



# IBM Capstone project

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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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- To analyse data
- Methodology used
  - Data visualizations
  - Data analysis
- Summary of result with graph
- Summarize the research findings and their significance
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# INTRODUCTION

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- We are to analyze programming language trends
- To analyze top databases in the world
- Trends to predict current future technologies to work with

# METHODOLOGY

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- Collect survey data & explore its content
- Web Scraping
- APIs.
- Request library.
- Data Wrangling
- Exploratory data analysis
- Analyzing data distribution.
- Handling outliers.
- Correlations.
- Data Visualization
- Highlight distribution of data, relationships, the composition and comparison of data.
- Dashboards

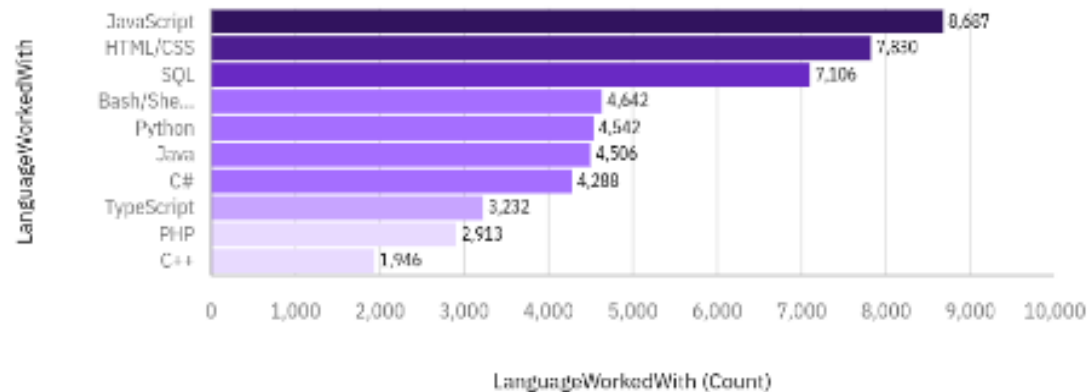
# RESULTS

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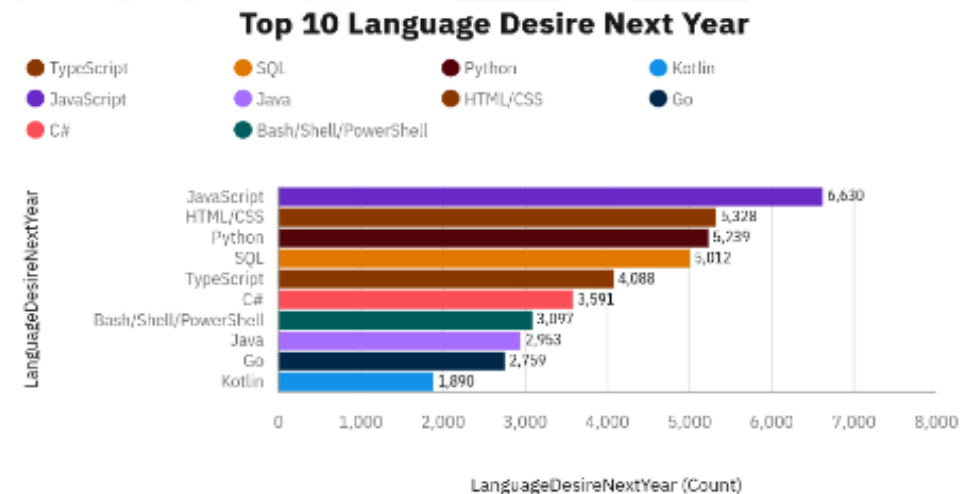


# PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Top language used is Javascript
- Top desirable language is also Javascript

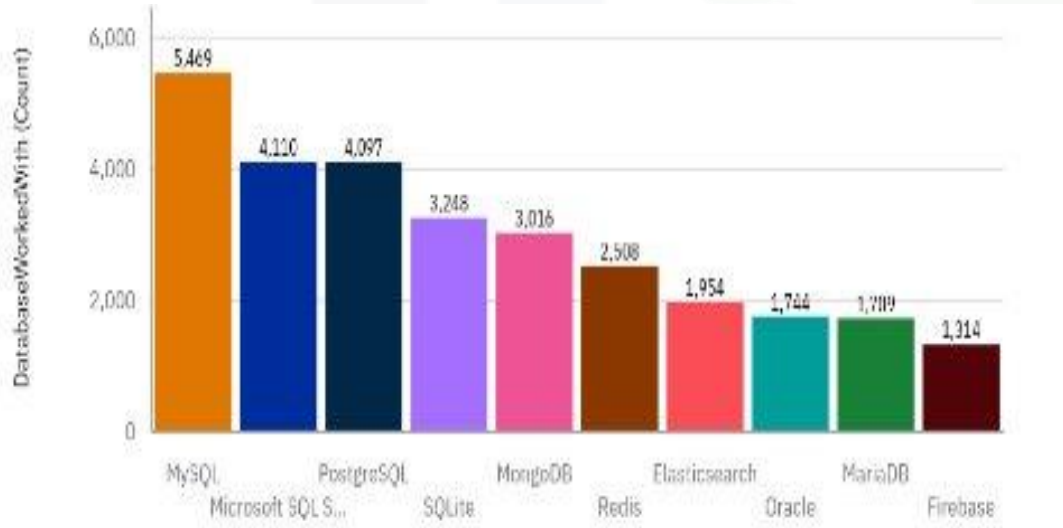
## Implications

- Upcoming developers will try to master javascript

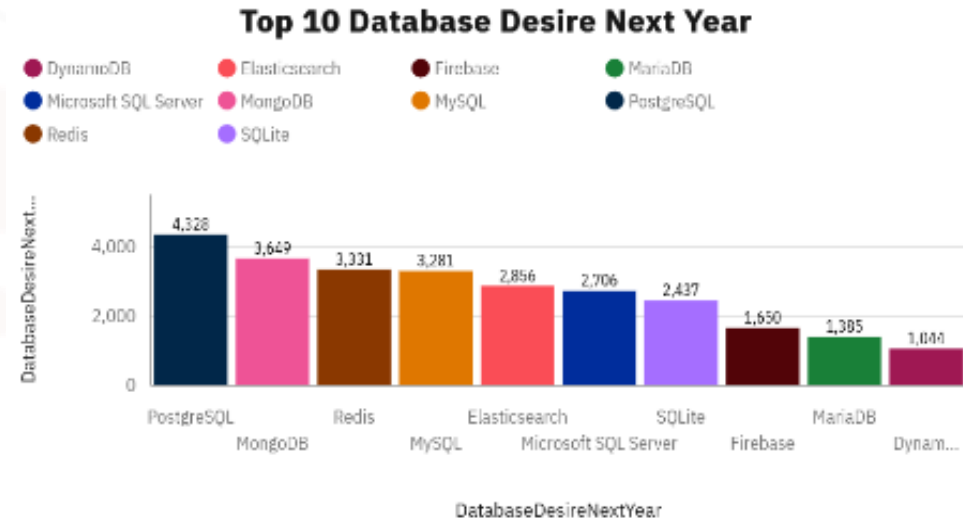


# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Top database to work with is MySQL
- Desired database to learn is PostgreSQL

## Implications

- People want to learn and expertise PostgreSQL

# DASHBOARD

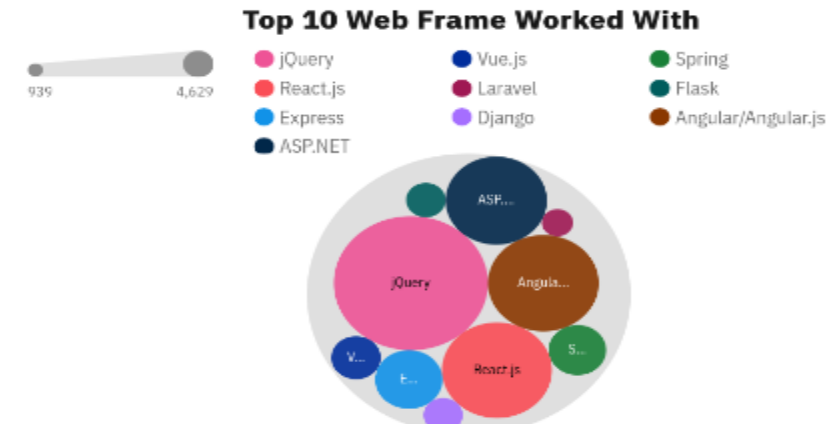
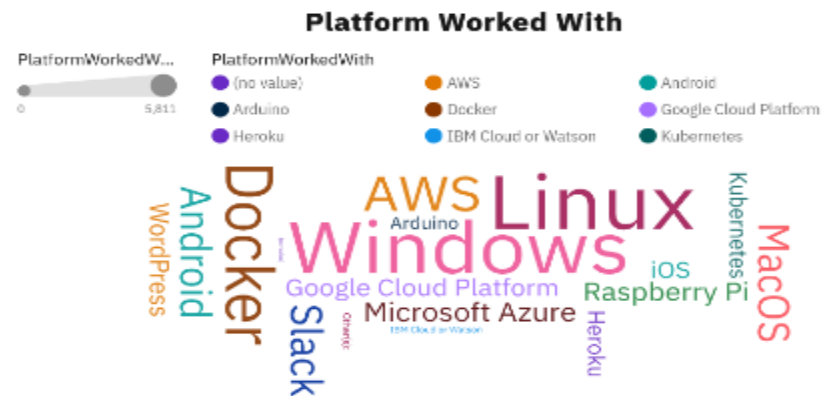
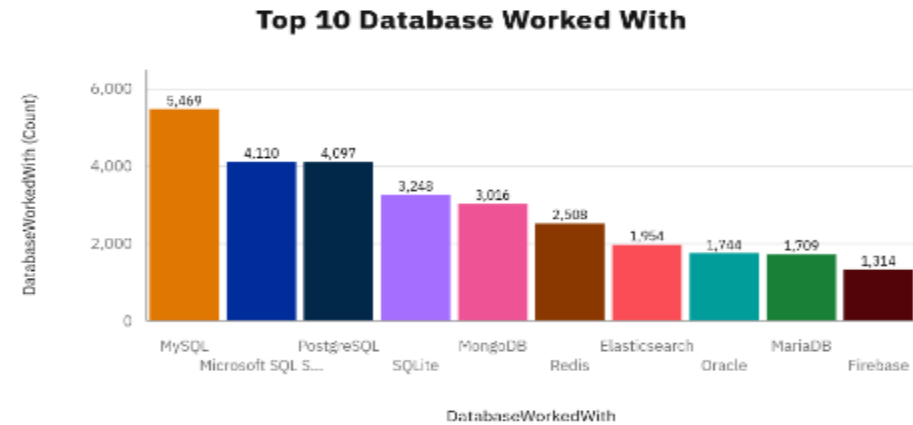
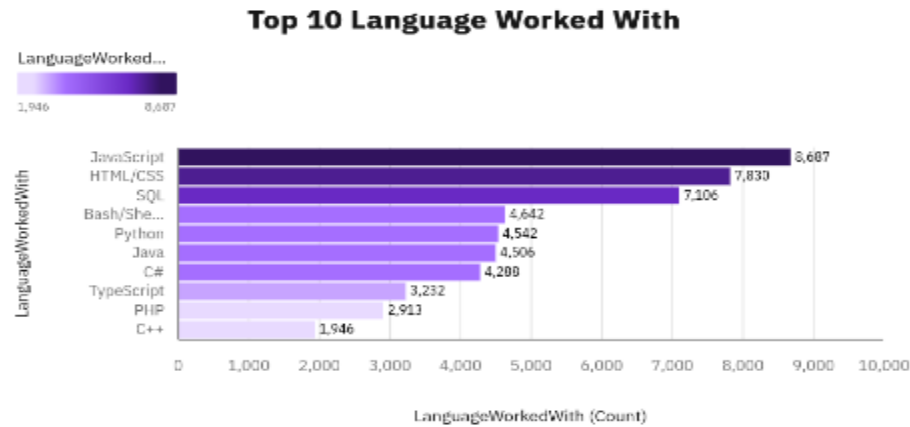
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<https://github.com/rupalimkrishnan/IBM-capstone-project/blob/main/Dashboards%20week%205.pdf>

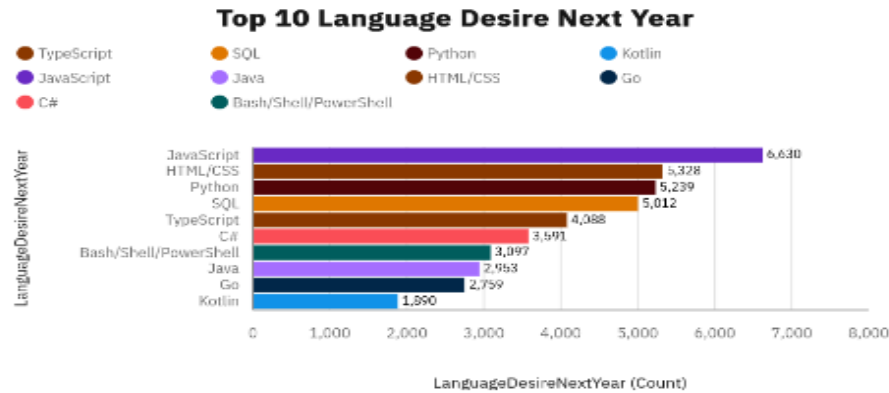
# CURRENT TECHNOLOGY USED

Current Technology Usage

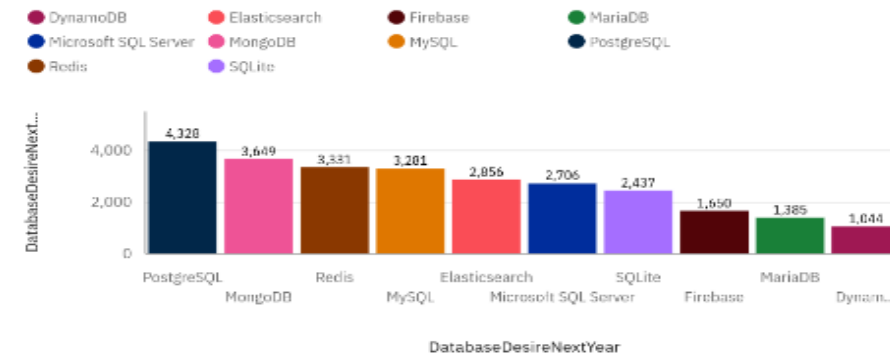


# FUTURE TECHNOLOGY TRENDS

Future Technology Trend



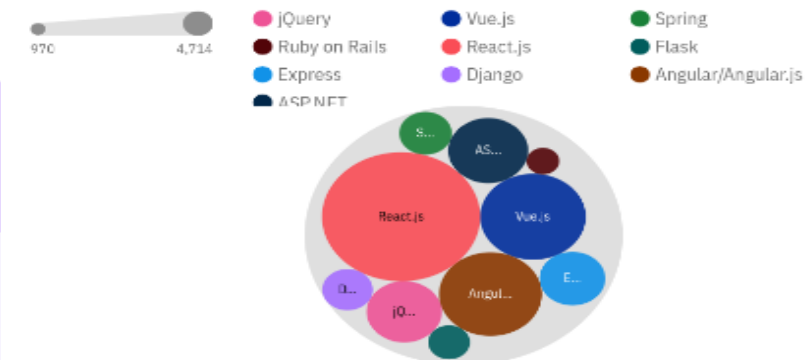
**Top 10 Database Desire Next Year**



**Platform Desire Next Year**



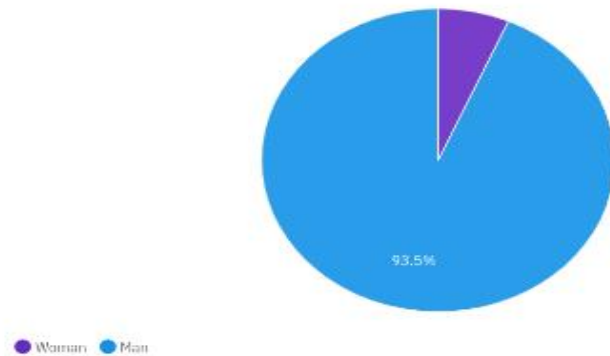
**Top 10 Web Frame Desire Next Year**



# DEMOGRAPHICS

## Demographics

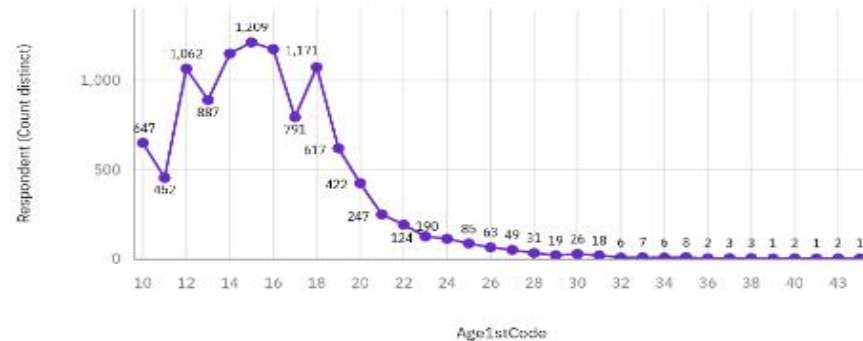
Respondent classified by Gender



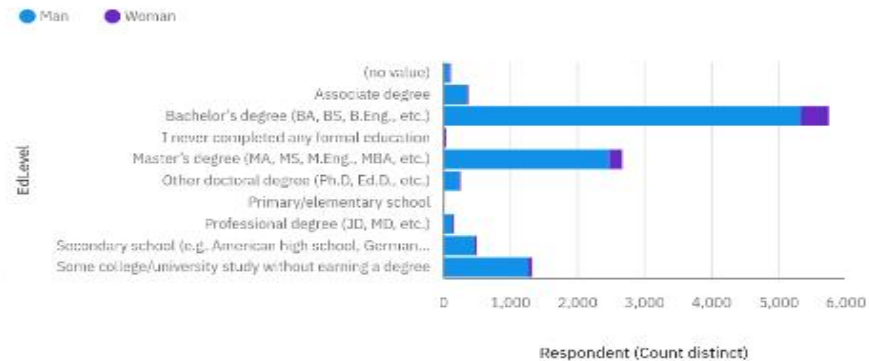
Respondent Count for Countries



Respondent Count by Age



Respondent Count by Gender and Formal Education Level



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- JavaScript widely used and TypeScript getting popular.
- Over 90% young male developers.
- Developers mostly located in developed countries.

## Implications

- Global polarization of developers
- location and gender.
- Young developers without postgrad studies on its majority.



# CONCLUSION

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- Developers exhibit distinct characteristics.
- Understanding popularity trends across various tools, platforms, and languages is valuable.
- There's a need to enhance accessibility to this job market in developing countries.

# APPENDIX

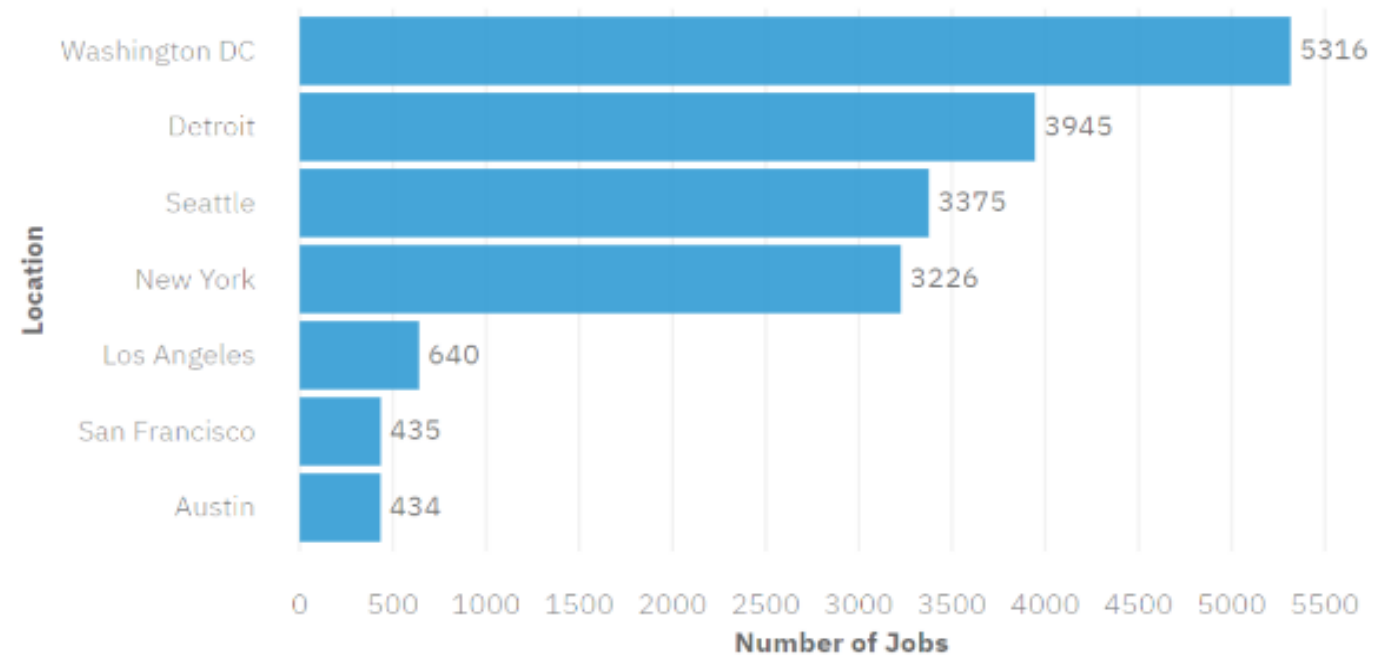
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- These analysis were done with Cognos



# JOB POSTINGS

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# POPULAR LANGUAGES

