Technology Survey Results

Crisenger Guerisma

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IBM **Developer**

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OUTLINE

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- Methodology
- Results
  - Visualization – Charts
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- Discussion
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EXECUTIVE SUMMARY

Objective: To Analyze the 2022 technology survey results conducted by StackOverFlow

- Analysis of this year's result:
  - Top programming languages used
  - Top databases used
  - Platforms used
  - Top webframes used

- Analysis of the results for respondent's next year learning plans:
  - Top programming languages
  - Top databases
  - Platforms
  - Top webframes

- Analysis of the respondent's demographics
  - Respondent Gender, Age, Country and Education Level

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INTRODUCTION

- Analyze the survey results data looking for trends and implications of the following
  - Technology used this year by respondents
  - Technology learning plans, and usage for next year

- Analyze the demographic distribution of the respondent
  - Breakdown of respondent by Gender
  - Breakdown of respondent by Age
  - Breakdown of respondent by Country
 - Breakdown of respondent by Education Level

METHODOLOGY

- Exploratory method used to analyze the dataset which was obtained from the StackOverflow website.

- Data is summarized and presented in a dashboard that will be accessible by all interested parties.

- The data was used as-is from the website with no change.

- Null values are excluded from the overall summarization of the data.

RESULTS

- JavaScripts and HTML/CSS are still the top languages being used this year and will be learned next year.

- SQL is the second most used language this year. However, python is the second most language respondent will be learning next year.

- MySQL and SQL server where the top database for this year. However, PostgreSQL and MongoDB are the two top databases that respondent wish to learn next year.

- Man made up over 90% of the respondent, and women came up under 8%.

PROGRAMMING LANGUAGE TRENDS

Current Year
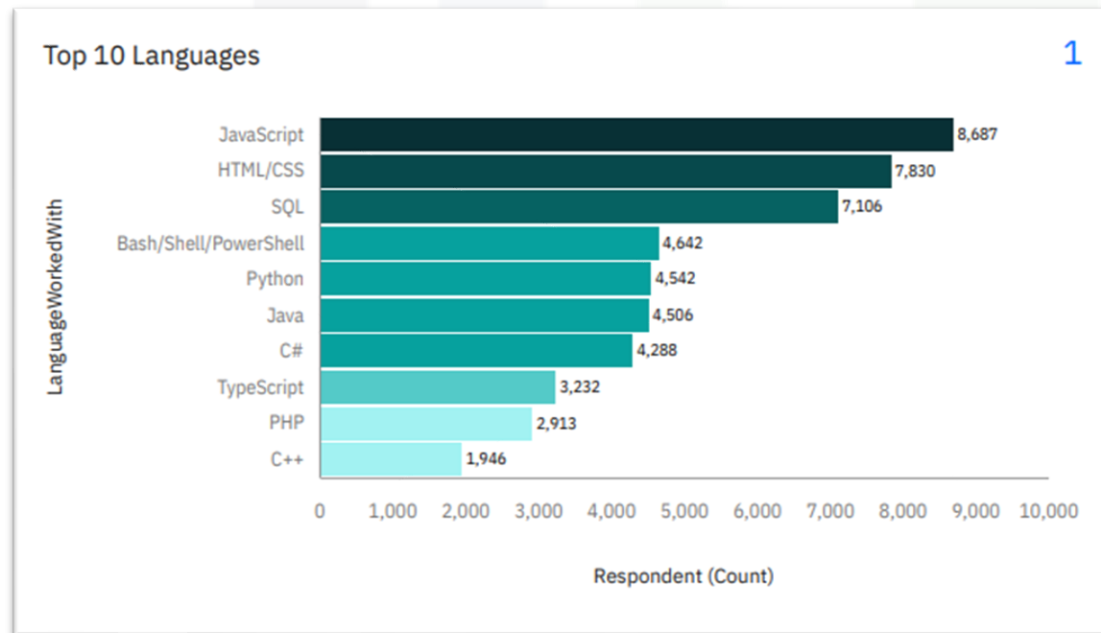
Next Year
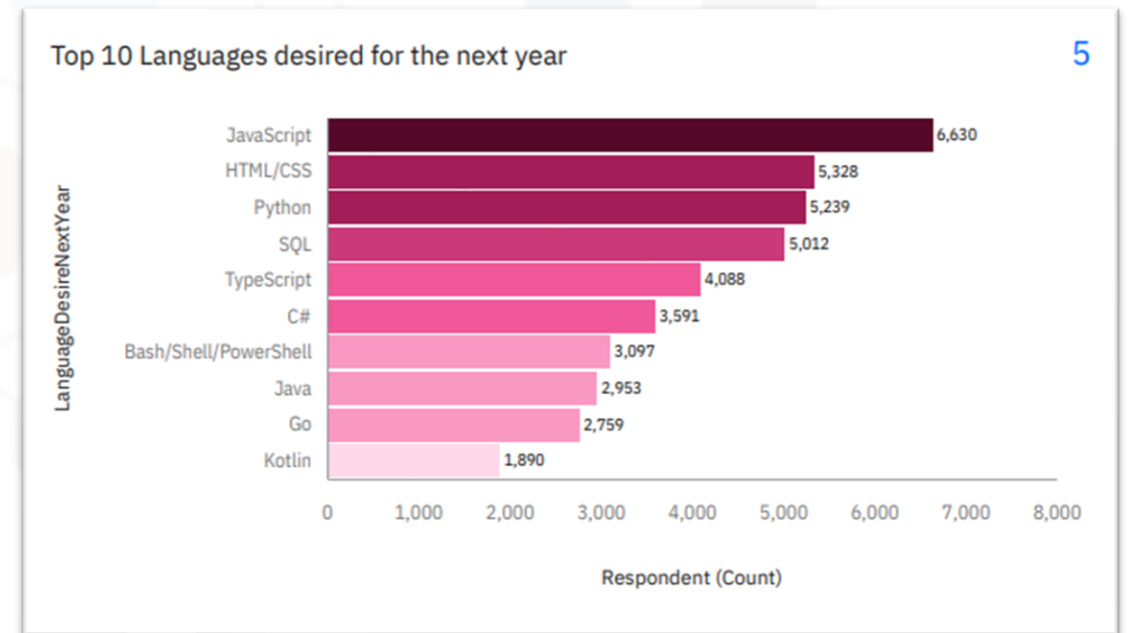
PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript and html/CSS are the leading languages used this year

- JavaScript and html/CSS are also the leading languages that respondent desires to learn next year

- SQL was the third most language used this year. However, python is the third preference for next year
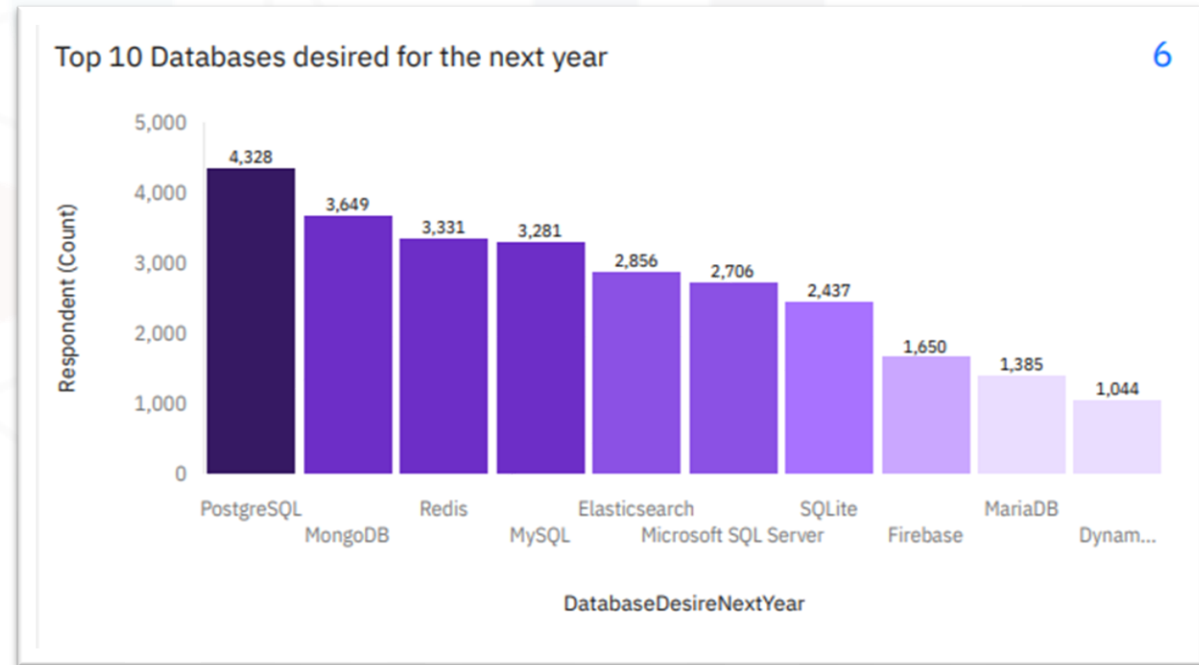
Implications

- Demand for JavaScript / html training needs remain strong

- Demand for python programing jobs is trending up. So, is the need to training courses.

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DATABASE TRENDS

Current Year

Top 10 Databases — 2

Next Year

Top 10 Databases desired for the next year — 6
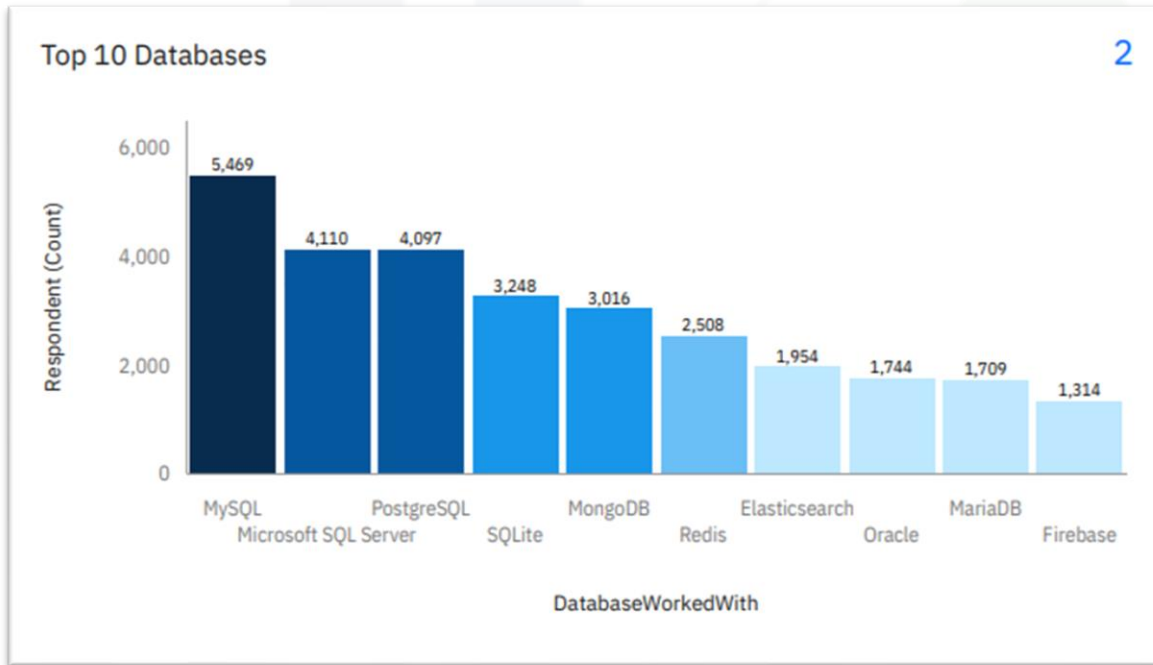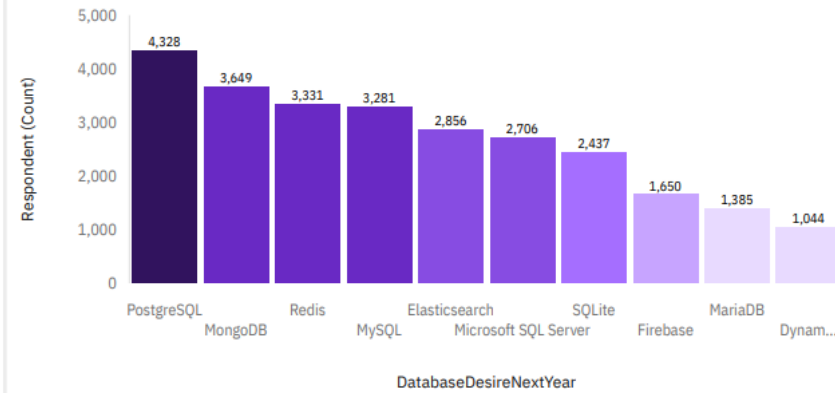
DATABASE TRENDS - FINDINGS & IMPLICATIONS
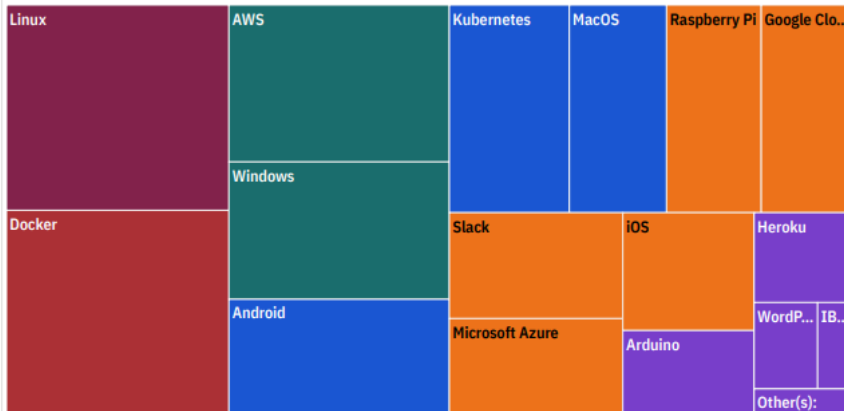
Findings

- MySQL is the top database used this year

- PostgreSQL is the top DB to be learned next year

- SQL Server is second most used DB this year, but sixth on the least of DB to be learned next year.

Implications

- Big increase in demand for PostgreSQL and MongoDB learning for next year.

- MySQL and SQL Server skills not as in demand from next year.

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DASHBOARD

https://github.com/gcris07/launchpad/blob/be2b3d8099ec2b5d4d4ab9c716299df7bad74295/Technology%20Survey%20Results%20Dashboard.pdf

DASHBOARD TAB 1

DASHBOARD TAB 2

Future Technology Trend
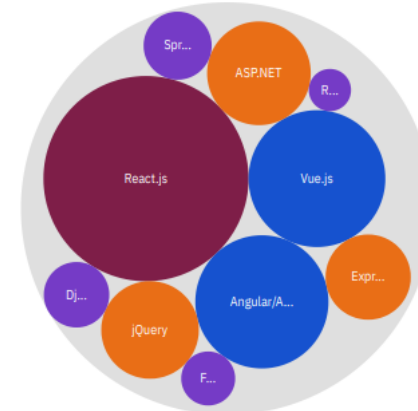
DASHBOARD TAB 3
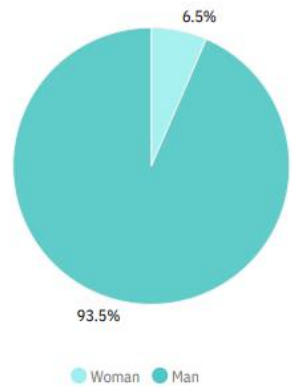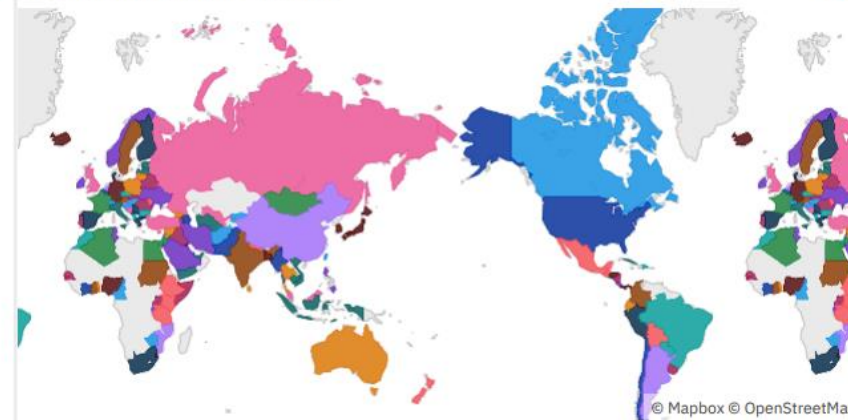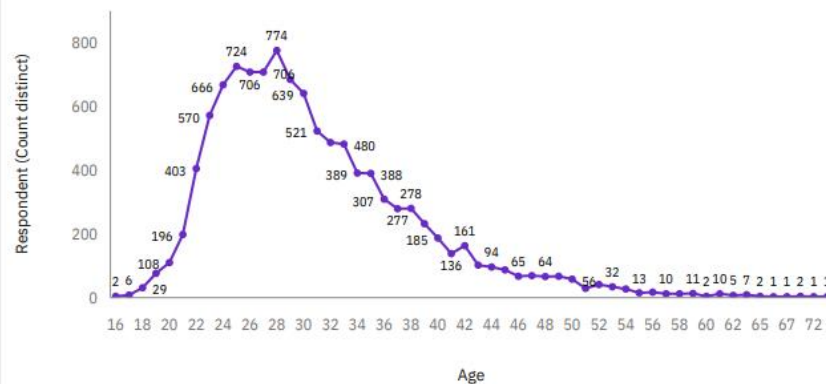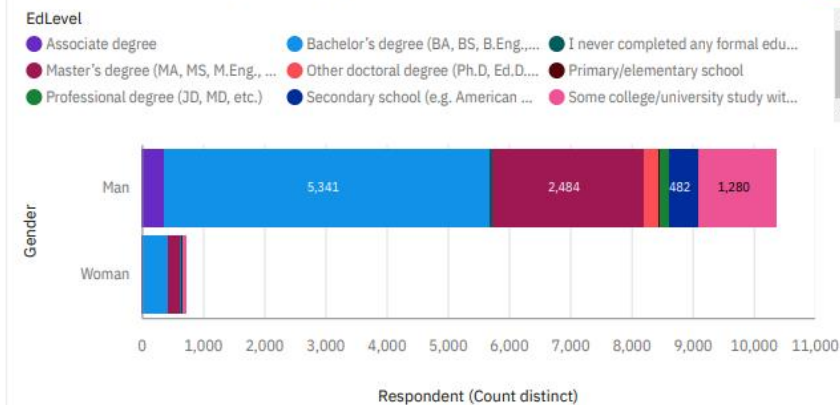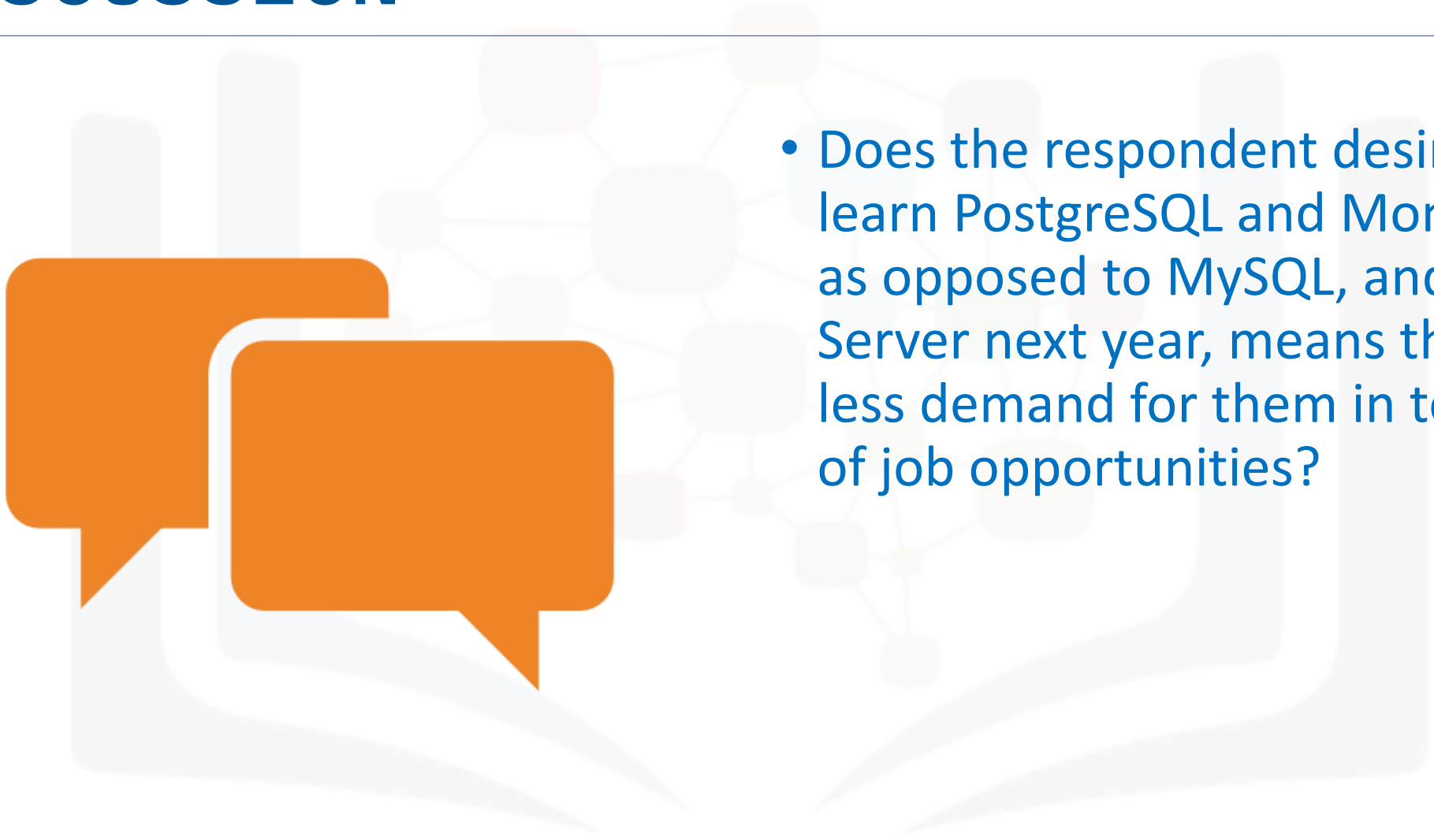
DISCUSSION

- Does the respondent desire to learn PostgreSQL and MongoDB as opposed to MySQL, and SQL Server next year, means there is less demand for them in terms of job opportunities?

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScripts and Html/CSS skills demand remain strong
- Python programming skills demands is also increasing

Implications

- Companies are shifting toward newer technology such as python, MongoDB, etc
- Java, C, C++ programmers needs to upgrade their skill to meet demand.

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CONCLUSION

- Based on next year desire technology to learn, emphasize a trends toward newer technologies.

- Man greatly over index woman in the field. Additional opportunities needs to make available to them.

- To stay competitive, companies needs to take steps to insure the employees are keep up with the trends highlighted in this analysis.

APPENDIX
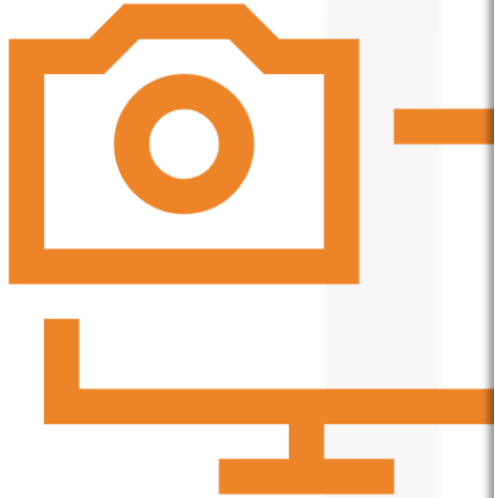
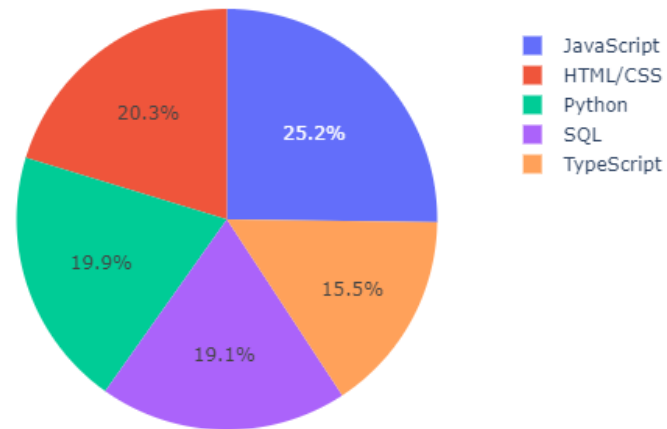Top 5 Language for Next Year

- JavaScript — 25.2%
- HTML/CSS — 20.3%
- Python — 19.9%
- SQL — 19.1%
- TypeScript — 15.5%

Top 5 databases for Next Year

- PostgreSQL — 24.8%
- MongoDB — 20.9%
- Redis — 19.1%
- MySQL — 18.8%
- Elasticsearch — 16.4%

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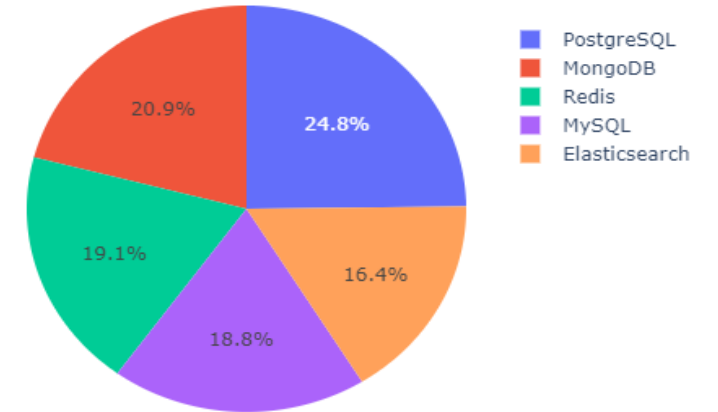
JOB POSTINGS

Washington DC had the most job posting

Total job postings by city

City	Total job postings
Washington DC	5316
Detroit	3945
Seattle	3375
New York	3226
Los Angeles	640
San Francisco	435
Austin	434
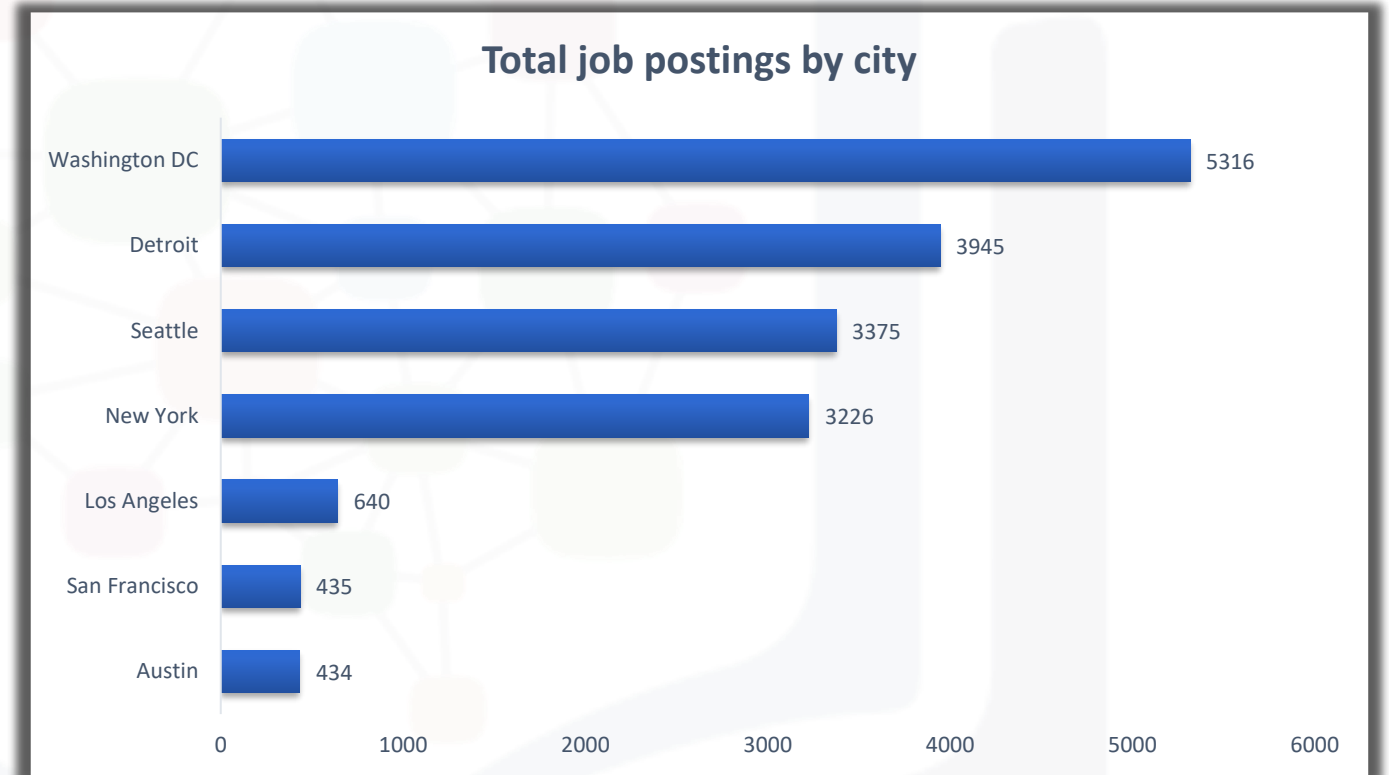
POPULAR LANGUAGES

Swift has the most job posting followed by python.

AVERAGE ANNUAL SALARY BY PROGRAMMING LANGUAGE

Language	Salary
Swift	$130,801
Python	$114,383
C++	$113,865
Javascript	$110,981
Java	$101,013
Go	$94,082
R	$92,037
C#	$88,726
SQL	$84,793
PHP	$84,727