



# Technology Trends

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- Trends in Programming Languages and Databases
- Demographics Survey
- Technology in Countries
- Gender differences in Workplace
- Dashboard for Current Skills, Future Trend Skills and Demographics

# INTRODUCTION

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- Refreshing till date regarding the changing technology in IT field is important
- Top Programming Languages in demand and in the future
- Top Database Skills in demand and in the future
- Skills requirement for Future

# METHODOLOGY

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- Data Collections
  - Web Scraping
  - APIs
  - Stack Overflow Developer 2019 Survey
- Data Wrangling
- Data Cleaning
- Exploratory Data Analysis
- Data Visualization
- Dashboard

# RESULTS

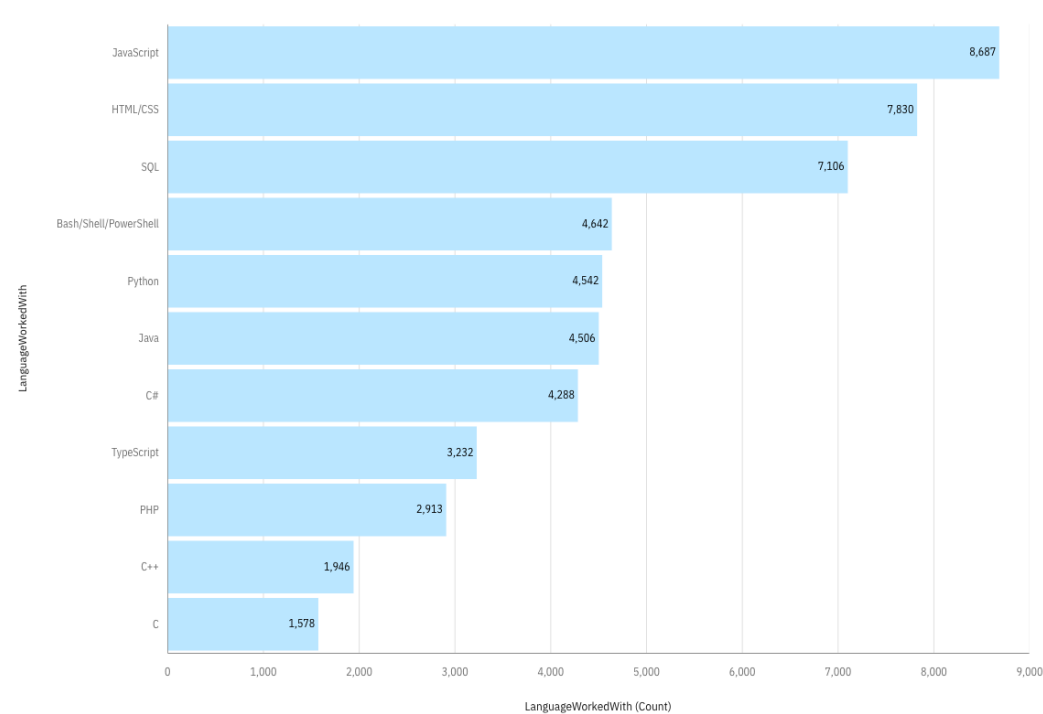
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The data that were collected were cleaned and processed for the statistical analysis which helped to draw a human readable conclusion making dashboards for the Current and Future Trends in the technology along with Demographics

# PROGRAMMING LANGUAGE TRENDS

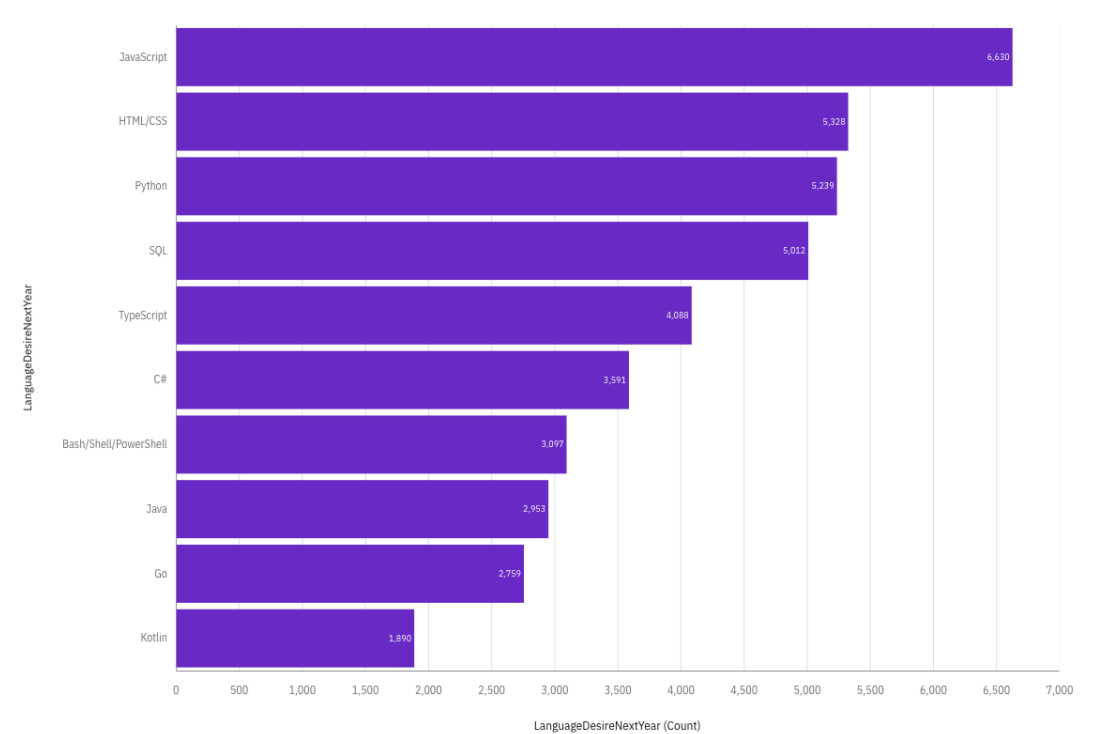
## Current Year

Top 10 Languages Worked With



## Next Year

Top 10 Language Desire Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Maximum developer loves to work with Javascript followed by HTML/CSS and SQL
- In Future, Python is becoming more popular
- Bash/Shell/Powershell is less likely to use by developer in the future

## Implications

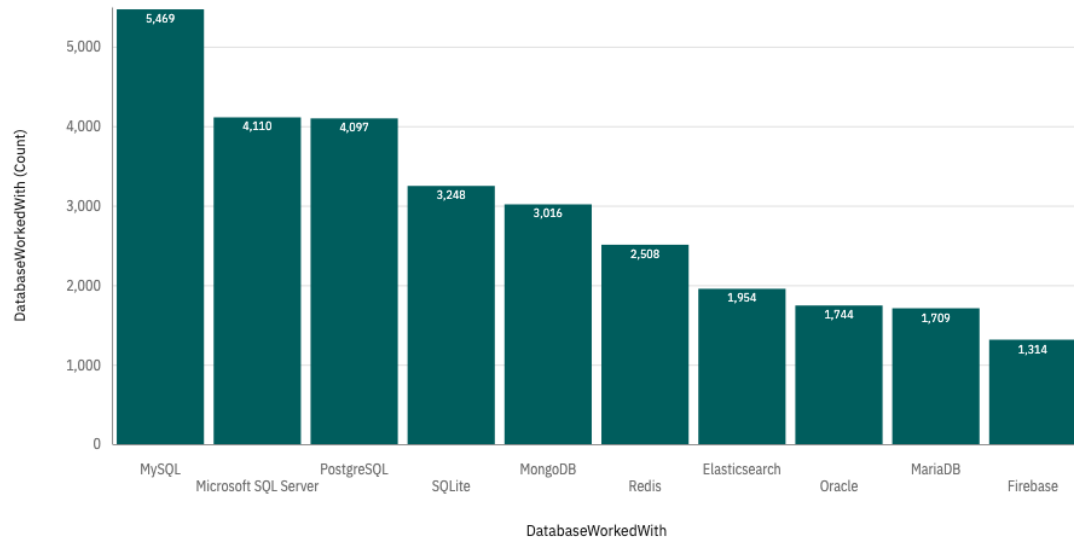
- Javascript and HTML/CSS i.e. web development is still in the trends
- SQL will always be favorite and preferable
- Python is the growing programming language in the future



# DATABASE TRENDS

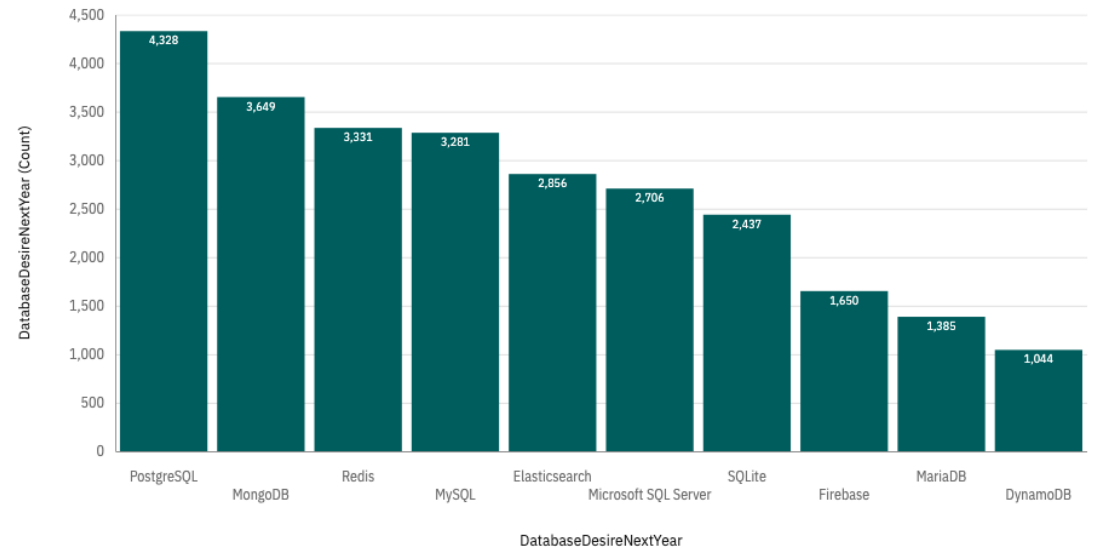
## Current Year

Top 10 Database Worked With



## Next Year

Top 10 Database Desire Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- PostgreSQL will overtake MySQL over time
- MySQL is popular database trend
- MongoDB is loved by developers and will be widely used in the future

## Implications

- MySQL will still be used
- NoSQL databases like MongoDB will make a high impact in the future
- Redis and Elastic Search are also making impact in the database trends

# DASHBOARD

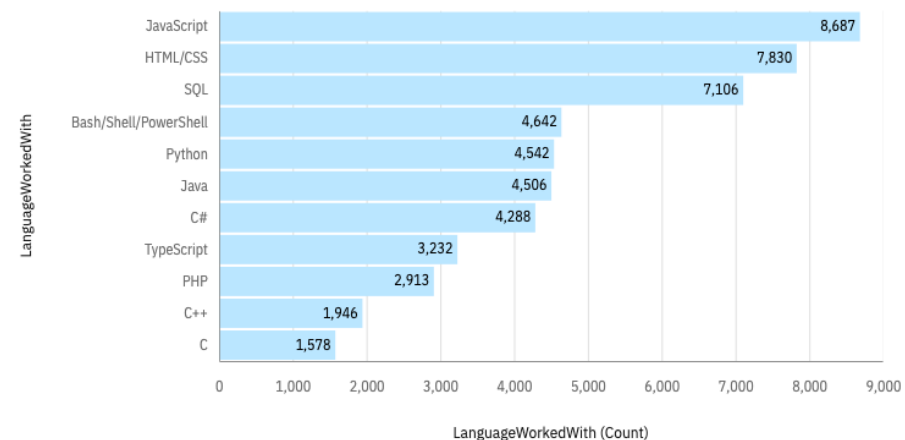
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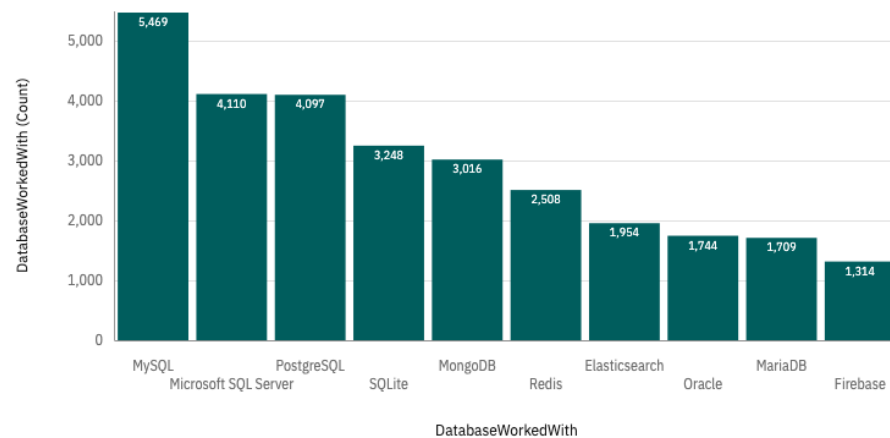
<https://github.com/thesumitshrestha/Coursera-IBM-Cognos-Analytics/blob/main/Coursera-Assignment-Dashboard.pdf>

# DASHBOARD TAB 1

Top 10 Languages Worked With



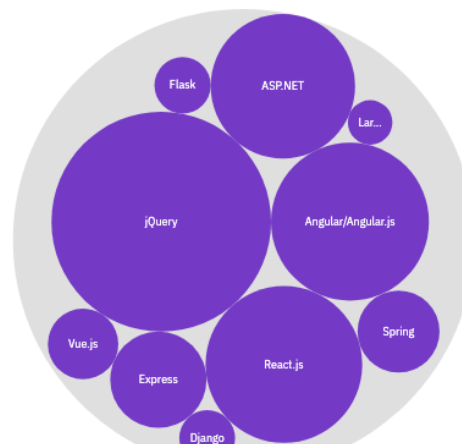
Top 10 Database Worked With



Platform Worked With

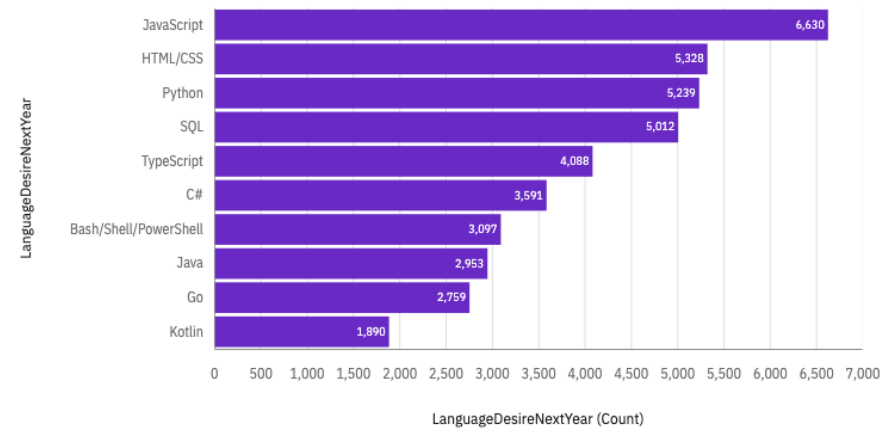


Top 10 Web Framed Worked With

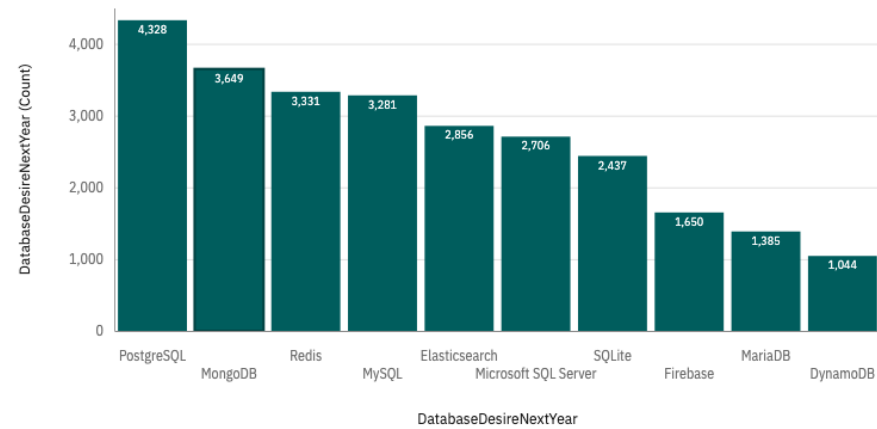


# DASHBOARD TAB 2

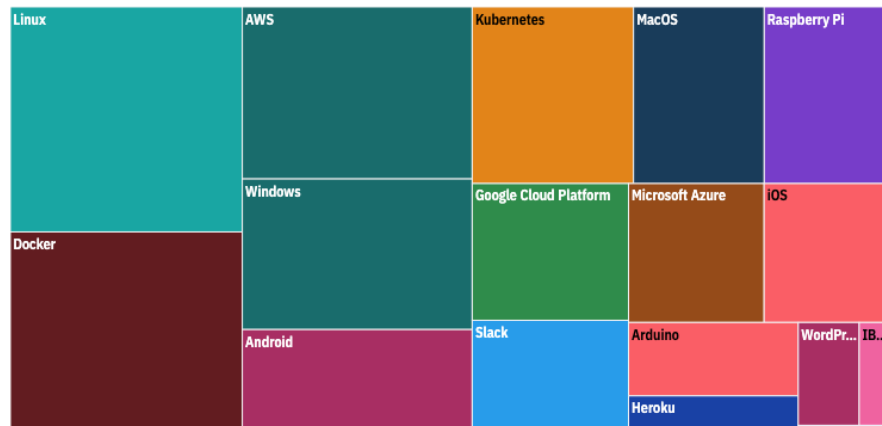
Top 10 Language Desire Next Year



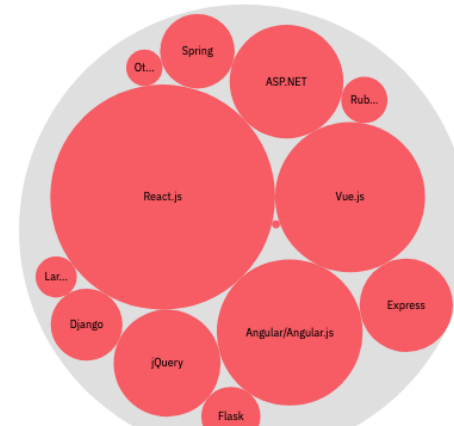
Top 10 Database Desire Next Year



Platform Desire Next Year



WebFrameDesireNextYear, WebFrameDesireNextYear



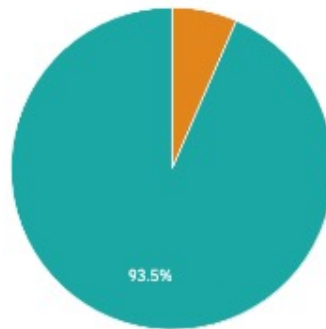
# DASHBOARD TAB 3

## Demographics

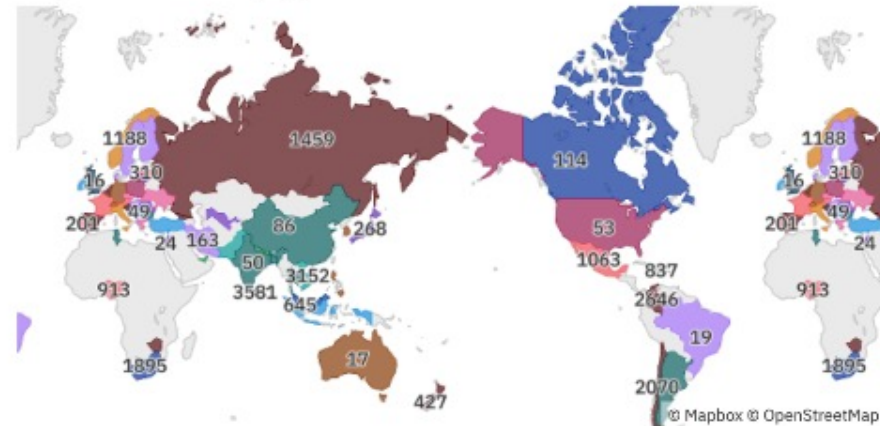
### Respondent Classified by Gender

Gender

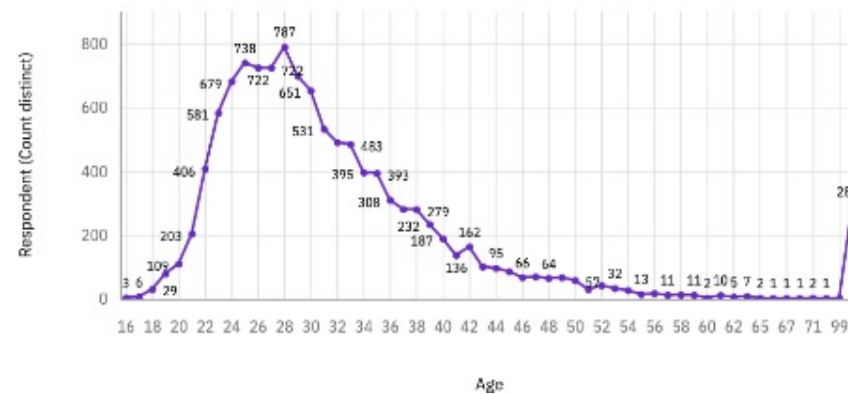
Woman Man



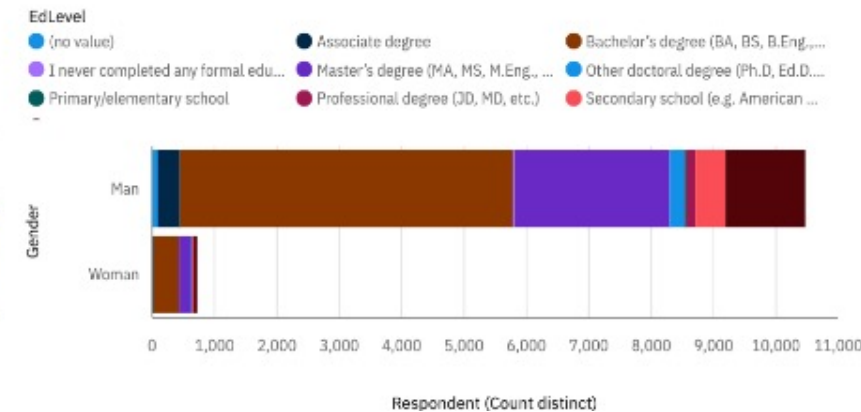
### Respondent for Country regions



### Respondent Count by Age



### Respondent Count by Gender, Classified by Formal Education Level



# DISCUSSION

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- Women participation in the global IT areas
- Why HTML/CSS is still required?
- Gap in technology in most of the developing countries
- Why SQL servers remained most interest in the future?

# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- JavaScript and HTML/CSS will be top programming language in the future
- Gender Gap in Technology Jobs
- NoSQL is growing
- Python is growing along with AWS and Docker

## Implications

- JavaScript and HTML/CSS will be popular for the next trend
- Spread use of technology in the small or developing countries
- Companies must be till date regarding technology
- Demand of JQuery is decreasing



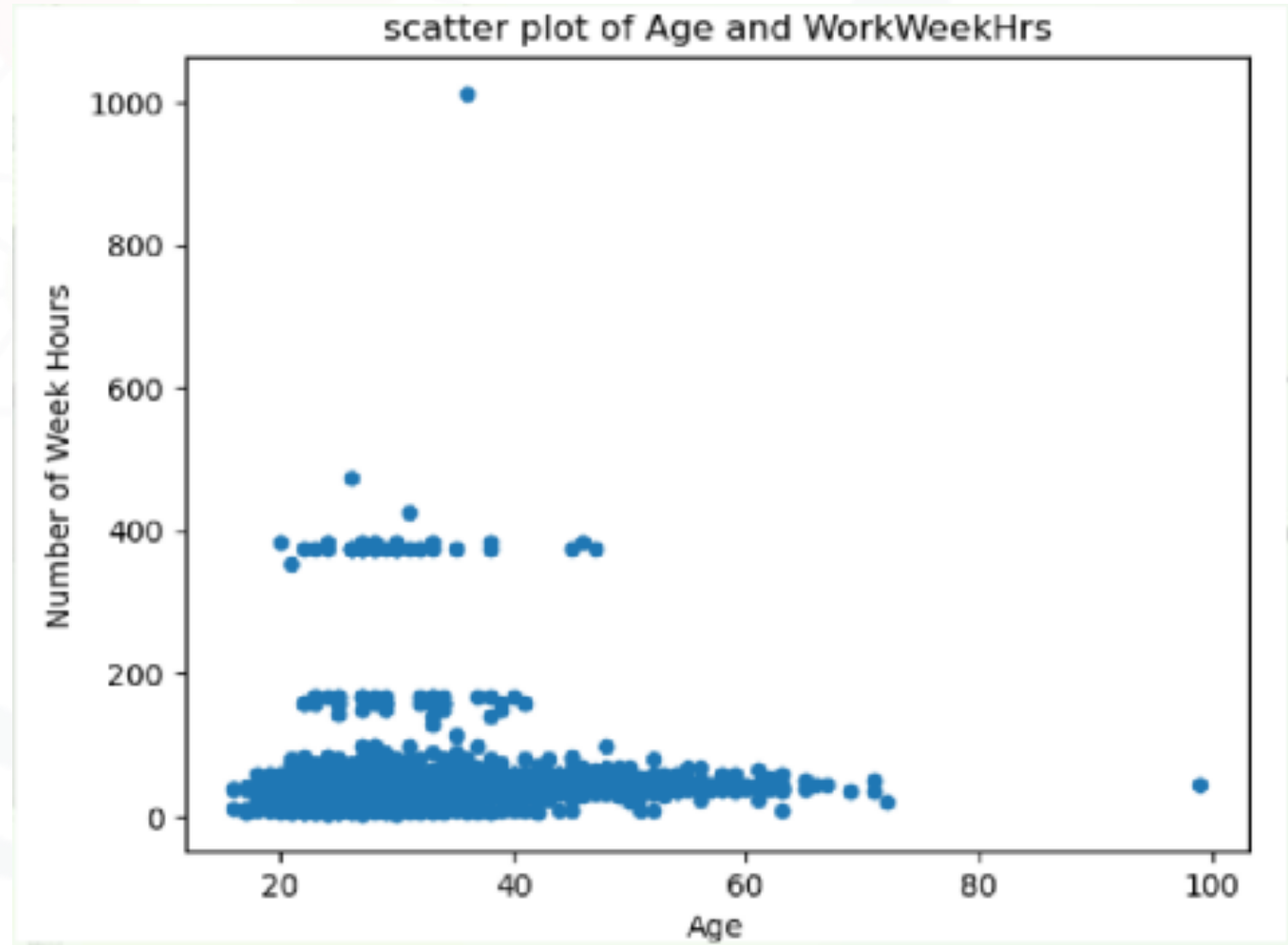
# CONCLUSION

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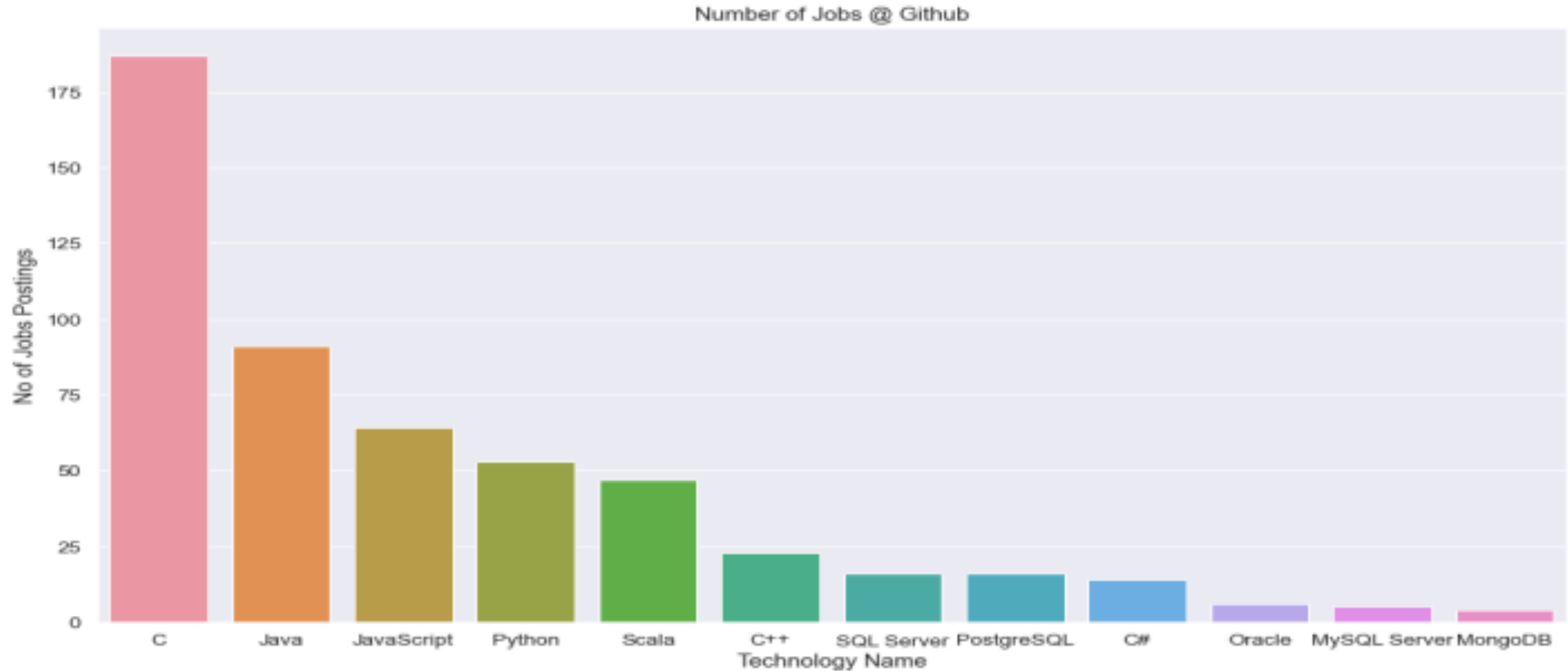


- Technology Trends for current and next year
- PostgreSQL will be most demanded database whereas HTML/CSS and JS will still be popular in the future
- Men are interested in IT skills more than Women
- React, NoSQL, Docker and AWS are trending for the future

# APPENDIX



# JOB POSTINGS



# POPULAR LANGUAGES

