



CAPSTONE PROJECT

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OUTLINE



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

EXECUTIVE SUMMARY



- Understanding what Programming Languages are
- Introduction to programming Languages
 - Programming Language Trends
 - Programming Language Trends, Findings and Implications
- Understanding database
- Database Trends
- Database Trends and Implications

INTRODUCTION



- Programming Languages serve as tools in this modern age
- Programming Languages help machines function
- Knowledge of programming Languages gives one the needed sort after skills
- Databases helps store data
 - Databases helps companies serve customers better
 - Databases reduces data loss

METHODOLOGY



- Regressive Analysis
- Hypothesis Analysis
- Content Analysis
- Discourse Analysis
 - Collect the data
 - Analysis the content

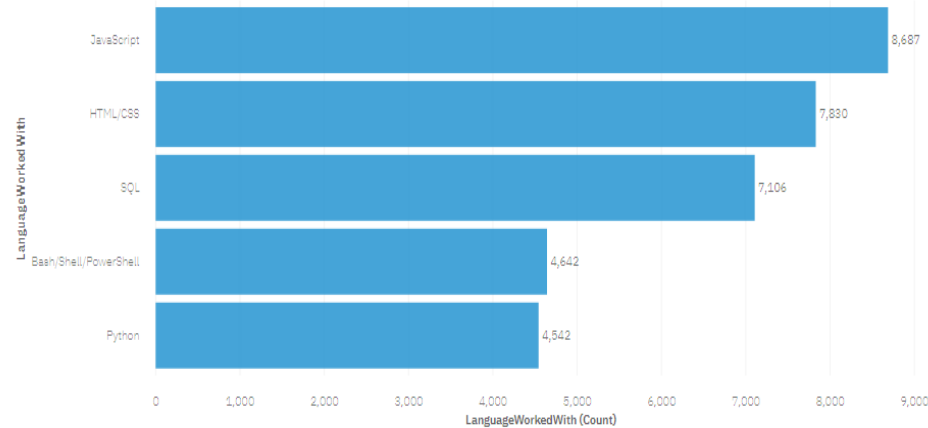
RESULTS



PROGRAMMING LANGUAGE TRENDS

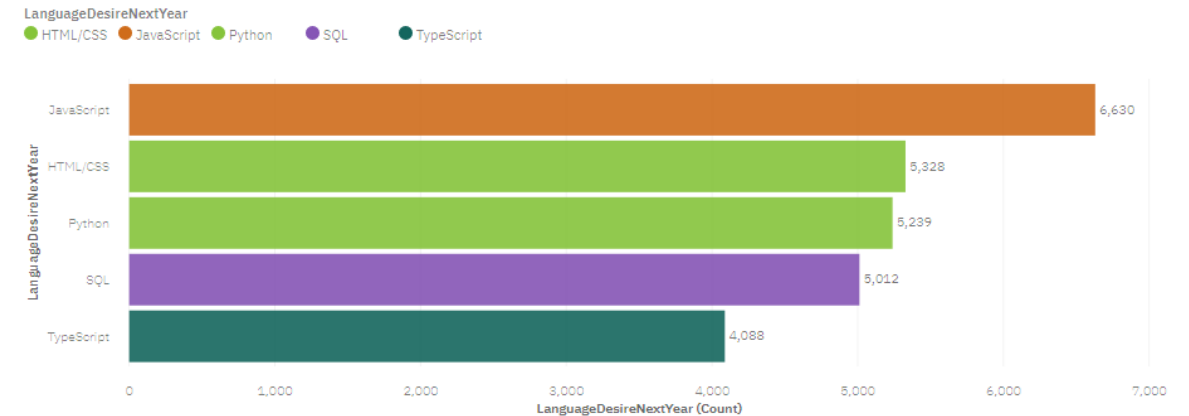
Current Year

Top 5 Language Worked With



Next Year

Top 5 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Java – the most popular primary programming language
- JavaScript – the most used overall programming language
- Python – the most studied programming language

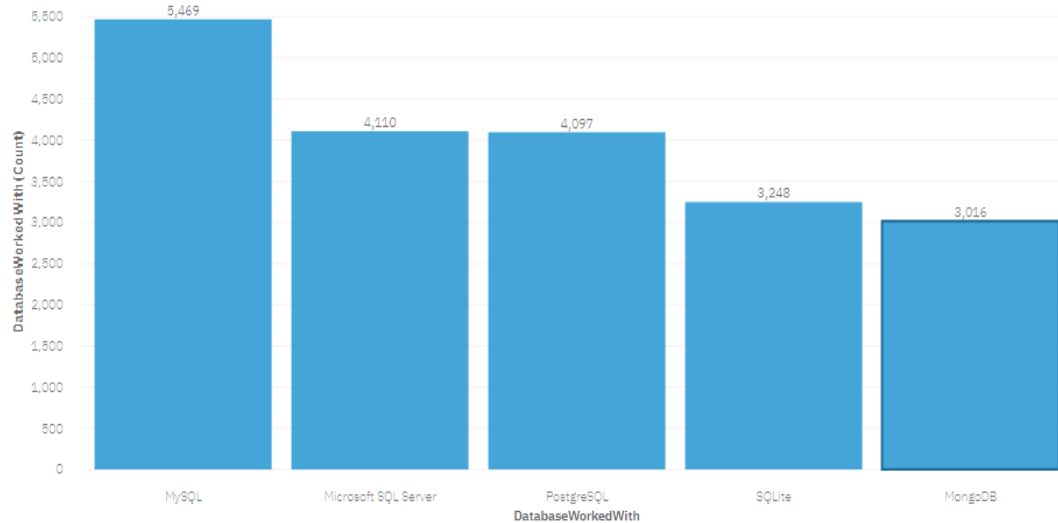
Implications

- Programming is the next big thing
- Programming languages makes work faster
- Programming languages are becoming a vital tool needed in the society

DATABASE TRENDS

Current Year

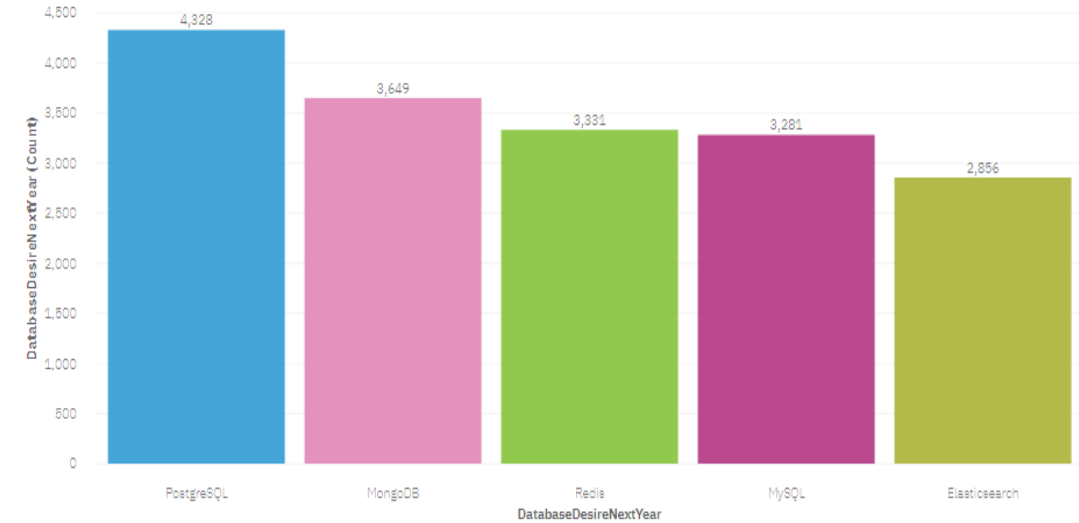
Top 5 DatabaseWorkedWith



Next Year

Top 5 DatabaseDesireNextYear

DatabaseDesireNextYear
Elasticsearch MongoDB MySQL PostgreSQL Redis



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- SQL back on top
- ML – Driven Databases
- Microservice Integration

Implications

- SQL is being used as the default querying languages
- ML models is becoming standard practice
- Microservices approach is being used for creating apps

DASHBOARD



<https://eu-gb.dataplatform.cloud.ibm.com/dashboards/41730dfa-2786-42c7-972b-412d9450dbe9/view/1934f60566f13fef4ed5d0e4079d2c52293f215ae3bb8a02d2837b495a652397a96f1393c82a4308d9135061f2e5135cc9>

DASHBOARD TAB 1

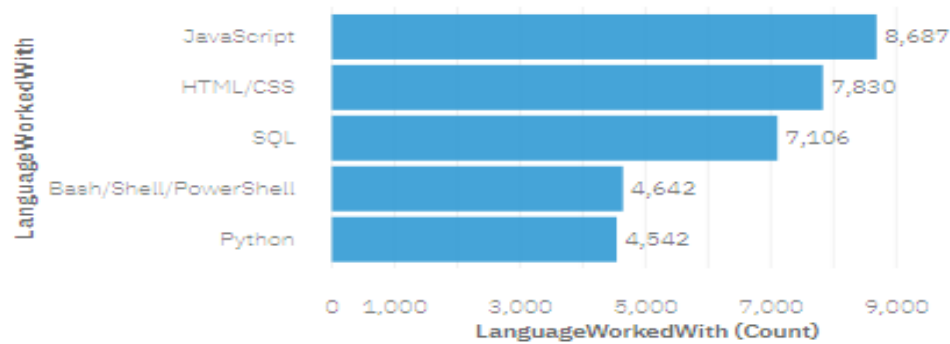
Current Technology Usage

Future Technology Trend

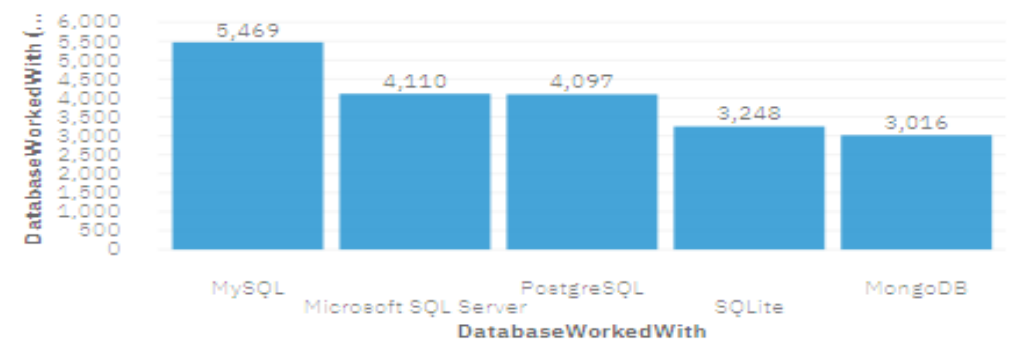
Demographics



Top 5 Language Worked With



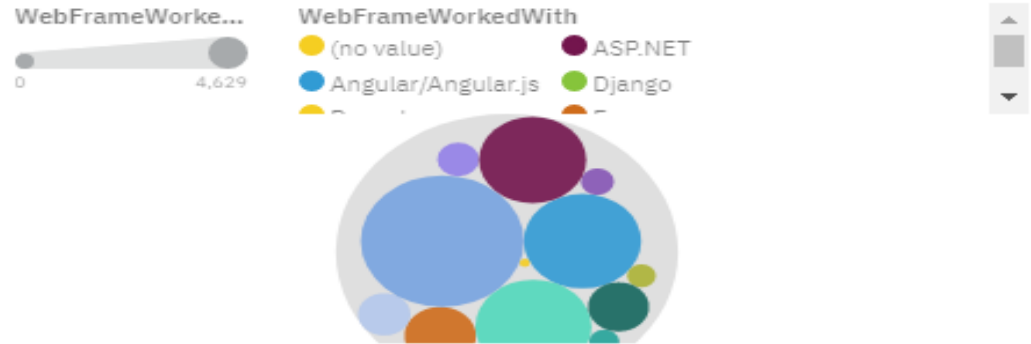
Top 5 Database Worked With



Platform Worked With



Top 10 WebFrame Worked With



DASHBOARD TAB 2

Current Technology Usage

Future Technology Trend

Demographics



Top 5 LanguageDesireNextYear

LanguageDesireNextYear

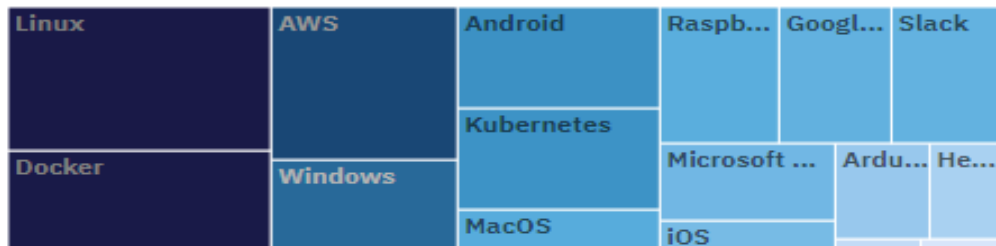
HTML/CSS JavaScript Python SQL TypeScript



PlatformDesireNextYear

PlatformDesireN...

0 5,865 0 5,865



Top 5 DatabaseDesireNextYear

DatabaseDesireNextYear

Elasticsearch MongoDB MySQL PostgreSQL Redis



Top 10 WebFrameDesireNextYear

WebFrameDesire...

970 4,714

WebFrameDesireNextYear

ASP.NET Angular/Angular.js Django Express



DASHBOARD TAB 3

Current Technology Usage

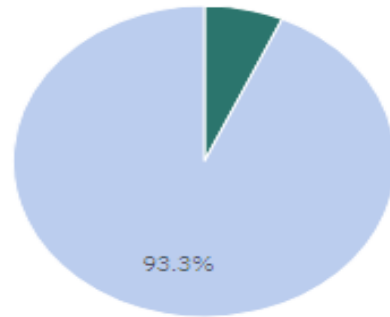
Future Technology Trend

Demographics



Respondent classified by Gender

Gender
● Woman ● Man

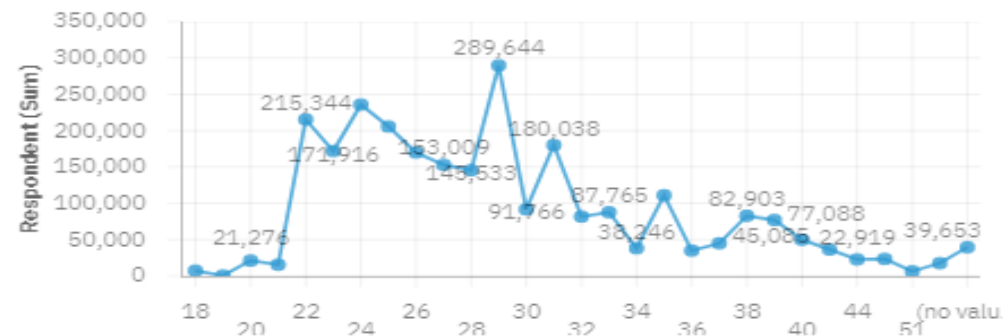


Respondent Count for Countries

Respondent (Sum)
865 38,170,293



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level

EdLevel
● (no value) ● Associate degree
● Bachelor's degree (BA, BS, B.E...) ● I never completed any formal ...
● Master's degree (MA, MS, M.E...) ● Other doctoral degree (Ph.D., E...)



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- Programming languages are increasingly used
- Java is the most popular language
- SQL is the leading database

Implications

- Increasing in job opportunities
- Apps will be created with it
- SQL will be used by most companies

CONCLUSION



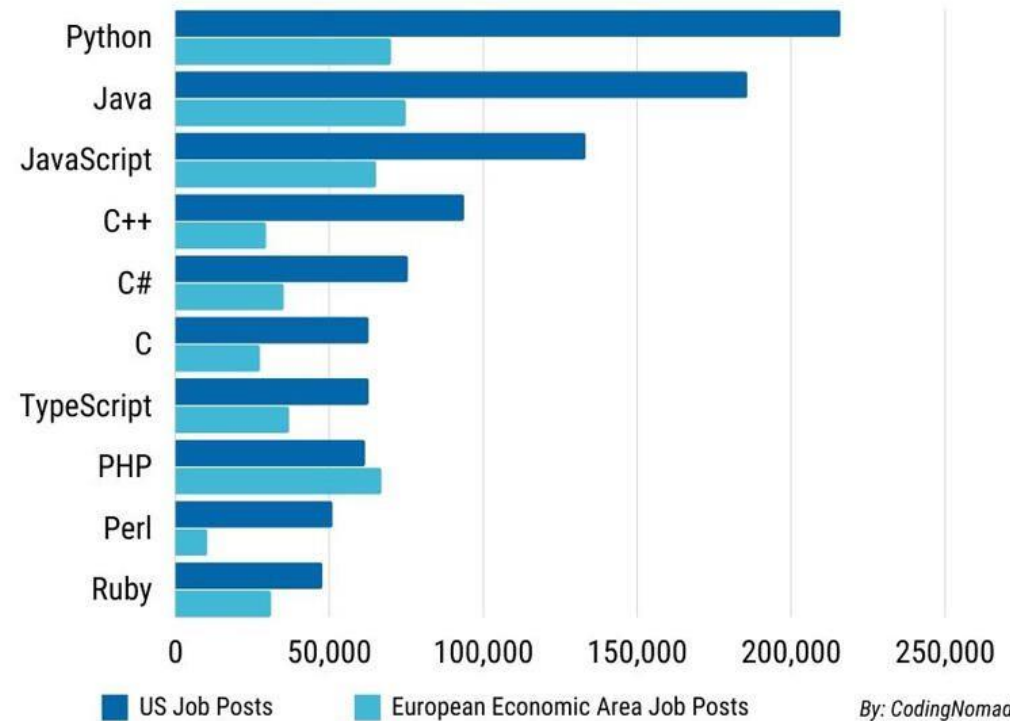
- People should try and learn a programming language
- Turn it into a lucrative skill
- Databases should be used to store data
- There are more emerging databases

APPENDIX



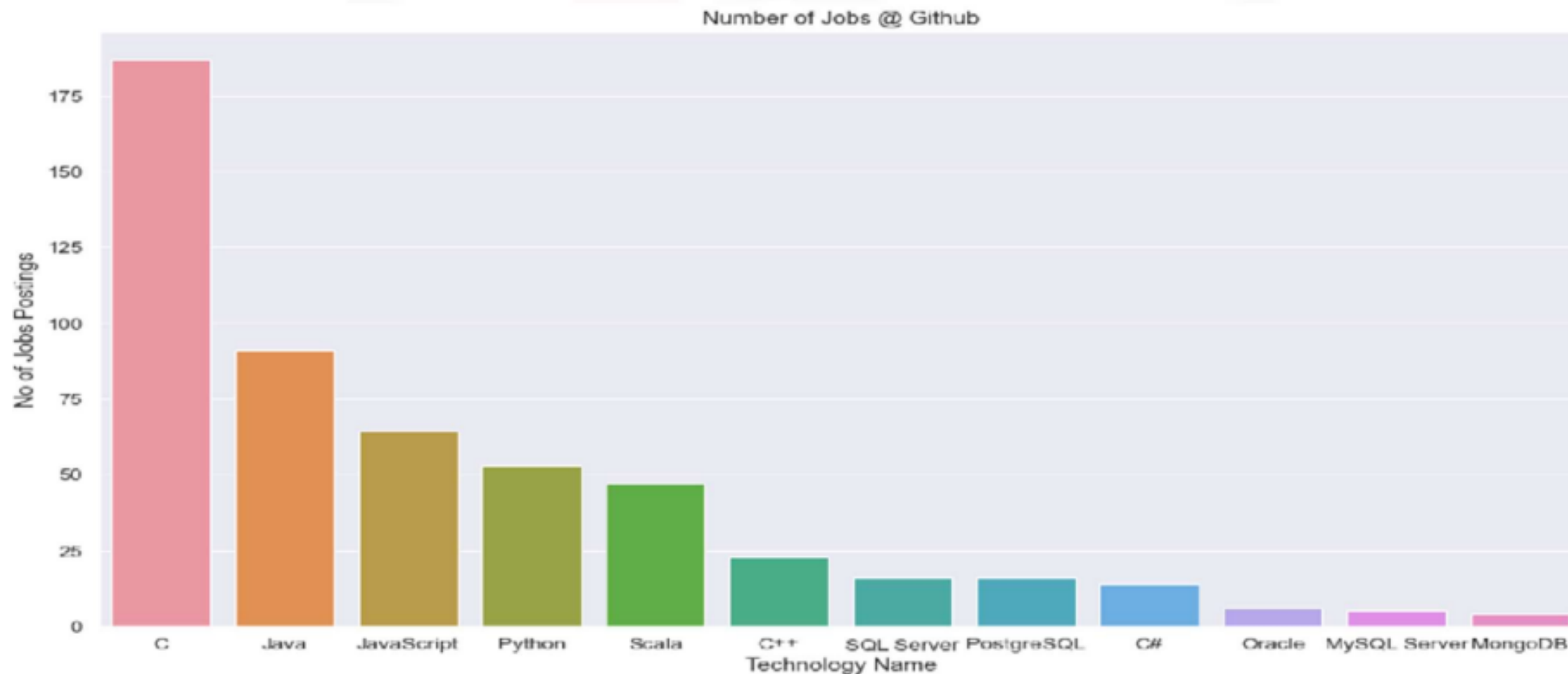
Most in-demand programming languages of 2022

Based on LinkedIn job postings in the USA & Europe



By: CodingNomads

GITHUB JOB POSTINGS



POPULAR LANGUAGES

