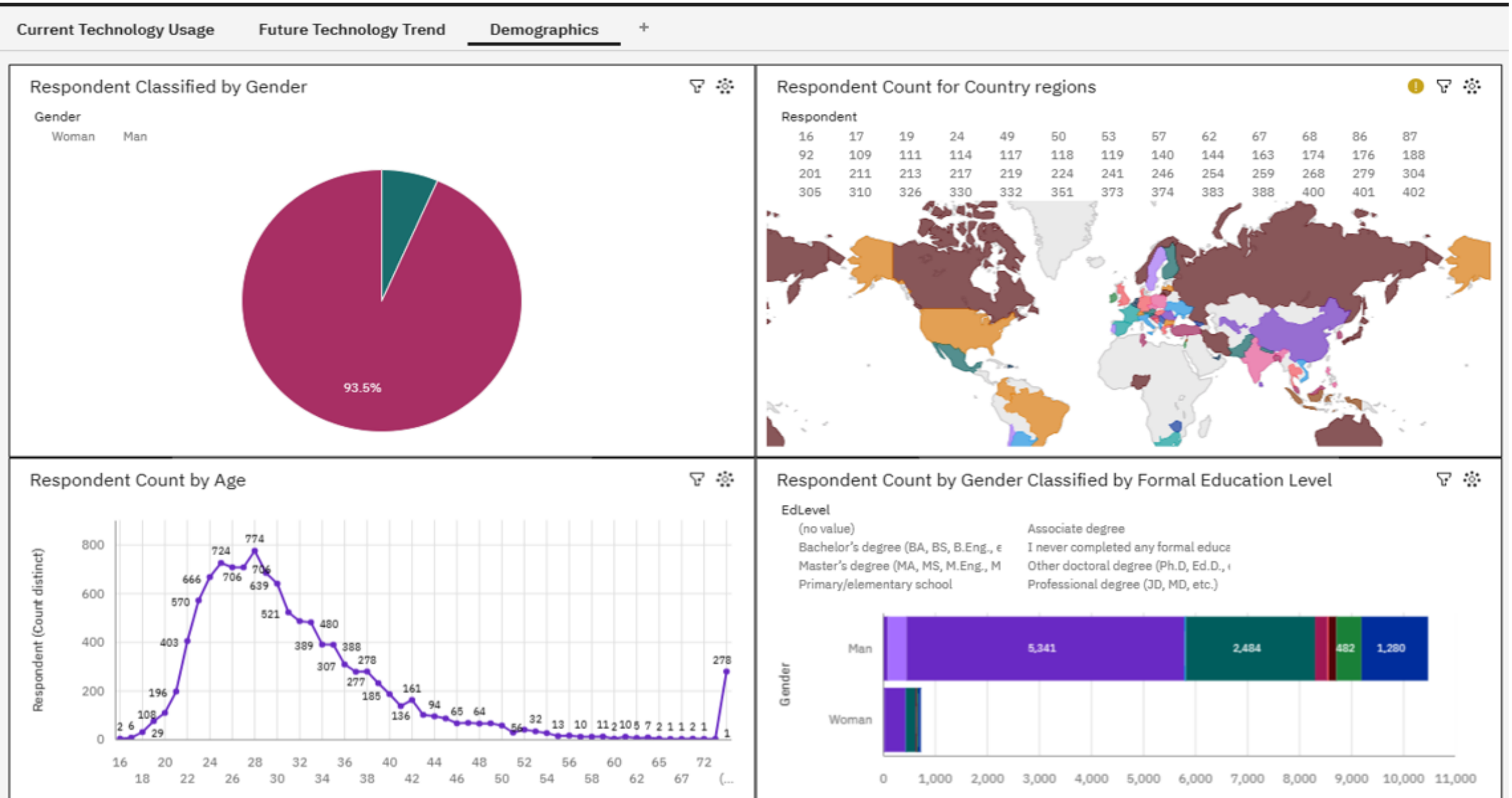
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is the top Programming Language and TypeScript is getting popular
- MySQL Database is used extensively
- Man respondent Count is much higher than the Woman respondent

Implications

- JavaScript and TypeScript will be trending in market.
- PostgreSQL & MongoDB will soon be trending in the market and will be top most used databases.
- Young graduates without post graduate studies are majority

CONCLUSION

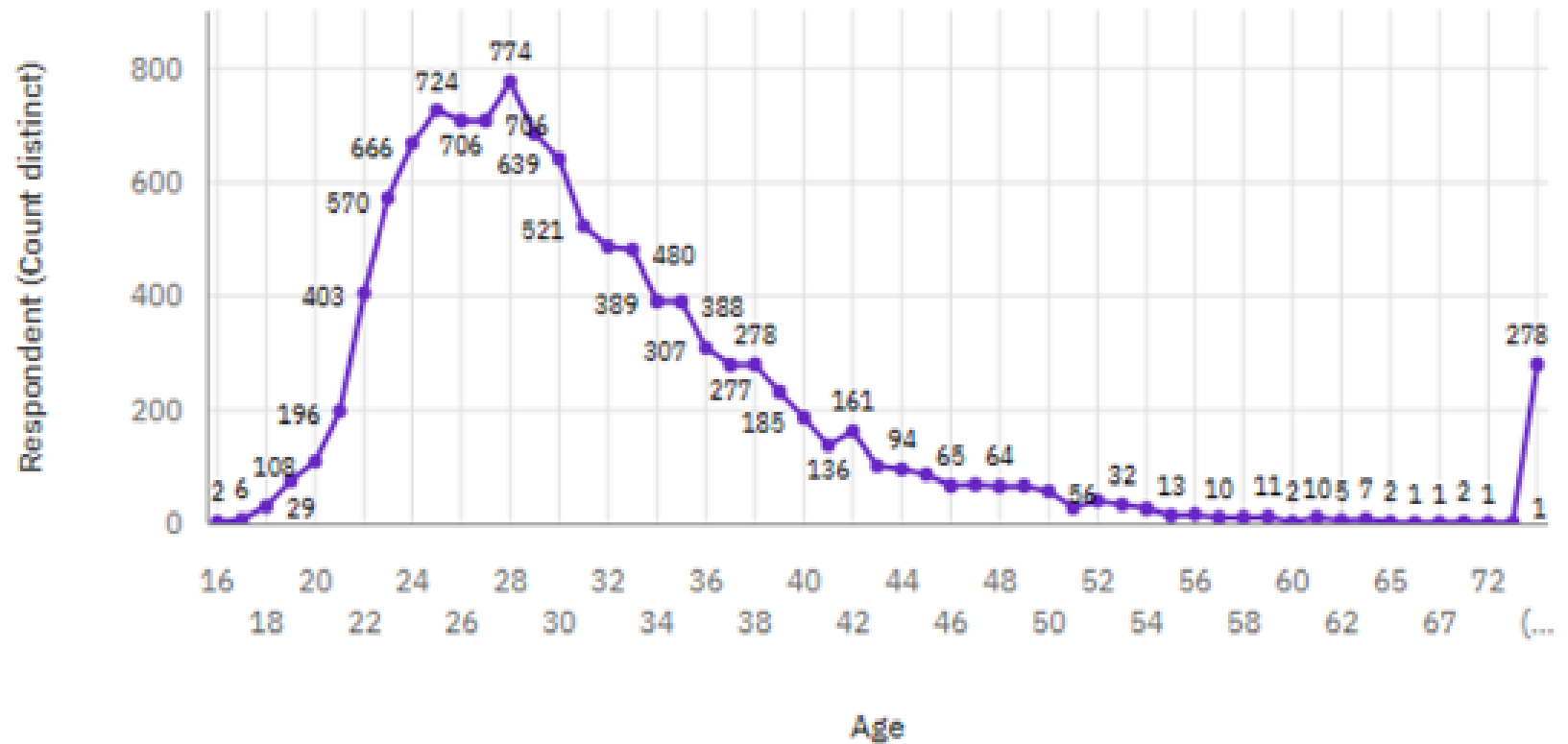


- Respondent of Surveys are more men than women
- Developers are people with marked characteristics
- A good idea of popularity trend of languages and databases is known
- Respondents of Survey are young individuals

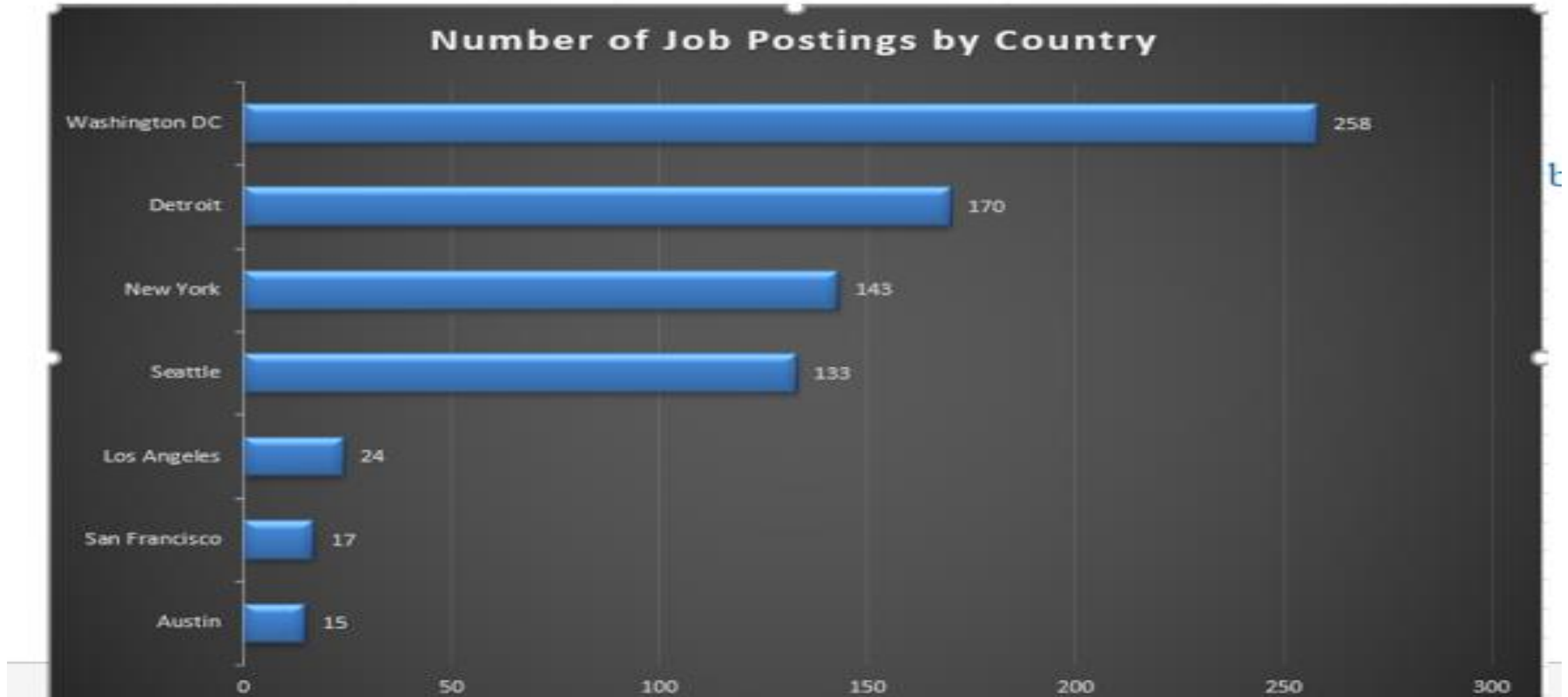
APPENDIX



Respondent Count by Age



JOB POSTINGS



POPULAR LANGUAGES

