Technology trend and analysis

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OUTLINE

- Executive Summary
- Introduction
- Methodology
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  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

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EXECUTIVE SUMMARY

- Current Trending Technology
  - Top 10 Languages in the current market
  - Top 10 Databases in the current market
  - Top trending platforms
  - Top trending web frameworks
- In-Future Trending Technologies
  - Top 10 desired languages next year
  - Top 10 desired databases next year
  - Desired platforms for the next year
  - Top Desired web frameworks for next year
- Demographics
  - Respondent classified by gender
  - Respondent count for countries
  - Respondent count by age
  - Respondent count by gender and classified by education level

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INTRODUCTION

- The top languages that are demand in the current market
- The top databases that are demand in the current market
- The popular platforms and popular web frameworks
- Using web scraping to collect data with api
- Finding correlation between numerical data
- Showcasing appealing and interactive databases

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METHODOLOGY

- Collecting data
  - Web scraping
  - Api
- Exploring the data collected
  - Python pandas
- Cleaning the data collected
  - Python pandas
- Visualizing the data collected
  - Cognos
- Presentation

RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

Top 10 languages to work with

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

Respondent (Sum)
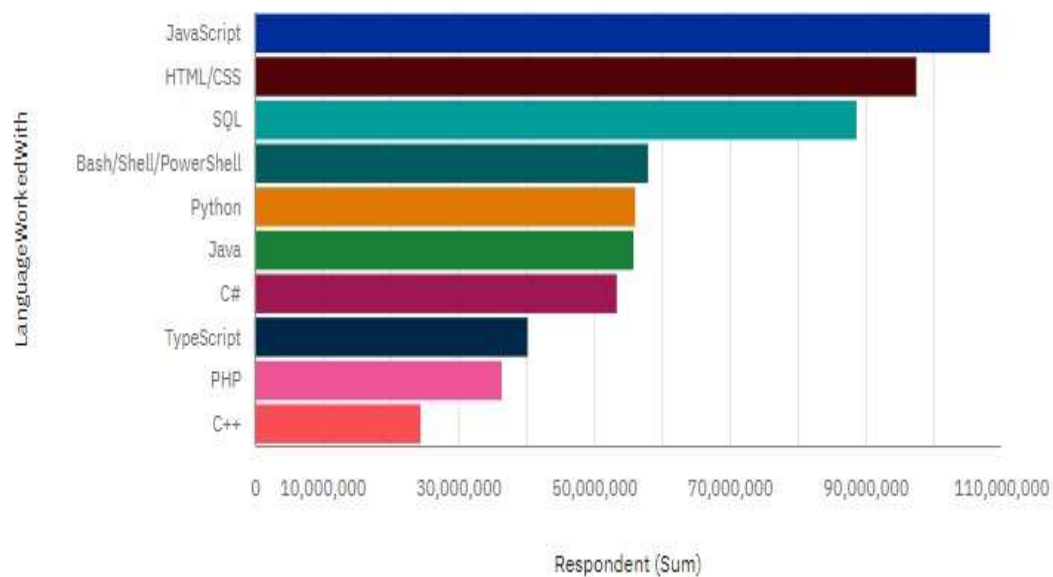
Top 10 Languages desired in future

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

Respondent (Sum)
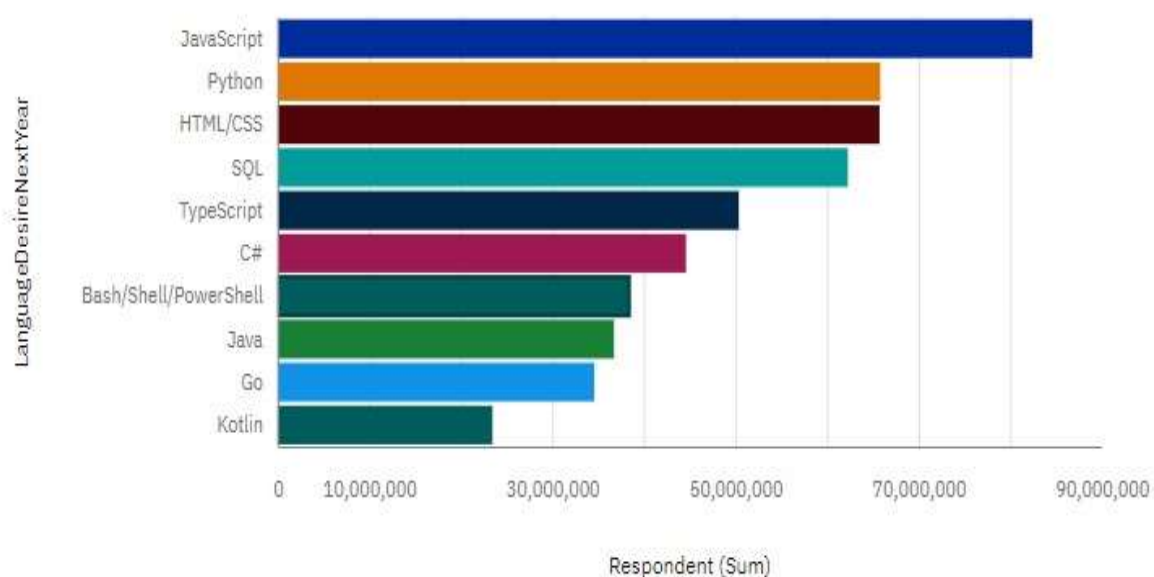
PROGRAMMING LANGUAGE TRENDS – FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most in demand and C++ is the least in demand
- Python , front-end languages and sql is in demand as well
- Old languages such as PHP and C++ remain in demand but not by a significant margin

Implications

- Web development remains trending
- Python demand increases due to machine learning and other application in the near future
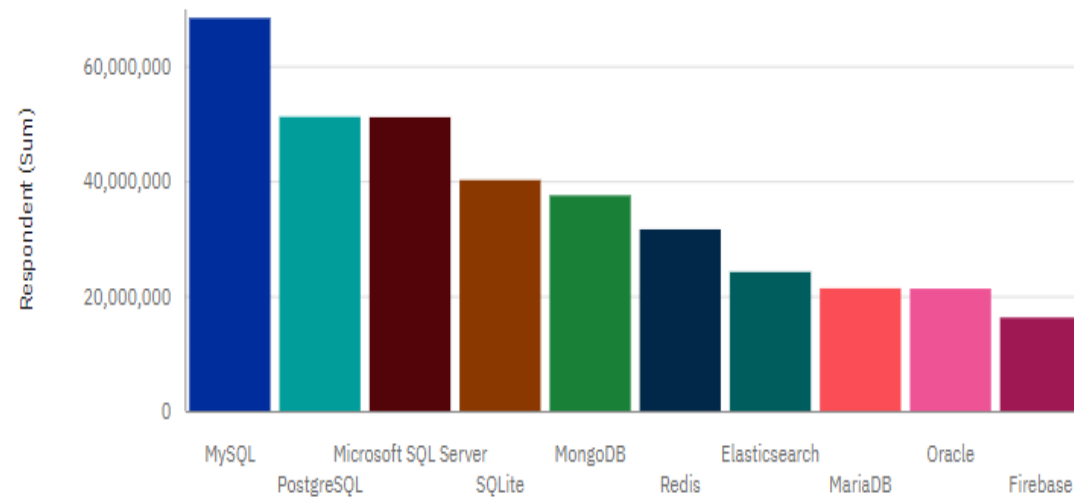- C++ and PHP are not used in near future as they will become outdated

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DATABASE TRENDS

Current

Next

DATABASE TRENDS – FINDINGS & IMPLICATIONS

Findings

- MySql is at top as it is free
- Oracle and firebase are not in demand
- PostgreSql is in demand as well

Implications

- MongoDB and Redis will become demanding in future
- PostgreSql will top the charts
- Orcale , ElasticSearch won't be demand in future

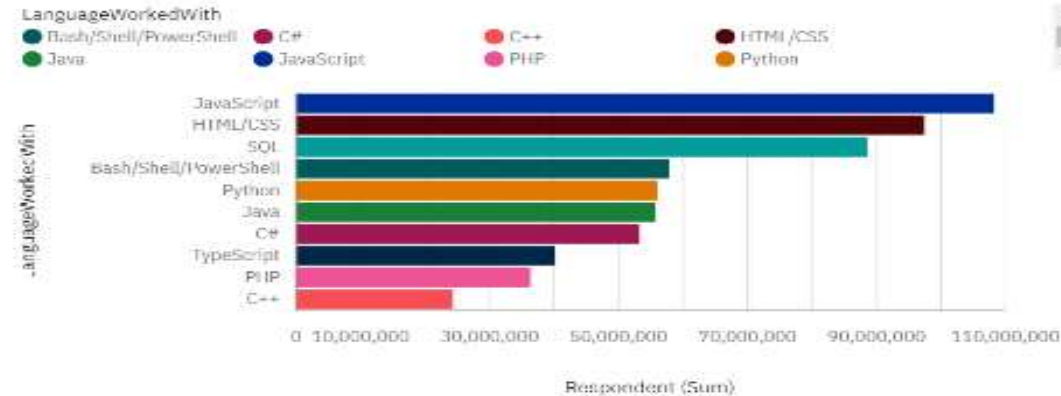IBM **Developer**

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DASHBOARD

< https://github.com/Pratyush-bit69/IBMCapstone/blob/main/Final%20caps tone%20project.pdf>

DASHBOARD TAB 1

Current Technology Usage
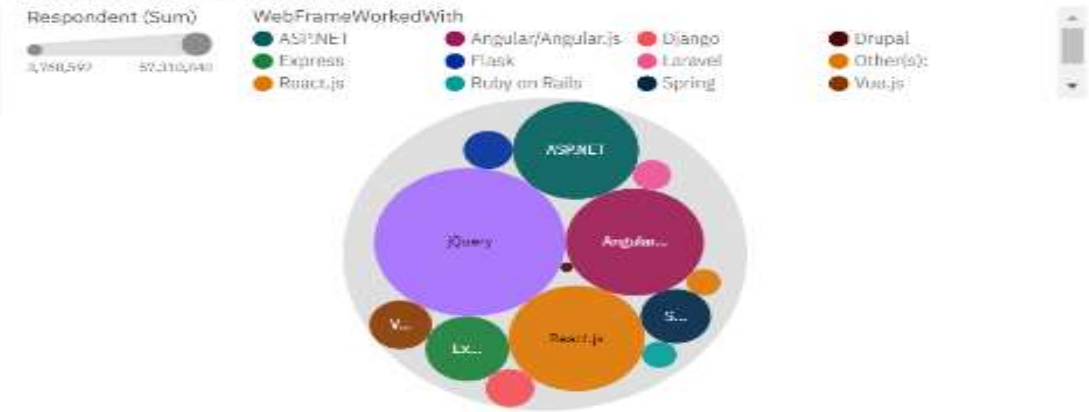
Top 10 languages to work with

Top 10 database worked with
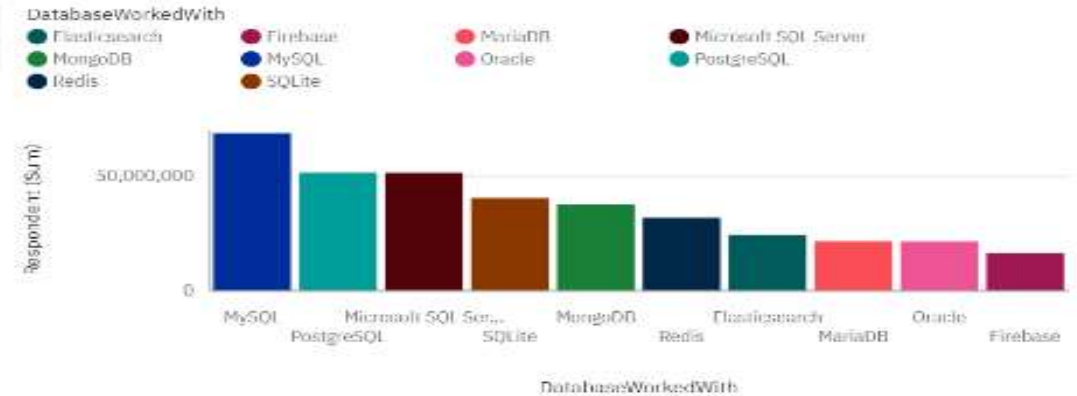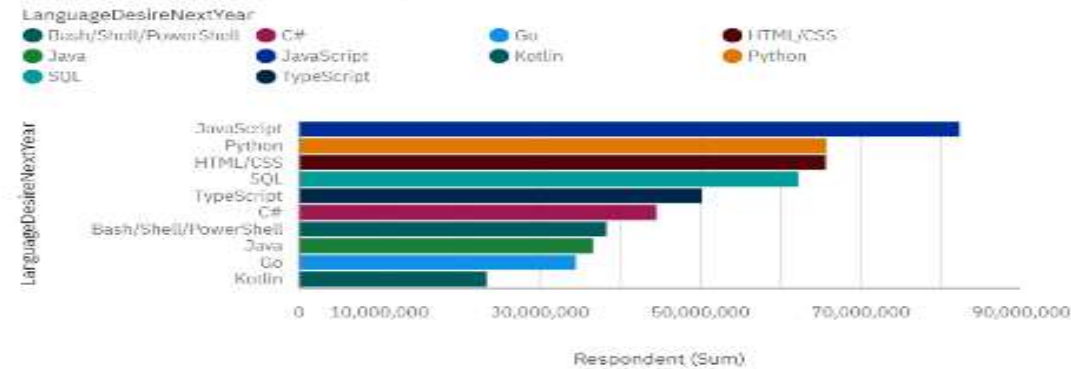

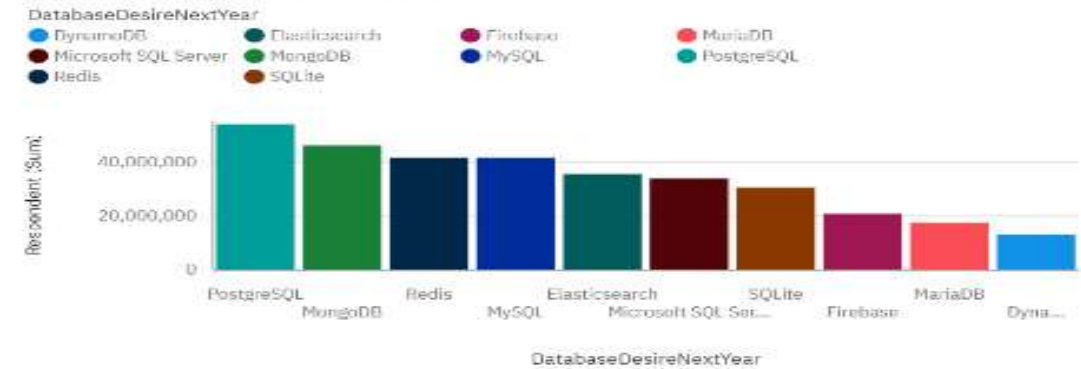### Top Platform worked with

Top framework worked with
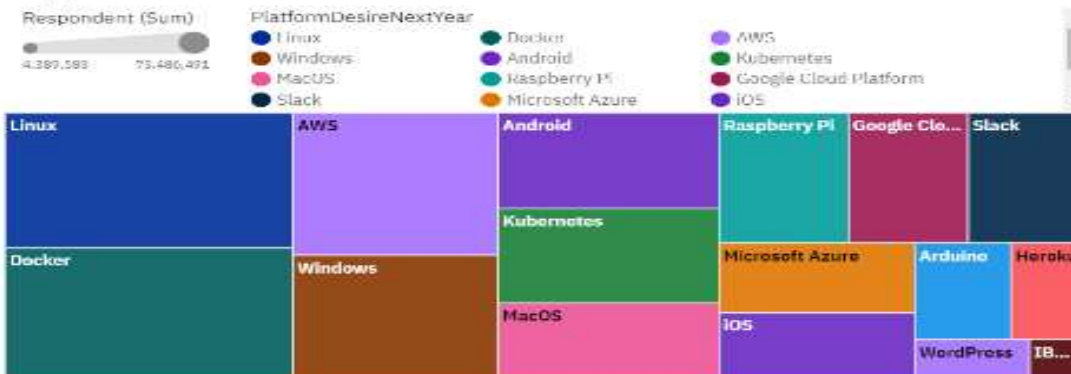
DASHBOARD TAB 2

Future Technology Trend

Top 10 Languages desired in future
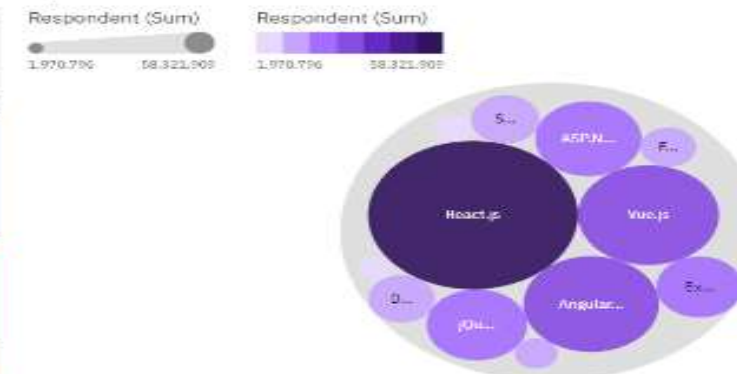
Top 10 desired databases in future

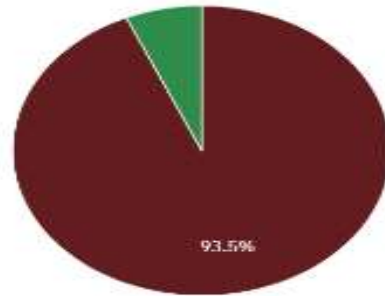Top platforms desired in future

Top frameworks desired i

DASHBOARD TAB 3
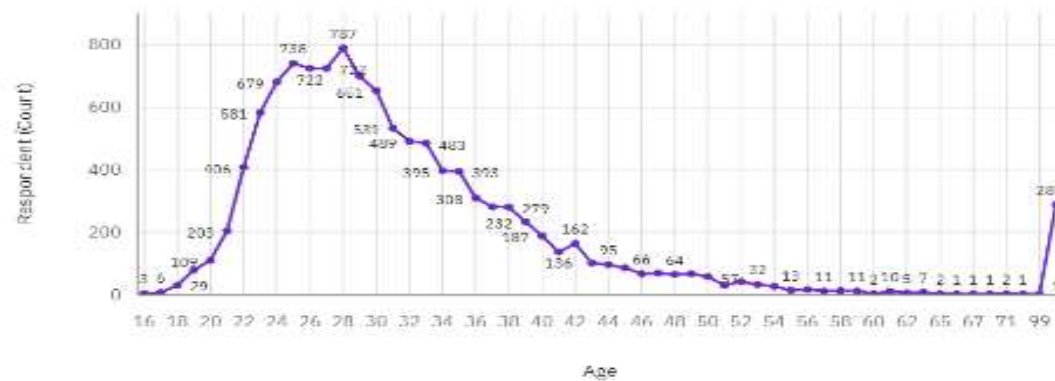

Demographics

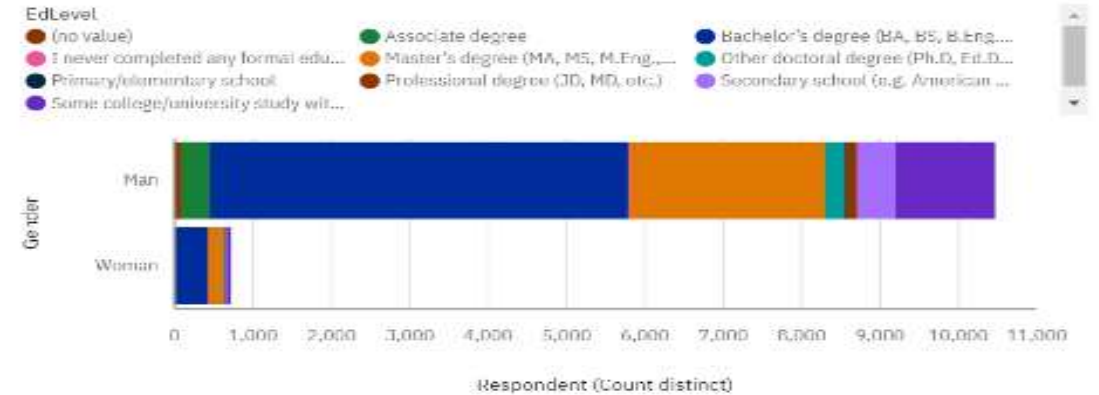Respondent by Gender / Respondent for Country regions / Respondent by Age / Respondent by Gender colored by EdLevel

DISCUSSION

- New technologies will constantly emerge in future leading to dynamic changes in the society.
- Female participation needs to be encouraged to eliminate gender gap.
- Bachelor of engineering remains prominent

OVERALL FINDINGS & IMPLICATIONS

Findings

- As the society dynamically changes the trends and demands also fluctuate
- JavaScript and Python will remain trending in the future
- PostgreSql,MySql,Mongo DB are some of the popular databases in the near future
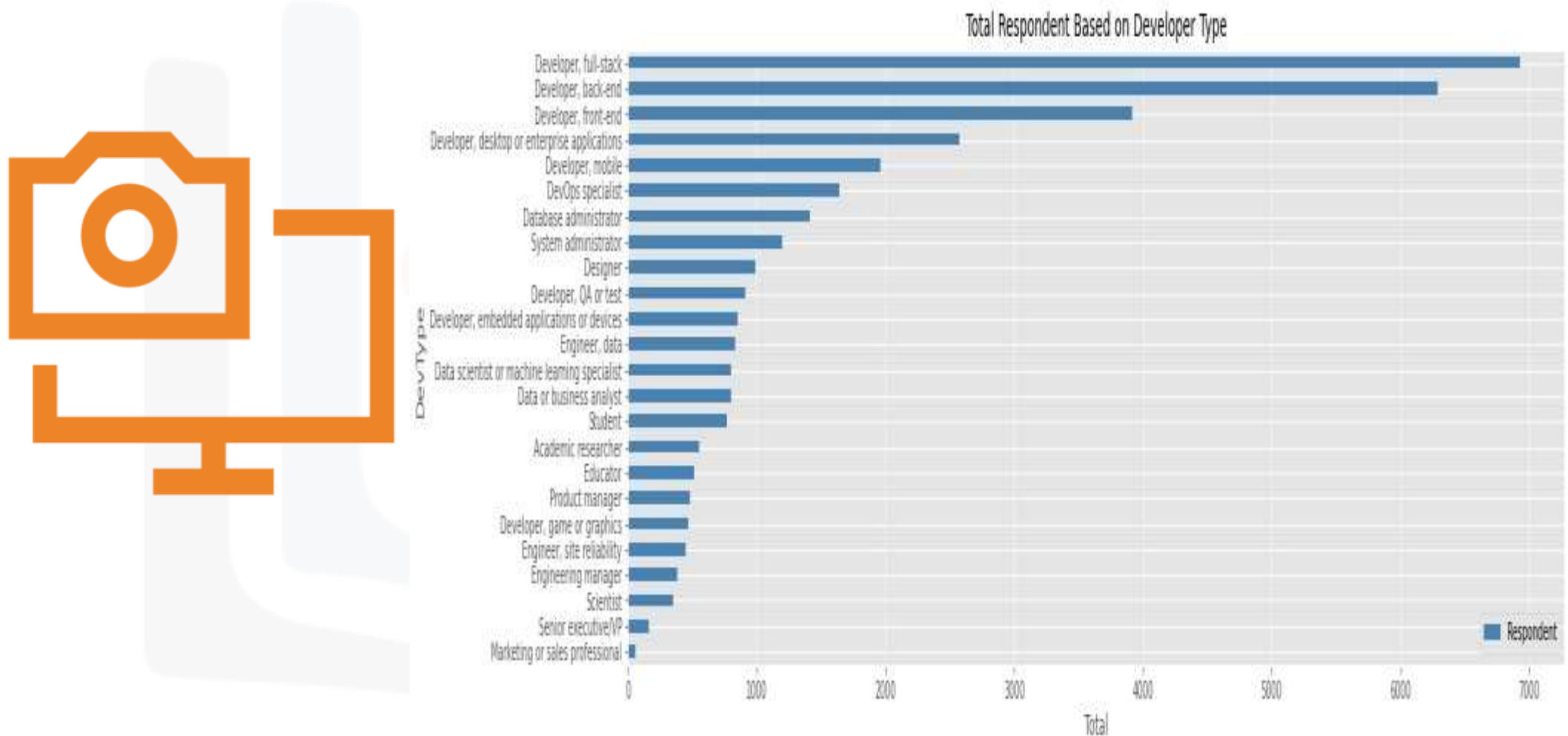
Implications

- The IT professionals and IT companies need to adapt to the changes in society
- Female Participation needs to be encouraged
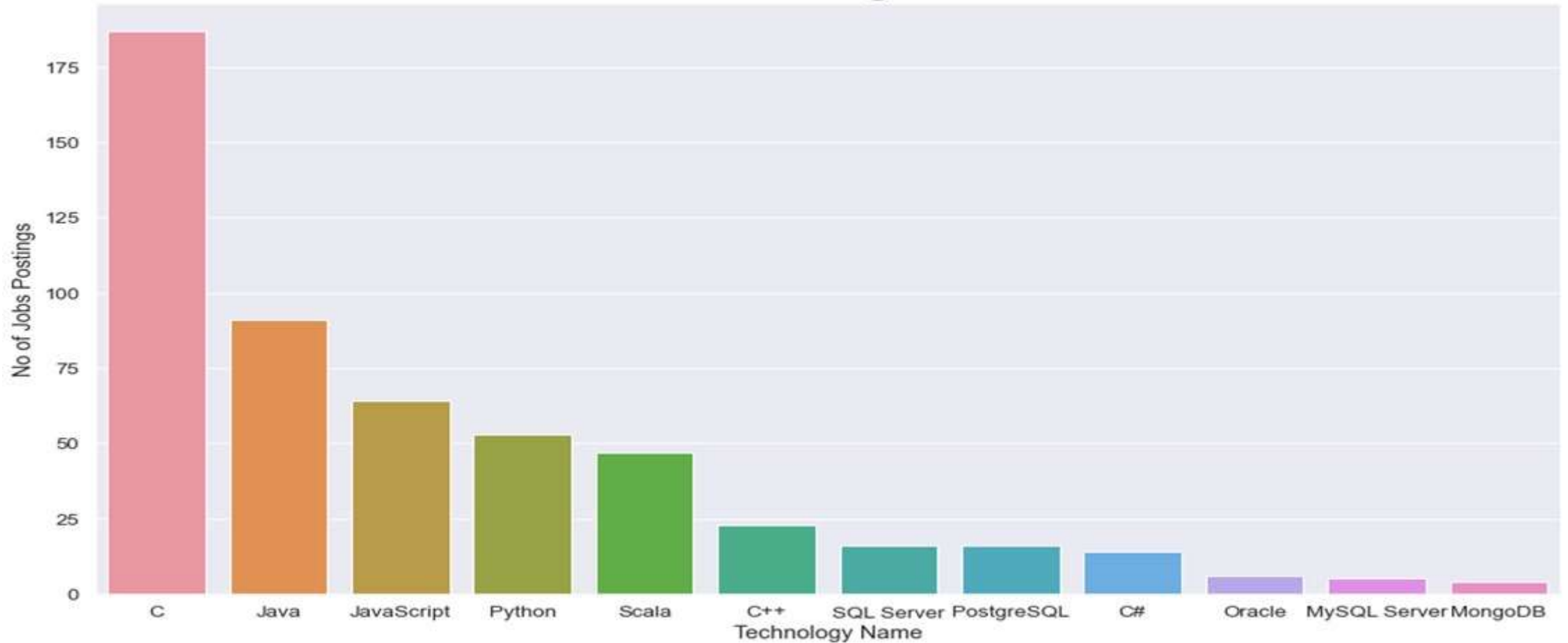- Skills as per the trends will yield more job oppurtunities

CONCLUSION

- New technology leads to different trends and demands
- JavaScript and Python are the most popular programming languages.
- PostgreSQL is the most popular database.
- The IT industry needs to diversify.

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Appendix

JOB POSTINGS

Number of Jobs @ Github

POPULAR LANGUAGES

Average Salary by Language Name colored by Language Name