Data Professionals Annual survey data

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IBM Developer

SKILLS NETWORK

EXECUTIVE SUMMARY

- Tech professional 2019 Annual survey data Analysis result
- The data accessed at IBM's cloud database is imported into python and processed using pandas library
- Most software developers are using JavaScript which is the most preferred for next year too
- Mysql was the most utilized database language while the next preferred database program is Postgres
- Most of the tech developers are from west
- Also, men are dominant in the sector

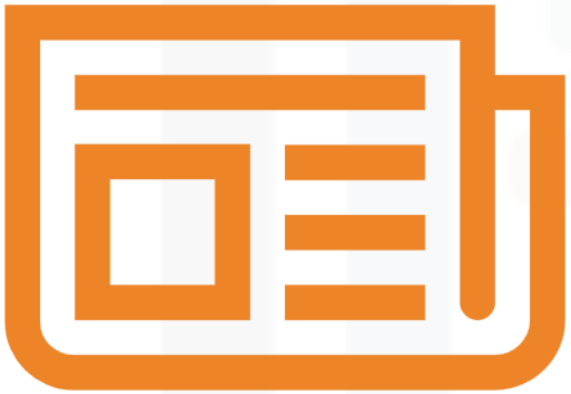
OUTLINE

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

INTRODUCTION

- Tech professional 2019 Annual survey data Analysis result
- The data has 11552 rows and 85 columns
- From the total data features the programming language, database management, web frame and plate form preferences
- Also, demographic analysis of the tech experts will be reviewed

METHODOLOGY



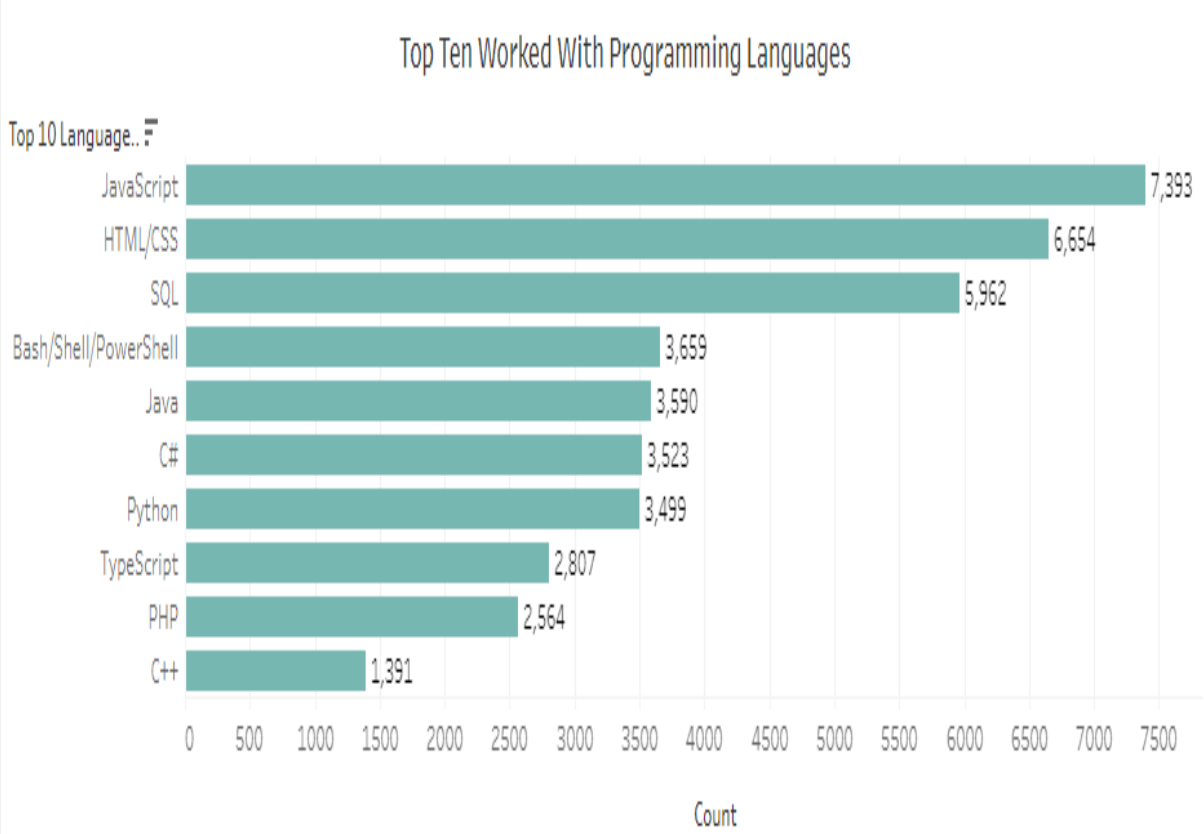
- The data was accessible at kaggle and at IBM's teaching cloud database
- The data from either sites is imported into python and processed using pandas library
- The target features are reviewed for any missing values are imputated using mean or median as appropriate from the distribution of the data
- Exploratory Data Analysis is made using python and matplotlib to visualize the distribution of the data
- Outliers are removed and dashboards prepared for the most vital features

RESULTS

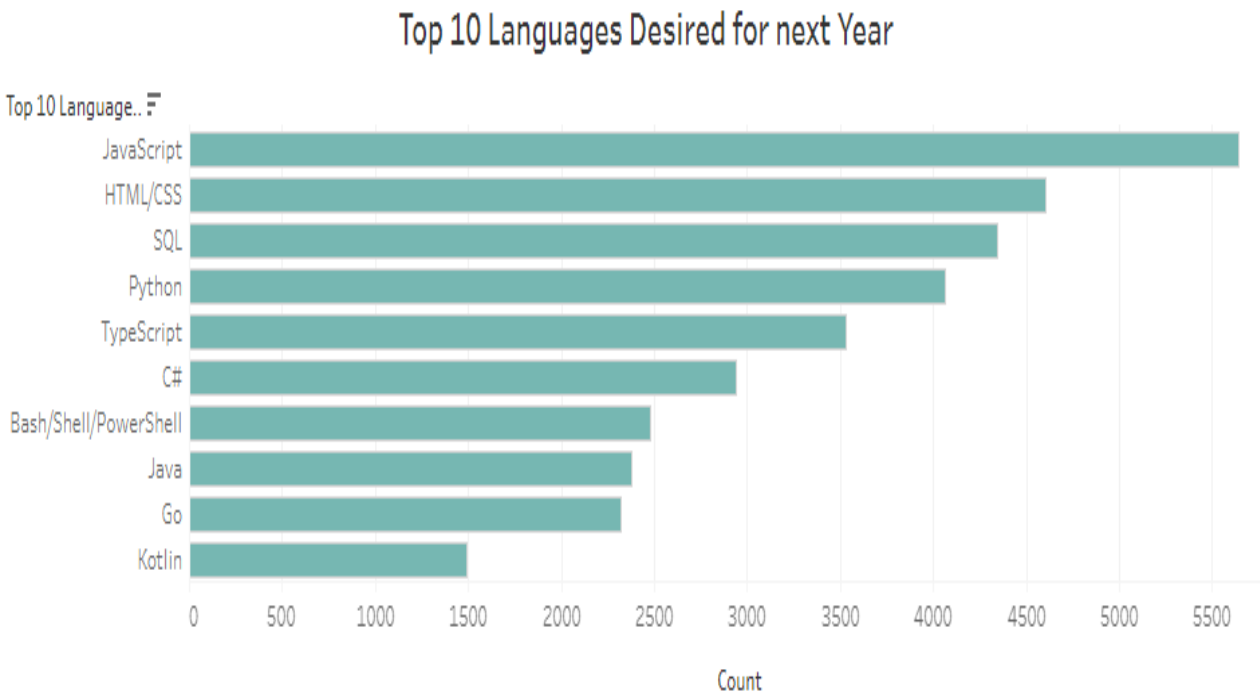
- Results of the data analysis findings from the data set are presented here in the next slides

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings in 2019

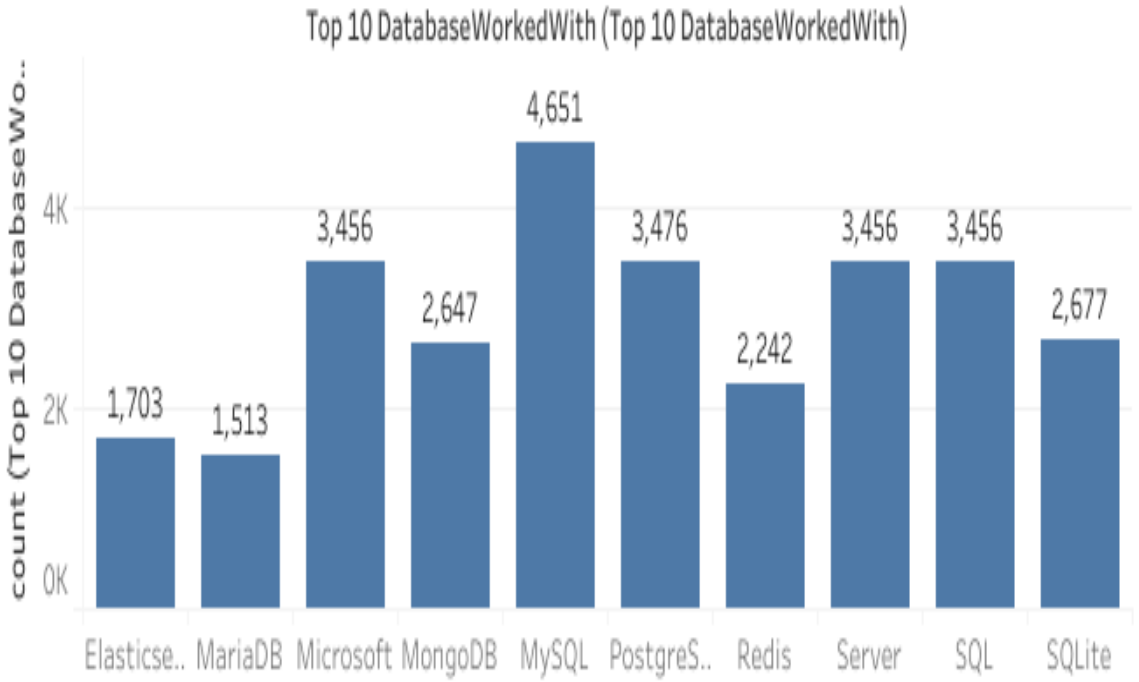
- Most software developers are using JavaScript
- Html/CSS is the second most utilized programming language
- Python is the 7th most utilized language

Future implications

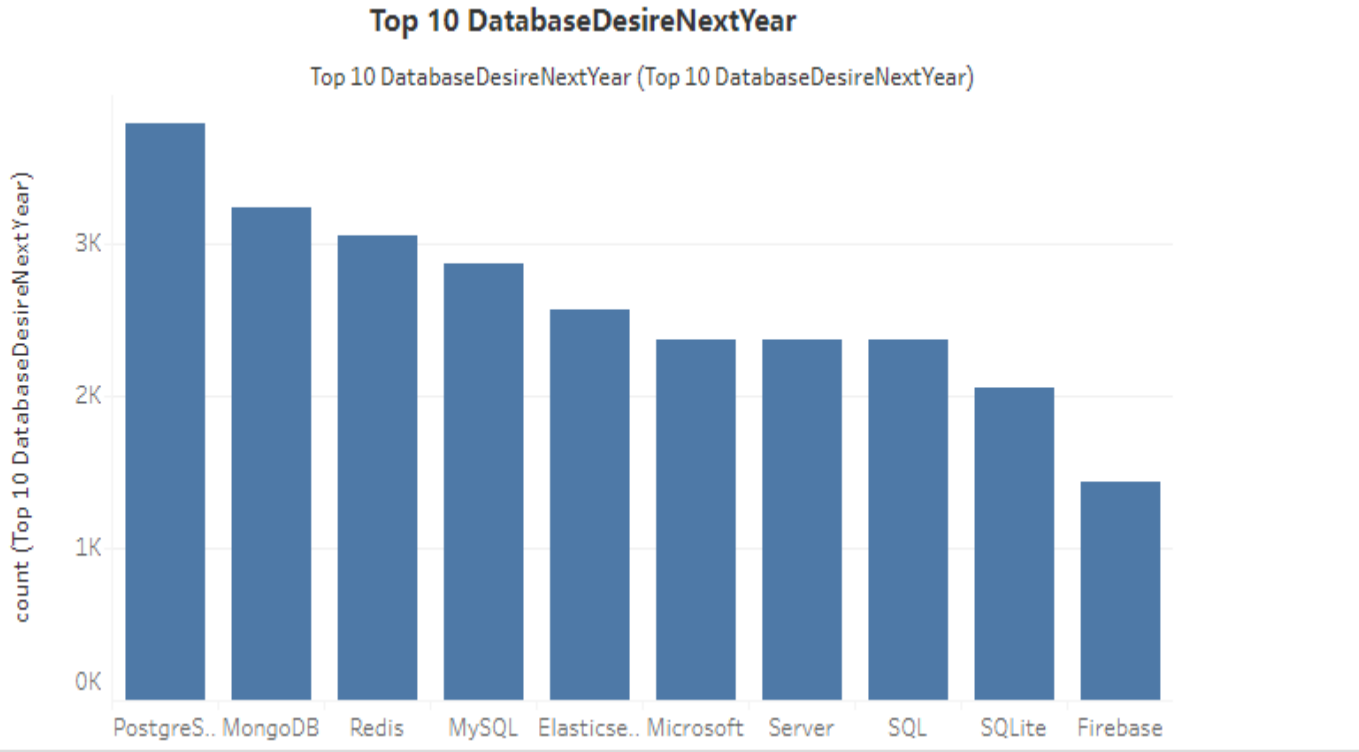
- Most programmers continue to prefer JavaScript
- The second most preferred language for the future is html/CSS
- Python is the 4th Most desired language

DATABASE TRENDS

Current Year



Next Year



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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Mysql was the most utilized database language
- SQL was the second most utilized database language
- Sqlite is the 6th most used database language

Implications

- Postgres is the most preferred database language
- MongoDB is the second most preferred database language
- Sqlite is the 9th most preferred database language

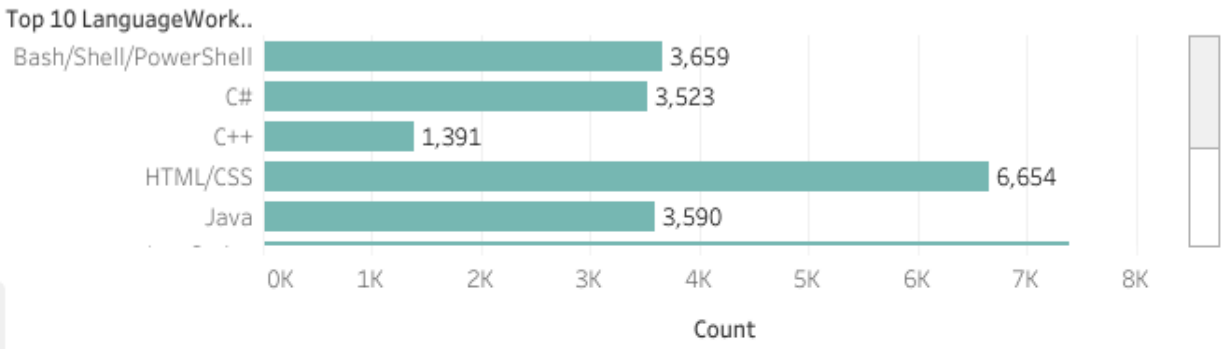
DASHBOARD

https://github.com/TeweboM/Capstone-project/blob/main/future_tech_trends.png

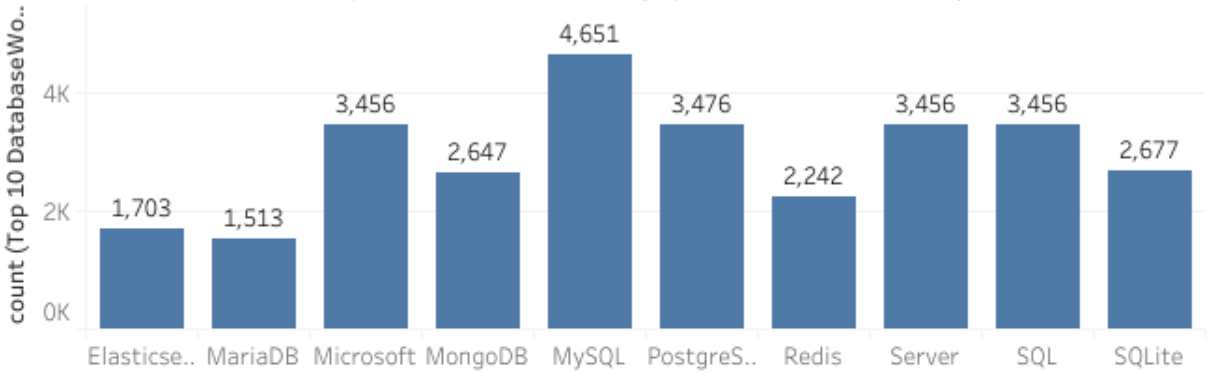
DASHBOARD TAB 1

Current technology Usage

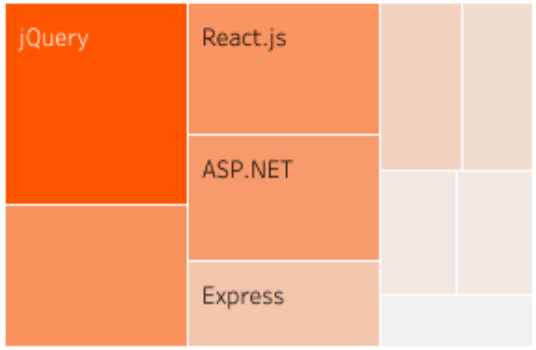
Top Ten Worked With Programming Languages

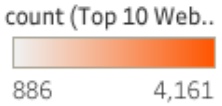


Top 10 DatabaseWorkedWith (Top 10 DatabaseWorkedWith)



Top Ten WebFrame worked with





Plateform Worked with

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DASHBOARD TAB 2

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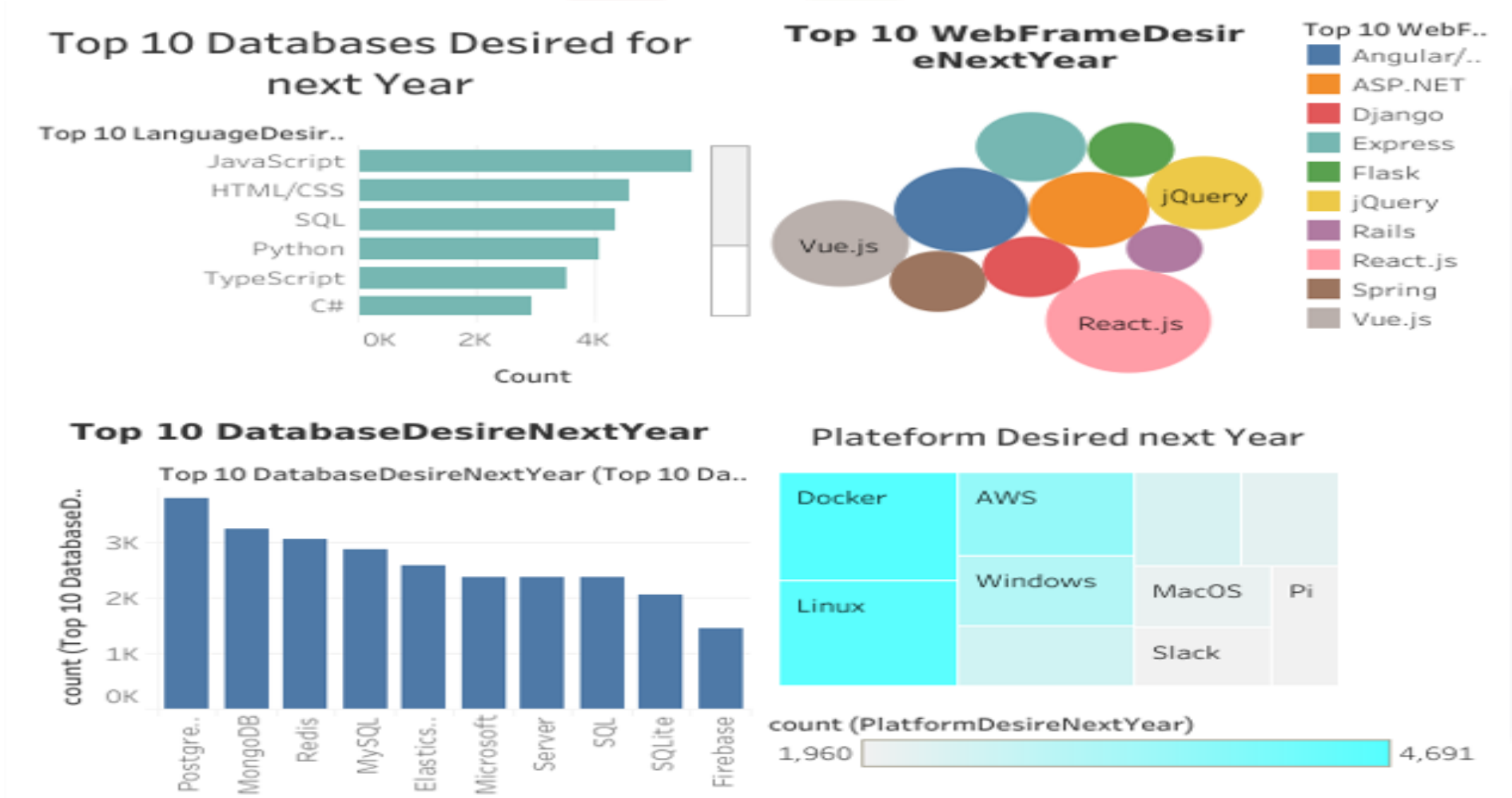
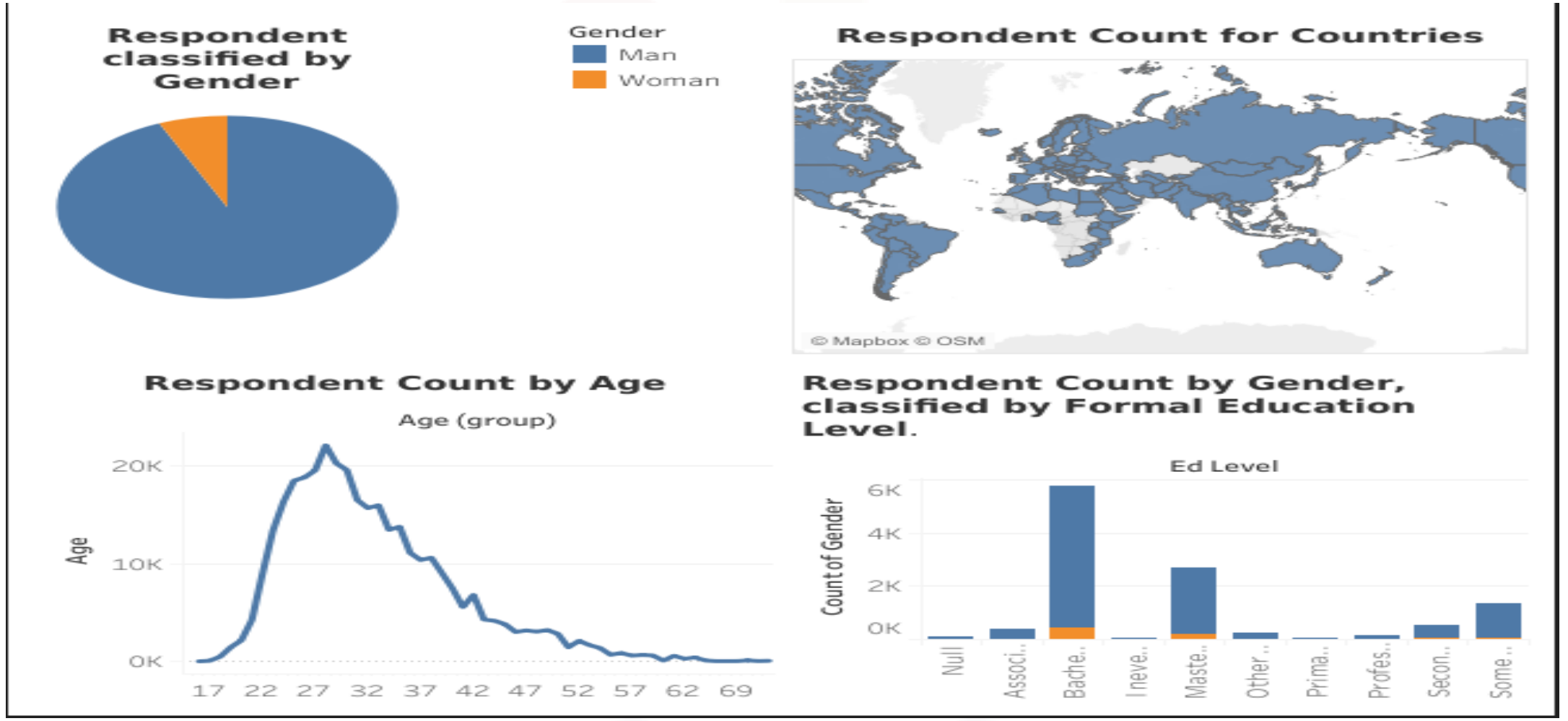


DASHBOARD TAB 3



DISCUSSION

- Most of the soft ware developers are from US
- There are no developers from central and western Africa
- In terms of Gender more than 95% of the developers are male.
- Most of the developers are in the age of 24 – 32

OVERALL FINDINGS & IMPLICATIONS

Findings

- Tech professionals preference over platforms and programming languages are changing over time
- Most of the tech developers are from western countries

Implications

- jQuery is the most used web frame
- While React.js is the trending web frame
- Doker and linux are the most used plateforms
- Though linux will keep utilized Doker will be replaced by AWS

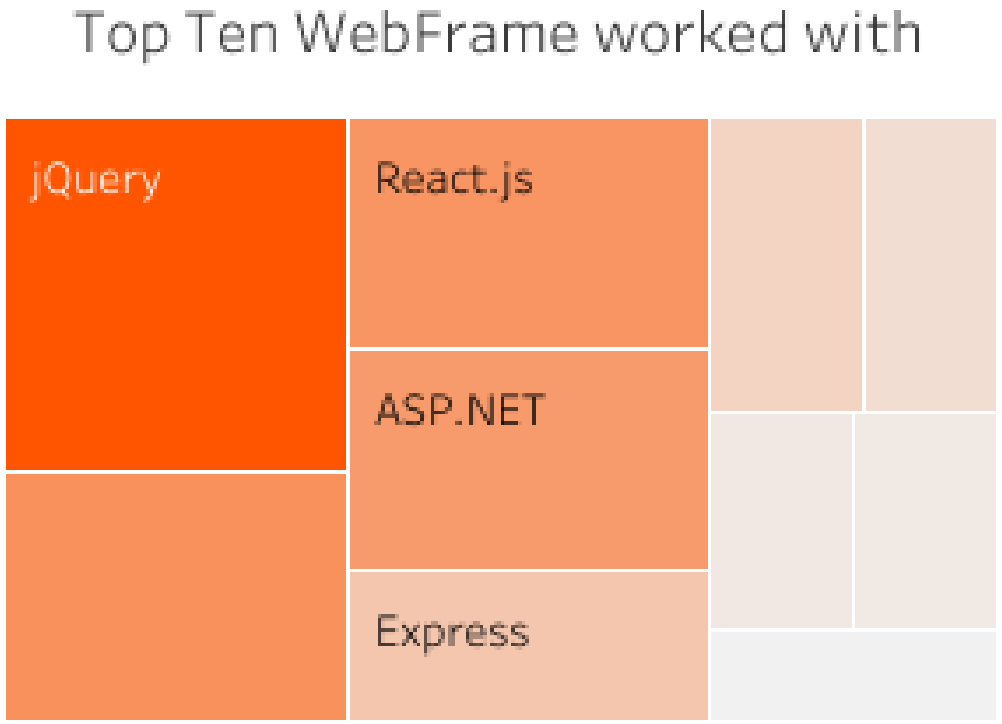
CONCLUSION

- The tech jobs are becoming attractive is the west
- The preferences of programming and database languages are changing
- Men are dominating the tech profession
- Annual payments are increasing for tech experts

APPENDIX

- Additional charts

Web Frame by tech Experts



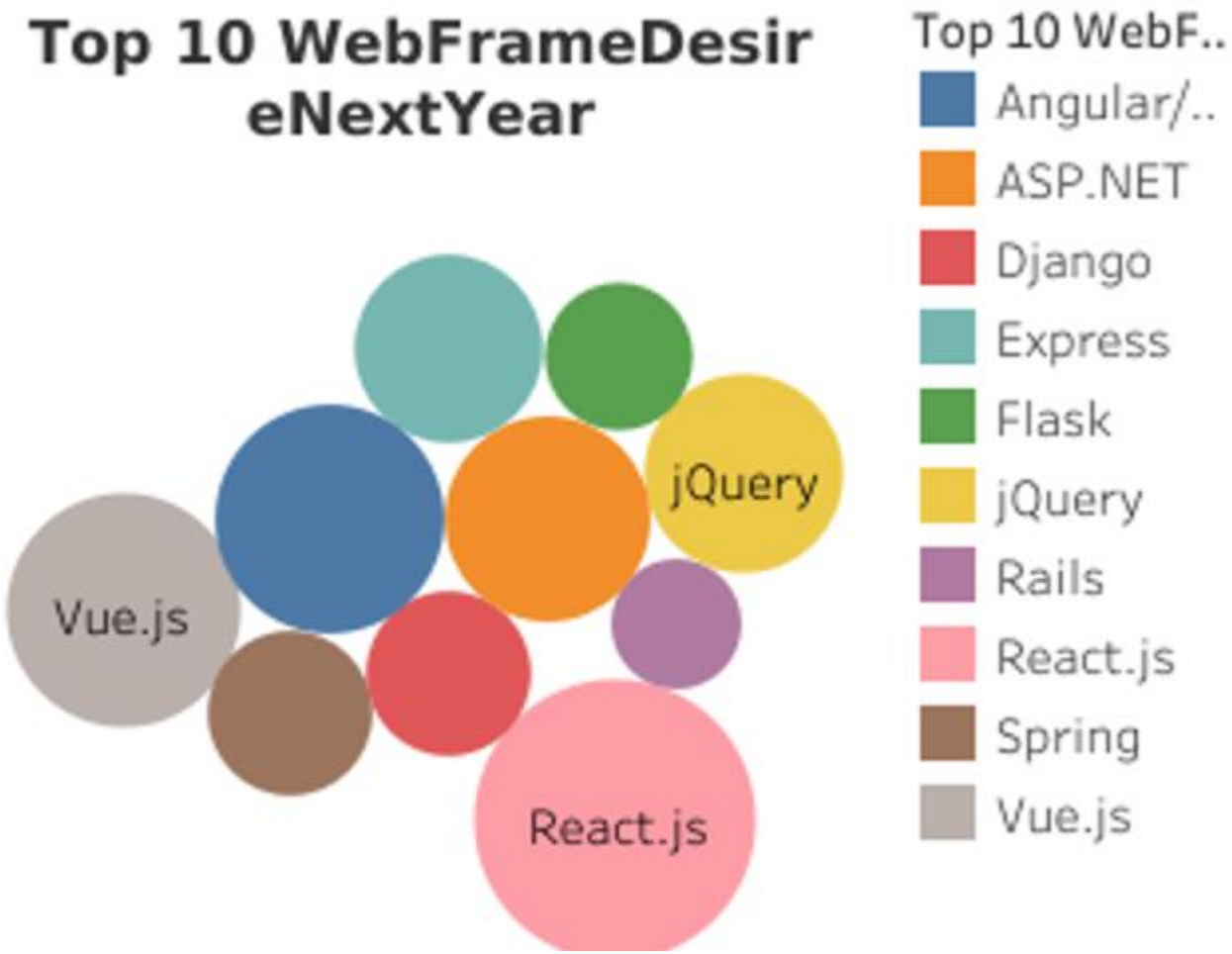
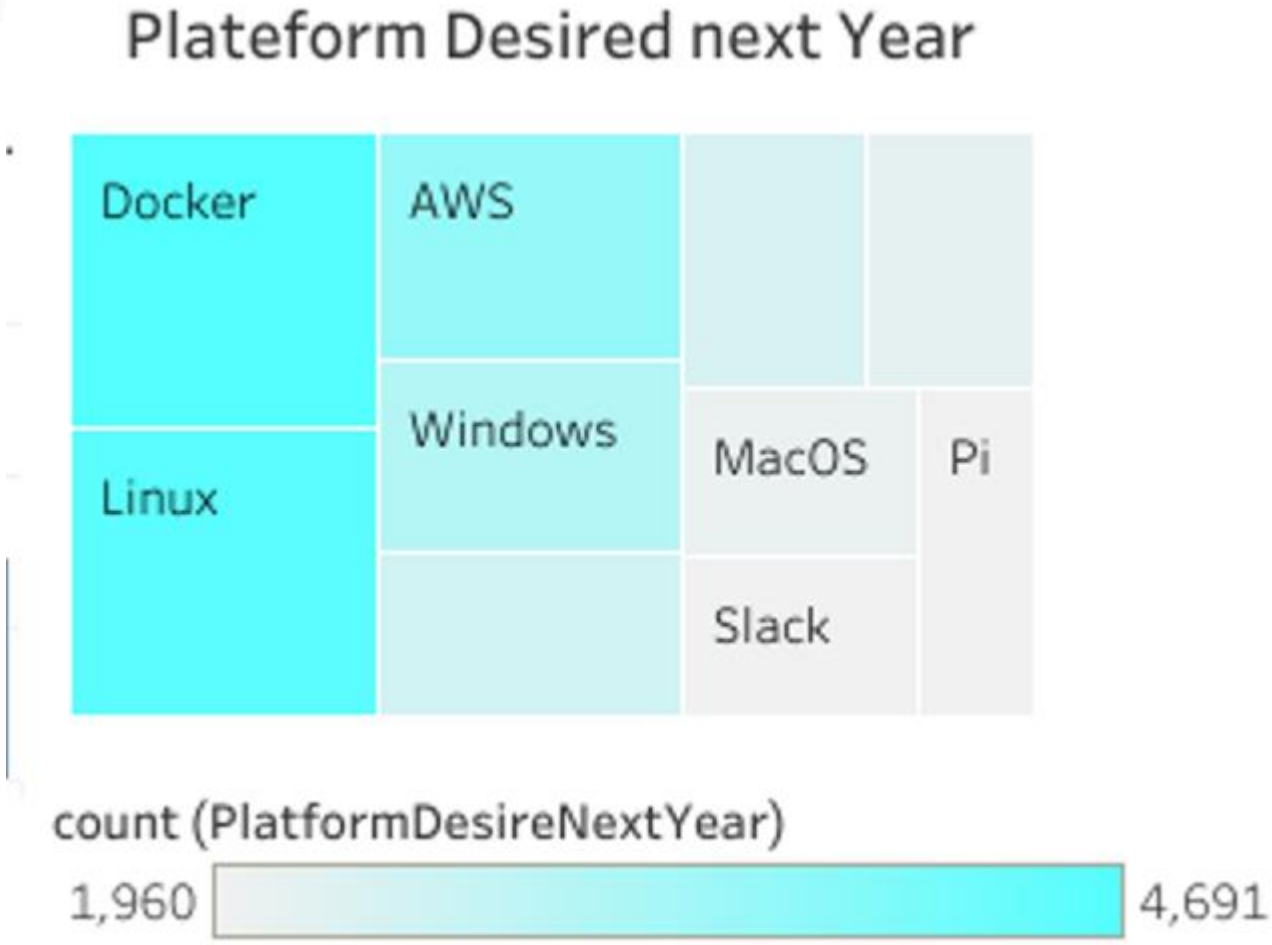
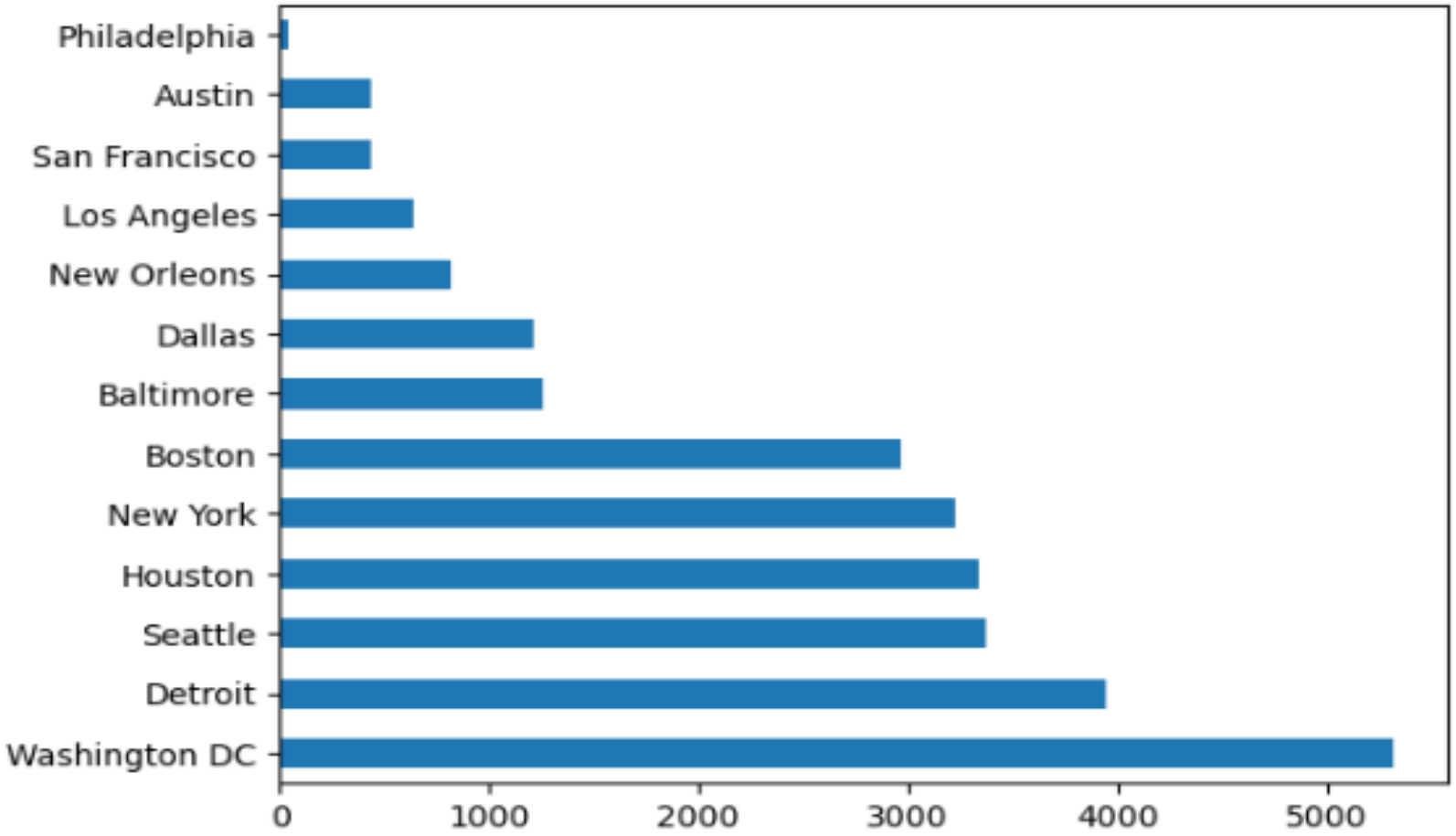
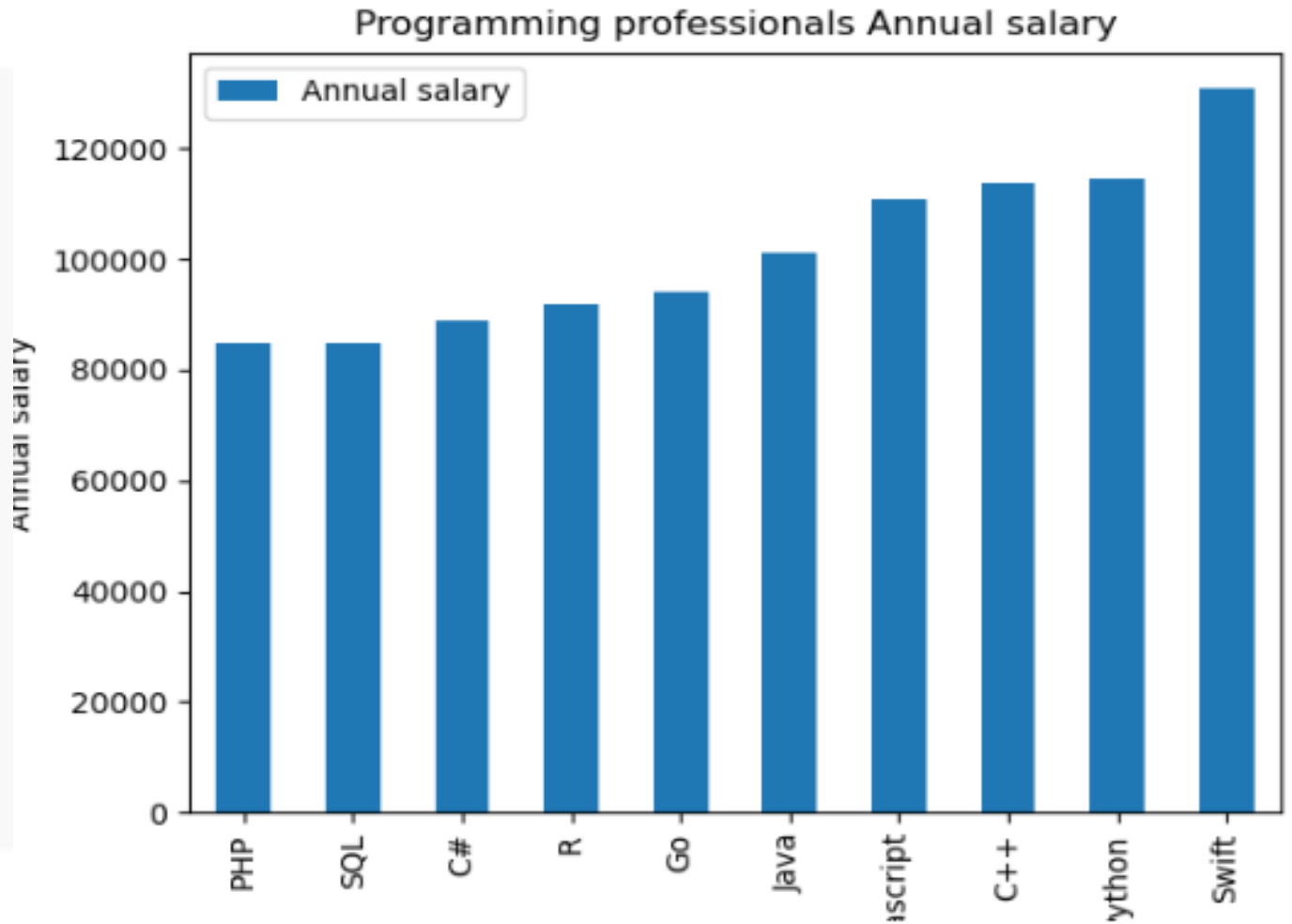


Plate form by tech Experts



JOB POSTINGS LOCATION



POPULAR LANGUAGES