



TECHNOLOGY TREND ANALYSIS

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OUTLINE



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- Methodology
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 - Visualization – Charts
 - Dashboard
- Discussion
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- Conclusion
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EXECUTIVE SUMMARY



- The most popular technology language are JavaScript, HTML, SQL, Python
- Among all web-based frame works, jQuery and Angular.js is the most popular frame works.
- Windows and Linux are the 2 most used platform.
- RDBMS like MySQL and Microsoft SQL server are current most use database language but NOSQL like MongoDB is becoming more popular in future trends

INTRODUCTION



- The technology market changes quickly every year.
- It is important to catch-up with the latest technology in each field.
- The comparison between current & next year technology trend will provide great inside into the market.
- The study consist of 4 main parts:
- Popular Current and Future Language
- Popular Current and Future Database
- Popular Current and Future Platform
- Popular Current and Future Web Frame

METHODOLOGY

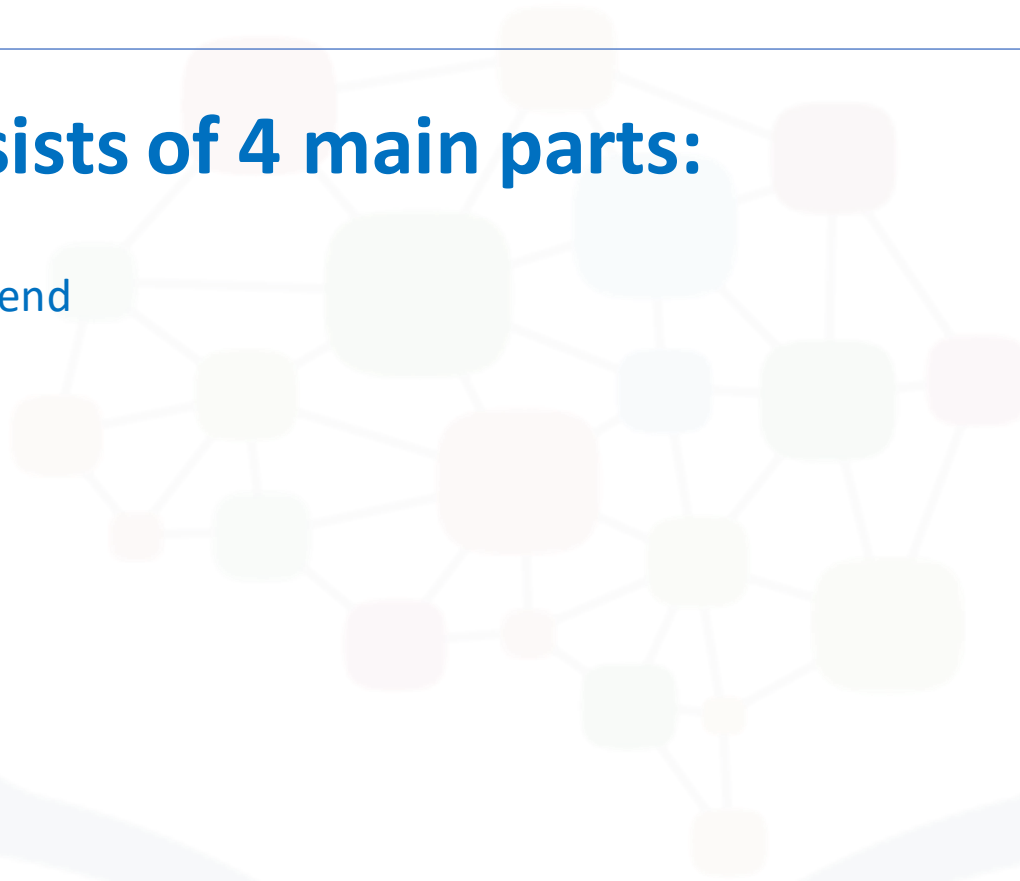


- Comparing current and future technology usage.
- The data was from the 'Stack Overflow Developer Survey 2019'.
- Different type of charts, such as bar, line, pie, tree-map ... will be used to visualize the result.
- The IBM dashboard is used to analyze data and create visualization.

RESULTS

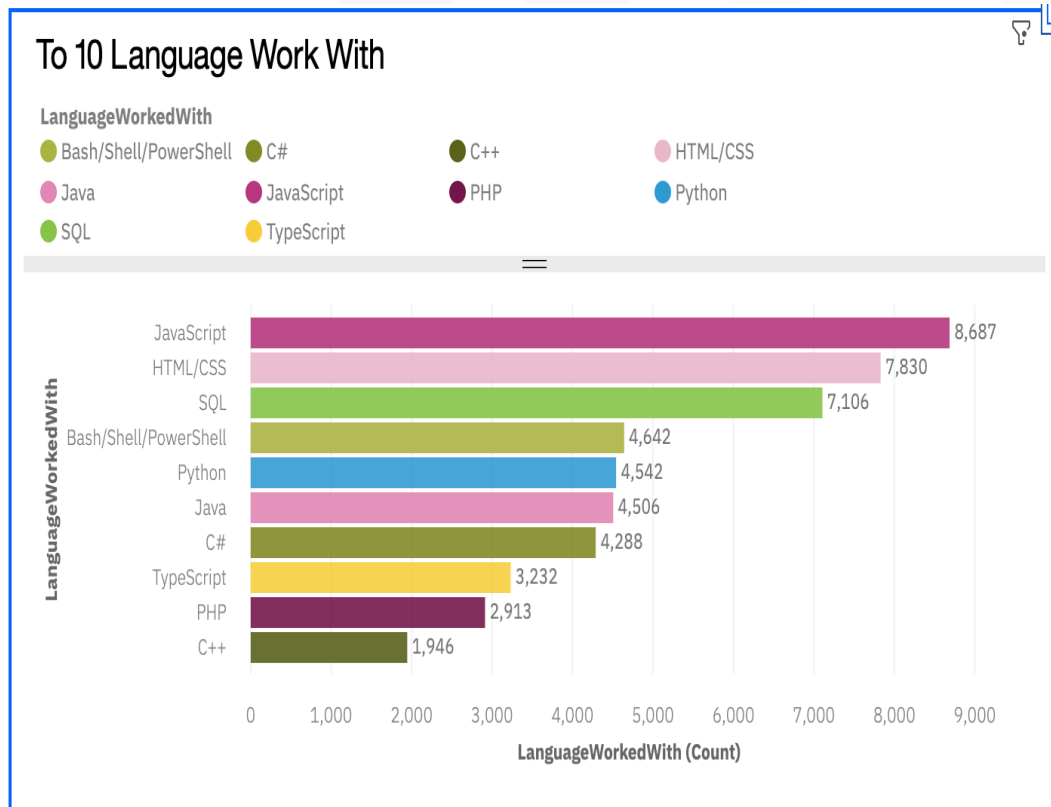
The results consists of 4 main parts:

- Programming language trend
- Database trend
- Platform trend
- Web frame trend

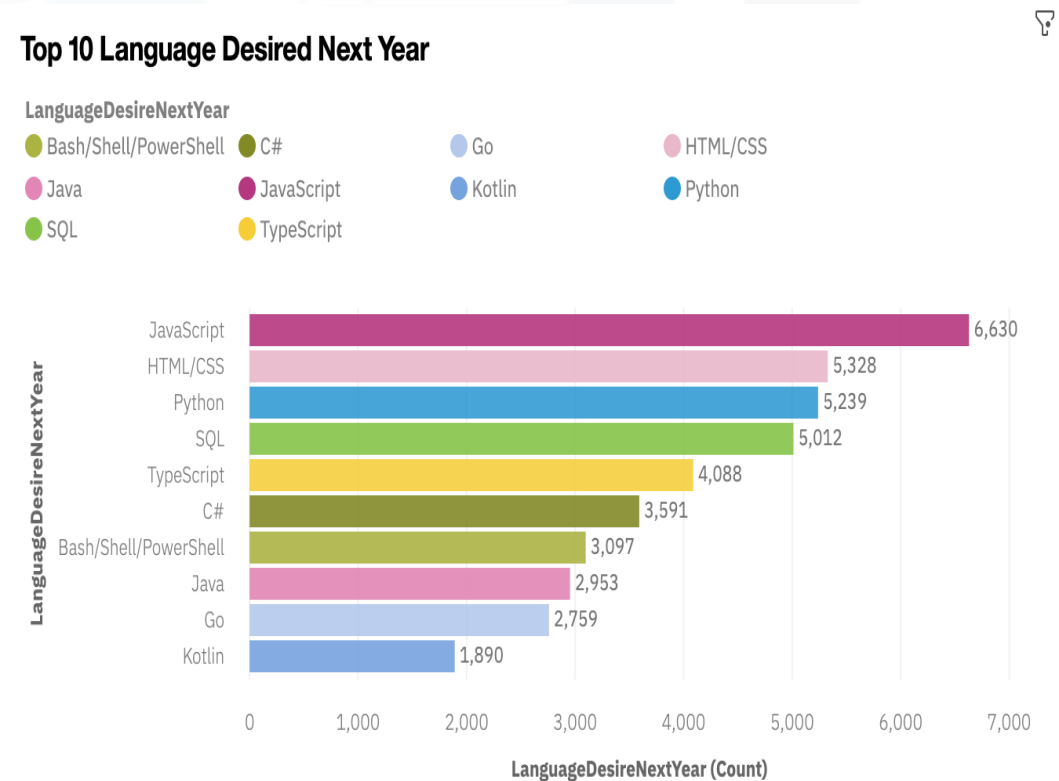


PROGRAMMING LANGUAGE TRENDS

Current Trend



Future Trend



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript & HTML/CSS are top programming languages for both current and future trend.
- Python moves from 5th position to 3rd position in top 10.
- C++ and PHP are disappearing from top 10.

Implications

- Web programming languages like JavaScript and HTML/CSS will continue holding its top position in near future.
- Python is becoming more popular and used programming language.
- Language such as C++, PHP are losing popularity

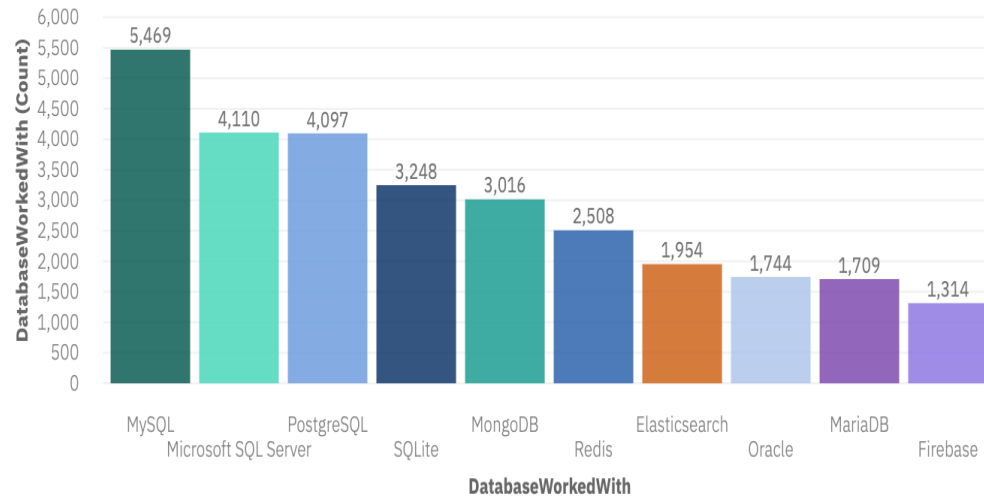
DATABASE TRENDS

Current Trend

Top 10 Database Worked With

DatabaseWorkedWith

Elasticsearch Firebase MariaDB Microsoft SQL Server MongoDB
MySQL Oracle PostgreSQL Redis SQLite

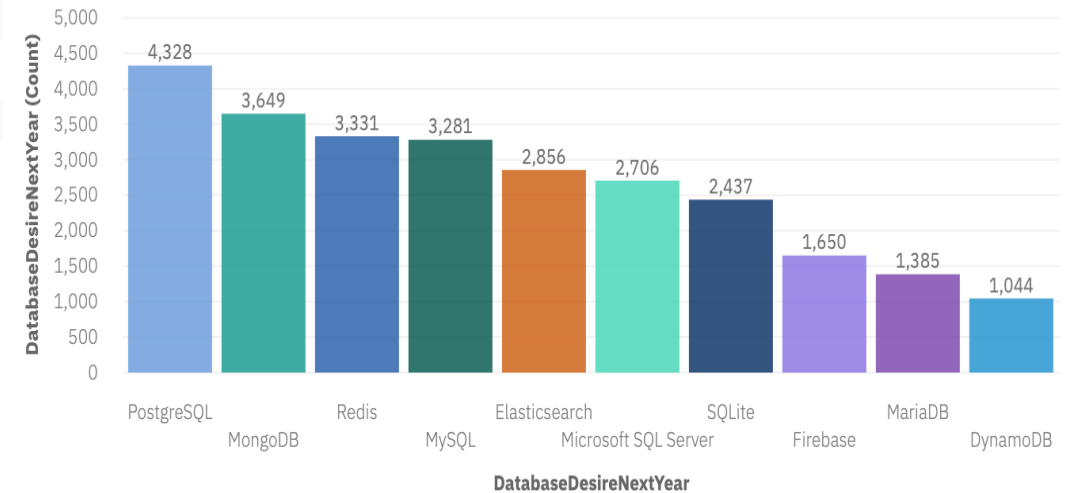


Future Trend

Top 10 Database Desired Next Year

DatabaseDesireNextYear

DynamoDB Elasticsearch Firebase MariaDB Microsoft SQL Server
MongoDB MySQL PostgreSQL Redis SQLite



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MongoDB and Redis is gaining popularity
- PostgreSQL moves from No.3 to No.1
- MS SQL server is losing its popularity as its position drops from No.2 to No.7
- Oracle lost its position in top 10 database in near future

Implications

- Open source database becomes more and more popular compared with commercial one.
- The usage of NoSQL like MongoDB and Redis is increasing in future .
- RDBMS like PostgreSQL still takes a leading position in the near future.

DASHBOARD

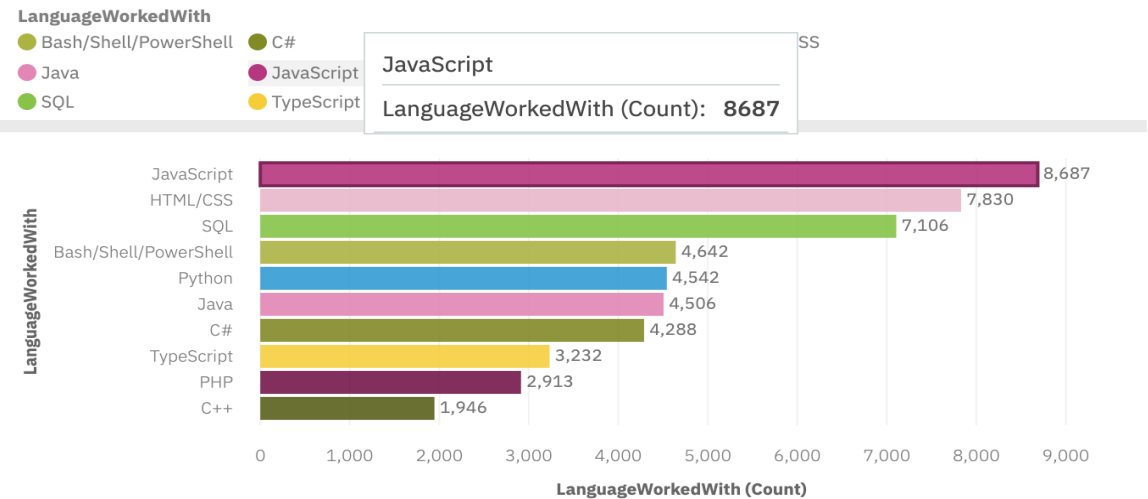


[Dash Board Link is given below](#)

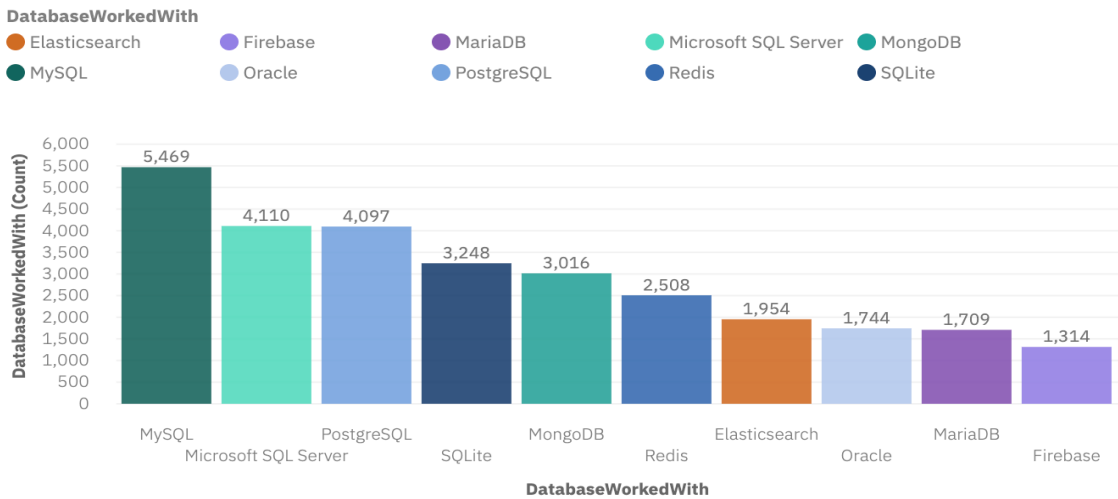
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Current Technology Usage

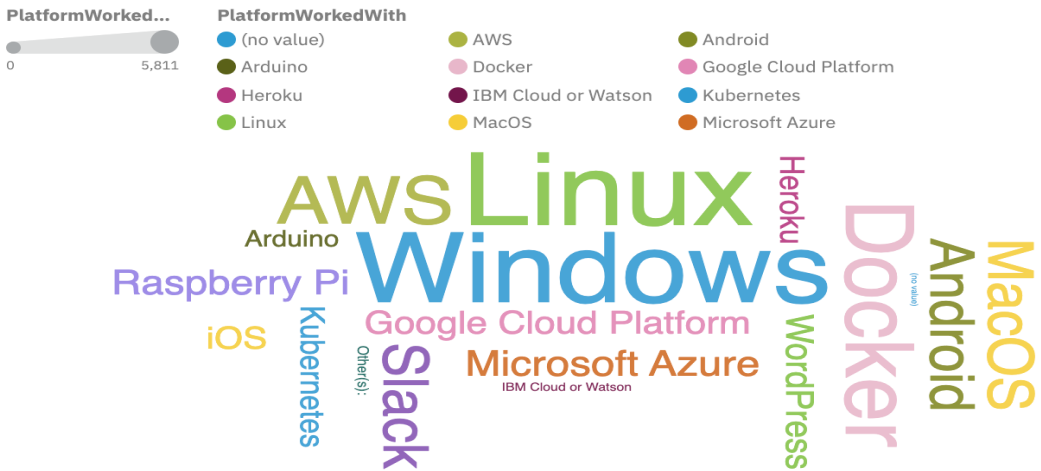
To 10 Language Work With



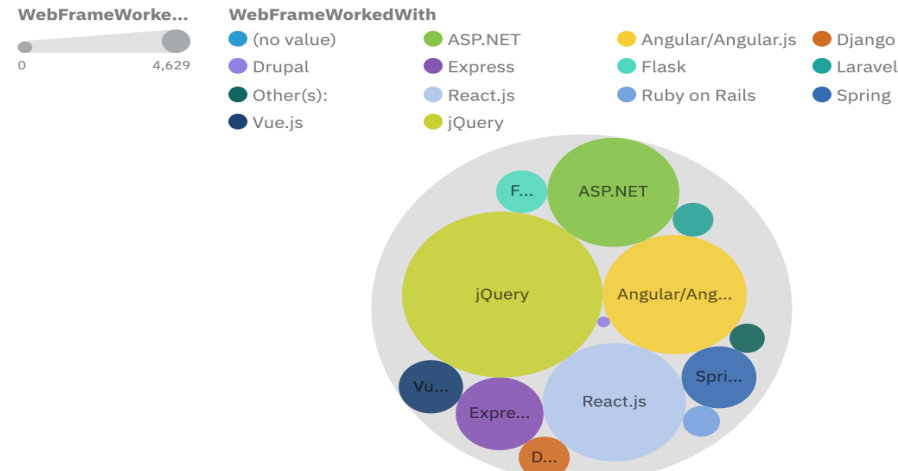
Top 10 Database Worked With



Platform Worked With

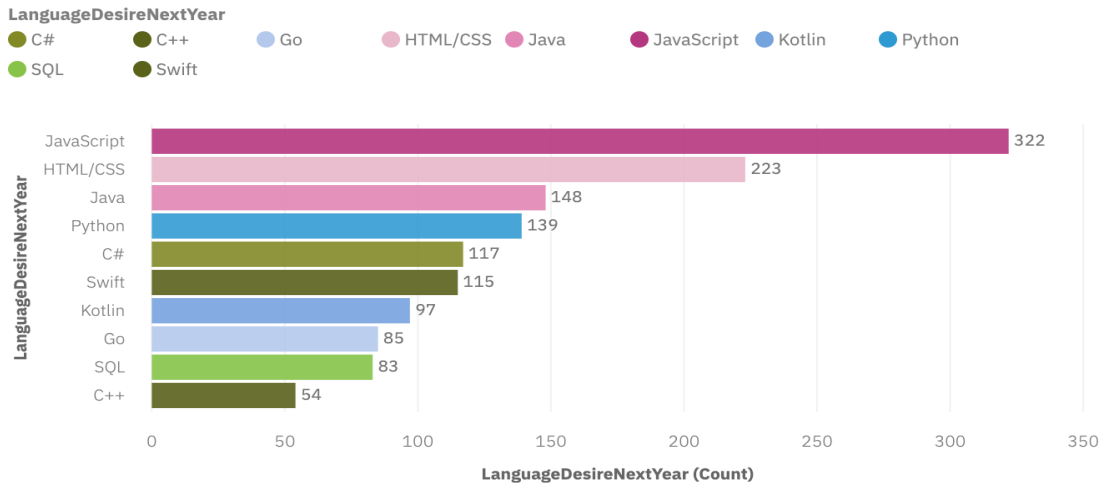


Top 10 Web Frame Worked With

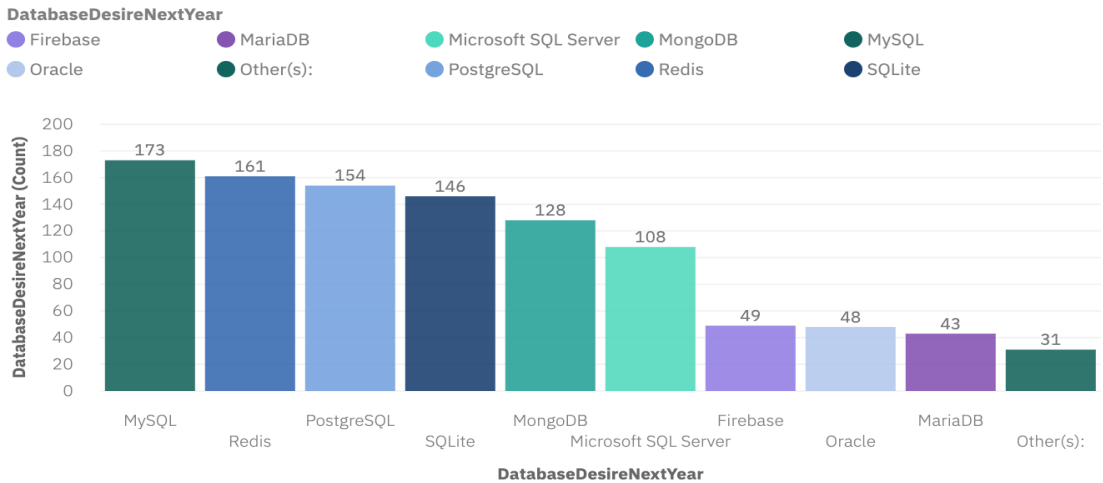


Future Technology Trend

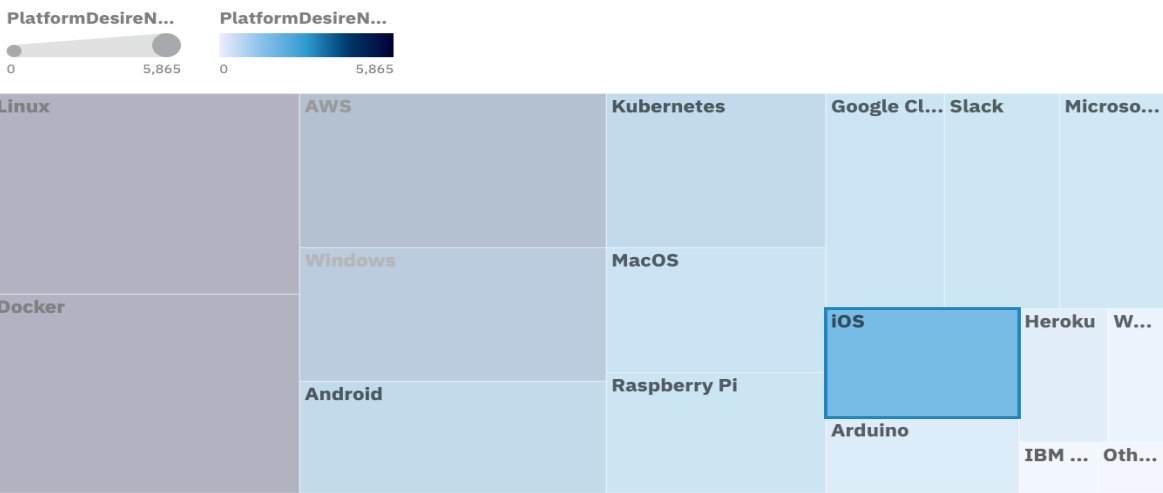
Top 10 Language Desired Next Year



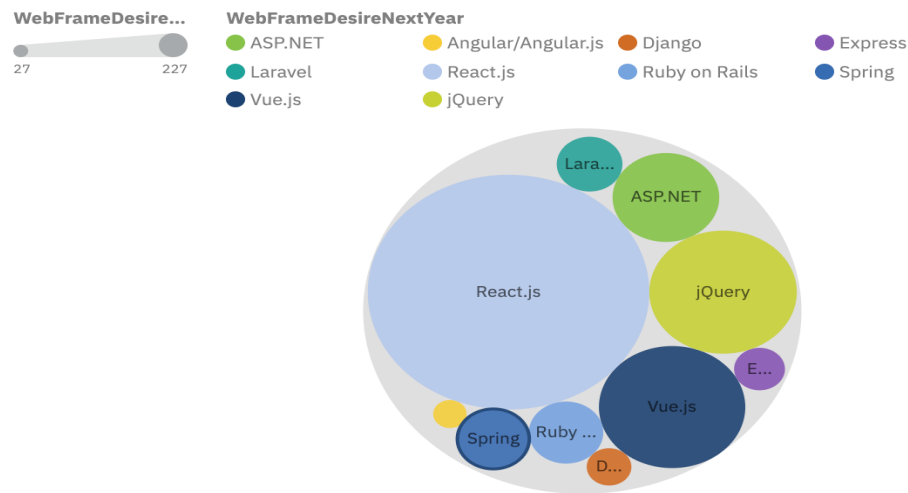
Top 10 Database Desired Next Year



Platform Desired Next Year



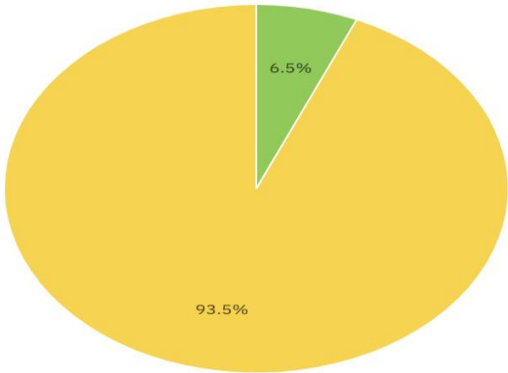
Top 10 Web Frame Desired Next Year



Demographics

Respondent classified by Gender

Gender
● Woman ● Man

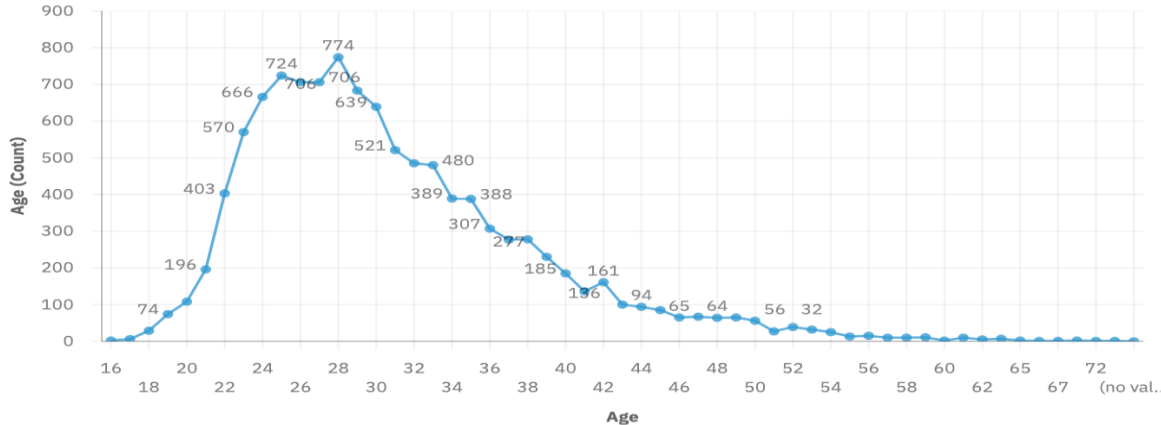


Respondent Count for Countries

Country (Count)
1 3,058

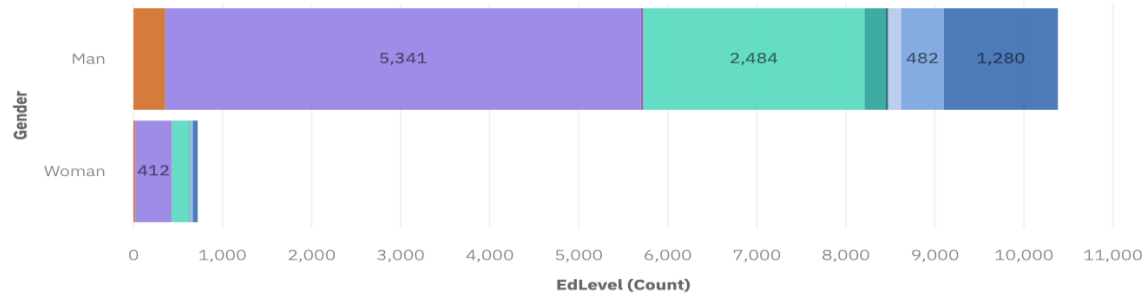


Respondent Count by Age



Respondent classified by Formal Education Level

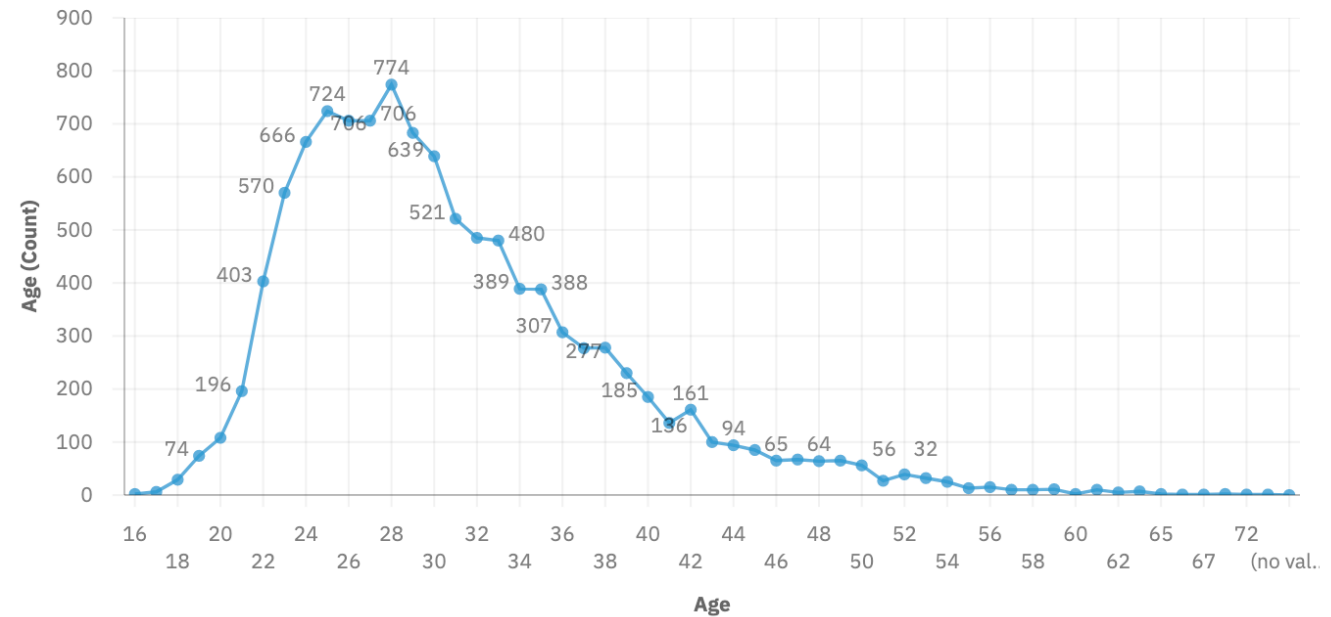
EdLevel
● (no value) ● Associate degree ● Bachelor's degree (BA, BS, B.E...
● I never completed any formal ... ● Master's degree (MA, MS, M.E... ● Other doctoral degree (Ph.D, E...
● Primary/elementary school ● Professional degree (JD, MD, e... ● Secondary school (e.g. Americ...
● Some college/university study ...



DISCUSSION



Respondent Count by Age



Majority of respondents are at young age (25, 30s) → this could skew the result in favor of new technology.

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript and HTML/CSS stays at No.1
- NoSQL like MongoDB and Redis moves to No.2 & No.3
- Linux remains No.1 platform
- Cloud Platform like AWS gaining popularity
- React.js moves to No.1 on web framework.

Implications

- Web based application is taking over the traditional application.
- NoSQL database sees increasing usage.
- Cloud-based Platform is becoming top-choice.

CONCLUSION



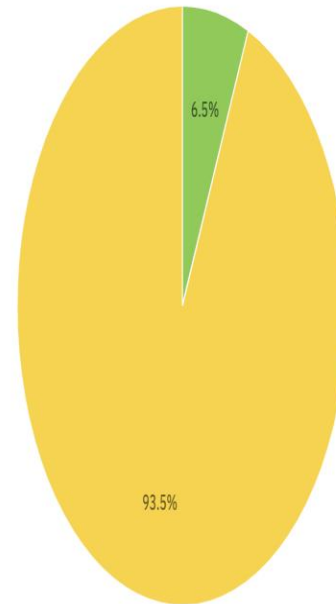
- To stay relevant in the technology field, it's important to learn web-based language, Relational & non-relational database.
- Among web framework, React.js is the best to learn for your future.
- Cloud-based service is the future.

APPENDIX



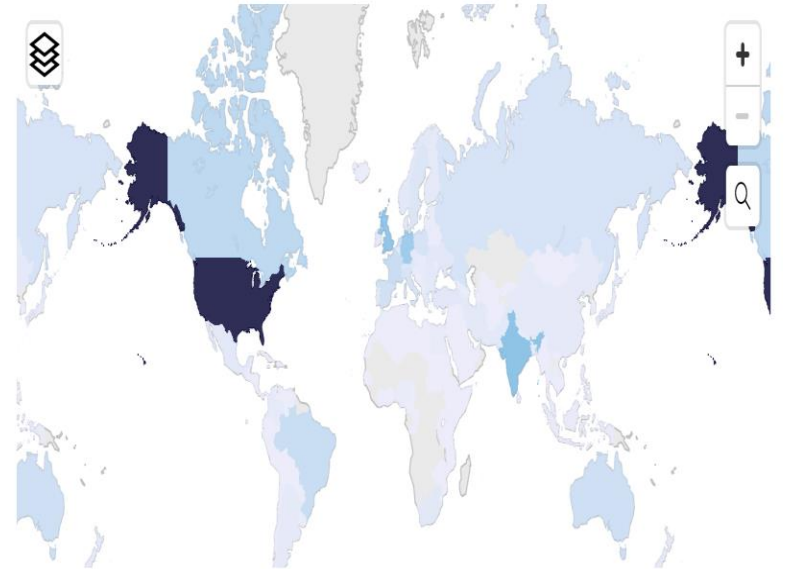
Respondent classified by Gender

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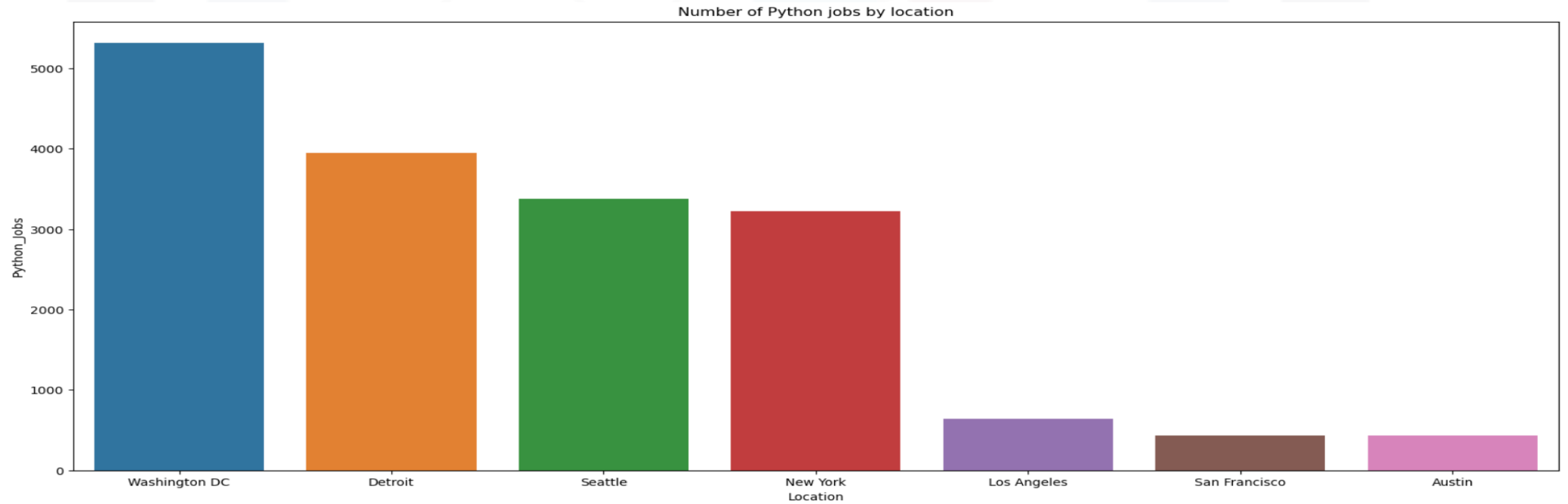


Respondent Count for Countries

Country (Count)
1 3,058



PYTHON JOB POSTINGS PER LOCATION



JOB POSTING PER LANGUAGE

