



Final Capstone Project: Presentation of Stack Overflow Survey Findings in 2019

Vallian Sayoga

5th February 2022

OUTLINE



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EXECUTIVE SUMMARY



- A survey was conducted in 2019 on Stackoverflow Visitors
- The data was gathered:
 - On Stackoverflow
 - By using survey
- Results show that Javascript, HTML, CSS, SQL, and Python are the top languages
- The rise of data science and Typescript change next year trend
- Most developers still prefer working on Windows

INTRODUCTION



- This study is aimed for developers, industries, and people who are interested in IT
- Knowing top languages can help predict next year's trend in IT

METHODOLOGY



- Data gathering using survey on Stackoverflow
- Data wrangling using Python
- Dashboarding with IBM Cognos
- Presenting the findings with PowerPoint Online

RESULTS

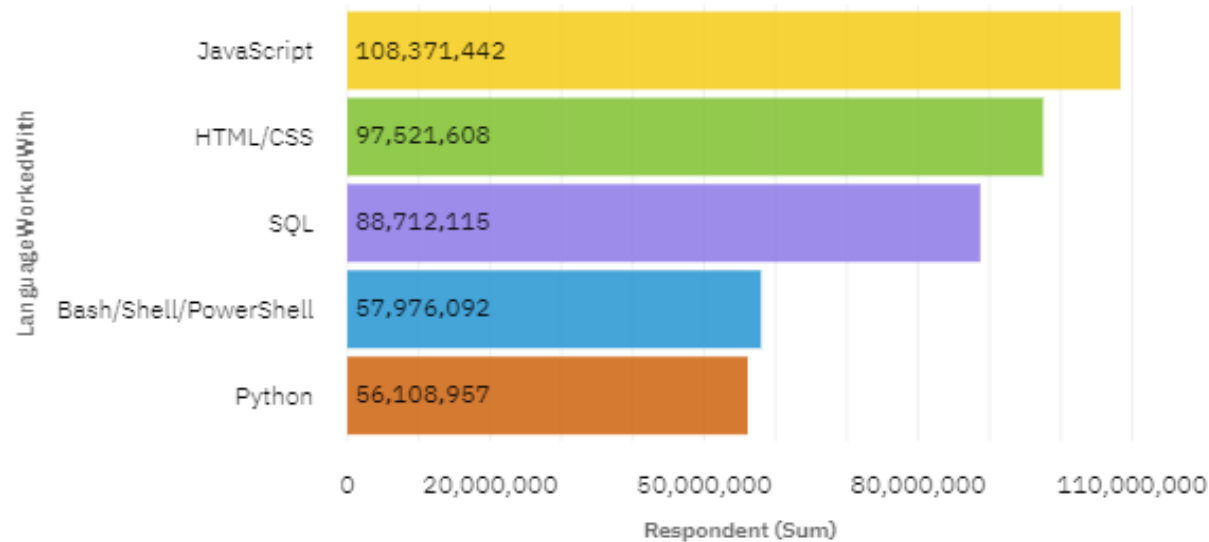


PROGRAMMING LANGUAGE TRENDS

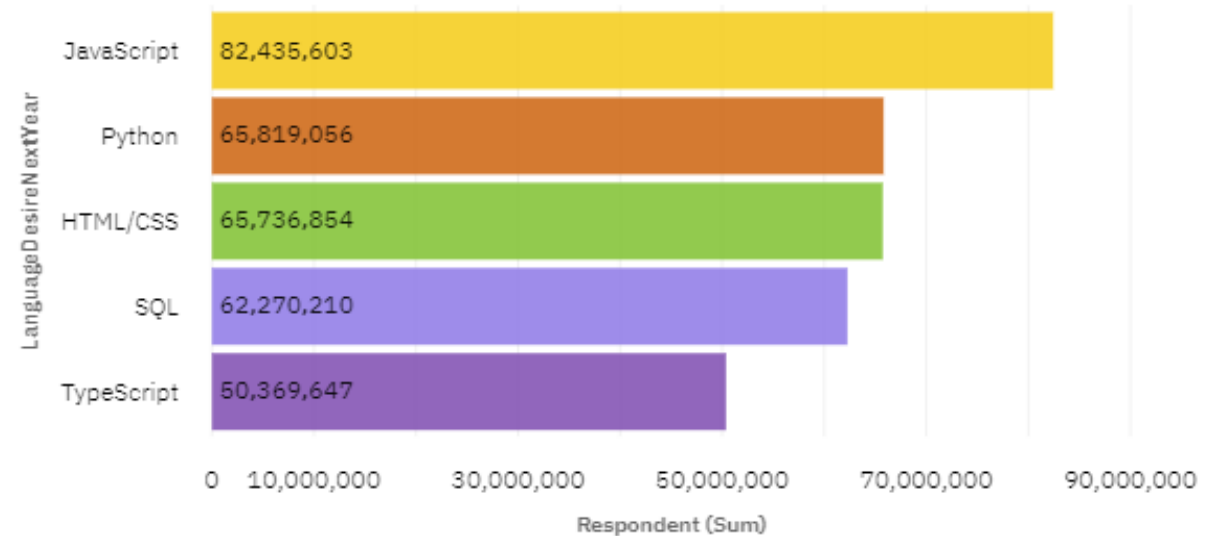
Current Year (2019)

Next Year (2020)

Top 5 Languages of Current Year



Top 5 Desired Languages of Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Web dev languages are the most popular (JS, HTML-CSS, SQL) for current & next year
- Python rises popularity for the next year
- Typescript enters onto the stage in the next year

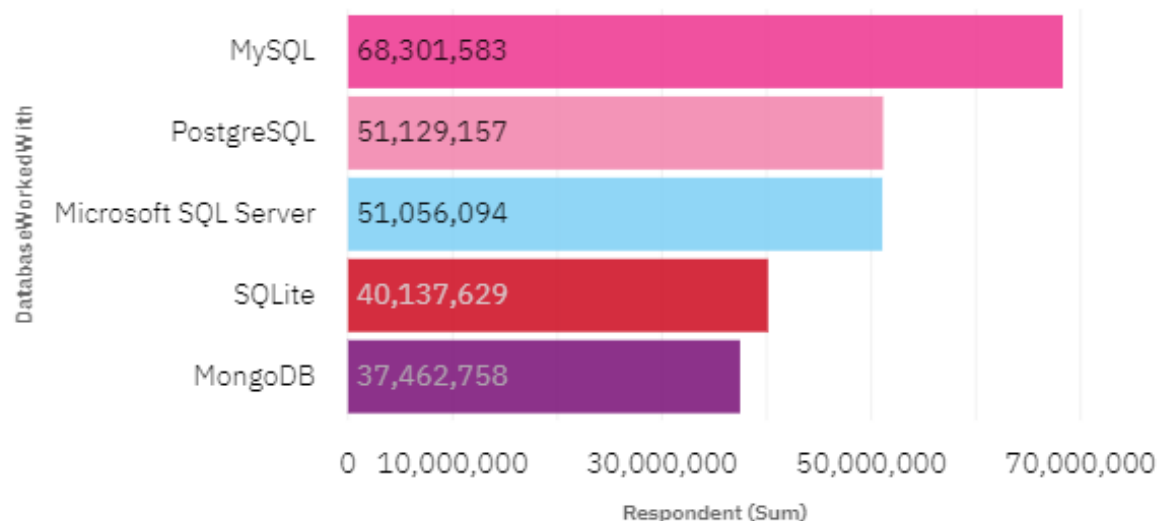
Implications

- Web development is still the most well sought skill to have lately
- The rise of machine learning, data analysis, data science help the rise of Python
- TypeScript is a superset of JavaScript which primarily provides optional static typing, classes and interfaces

DATABASE TRENDS

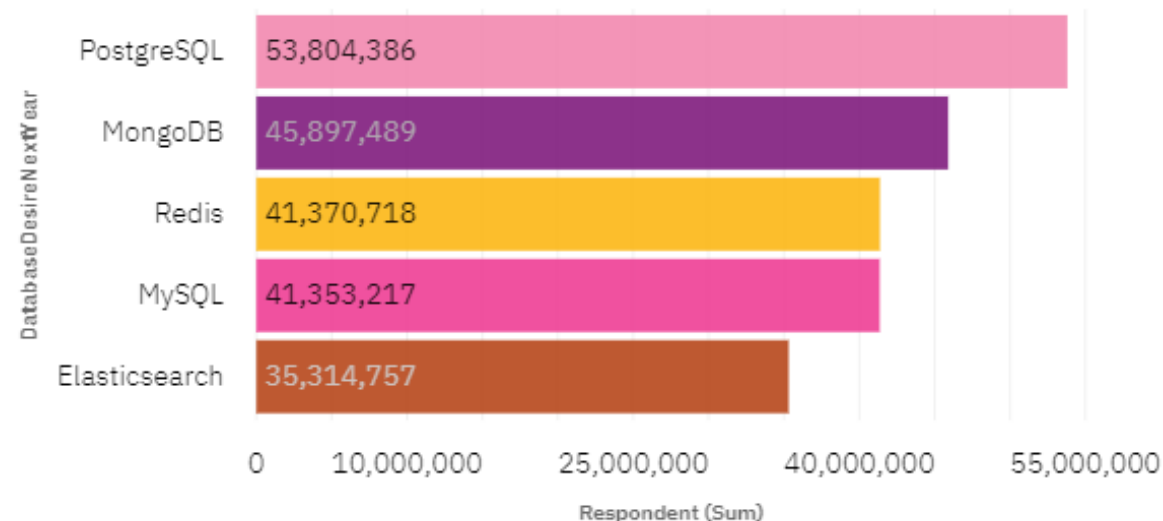
Current Year

Top 5 Databases of Current Year



Next Year

Top 5 Desired Databases of Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Most popular databases are dominated by SQL based RDBMS
- The only No-SQL is MongoDB
- MySQL is replaced by PostgreSQL in the next year

Implications

- SQL is still industries standard because of it relational nature
- SQL has weaknesses that's why No-SQL comes into play, such as MongoDB
- PostgreSQL has many features that MySQL does not

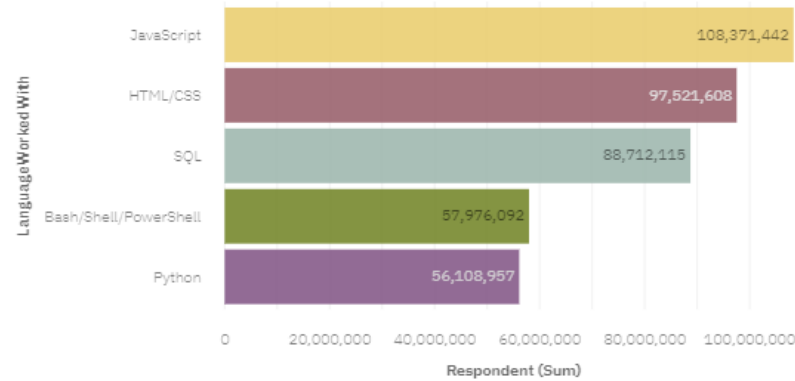
DASHBOARD



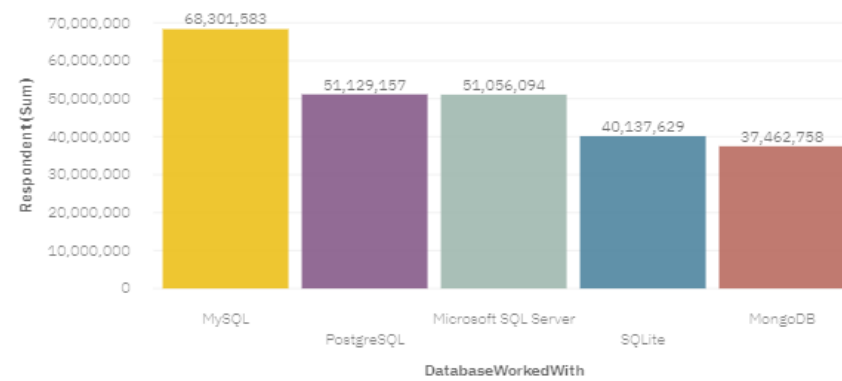
[My Dashboard Link](#)

DASHBOARD TAB 1

Top 5 Language Worked With



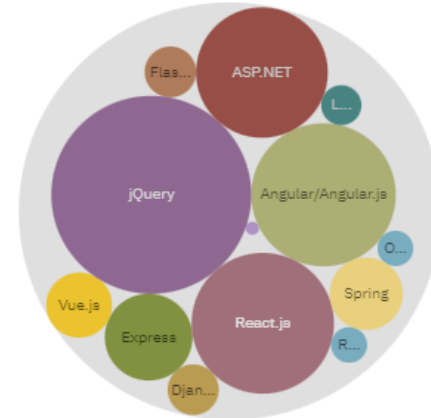
Top 5 Database Worked With



Platform Worked With

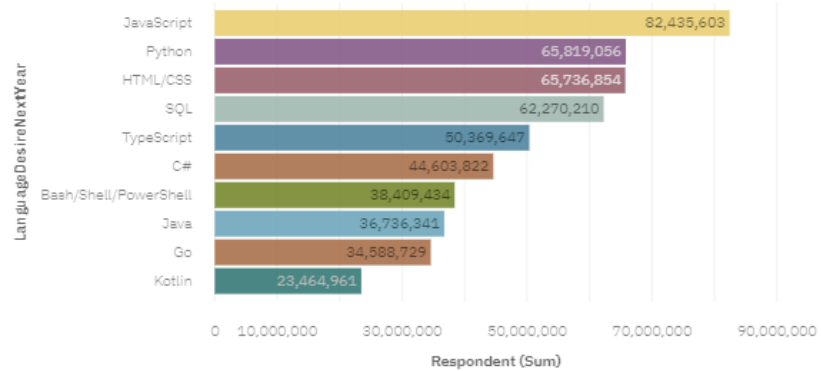


Top 10 Web Frame Worked With

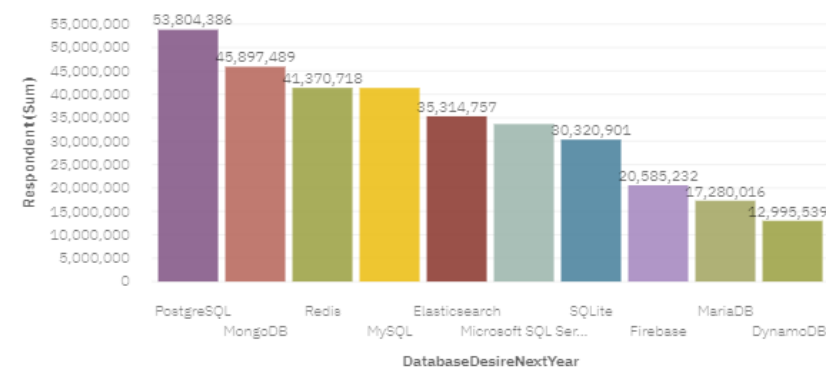


DASHBOARD TAB 2

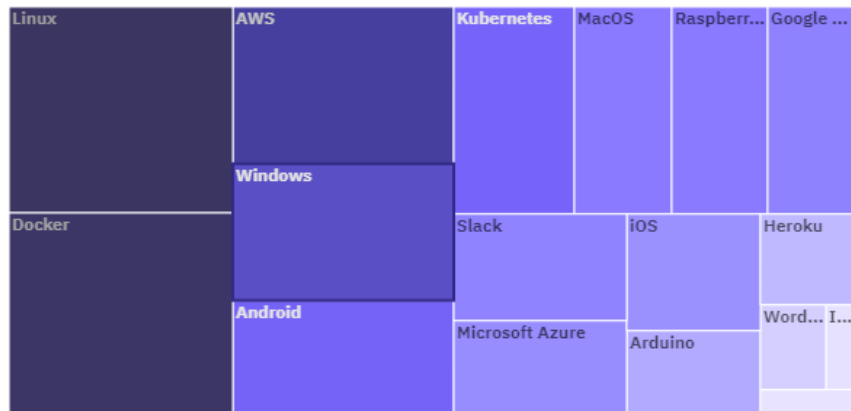
Top 5 Language Desire Next Year



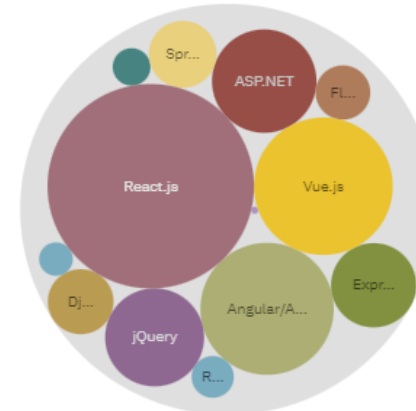
Top 5 Database Desire Next Year



Platform Desire Next Year

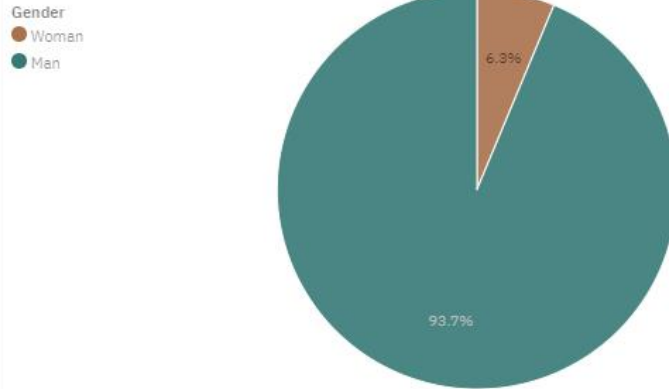


Top 10 Web Frame Desire Next Year

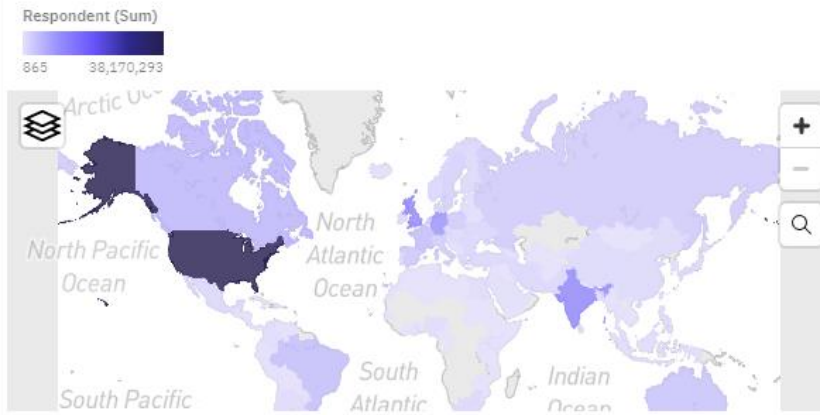


DASHBOARD TAB 3

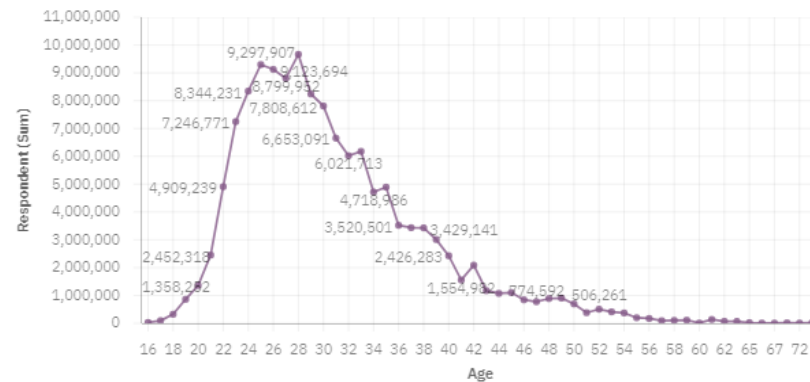
Respondent classified by Gender.



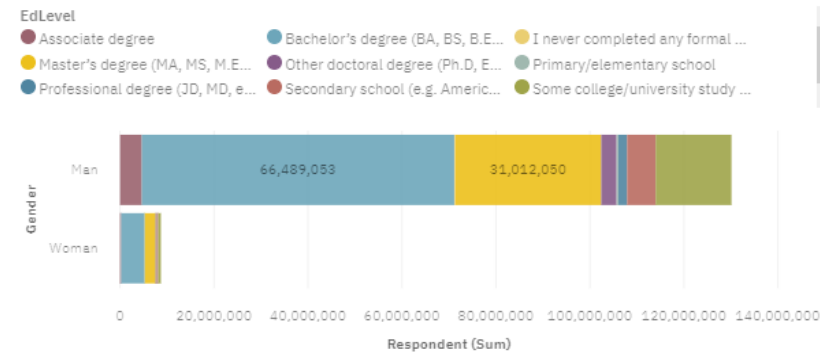
Respondent Count for Countries



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level



DISCUSSION

What do you think about this trend? Is it as you expected?

What'd you think for 2022 trend?

OVERALL FINDINGS & IMPLICATIONS

Findings

- Web dev stack is still the most popular languages
- RDBMS (SQL) databases dominate the chart
- Python is in the second position in the next year after in the last position the current year

Implications

- Web development is still needed by most industries to develop UI/UX or website
- The nature of structured data favours RDBMS
- Machine learning, neural network, and deep learning with Python are on the rise lately

CONCLUSION



- JS, HTML/CSS, and SQL are the main languages to master in current IT sector
- Regarding databases, RDBMS is still the software of choice
- The increase of data science and unfulfilled demands make Python popularity rise
- The simplicity of Python makes it easy for beginner to learn

APPENDIX

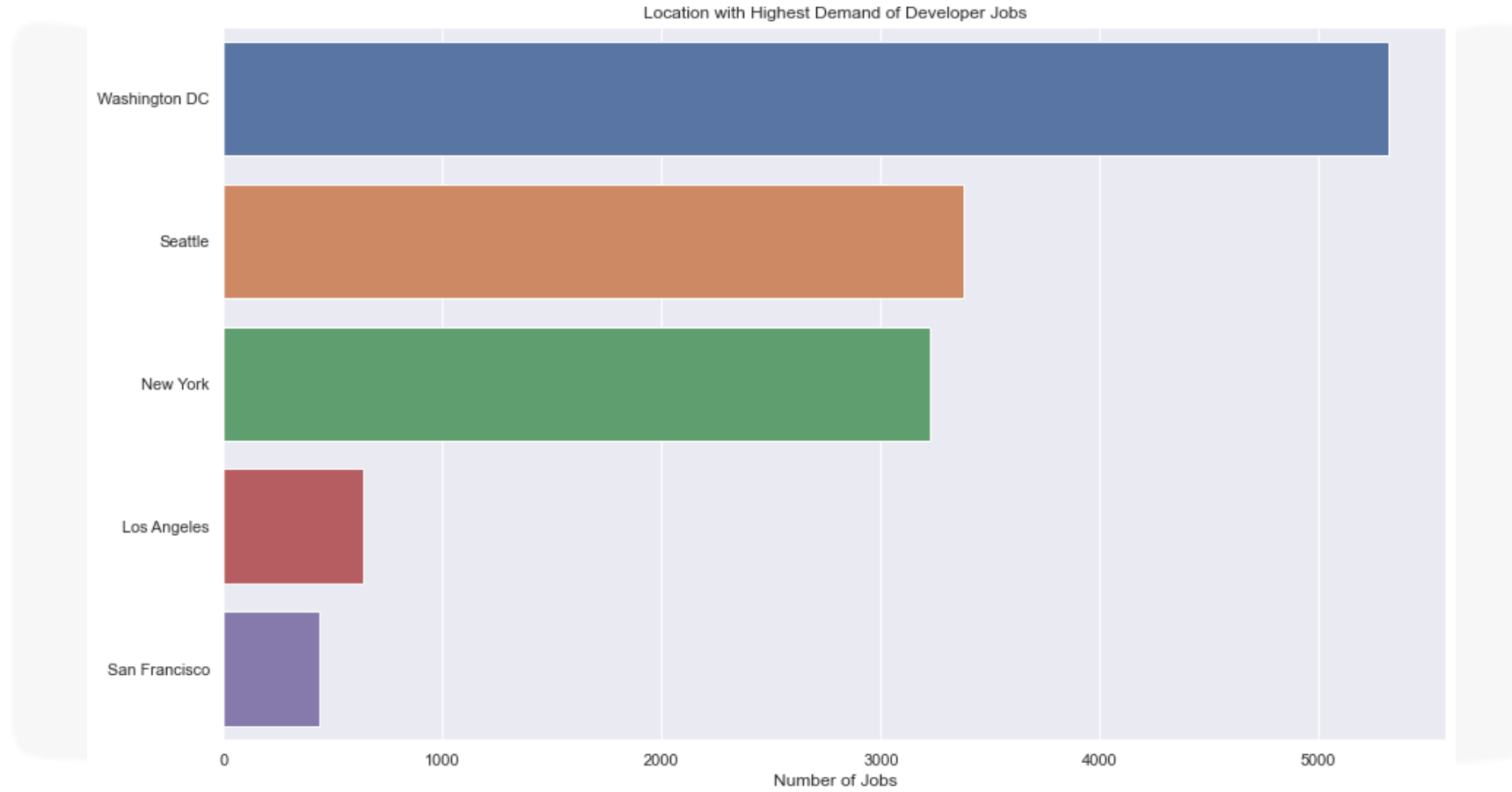


Platform Worked With



Developers still prefer Windows for their platform of choice

GITHUB JOB POSTINGS



POPULAR LANGUAGES

