



Stack Overflow Developer Survey-2019 Finding & Implication

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OUTLINE



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EXECUTIVE SUMMARY



- **Current Technology Usage**

- Top 10 Languages
- Top 10 Databases
- Platforms
- Top 10 Web Frames

- **Future Technology Trends**

- Top 10 Languages desired for the next year
- Top 10 Databases desired for the next year
- Desired platforms for the next year
- Top 10 Web Frames desired for the next year

- **Demographics**

- Respondent classified by gender
- Respondent count for countries
- Respondent count by age
- Respondent count by gender and classified by education level

INTRODUCTION



- The top programming language in demand
- The top databases skills in demand
- The popular IDEs
- Correlation Between numerical data
- Scraping internet web sites and accessing APIs to collect data.

METHODOLOGY



- Collecting Data Using APIs.
 - The GitHub Jobs API allows us to search and view jobs with JSON over HTTP.
 - GitHub Jobs API allows anyone to query for the job based upon:
 - Technology like Python, MySQL
 - City like New York, Bangalore
- Collecting Data Using Web scraping.

RESULTS: GENDER, AGE & SALARY

- The respondents had a median age of 29 and median annual salary of US\$52,704.
- There is a high gender gap between the men and women respondents (93.5% of men vs. 6.5% of women).
- However, the median salary of women (US\$54,956) is slightly higher than men (US\$52,339).
- Age and annual USD salary were positively correlated ($r = 0.40$).
- The regplot showed that the increase in age will follow by the rise in the median annual USD salary.

PROGRAMMING LANGUAGE TRENDS

Current Year

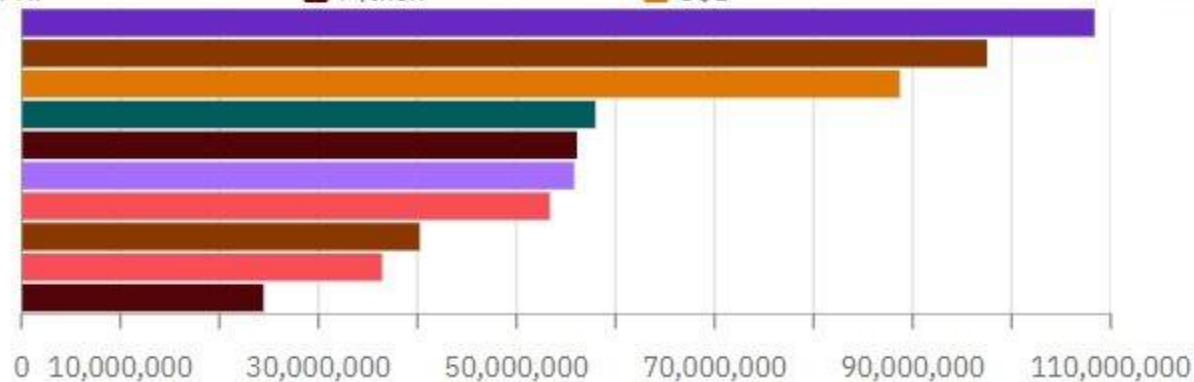
Top 10 Language Worked With

Top 10 Language Worked With

LanguageWorkedWith

Legend for Current Year:

- Bash/Shell/PowerShell
- HTML/CSS
- PHP
- C#
- Java
- Python
- C++
- JavaScript
- SQL



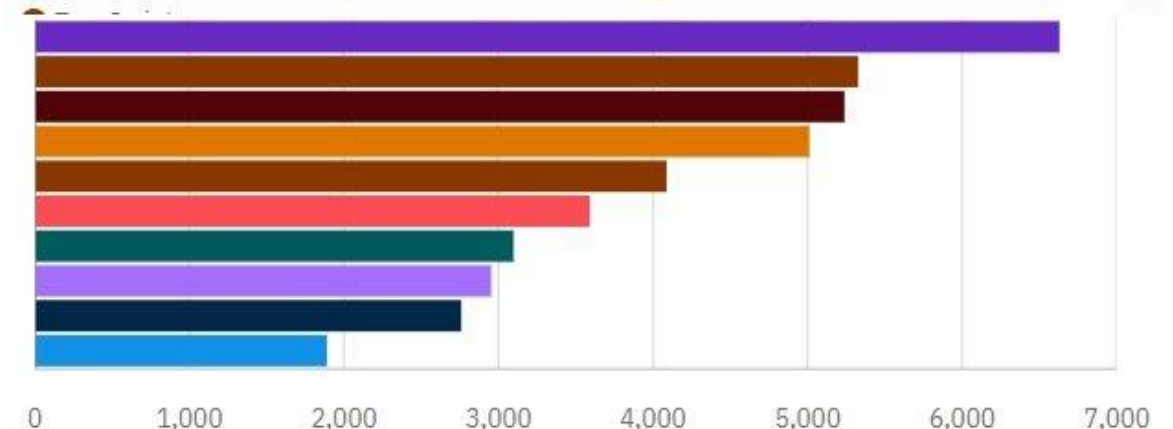
Next Year

Top 10 Language Desire Next Year.

LanguageDesireNextYear

Legend for Next Year:

- Bash/Shell/PowerShell
- HTML/CSS
- Kotlin
- C#
- Java
- Python
- Go
- JavaScript
- SQL



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most popular language to use in current and also in future.
- HTML/CSS is the second most popular language to use in current and also in future.
- Python has the rising trend.

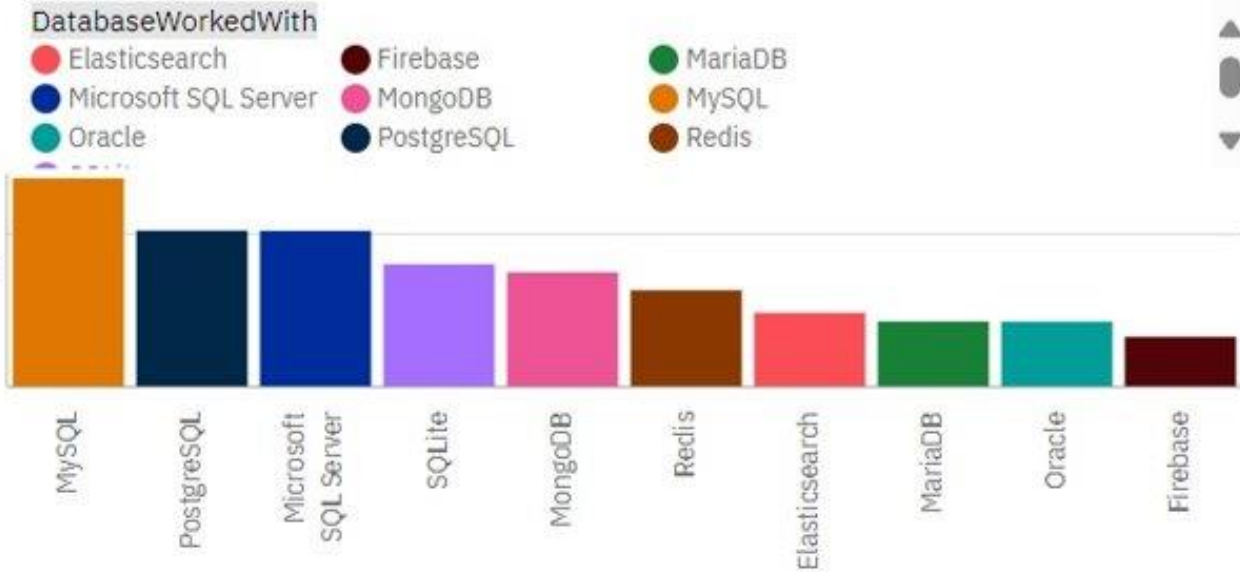
Implications

- JavaScript and HTML/CSS both have demand in current and future trend.
- Python is the new thread for near future and need to be focused on that.
- Java, c#, c++ have lost their momentum. People are looking for other languages apart from them.

DATABASE TRENDS

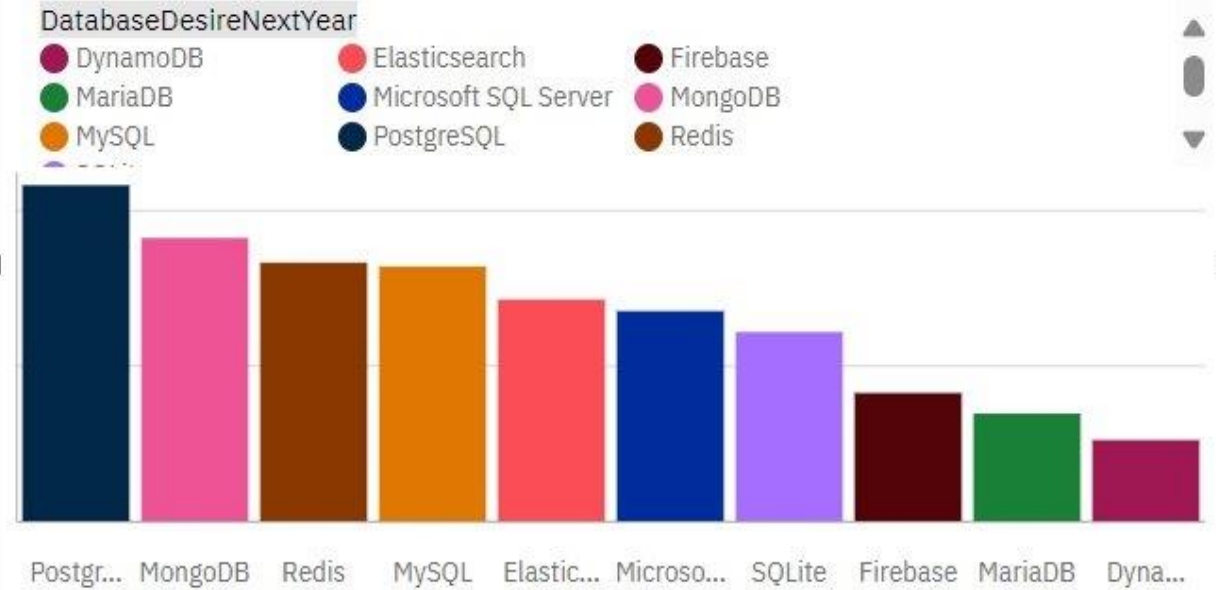
Current Year

Top 10 Database Worked With



Next Year

Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- RDBMS has the dominant trend in current usage.
- Non RDBMS have the dominant trend in future.

Implications

- People are highly interested to learn non-relational databases.
- It is clear that big data will become very popular in upcoming year.

DASHBOARD



<https://github.com/KumariPuja005/ideal-repo/blob/main/Capstone%20Project%20dashboard%20by%20Congo%20Analytics.pdf>

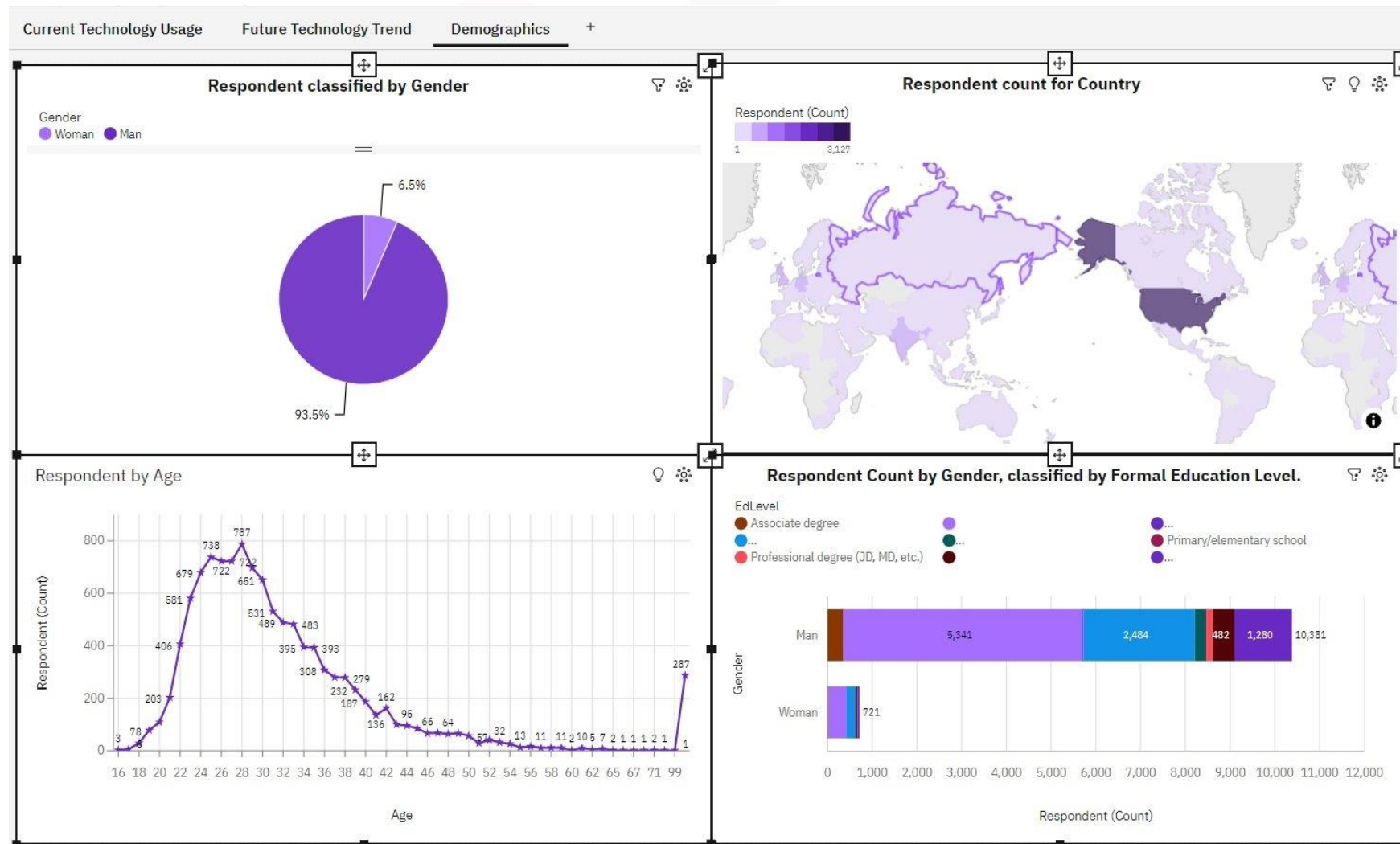
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- It is clear from previous study that, the upcoming future us for big data so the knowledge on big data along with advanced programming languages will make the differences.

OVERALL FINDINGS & IMPLICATIONS

Findings

- The upcoming programming trend is for advanced programming languages.
- The upcoming trend for databases is non-relational databases.

Implications

- People are looking for advanced programming languages along with easy learning.
- People are looking for big data cause data is everywhere.

CONCLUSION



- The top programming languages in demand.
- The top database skills in demand.
- The popular IDEs.
- Scraping internet web sites and accessing APIs to collect data.

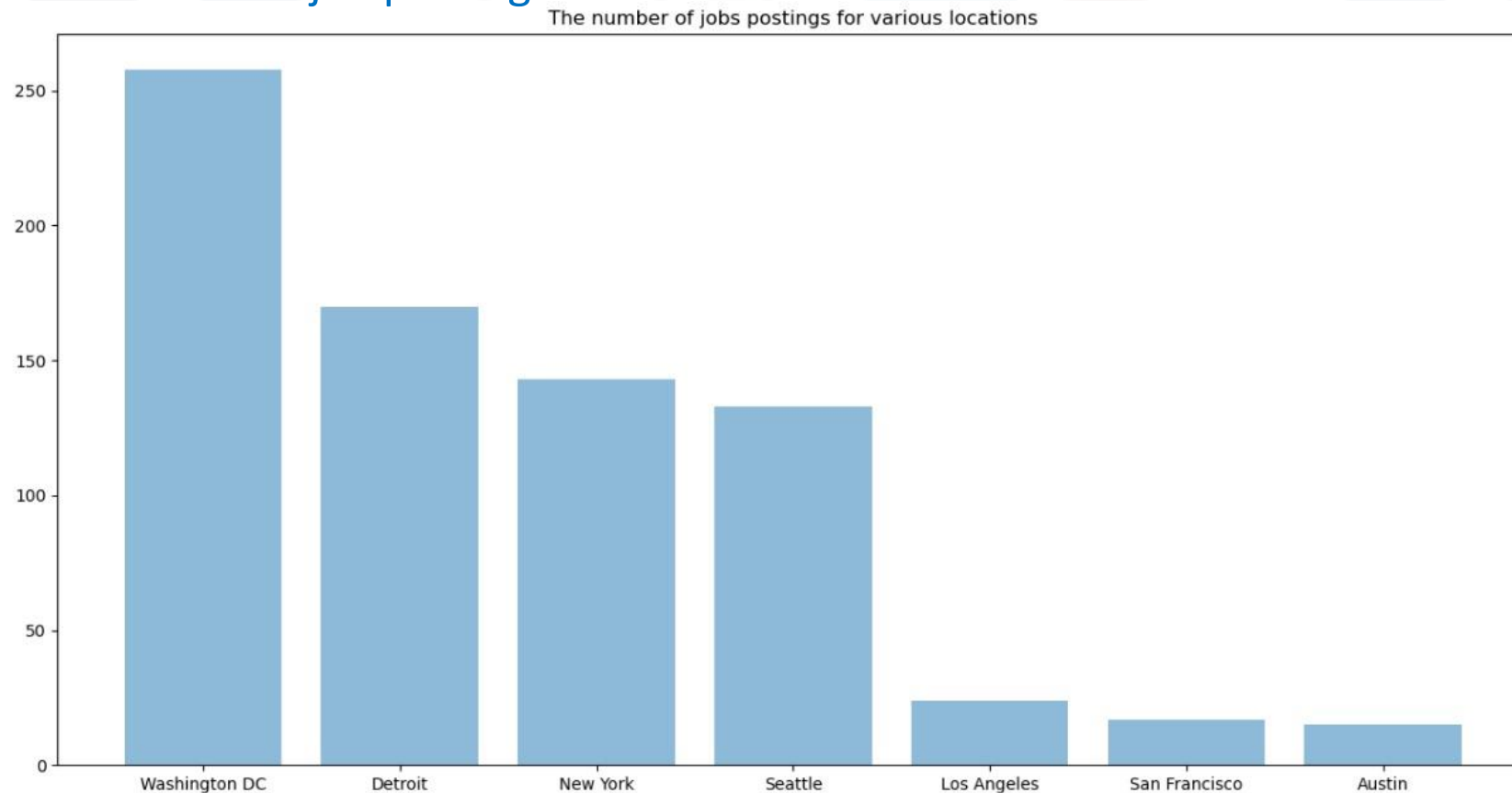
APPENDIX



- Include any relevant additional charts, or tables that you may have created during the analysis phase.

JOB POSTINGS

In Module 1 you have collected the job posting data using Job API in a file named “job-postings.xlsx”. Present that data using a bar chart here. Order the bar chart in the descending order of the number of job postings.



POPULAR LANGUAGES

In Module 1 you have collected the job postings data using web scraping in a file named “popular-languages.csv”. Present that data using a bar chart here. Order the bar chart in the descending order of salary.

