

Technology Jobs Posting Survey

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OUTLINE



- Executive Summary
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- Methodology
- Results
 - Visualization – Charts
 - Dashboard
- Discussion
 - Findings & Implications
- Conclusion
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EXECUTIVE SUMMARY



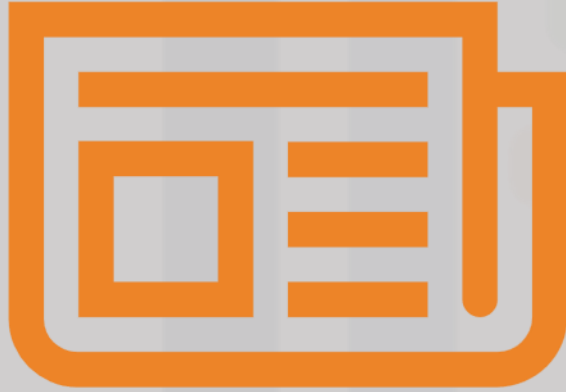
- Summary of methodology
 - Data Collection vis API & Web Scraping and Exploration
 - Data Wrangling
 - Exploratory Data Analysis
 - Data Visualization
 - Dashboard Creation
- Summary of results
 - Exploratory Data Analysis results
 - Data Visualization results
 - Dashboard Analysis results

INTRODUCTION



- in demand?
- What are the popular IDEs? Project background and context
 - The objective of the project is to identify trends on future skill requirements.
 - This is done in order to keep pace with changing technologies and remain competitive.
- Problems you want to find answers
 - What are the top programming languages in demand?
 - What are the top database skills

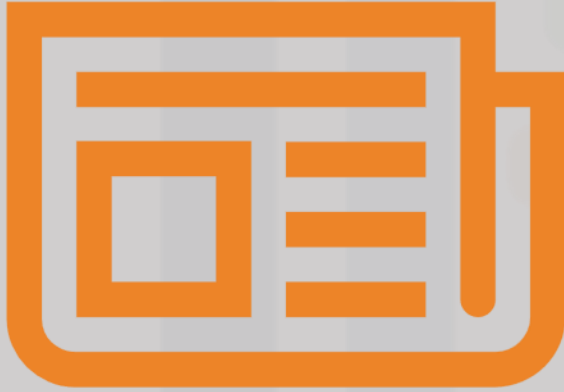
METHODOLOGY



- Data Collection:
 - Survey data was extracted from two sources
 - From (<http://127.0.0.1:5000/data>) via API
 - From (https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DA0321EN-SkillsNetwork/labs/datasets/Programming_Languages.html) via Web Scraping.
- Data Wrangling
- Exploratory Data Analysis
 - Data Distribution
 - Finding Outliers
 - Finding Correlation
- Data Visualization
 - Distribution of Data
 - Relationships in Data
 - Composition of Data
 - Comparison of Data

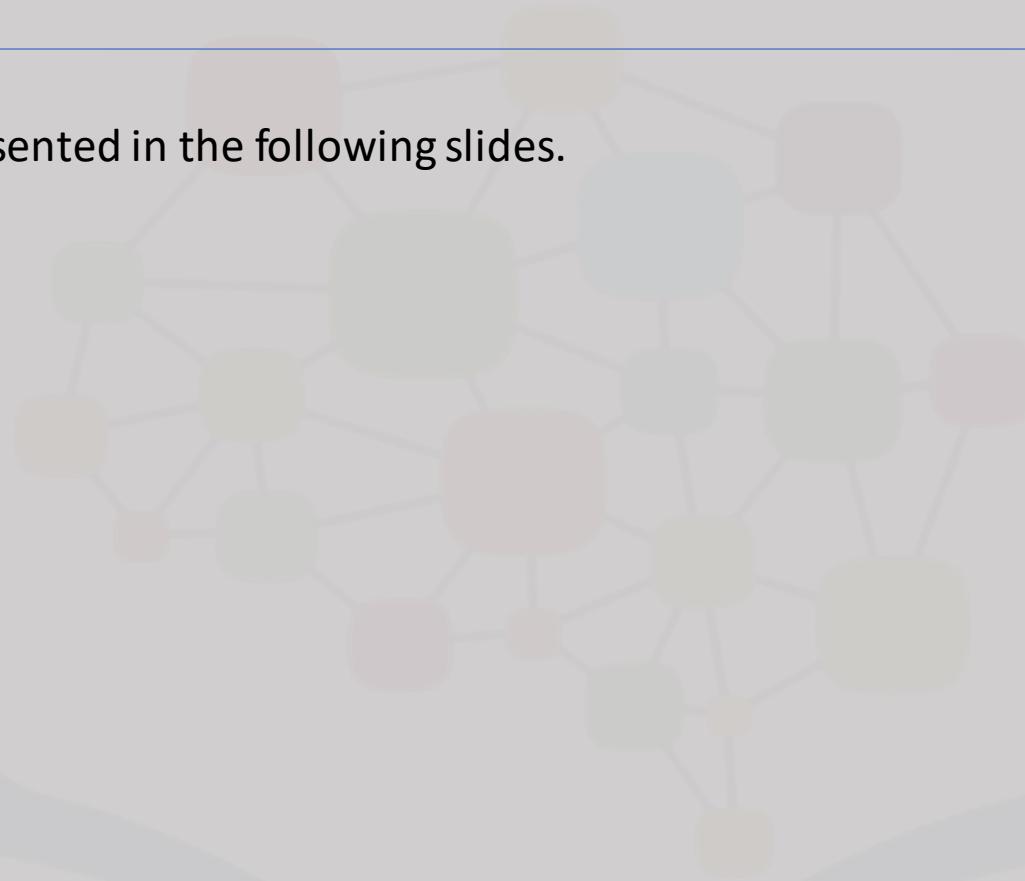
METHODOLOGY

- Presentation of Findings



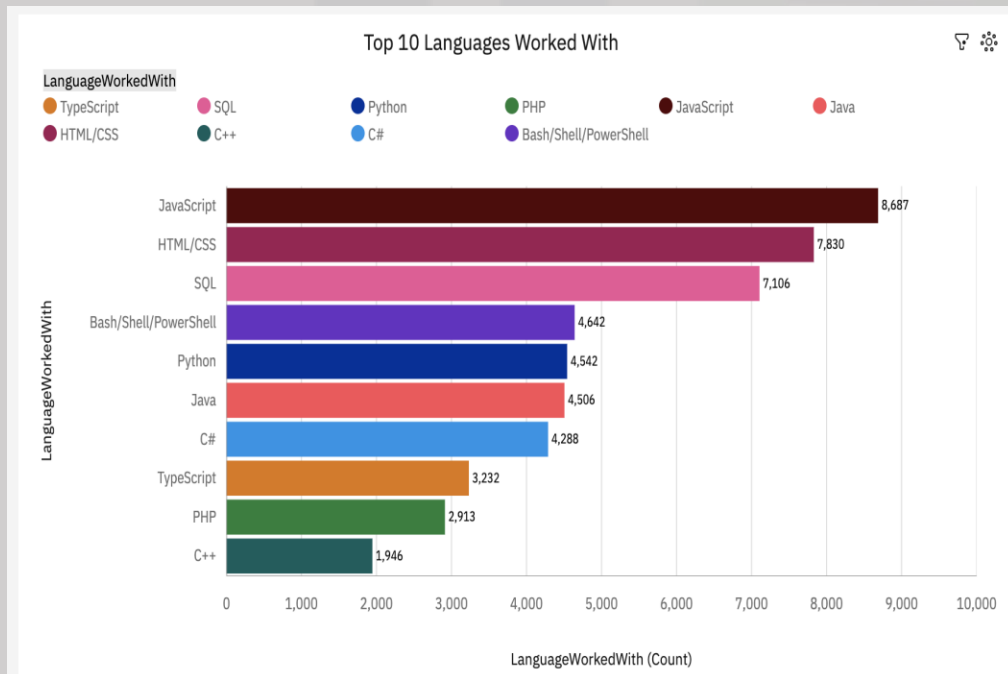
RESULTS

Results and findings are presented in the following slides.

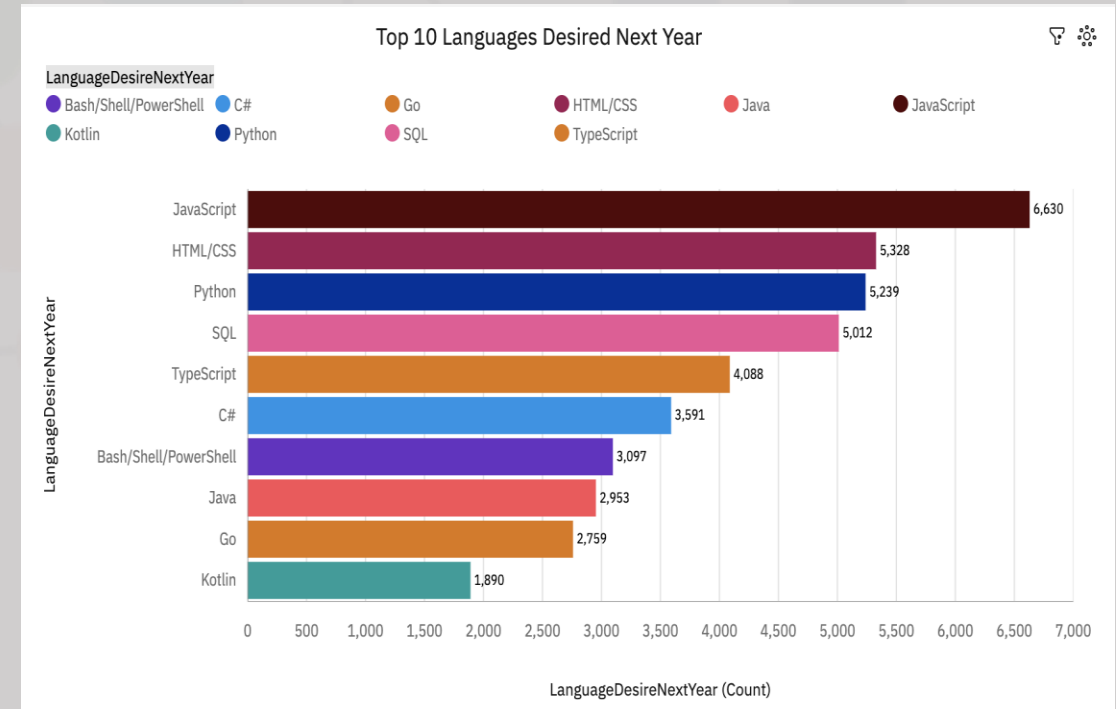


PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

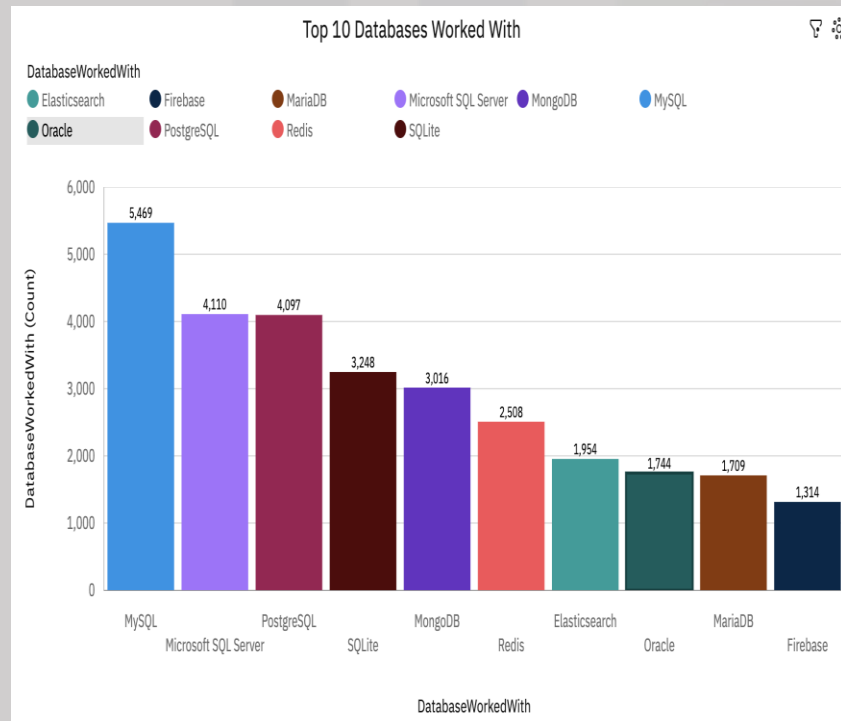
- Most respondents currently work with JavaScript and continue to be so the following year
- Python is the fastest growing programming language. TypeScript too is gaining momentum.
- Kotlin is going to be in the top 10 programming languages next year

Implications

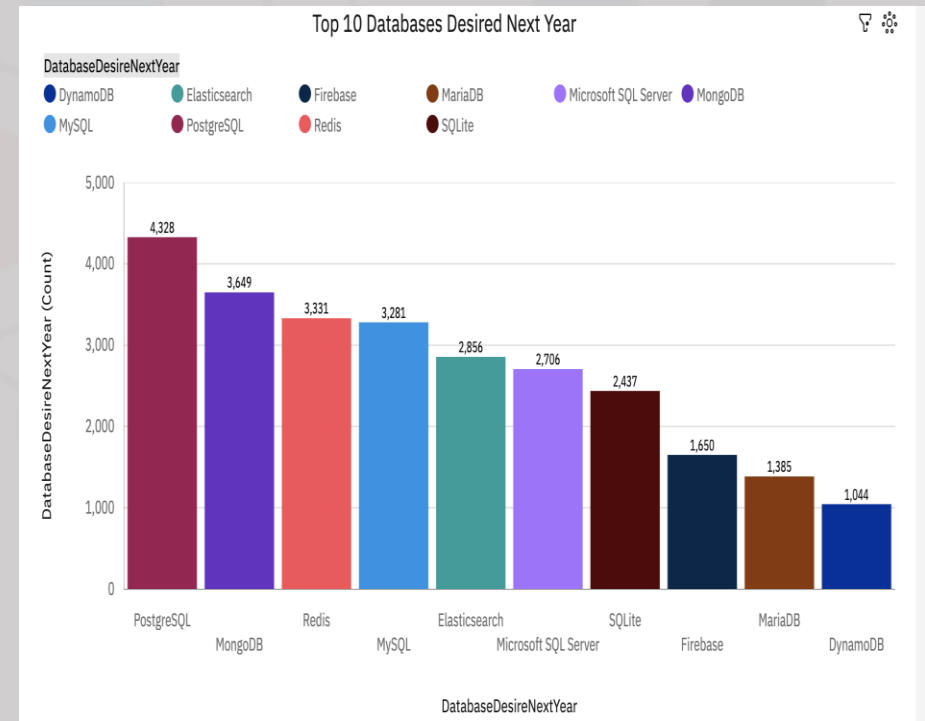
- JavaScript remains the favorite programming language but most likely be overtaken in the future.
- Python will most likely be the favorite language in the future
- Kotlin is going to get more awareness next year.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL has the highest number of respondents
- PostgreSQL will have the highest number of respondents next year
- Firebase currently has the lowest number of respondents

Implications

- Most respondents currently use MySQL
- More respondents will use MySQL next year compared to other databases
- Fewer respondents currently work with Firebase compared to other databases

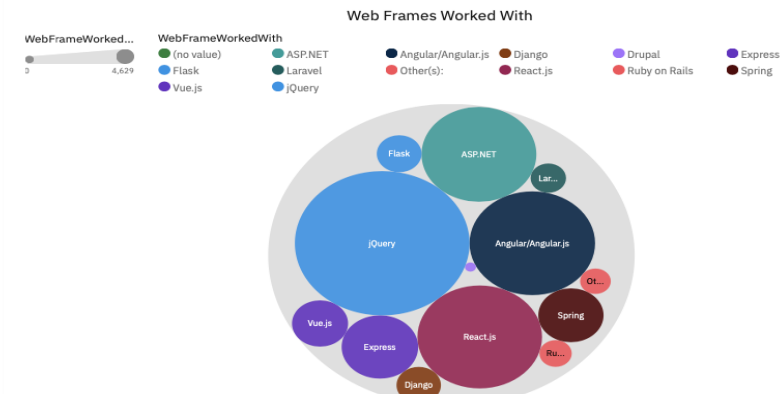
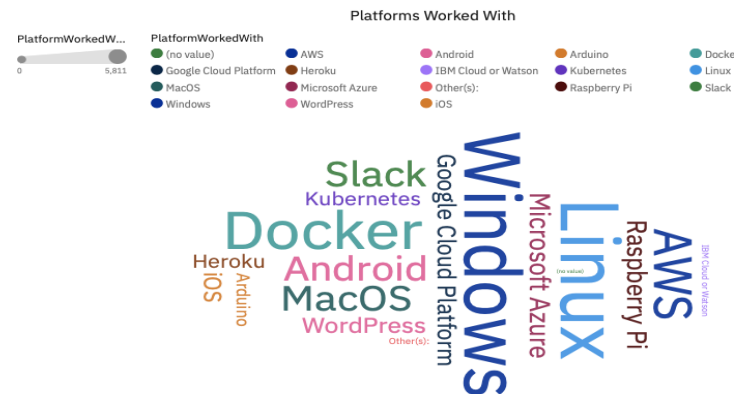
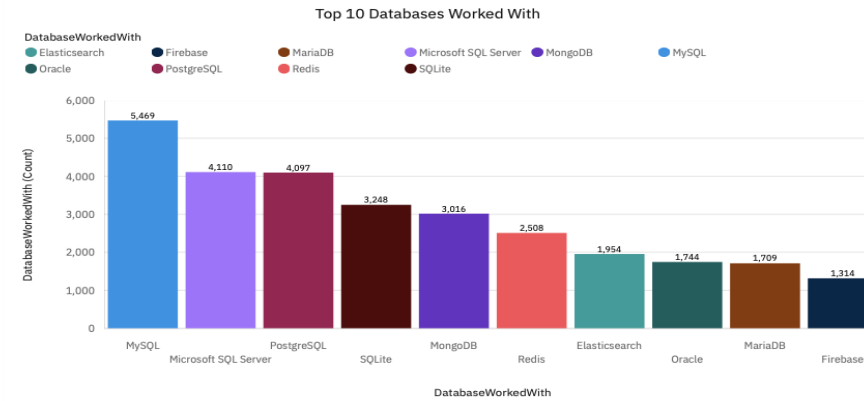
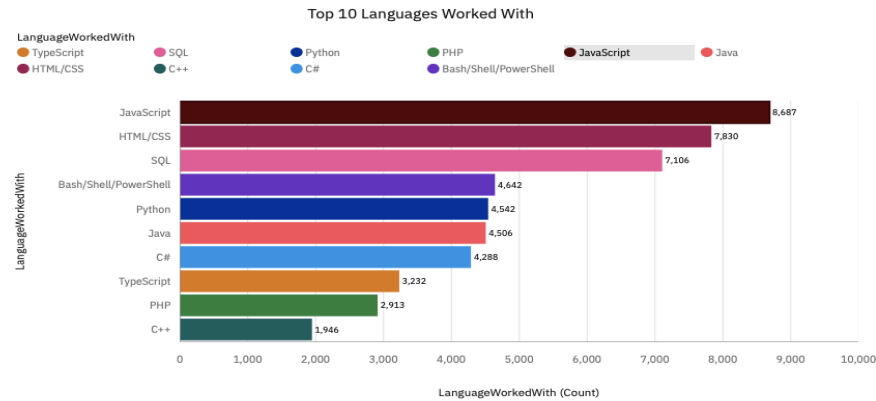
DASHBOARD



The read-only view of the Cognos dashboard can be found [here](#)

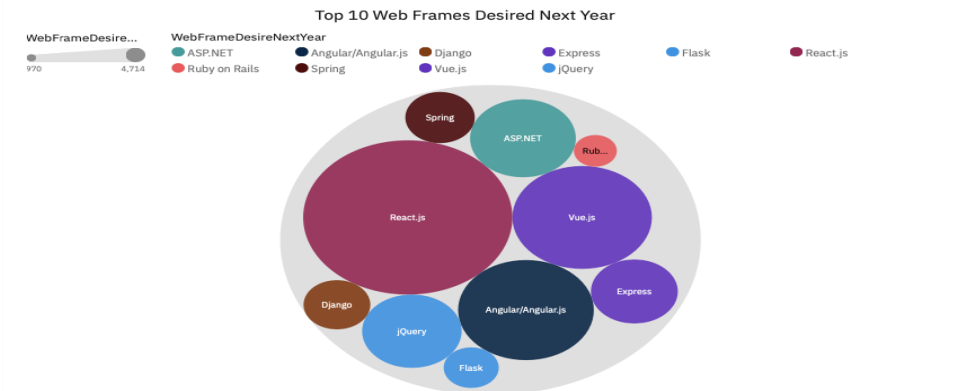
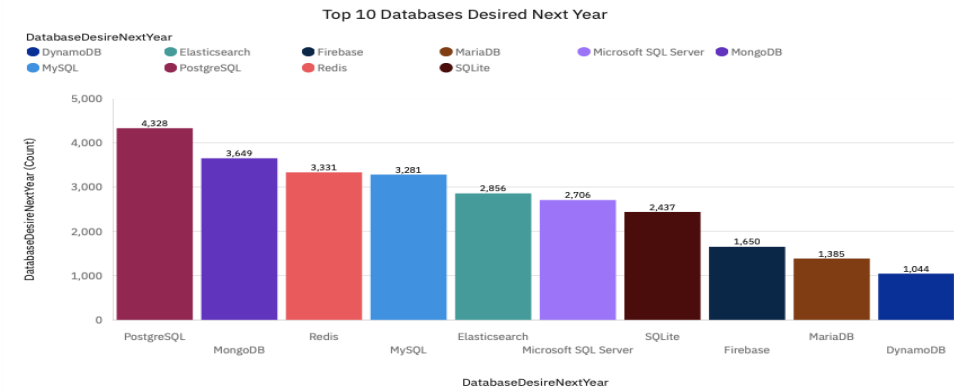
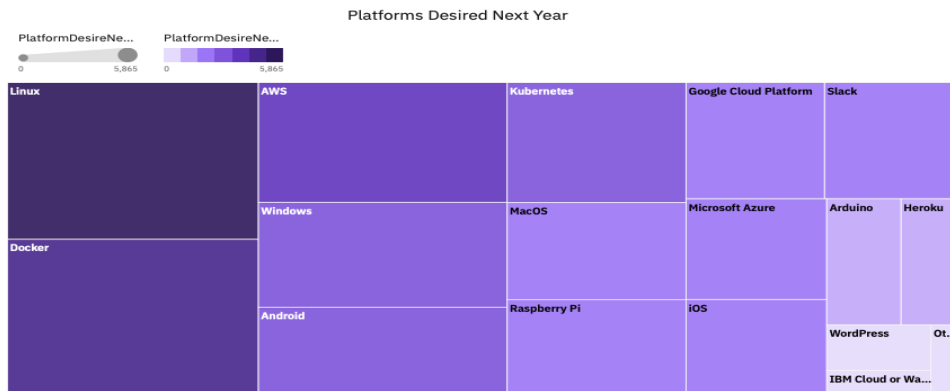
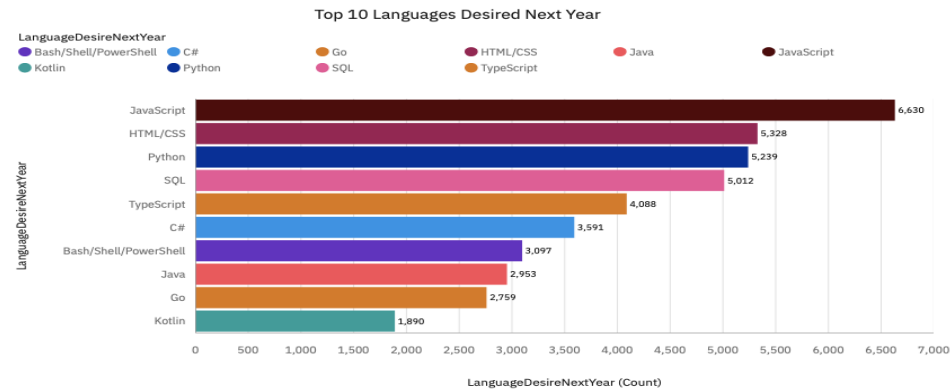
DASHBOARD TAB 1

Current Technology Usage



DASHBOARD TAB 2

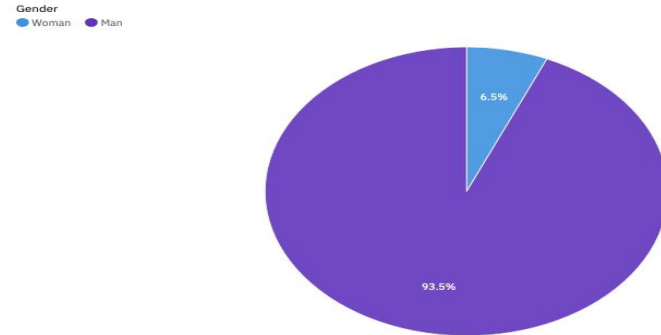
Future Technology Trend



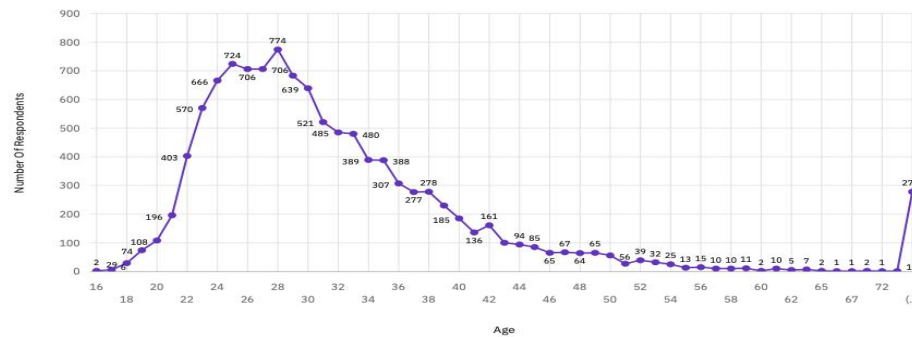
DASHBOARD TAB 3

Future Technology Trend

Composition of Respondents By Gender



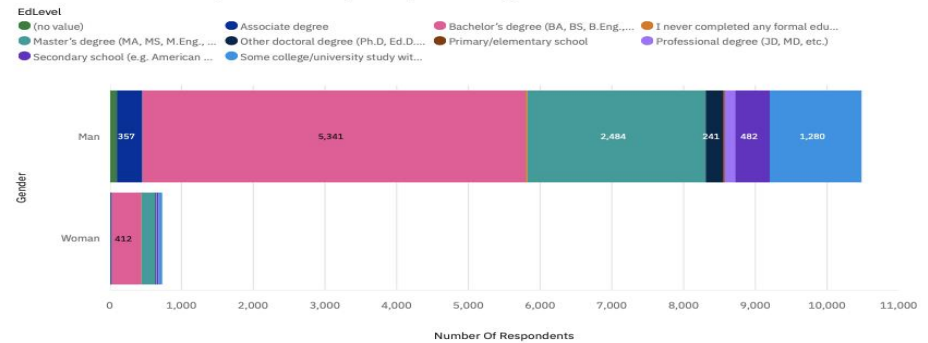
Respondent Count By Age



Respondent Count For Countries



Respondent Count By Gender, Classified By Formal Education Level



DISCUSSION



- Most respondents come from the United States of America, with a total of 3,058.
- The least number of respondents come from Africa.

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most widely used language followed by HTML/CSS and SQL.
- MySQL is currently widely used database followed by Microsoft SQL Server and PostgreSQL
- Most respondents currently work with Windows and Linux
- 93.5% of the respondents are men
- Majority of the men and women participated in the survey are Bachelor's degree holders
- The largest number of respondents are between the age of 26 and 28 years old

Implications

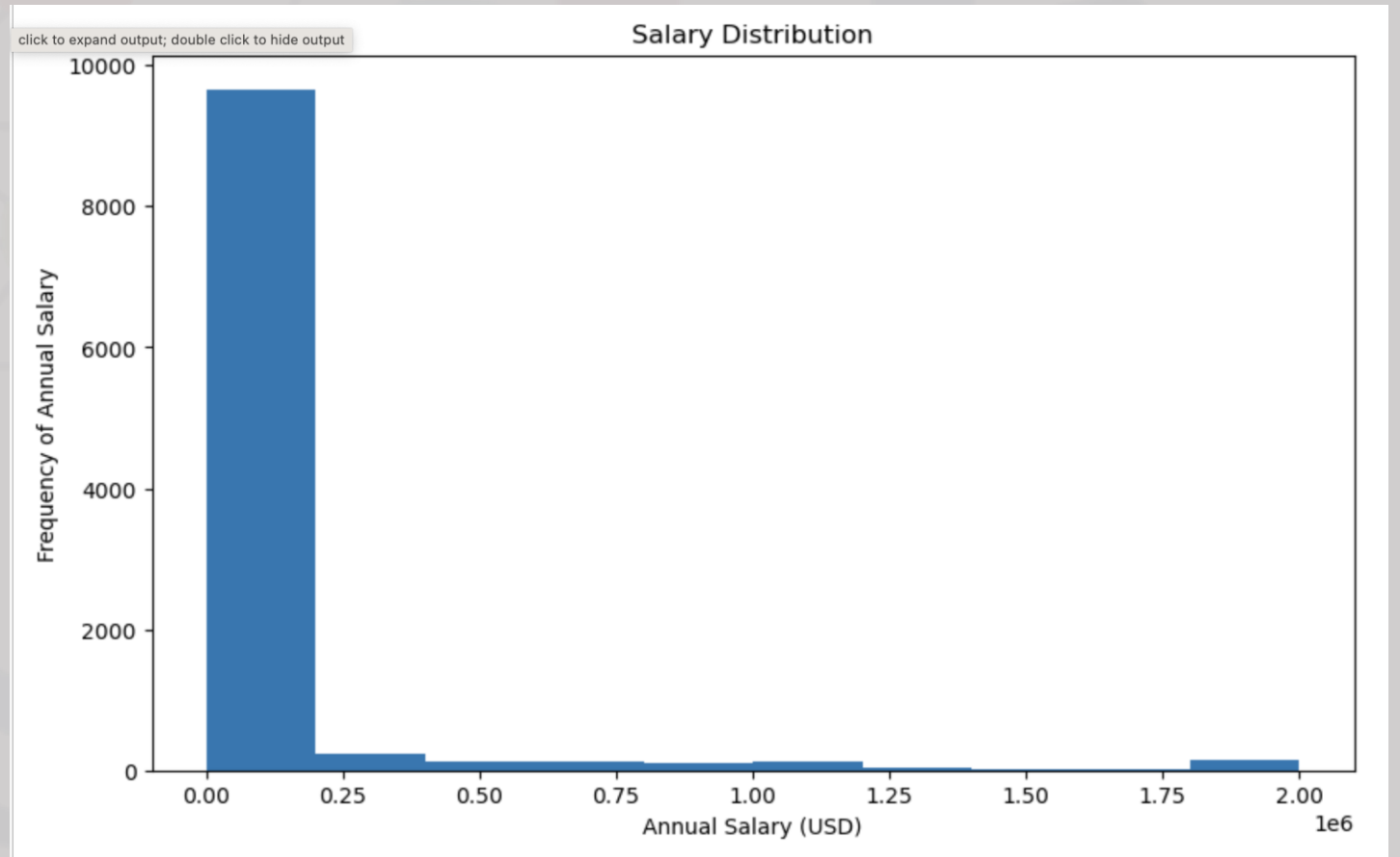
- JavaScript will still remain the favorite language next year.
- PostgreSQL will become the favorite database next year
- Linux is going to become the favorite platform next year
- More women need to be encouraged to consider tech as a job

CONCLUSION

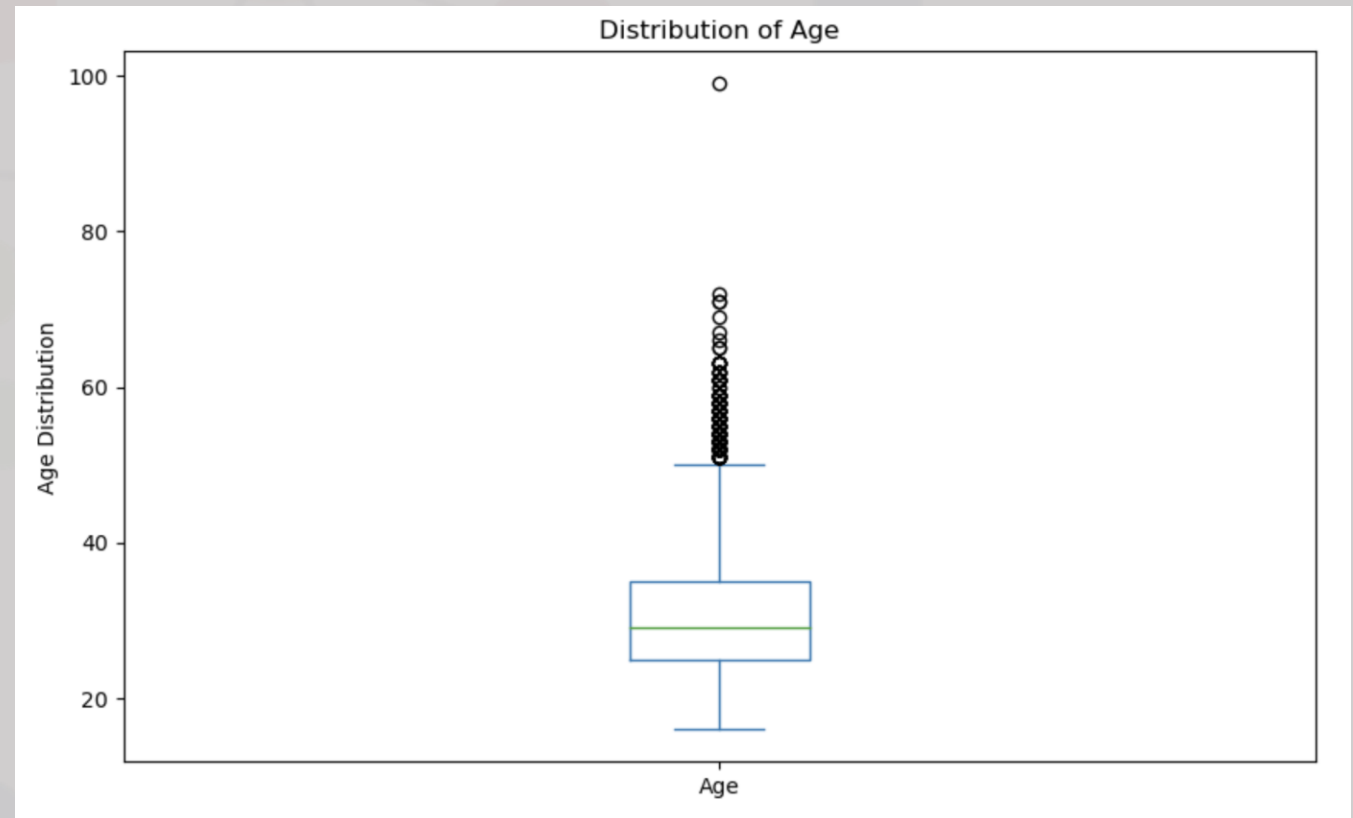
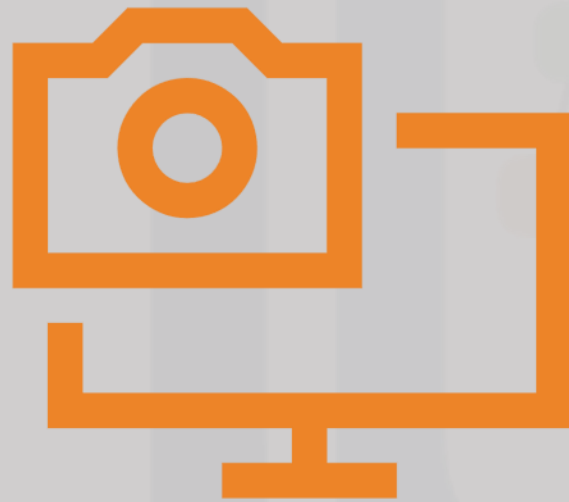


- JavaScript is the favorite programming language and will remain so next year
- MySQL is currently the most widely used database but will be overtaken by PostgreSQL next year.
- Windows is the most widely used platform but will be displaced by Linux next year.
- jQuery is the most widely used web frame but will be displaced by React.js next year.
- The vast majority (93.5%) of the respondents are men.

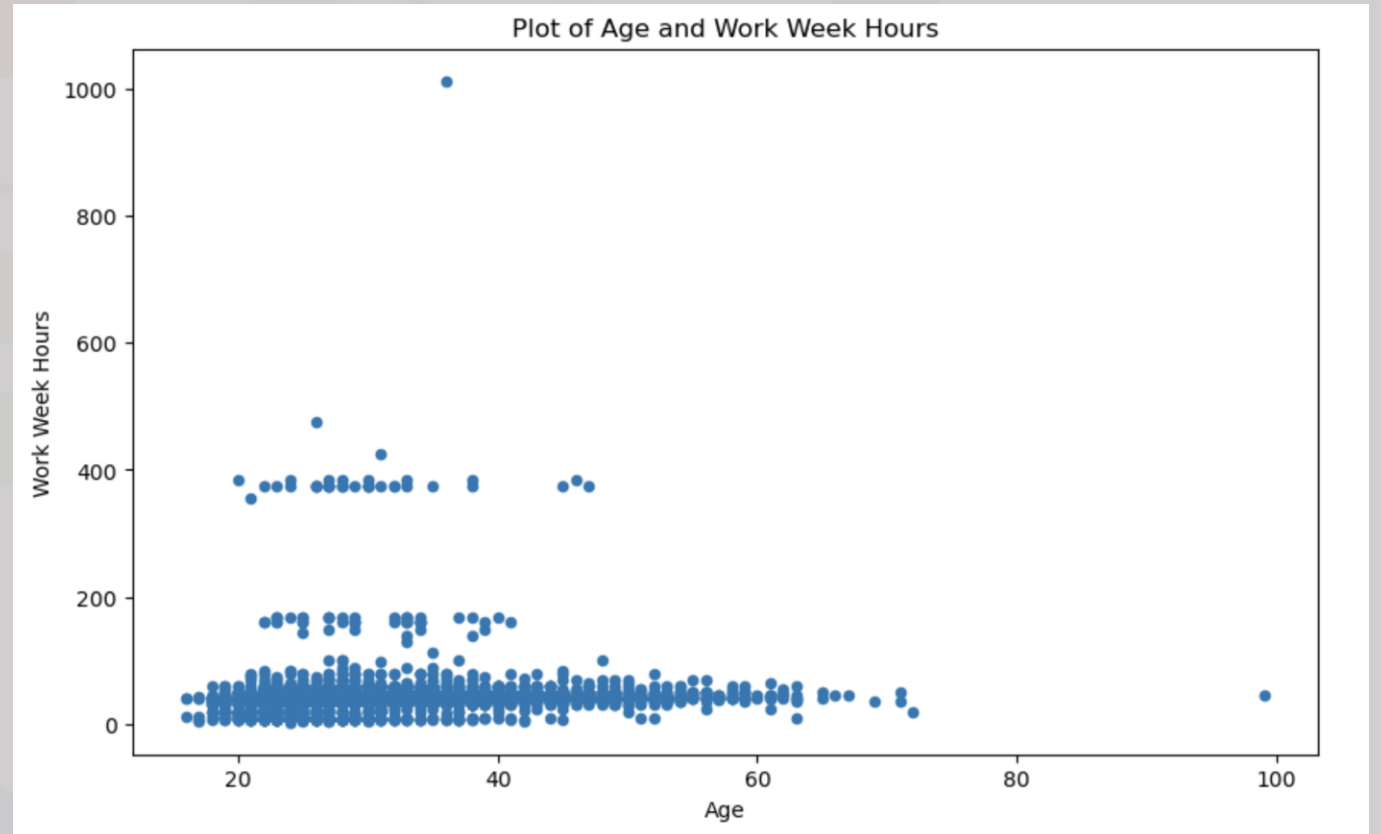
APPENDIX



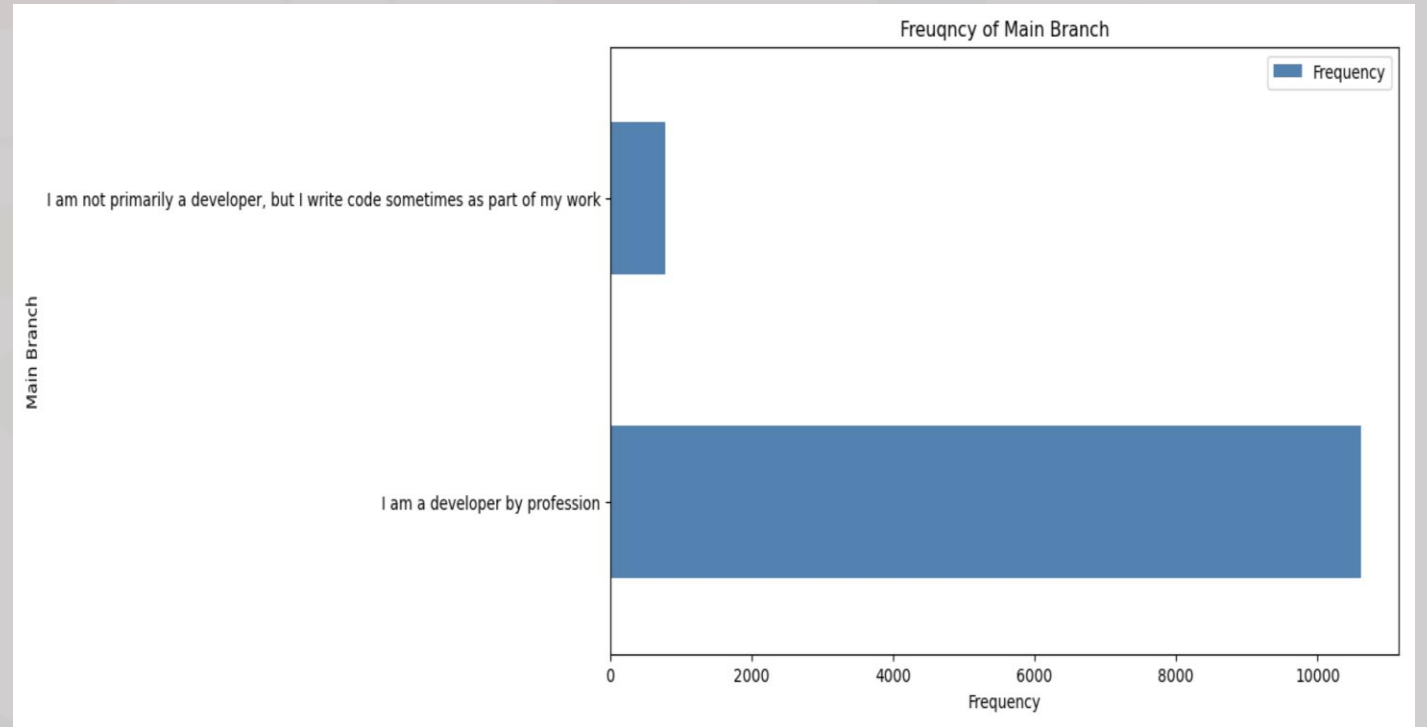
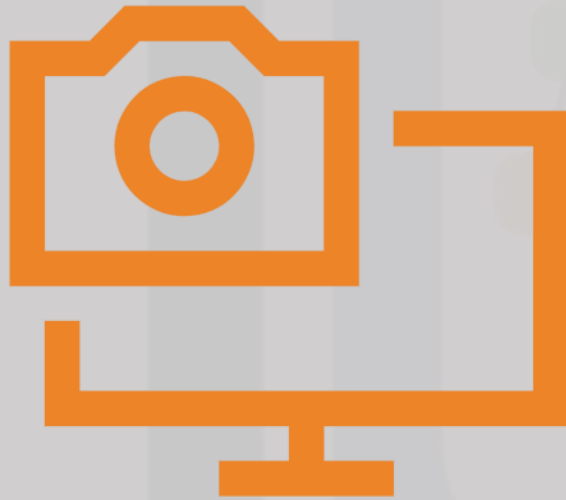
APPENDIX



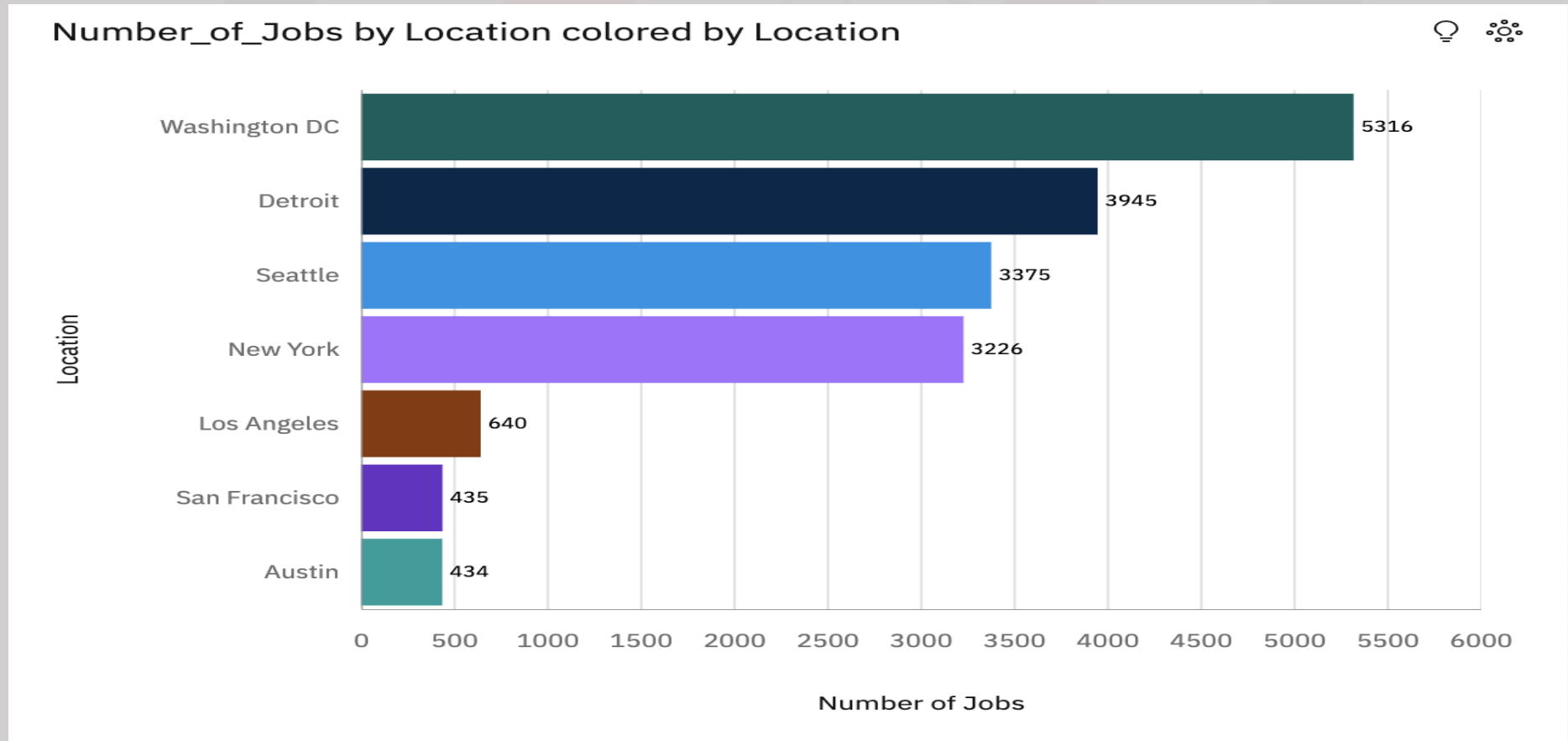
APPENDIX



APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

