



TECHNOLOGY TRENDS

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OUTLINE



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- Methodology
- Results
 - Visualization – Charts
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EXECUTIVE SUMMARY



- **Web technologies:** JavaScript, HTML, CSS are the most popular web technologies.
- **Web frameworks:** React.js and jQuery are the hottest web frameworks.
- **Development platforms:** Windows and Linux are the most popular development platforms.
- **Mobile platforms:** Android is the most popular mobile platform.
- **Databases:** MySQL is the most popular database, but MongoDB and PostgreSQL are gaining popularity.

INTRODUCTION



- **Technology market:** The technology market is constantly changing, so it is important to stay up-to-date with the latest trends.
- **Latest technology:** The latest technology in each field can provide a competitive edge.
- **Technology trend:** Comparing the current and next year technology trends can give you insights into the market.
- **Study:** The study consists of four main parts:
 - Top language: The most popular programming languages.
 - Top database: The most popular databases.
 - Top platform: The most popular development platforms.
 - Top web frame: The most popular web frameworks.

METHODOLOGY



- **Technology trend:** The study of the current and future usage of technology.
- **Data:** The data was from the Stack Overflow Developer Survey 2019.
- **Visualization:** Different types of charts, such as bar, line, pie, tree-map, will be used to visualize the data.
- **Dashboard:** The IBM dashboard will be used to analyze the data and create the visualizations.

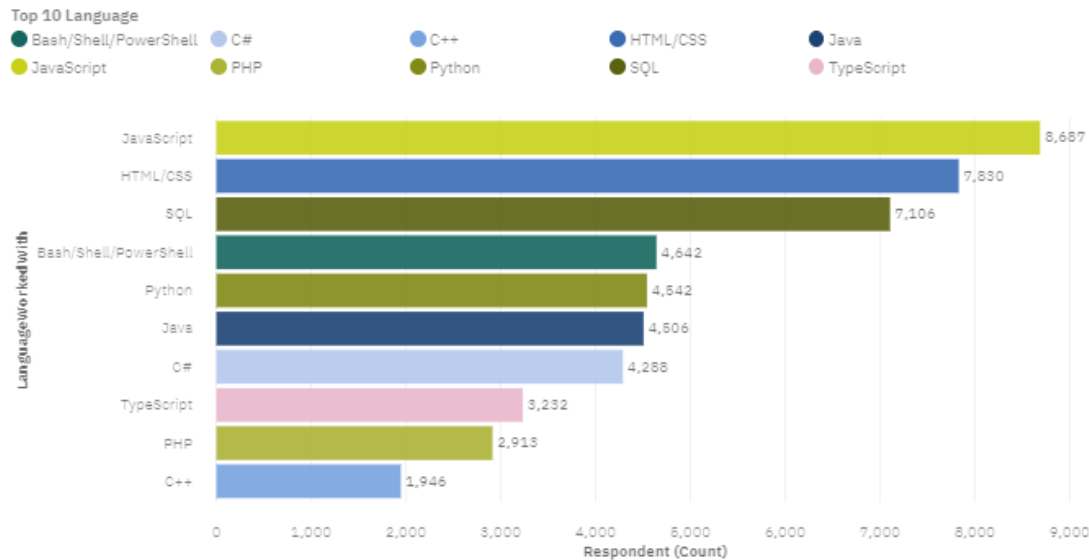
RESULTS

- The results consists of 4 main parts:
 - Programming language trend
 - Database trend
 - Platform trend
 - Web frame trend

PROGRAMMING LANGUAGE TRENDS

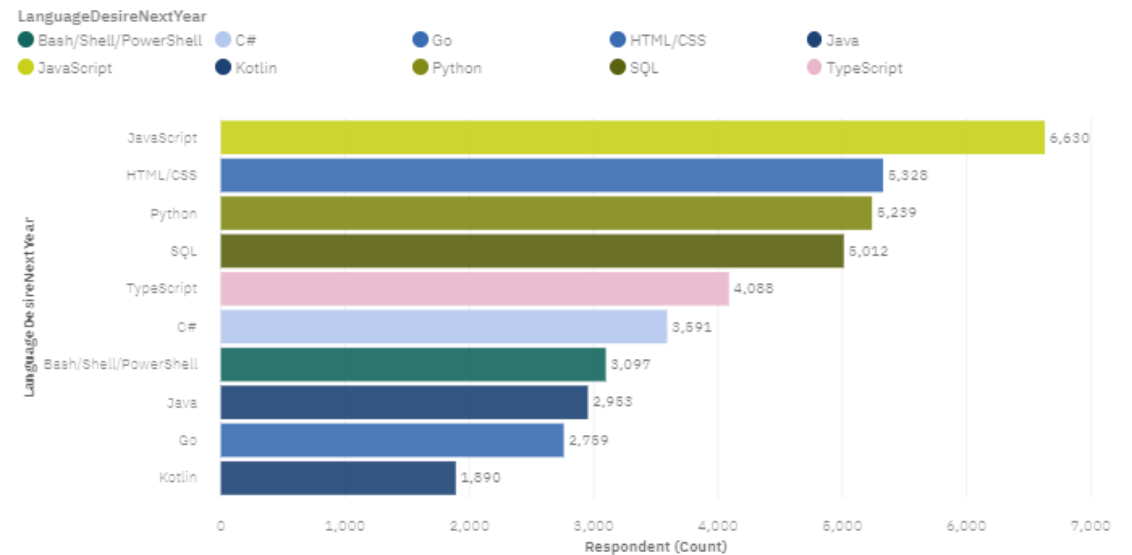
Current Year

Top 10 Language Worked With



Next Year

Top 10 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript and HTML/CSS are the most popular programming languages for web development.
- Python is becoming increasingly popular for data science, machine learning, and artificial intelligence.
- C++ and PHP are being replaced by newer languages, such as Rust and Go.

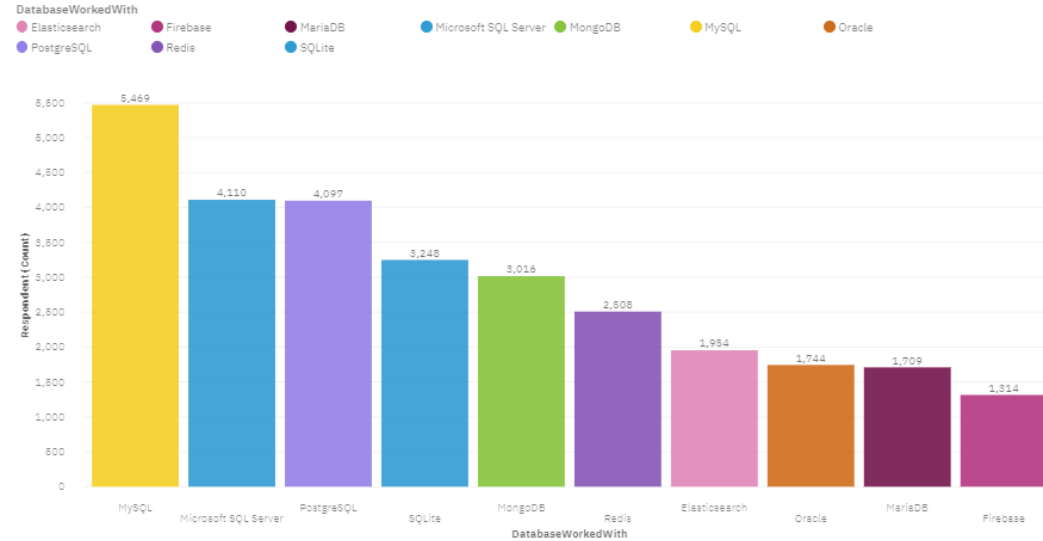
Implications

- Web programming languages will still dominate the near future.
- Python and data science are becoming increasingly important.
- Legacy languages such as C++ and PHP are gradually falling out of interest.

DATABASE TRENDS

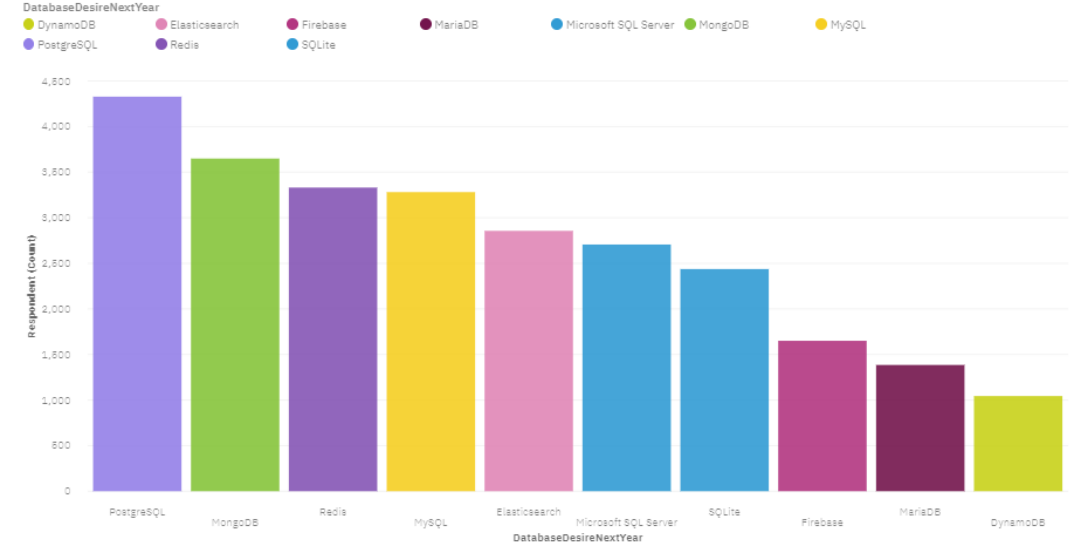
Current Year

Top 10 Database Worked With



Next Year

Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MongoDB and Redis are quickly gaining popularity and are now ranked 2nd and 3rd, respectively.
- PostgreSQL has moved up to the top spot, replacing MS SQL Server.
- MS SQL Server has dropped to the 5th spot, and Oracle has disappeared from the top 5.

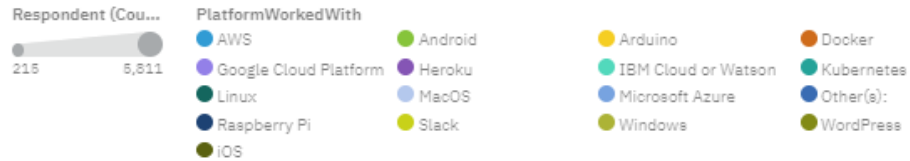
Implications

- Open source databases are becoming more popular than commercial databases.
- Non-relational databases are seeing increasing usage, but relational databases still take the lead.

PLATFORM TRENDS

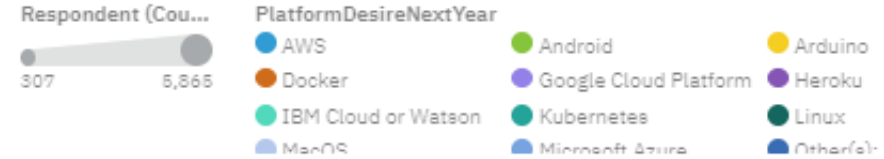
Current Year

Platform Worked With



Next Year

Platform Desire Next Year



PLATFORM TRENDS - FINDINGS & IMPLICATIONS

Findings

- Windows and Linux are still the dominant platforms for both desktop and server applications.
- Android is the No. 1 mobile platform, followed by iOS and Windows Phone.
- Cloud platforms such as Kubernetes, Docker, and AWS are gaining more and more market share.

Implications

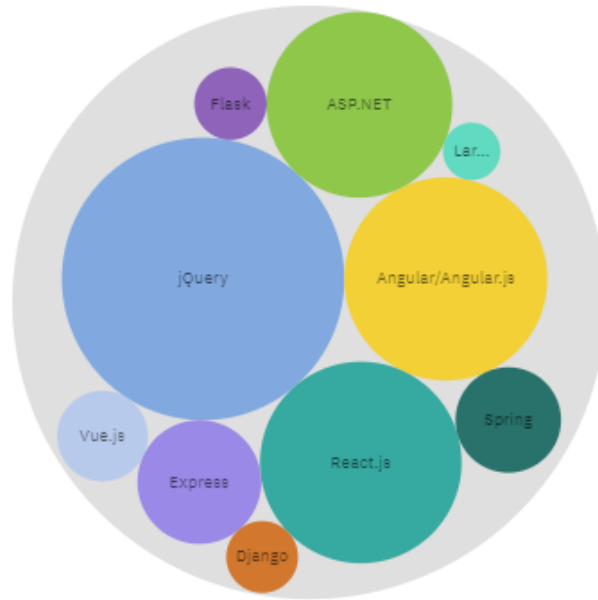
- Windows and Linux are still the main development platforms in the foreseeable future.
- The transformation to cloud computing is a non-reversible process.

WEB FRAME TRENDS

Current Year

Top 10 Web Frame Worked With

Respondent (Cou...
939 4,629
WebFrameWorkedWith

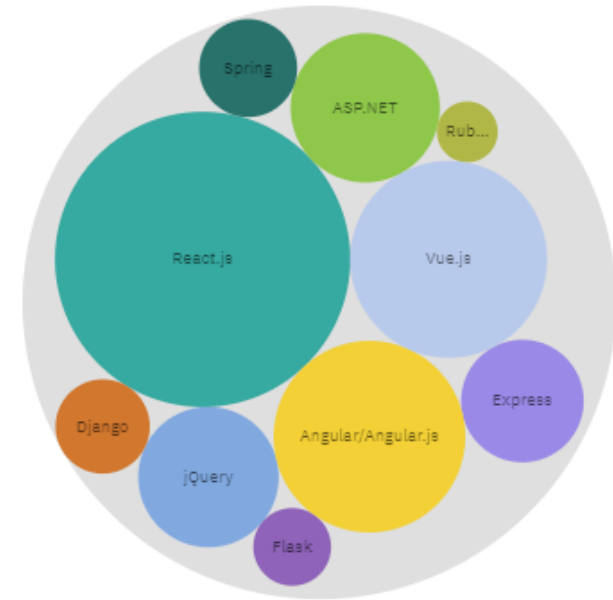


Next Year

Top 10 Web Frame Desire Next Year

Respondent (Cou... 970 4,714
WebFrameDesireNextYear

- ASP.NET
- Angular/Angular.js
- Django
- Express
- Flask
- Ruby on Rails
- Spring
- Vue.js
- jQuery



WEB FRAME TRENDS - FINDINGS & IMPLICATIONS

Findings

- jQuery's popularity has decreased, while React.js and Vue.js have become more popular.
- Angular.js has remained relatively stable in popularity.

Implications

- jQuery has lost market share and is no longer the standard for web framework development.
- React.js and Vue.js have become the new standard for web framework development.

DASHBOARD

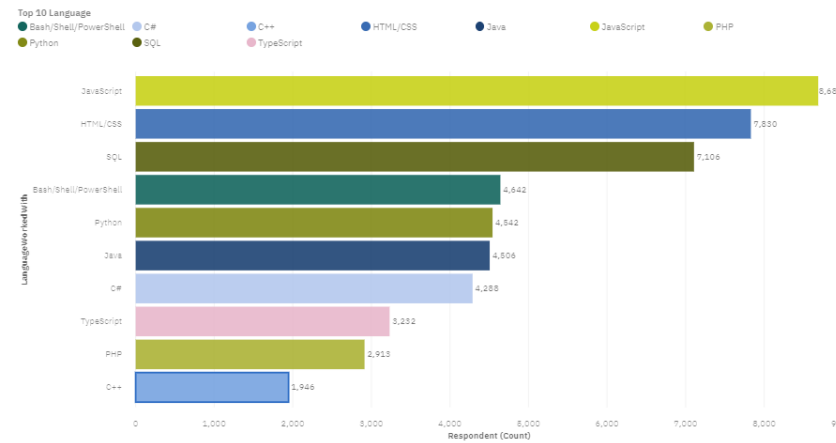


<https://github.com/DrRuin/IBM-Data-Analyst/blob/main/IBM%20Data%20Analyst%20Capstone%20Project/Cognos%20Dashboard.pdf>

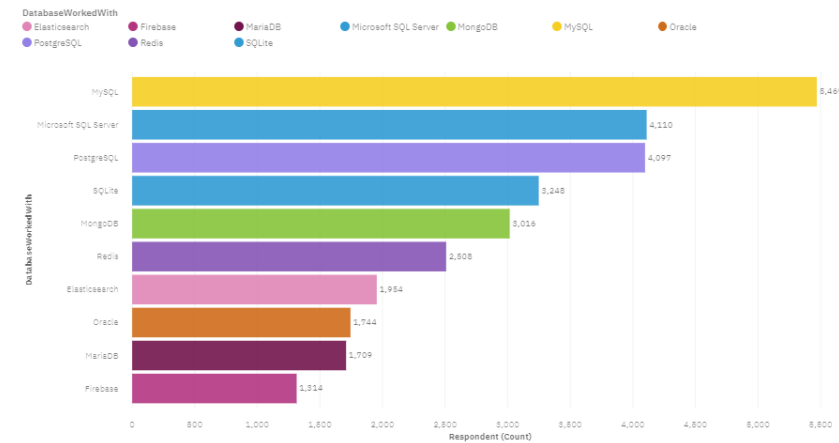
- Github link cause I don't want it to get lost in future and can come back, take a look at anytime I want !

DASHBOARD TAB 1

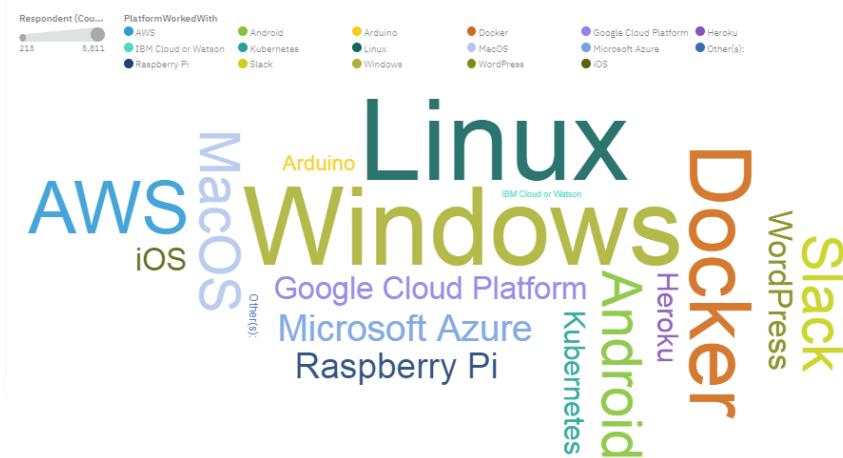
Top 10 Language Worked With



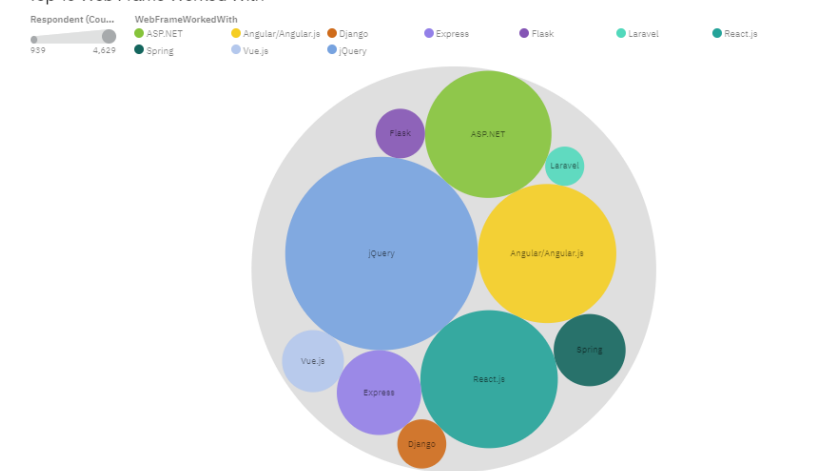
Top 10 Database Worked With



Platform Worked With

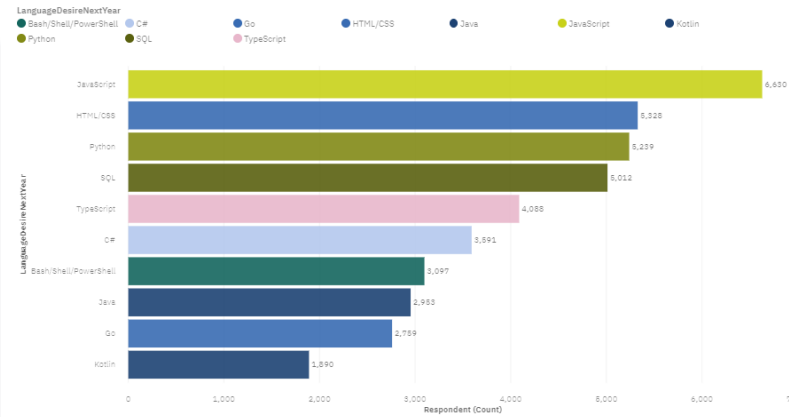


Top 10 Web Frame Worked With

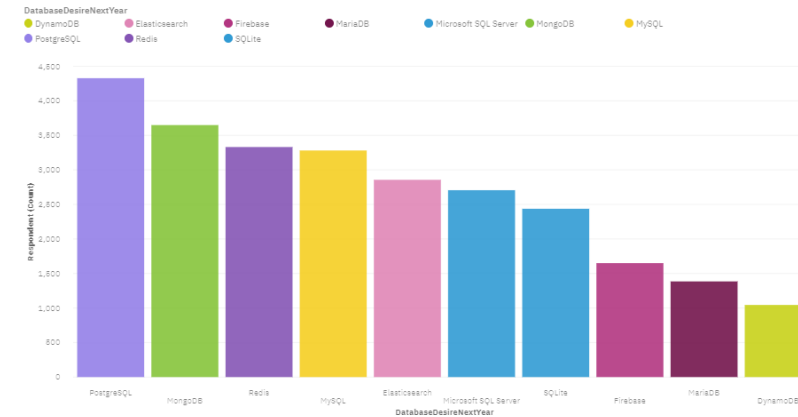


DASHBOARD TAB 2

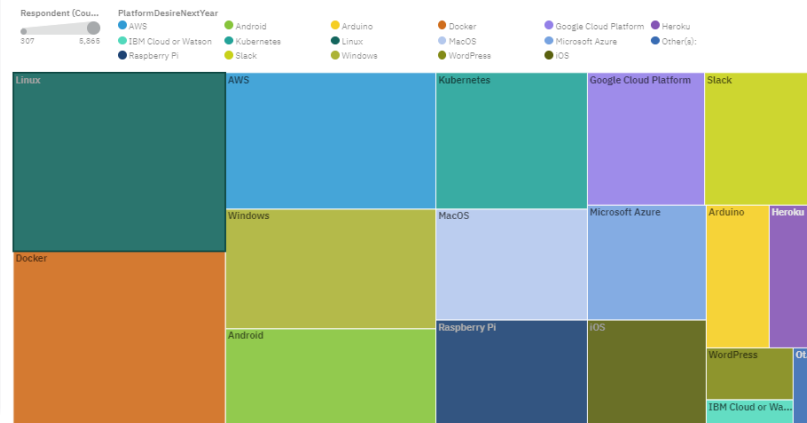
Top 10 Language Desire Next Year



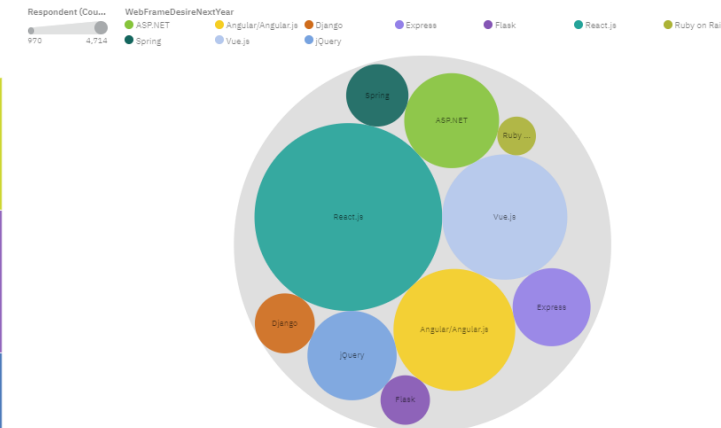
Top 10 Database Desire Next Year



Platform Desire Next Year



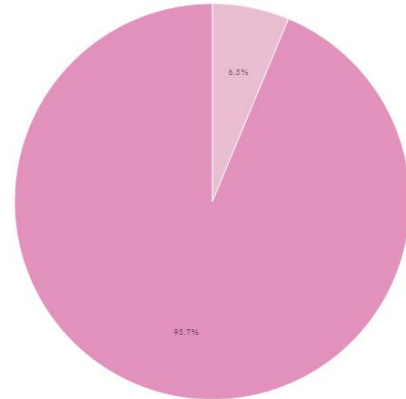
Top 10 Web Frame Desire Next Year



DASHBOARD TAB 3

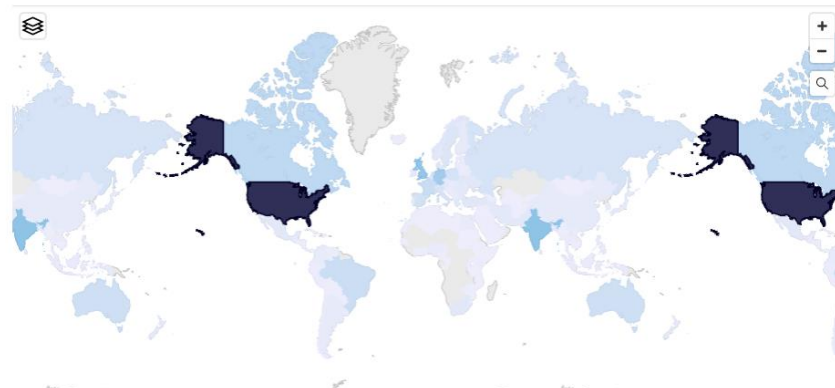
Respondent Classified by Gender

Gender
Woman Man

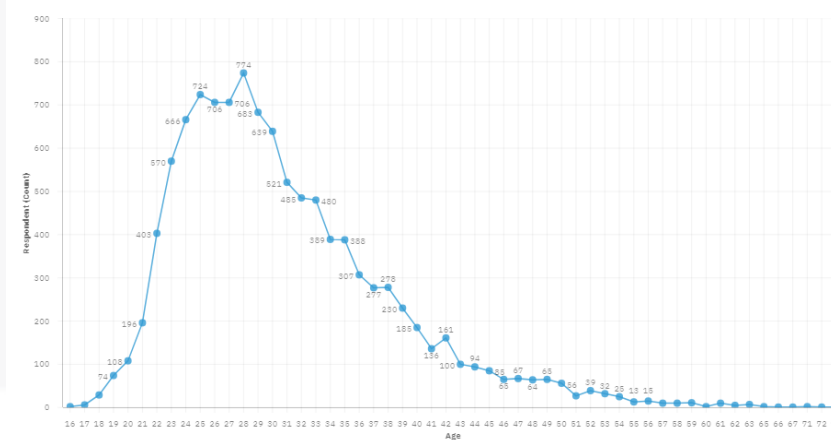


Respondent Count for Countries

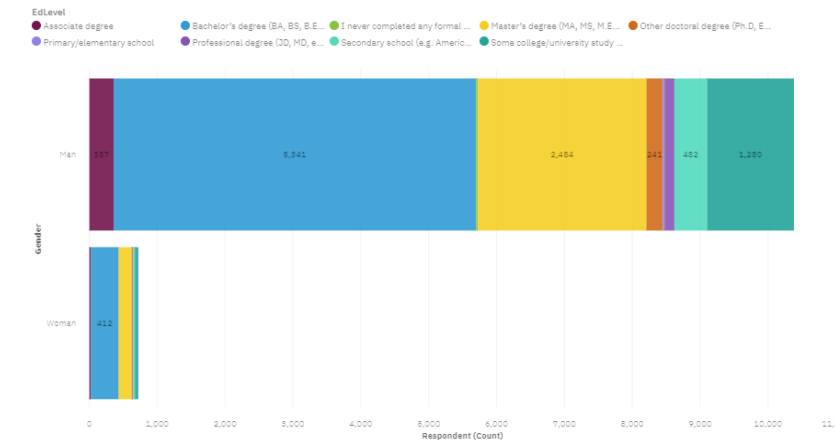
Respondent (Cou...
1 3,058



Respondent Count by Age



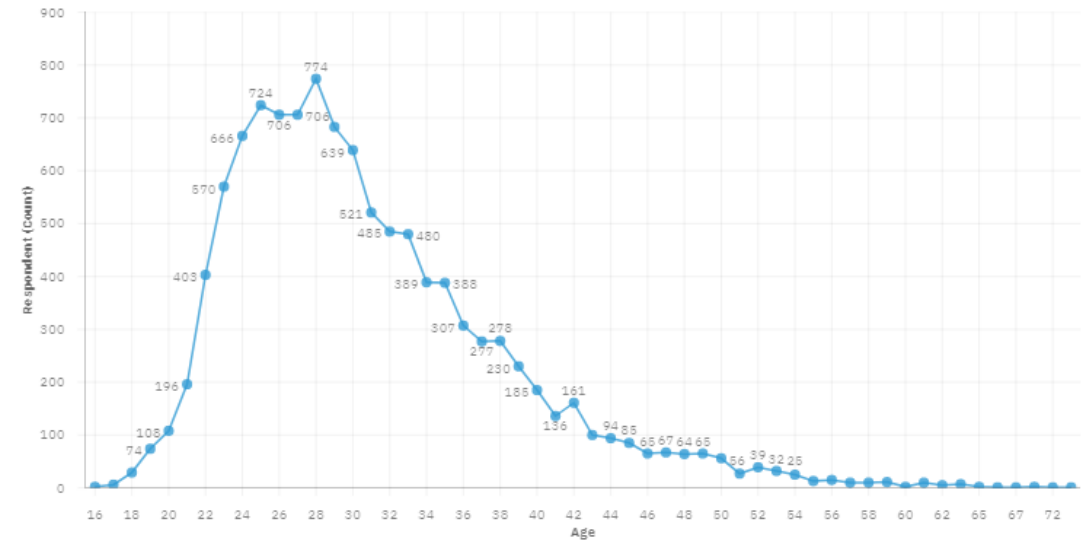
Respondent Count by Gender, classified by Ed Level



DISCUSSION



Respondent Count by Age



- Majority of respondents are at young age (20, 30s) → this could skew the result in favor of new technology.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Web-based languages are still the most popular, with JavaScript staying at the top.
- Non-relational databases are gaining popularity, with MongoDB and Redis moving to the 2nd and 3rd spots.
- Cloud-based platforms are becoming more popular, with AWS moving to the top spot.
- React.js remains the most popular web framework.

Implications

- Web-based applications are taking over traditional applications.
- Non-relational databases are seeing increasing adoption.
- Cloud-based services are becoming the top choice for platform development.

CONCLUSION



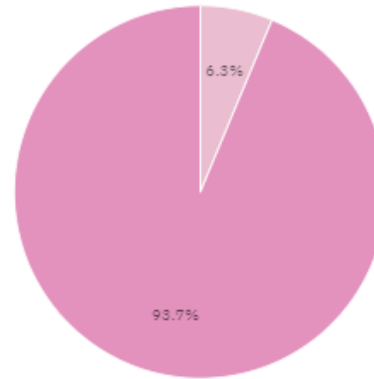
- To stay relevant in the technology field, it is important to learn web-based languages and non-relational databases.
- React.js is the best web framework to learn for your future.
- Cloud-based services are the right direction for IT investment.

APPENDIX



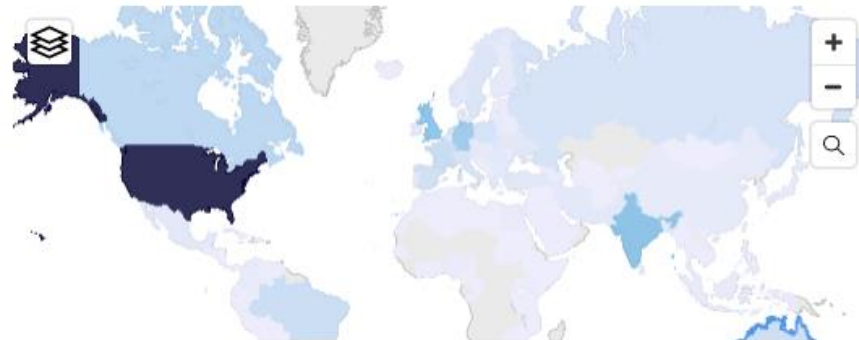
Respondent Classified by Gender

Gender
● Woman ● Man

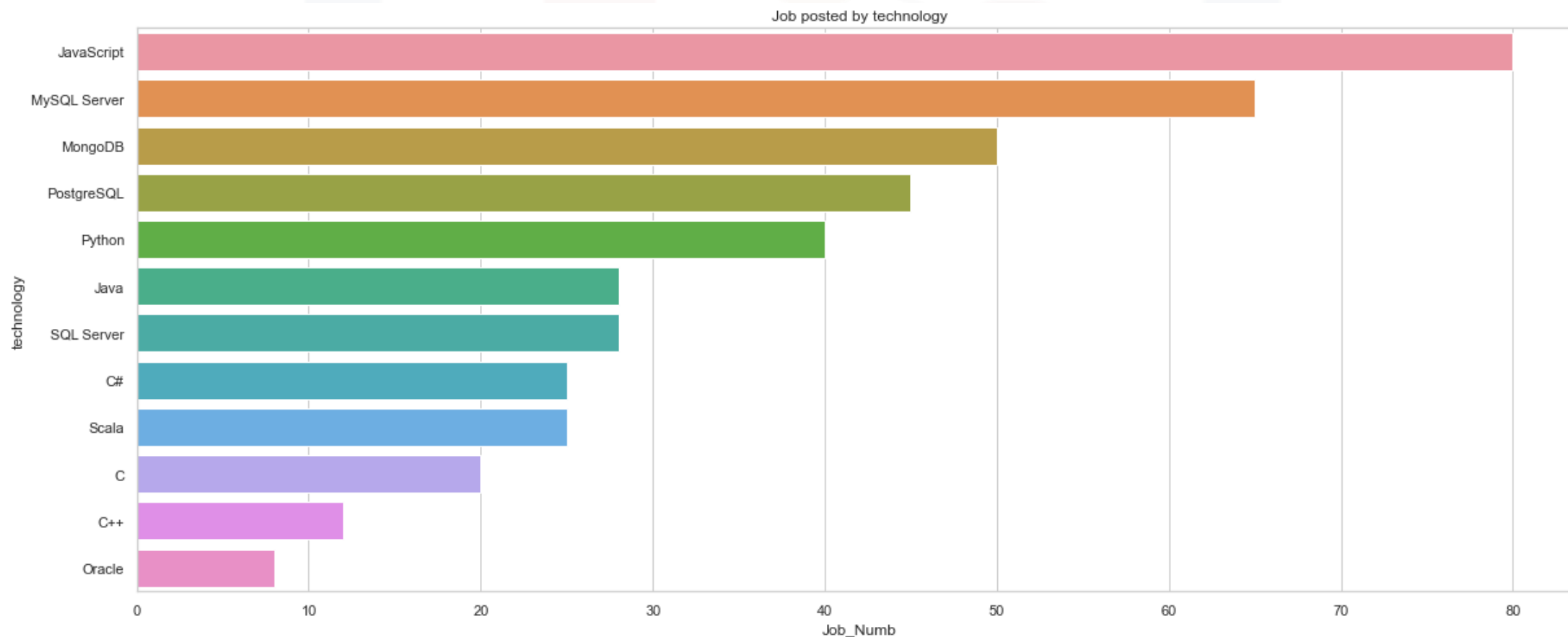


Respondent Count for Countries

Respondent (Cou...
1 3,058



GITHUB JOB POSTINGS



POPULAR LANGUAGES

