



Report to Technology Trends & Demographic

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OUTLINE



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

EXECUTIVE SUMMARY



- Trends in programming languages, databases, platforms and webframe.
- Future Technology Trend.
- Demographics survey

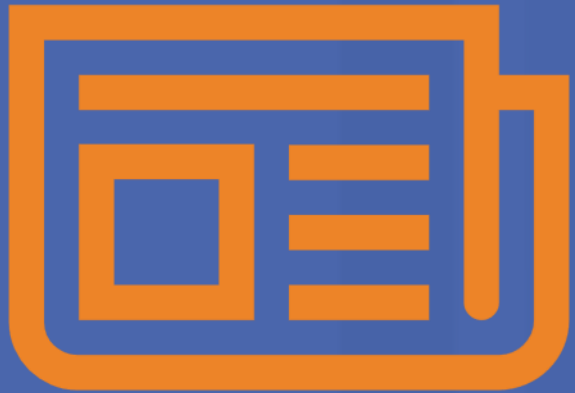
INTRODUCTION



About: Analyzing the trends in current and future technology .

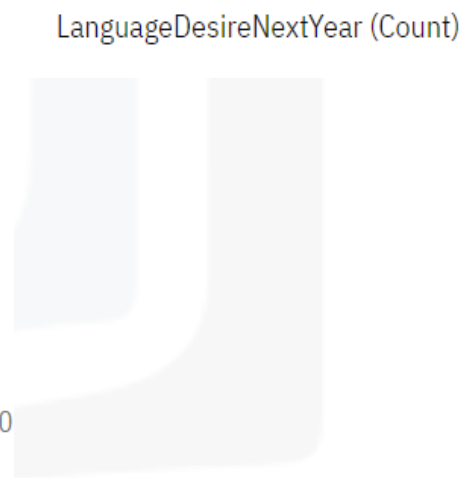
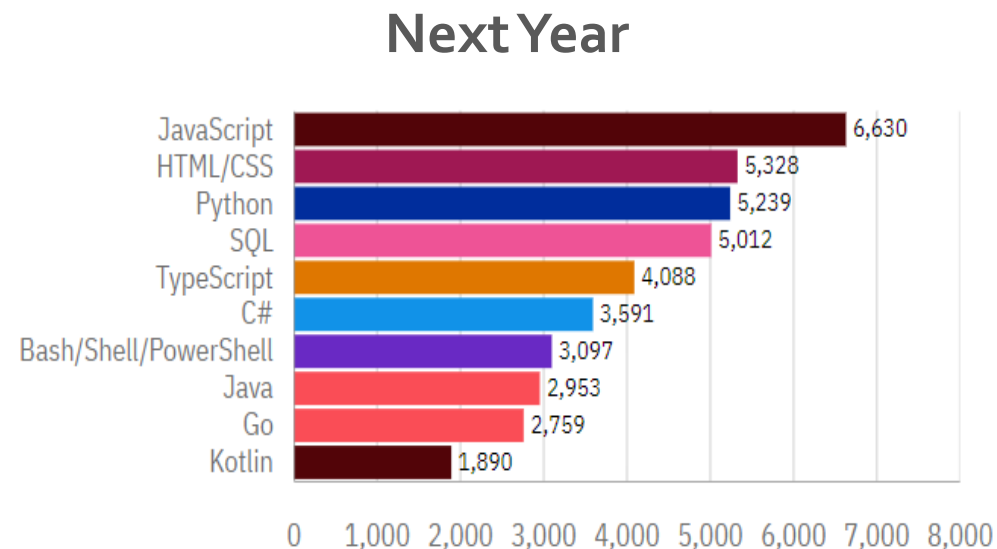
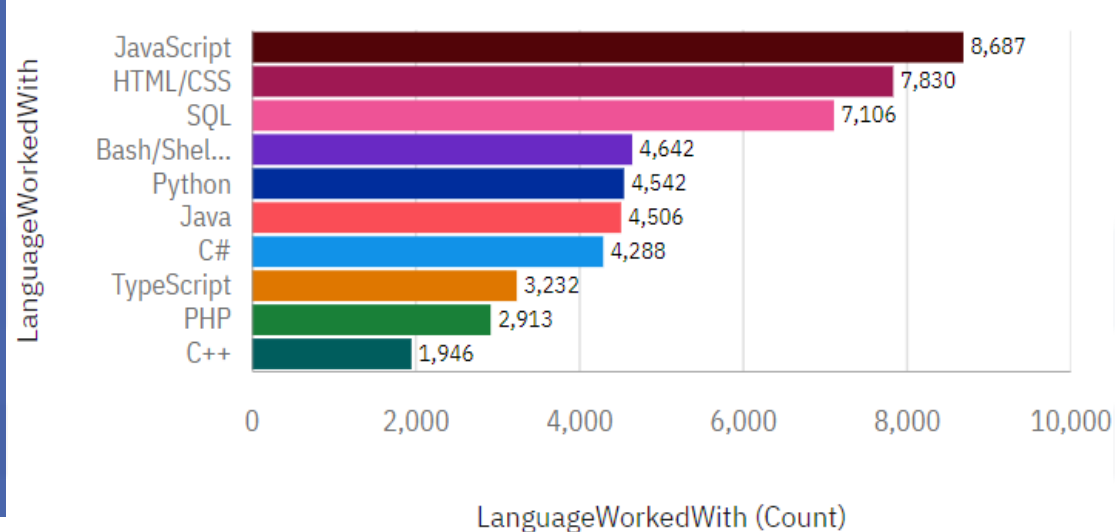
- Purpose:
 - What are the top programming languages in demand?
 - What are the top database skills in demand?
 - What are the popular web frame and platform?
 - Identify skill requirements for future
- For different audience such as stockholders.

METHODOLOGY



- Data Collection Sources
 - Using Kaggle website , API, webScrapping.
 - Stack Overflow Developer 2019 Survey
 - GitHub Job Postings Programming
 - Languages Annual Salary
- Data Exploration
- Data Cleaning
- Data Visualization
- Presentation

PROGRAMMING LANGUAGE TRENDS



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

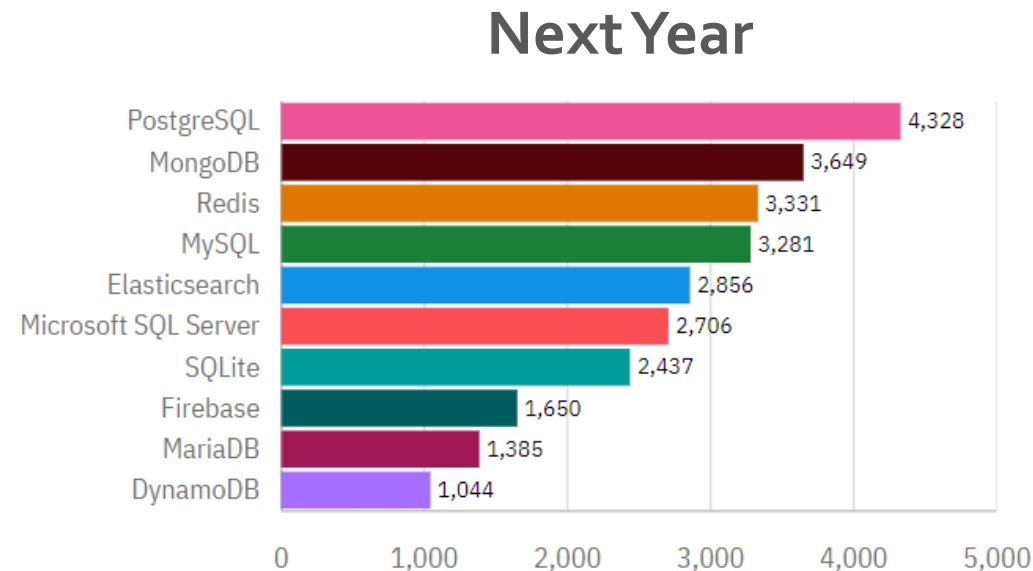
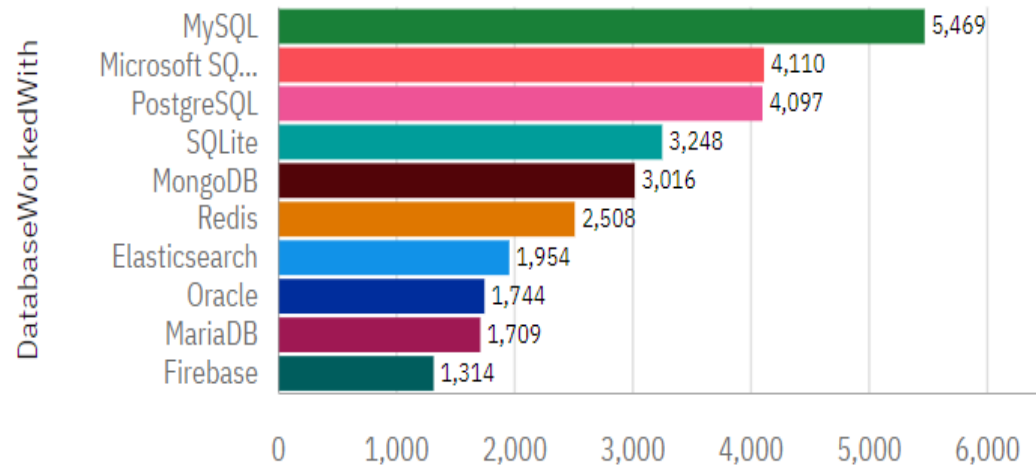
Findings

- JavaScript, HTML/CSS, SQL are top 3 this year
- Python, Typescript and Kotlin becoming popular next year.
- C++ and PHP less use in future.

Implications

- With AI and ML in rising demand, Python is best choice.
- Web development are still in high demand.
- Big Data technology in companies still requires SQL

DATABASE TRENDS



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL most popular
- Behind is Microsoft SQL
- MongoDB and PostgreSQL are upcoming favorites.

Implications

- Open-source databases are still preferable in companies
- NoSQL databases will make an impact for storing non-relational data
- Redis supports abstract data types
- Pre-tuned search to website, app, or ecommerce store



DASHBOARD

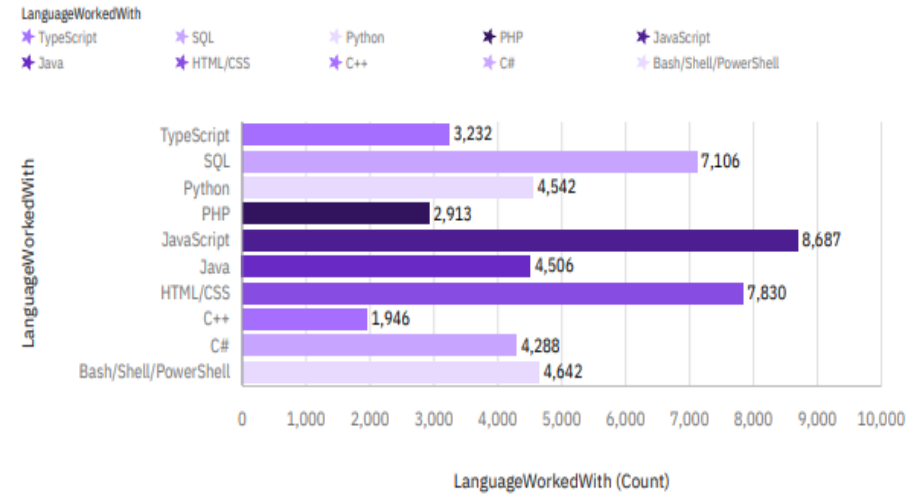
IBM COGNOS LINK DASHBOARD

[Projects/_ IBM Final Project Dash Board By Cognos.pdf at main · SaharGamal816/Projects \(github.com\)](#)

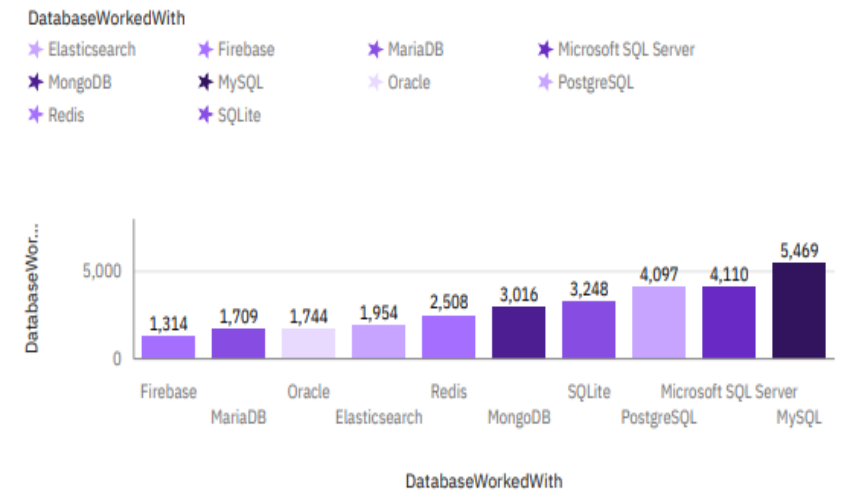
CURRENT TECHNOLOGY USAGE DASHBOARD

Current Technology Usage

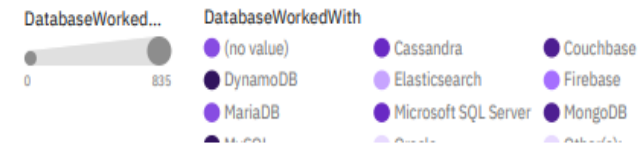
Top 10 Language Worked With



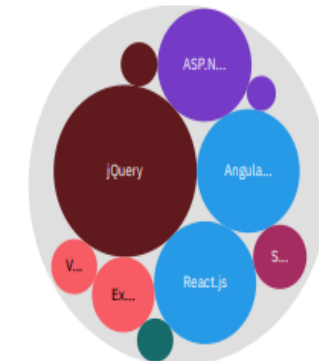
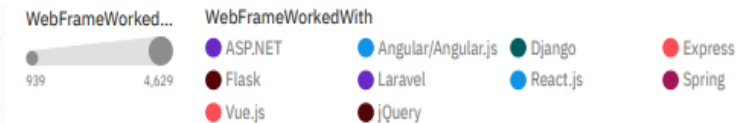
Top 10 Database Worked With



Platform Worked With



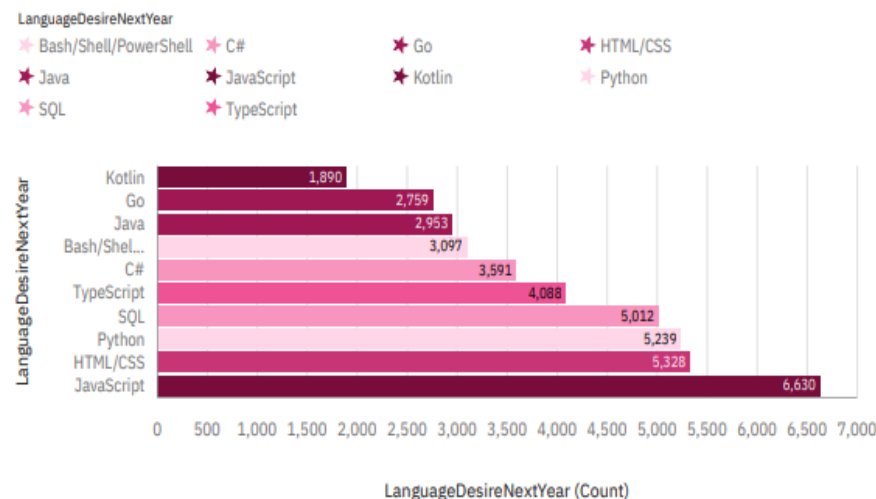
Top 10 Web Frameworks Worked With



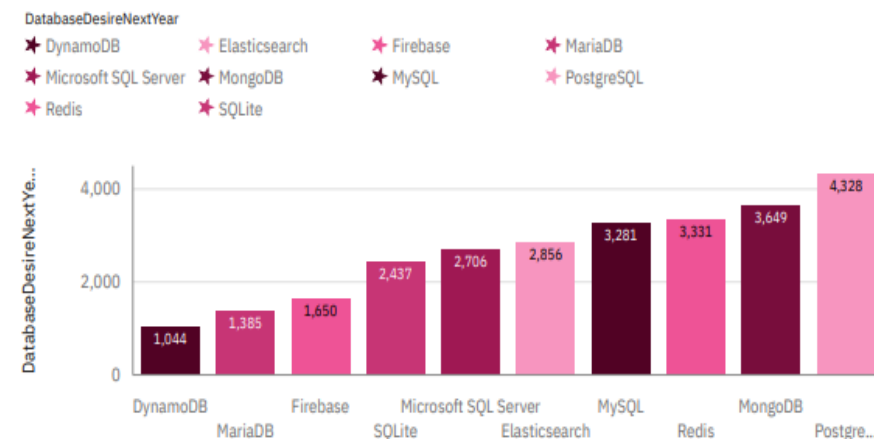
Future Technology Trend

Future Technology Trend

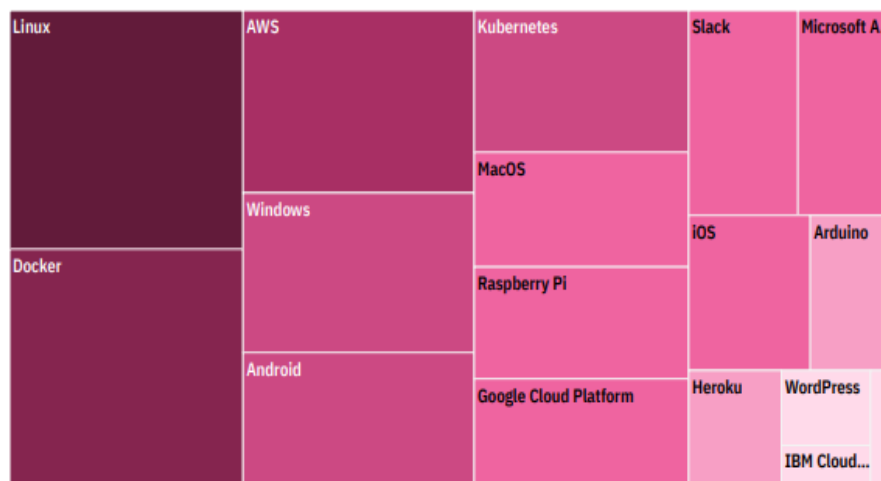
Top 10 Language Desire Next Year



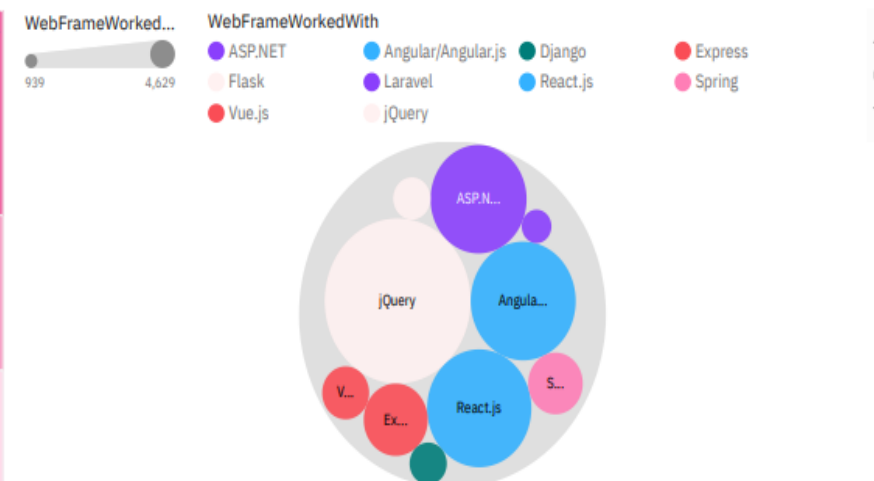
Top 10 Database Desire Next Year



Platform Desire Next Year



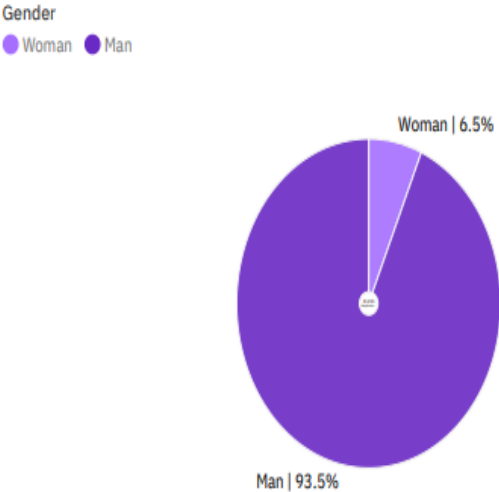
Top 10 Web Frame Desire Next Year.



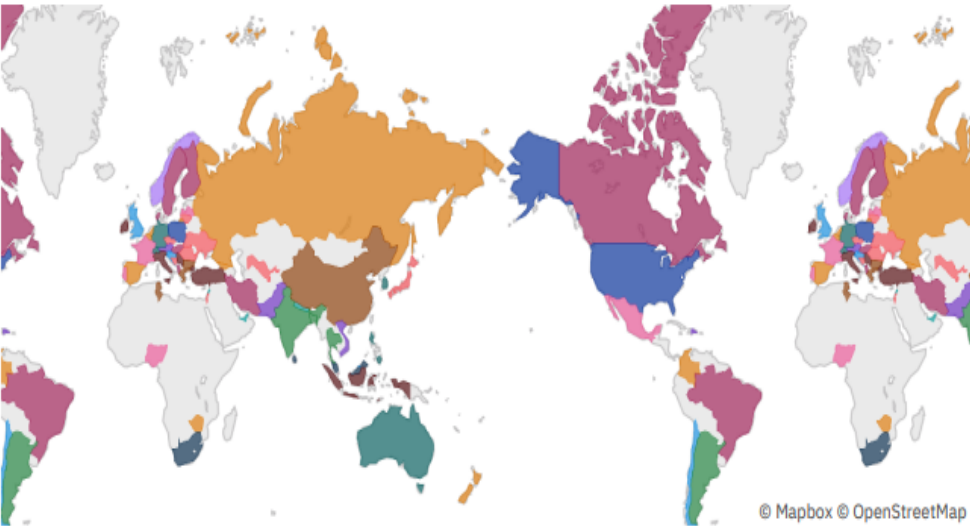
Demographics

DEMOGRAPHICS
DASHBOARD

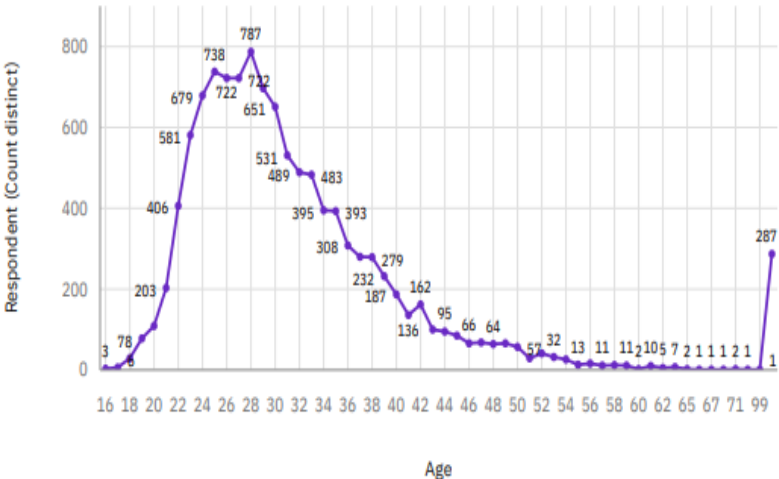
Respondent classified by Gender



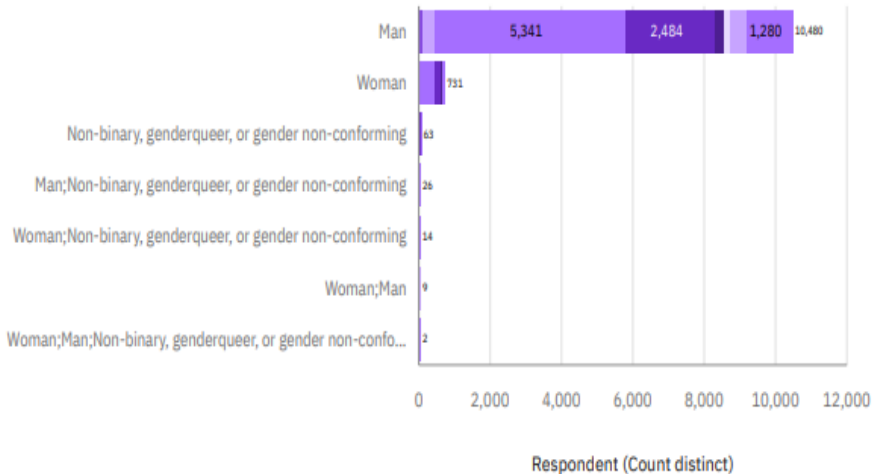
Respondent Count for Countries



Respondent Count by Age



Respondent by Gender Classified by EdLevel





DISCUSSION

- Technology Trends now and future
- Training and Reskilling workers
- Females participation in Technology field
- Bridge divide of technology gaps in developing countries
- Eliminate age and education discrimination in employment

OVERALL FINDINGS & IMPLICATIONS


Findings

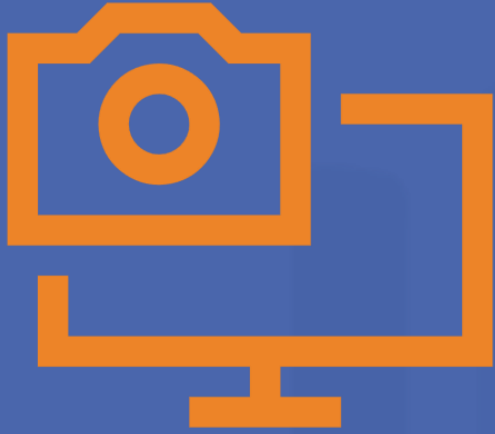
- Fast changing technology every year
- Concentration on several countries like USA and India
- Gender gap in technology jobs
- Platforms like Docker and AWS are growing

Implications

- Companies need to be flexible and adjust to rapid changes
- Need to spread technology out to lagging countries
- Impact of job hiring's
- Shift to faster app deployments and cloud services in future

CONCLUSION

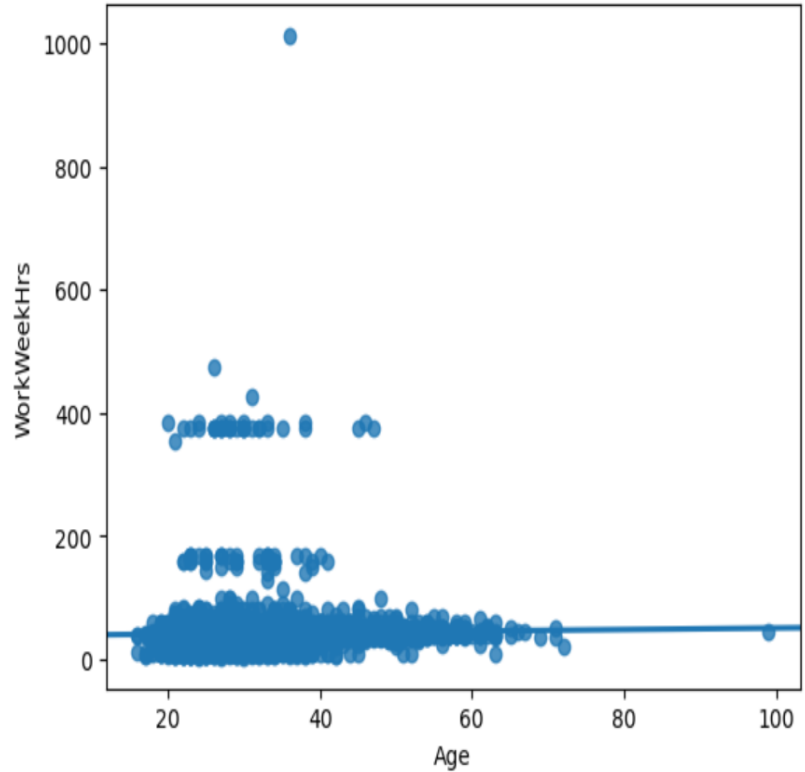
- 
- Technology Trends for current and next year
 - Programming Languages, Database and Platform overview
 - Demographics overview
 - Actions to be taken.



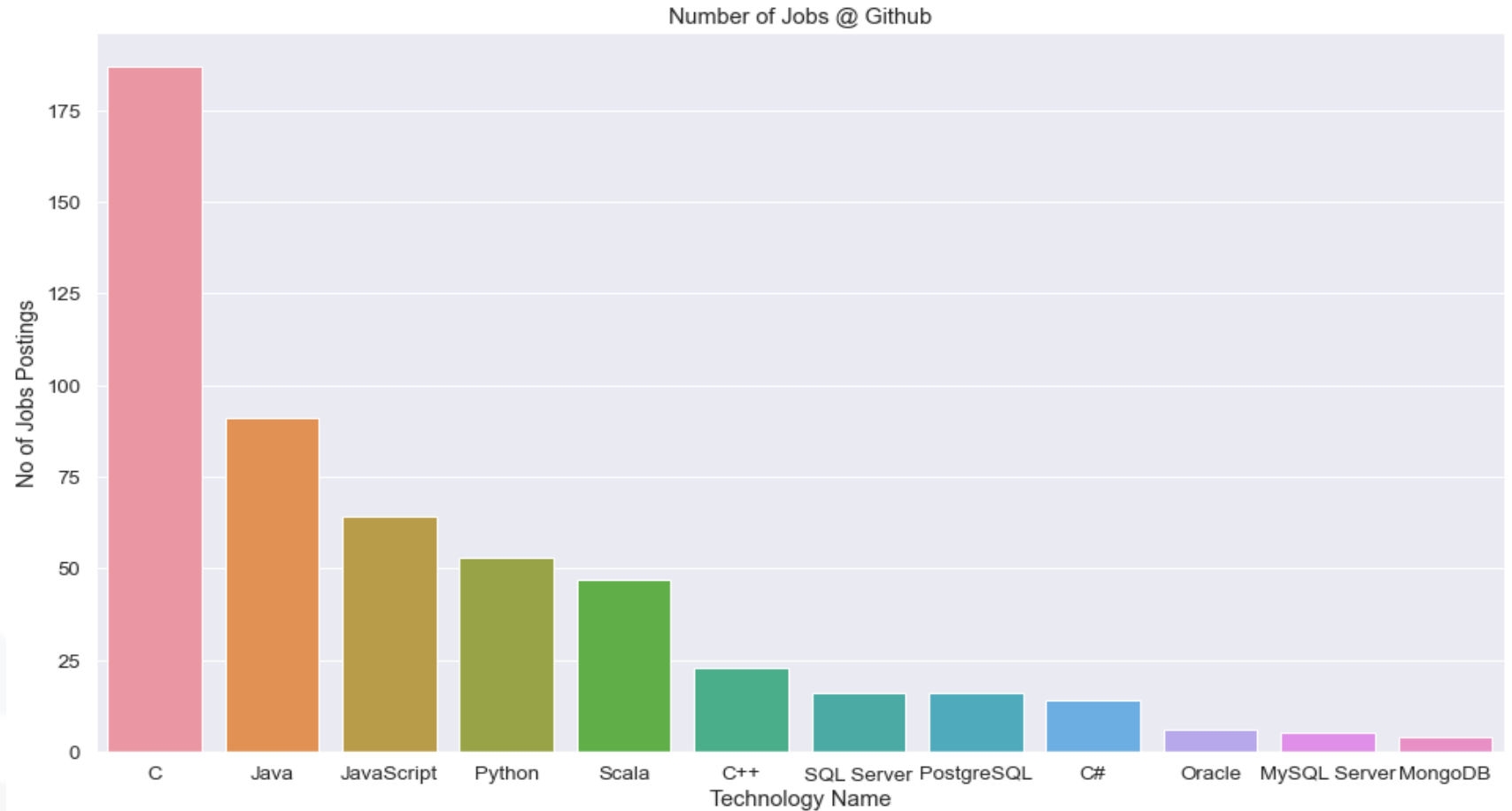
APPENDIX

	DatabaseDesireNextYear	Respondent
0	PostgreSQL	25142
1	Elasticsearch	25141
2	MongoDB	25141
3	Microsoft SQL Server	25141
4	Redis	25141

ConvertedComp	Age
16.0	8700.0
17.0	43550.5
18.0	20936.0
19.0	18319.0
20.0	21232.0



GITHUB JOB POSTINGS



POPULAR LANGUAGES BY SALARY

