



Dev Tech Trends: Present vs. Future

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OUTLINE



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- Discussion
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EXECUTIVE SUMMARY



- Trends in Tech
 - Current popular languages, databases, platforms and frameworks
 - Desired languages, database, platforms and frameworks
 - Sub Point 3
- Demographic Gaps in Developers
 - Genders
 - Age
 - Location

INTRODUCTION



- The goal of this presentation is to analyze the technologies that developers are currently using. It includes their demographic analysis, as well as their intended and current technologies.
- Data-driven decisions about which technologies to invest in for hiring or training current developers should be made easier with the help of the analysis.
- It also shows most developers' locations and other demographic data to help with recruiting and training.

METHODOLOGY



- Datasets
- Data Collection Methods
- Data Cleaning
- Data Visualization
- Dashboard Making

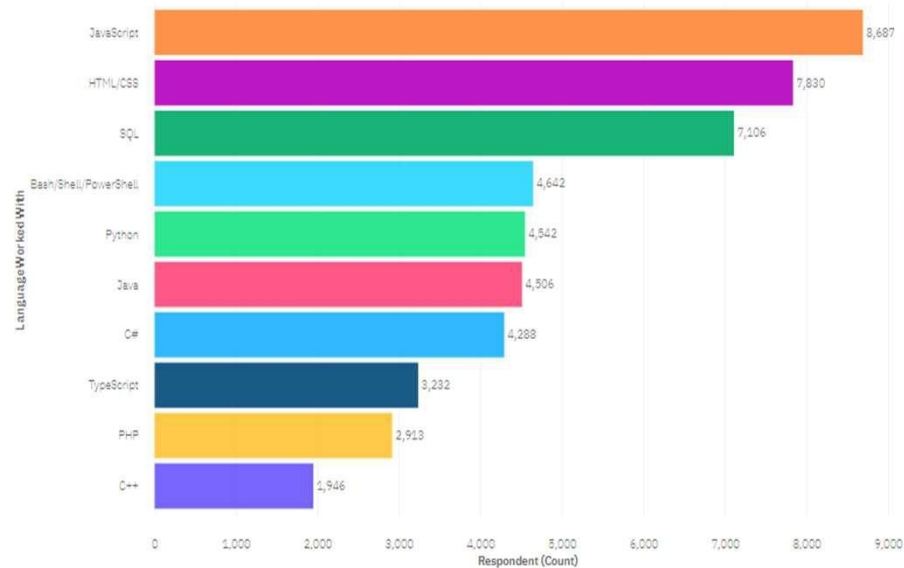


RESULTS

PROGRAMMING LANGUAGE TRENDS

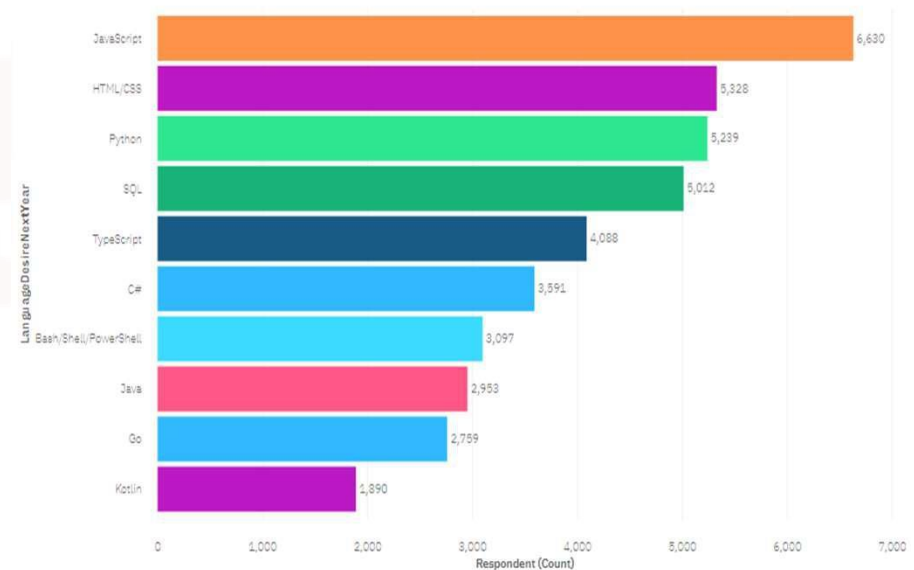
Current Year

Top 10 Languages Worked With



Next Year

Top 10 Languages Desired to Work With Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript remains the most popular language, showing consistent growth in use over all years.
- Its importance in data science and AI is leading to its status Translation. Python has been increasing more popularity as it delivers better support for Microsoft.
- The acceptance of Kotlin, among other languages, factors to the path mobile app development is starting.

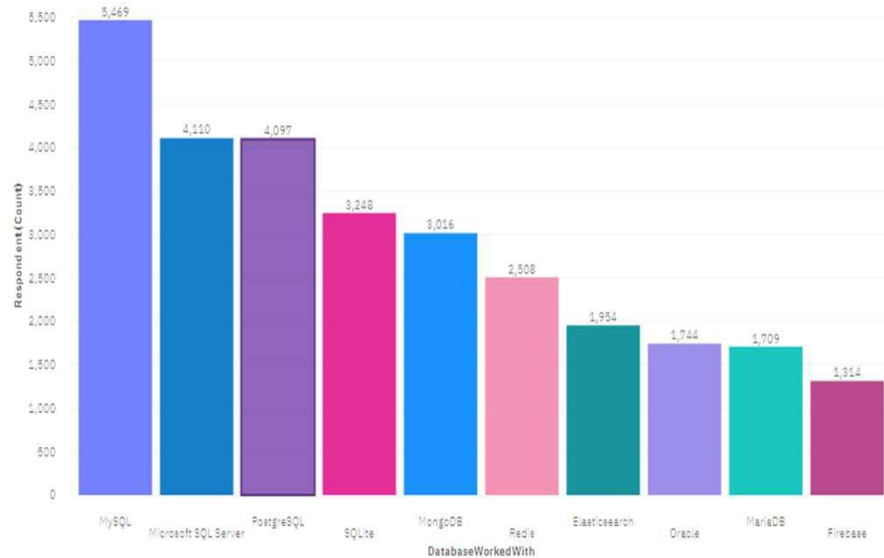
Implications

- Stick with making the web a more accessible place for developers to write their code in.
- Python education for developers so that they can be more effective on the task with its packages like data technological know-how and AI.
- Encourage learning and growth in cellular-specific languages which include Kotlin to live beforehand within the cell app market.

DATABASE TRENDS

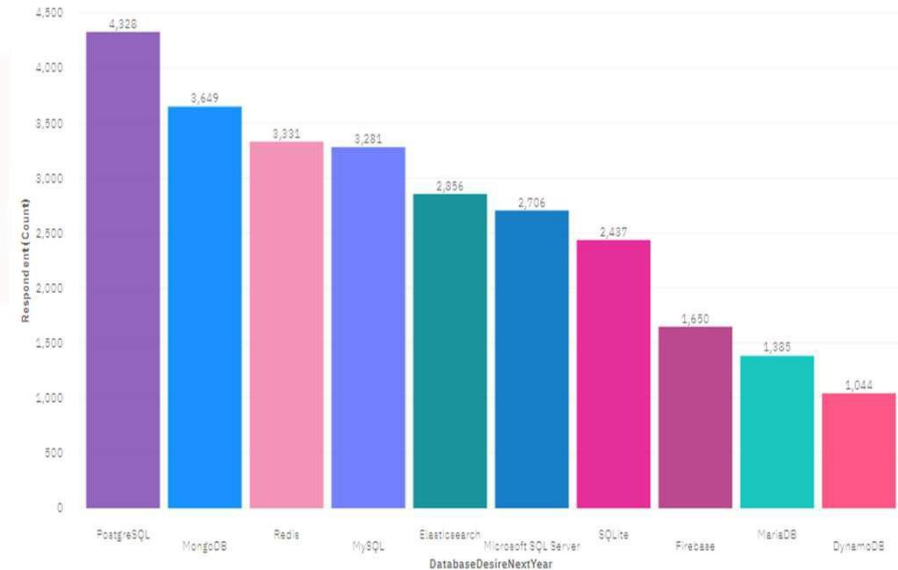
Current Year

Top 10 Databases Worked With



Next Year

Top 10 Databases Desired to Work With Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Redis Gaining Popularity Aimed for research done within a year
- Traditional databases such as MySQL and Microsoft SQL server is losing popularity.
- Newer Databases like PostgreSQL, MongoDB are emerging and are getting earmarked for the growth path in multiple projects reached newer heights & also they have their own pros and cons!

Implications

- Resource Be invested in training developers with resources to work on redis, due increase demand.
- MySQL and Microsoft SQL Server, investment will decrease as usage declines
- Focus on investments in training and development of PostgreSQL/MongoDB as these are getting traction.

DASHBOARD

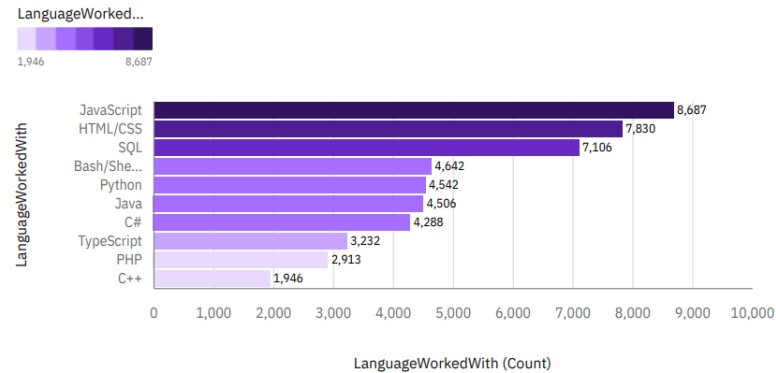


<https://github.com/Dhruvil-pat3l/IBM-Data-Analyst-Capstone-Project/blob/f3f9b401c38a89c025db5376ab4574b405c1748d/Dashboard%20with%20IBM%20Cognos%20Analytics.pdf>

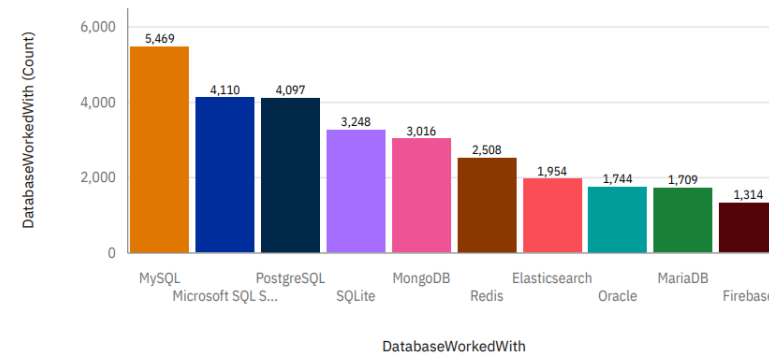
DASHBOARD TAB 1

Current Technology Usage

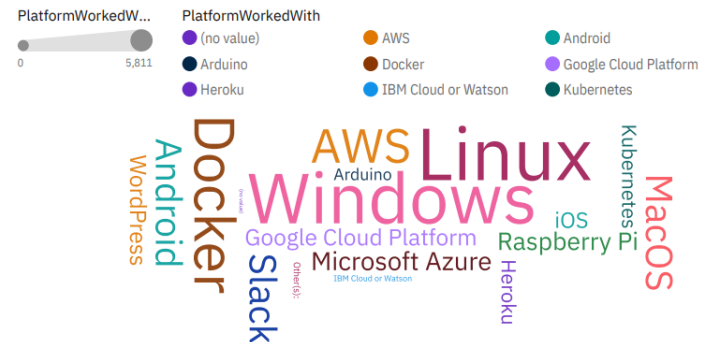
Top 10 Language Worked With



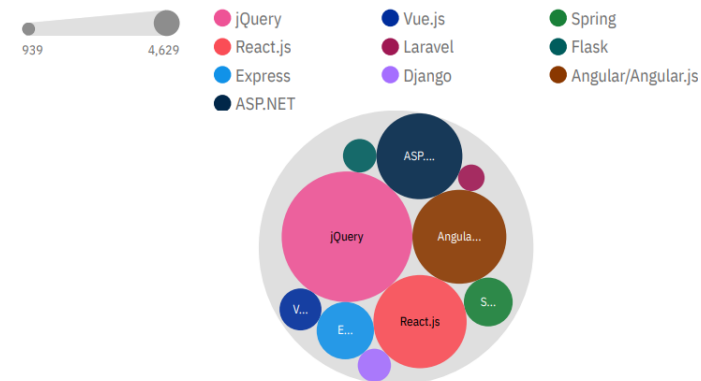
Top 10 Database Worked With



Platform Worked With



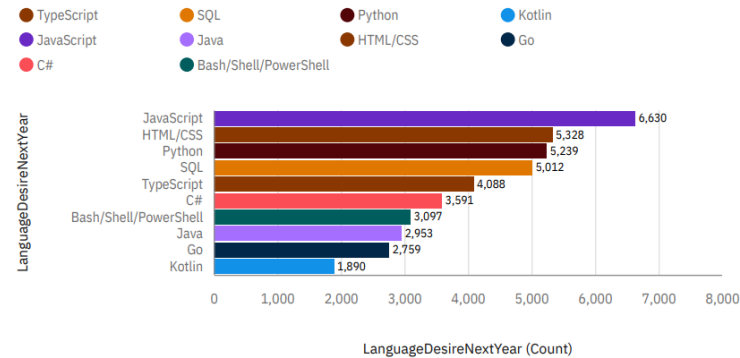
Top 10 Web Frame Worked With



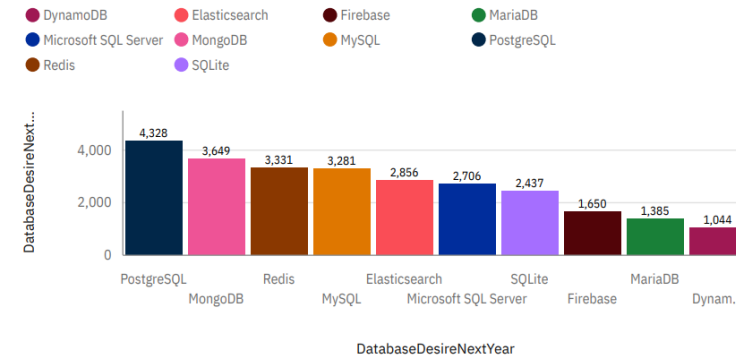
DASHBOARD TAB 2

Future Technology Trend

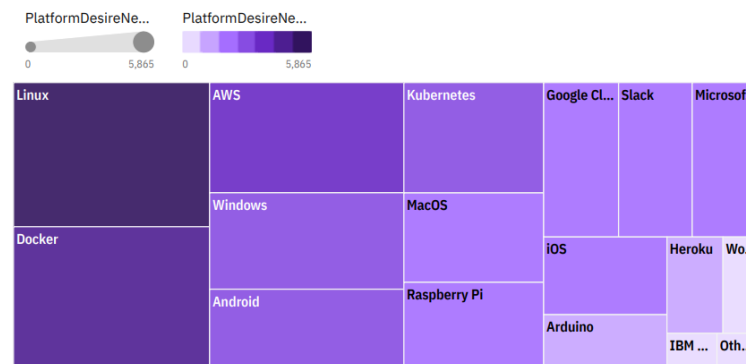
Top 10 Language Desire Next Year



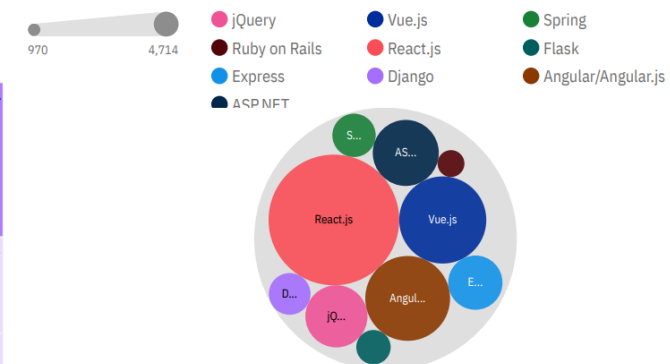
Top 10 Database Desire Next Year



Platform Desire Next Year



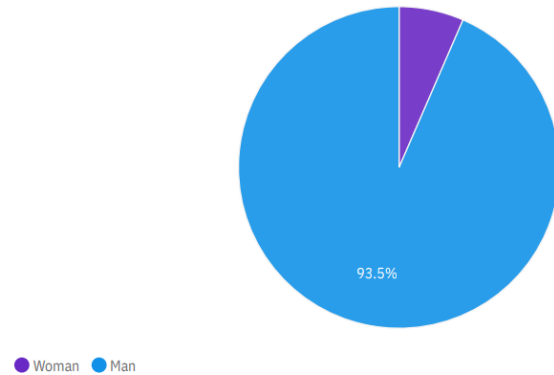
Top 10 Web Frame Desire Next Year



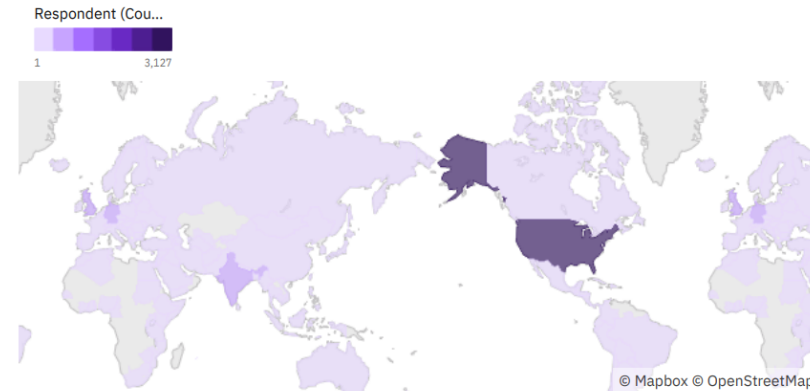
DASHBOARD TAB 3

Demographics

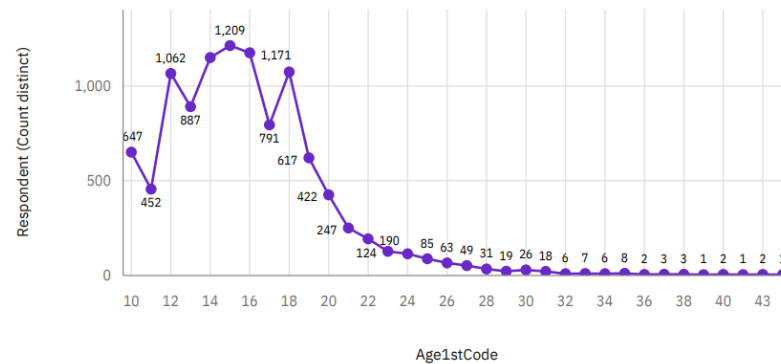
Respondent classified by Gender



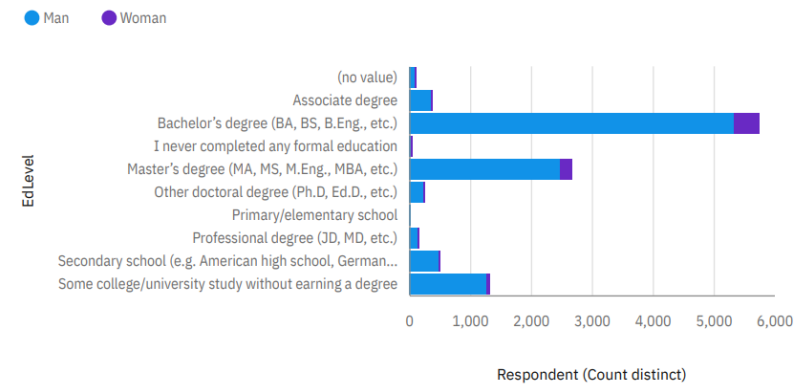
Respondent Count for Countries



Respondent Count by Age



Respondent Count by Gender and Formal Education Level



DISCUSSION

- 
- Technology trends
 - Demographics of developers

OVERALL FINDINGS & IMPLICATIONS

Findings

- Developer talent is centered in the USA and India.
- There is a significant gender gap in the field, with 93.5% of developers being men and only 6.5% women.
- Languages used in web development, data science, big data, artificial intelligence, and machine learning all remain popular.

Implications

- Intentional investments need to be made to get more women involved in software development.
- Businesses that are not primarily located in the USA and India would have to consider outsourcing development talent or investing in training local talent.
- Web development and data use should continue.

CONCLUSION



- Invest in local developer talent or outsource developers if located outside of the US and India
- Get more women into the tech and software development space
- Make use of data in making business decisions
- Continue focus on web development

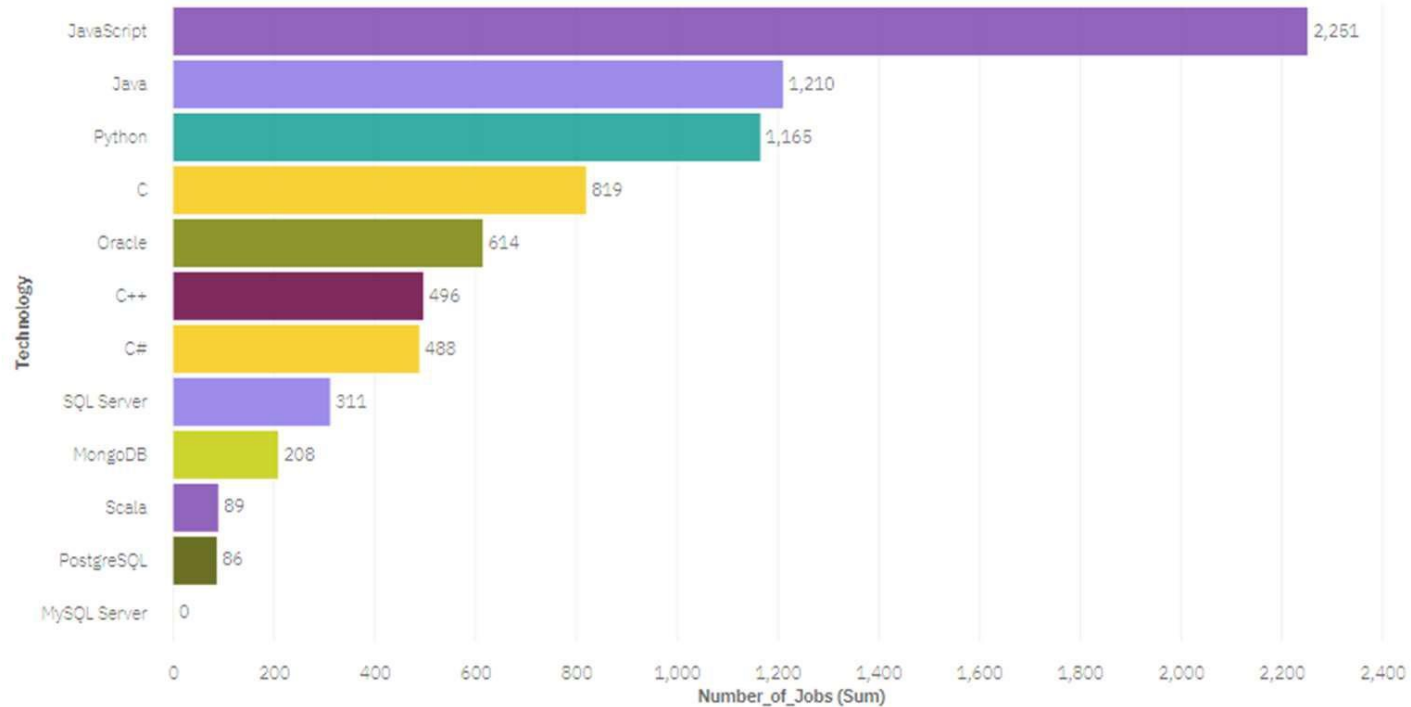
APPENDIX



IBM Cognos Dashboard Embedded (CDE) is an AI-fueled business intelligence service that supports the entire data analytics cycle, from discovery to operationalization. It provides users with data discovery capabilities to visually explore and interact with their data to identify the key insights for improving data driven decisions.

JOB POSTINGS

Number of Job Postings for each Technology



POPULAR LANGUAGES

Average Annual Salary based on Language

