



Global Survey on technology use in business

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EXECUTIVE SUMMARY



Why?

This survey presents findings from a comprehensive technology survey conducted to understand trends, preferences, and usage patterns respondents. The survey aimed to gather insights into various aspects technology adoption, including programming Languages current usage and future desired technologies.

What?

The survey was conducted over a period of 6 months and collected responses from thousands of respondents across diverse global demographics. Data was gathered through online questionnaires and analysed using statistical techniques to derive meaningful insights.

Next Step?

The survey findings underscore the growing reliance on applications in various aspects of business operations. Addressing simplicity, affordability, and enhancing user education are key areas for businesses to focus on. Moreover, opportunities exist for innovation in emerging technologies to meet evolving consumer needs.

INTRODUCTION



in an era defined by digital transformation and technological advancement, the choice of programming language plays a pivotal role in shaping software development practices, project outcomes, and even career trajectories. Understanding the preferences, trends, and sentiments surrounding programming languages is crucial for developers, businesses.

Purpose of the Survey:

This report presents findings from a comprehensive survey conducted to explore various aspects of programming language usage, desirability, and perceptions within the developer community. The survey aimed to uncover insights into the popularity, adoption rates, satisfaction levels, and emerging trends associated with different programming languages.

METHODOLOGY



Scope and Methodology:

The survey was distributed online to a diverse sample of developers and professionals across different countries. Participants were asked to provide information about their programming background, the languages they use, their reasons for choosing specific languages, and their opinions on various language-related topics. The survey was conducted over 6 months and received thousands of responses, which were then analyzed to derive meaningful insights.

Key Objectives:

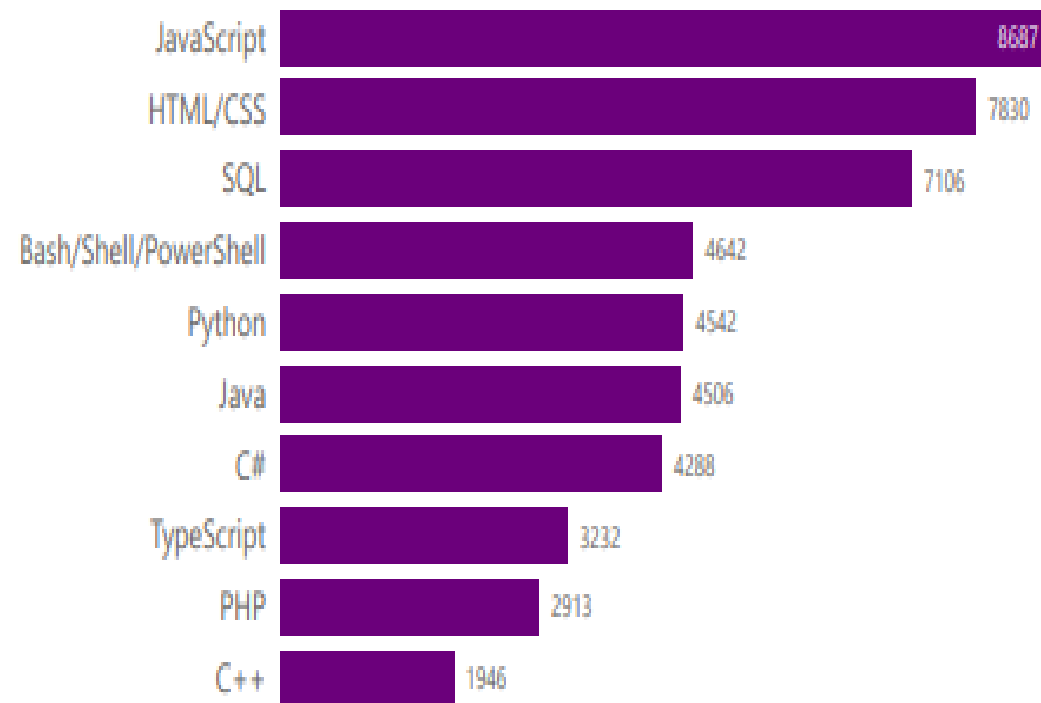
- Identify Popular Programming Languages
- Explore Language Preferences
- Assess Satisfaction Levels
- Examine Emerging Trends

RESULTS

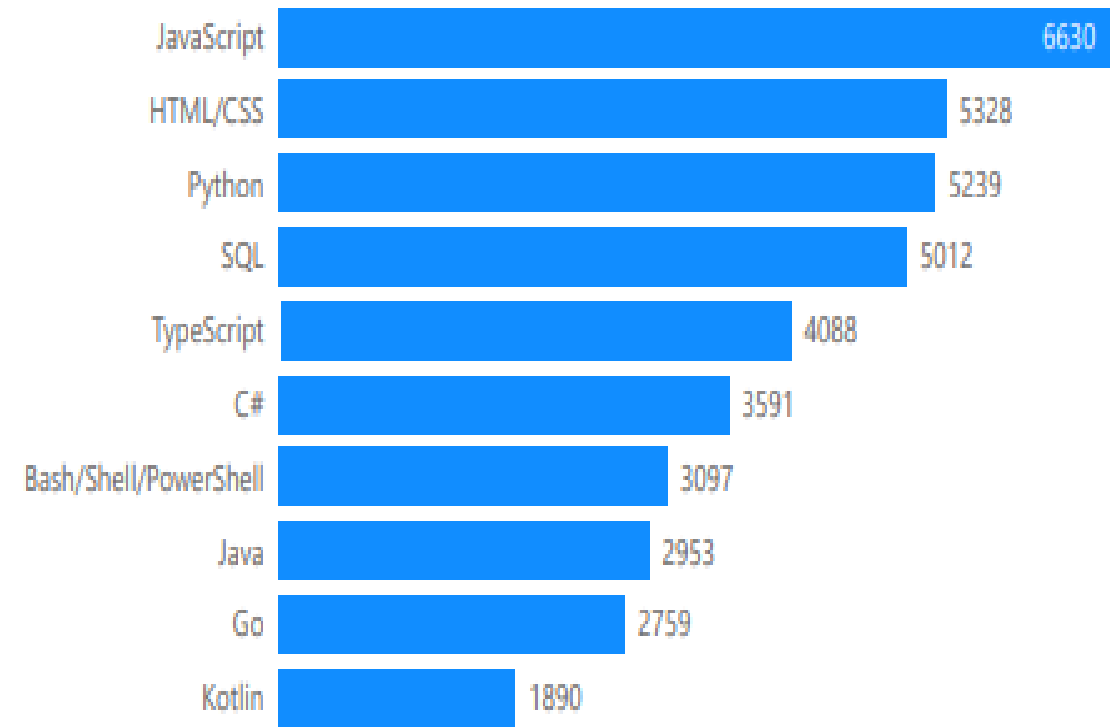
The results presented in this report inform of charts and graphs offer valuable insights into the dynamic landscape of programming languages and their impact on software development practices. By understanding the preferences, trends, and challenges faced by developers, stakeholders can make informed decisions to support the needs of the developer community and drive innovation in the field of software engineering.

PROGRAMMING LANGUAGE TRENDS

Top 10 Language Worked With



Top 10 Language Desire Next Year



Count of Respondent

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings:

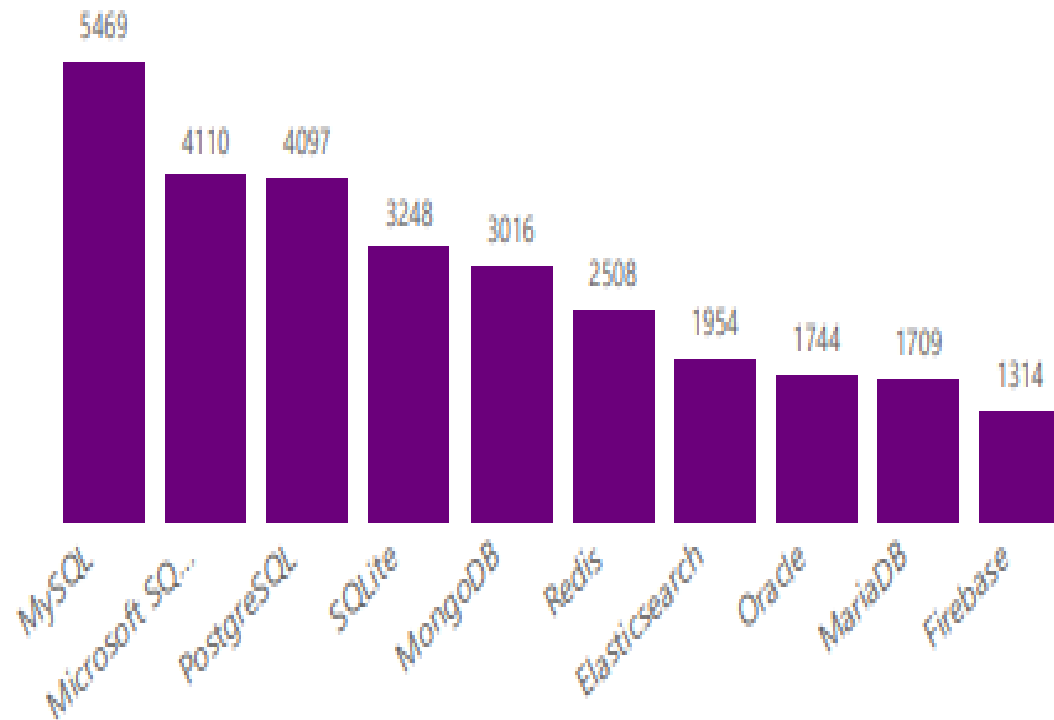
- Programming languages such as JavaScript, HTML and SQL emerged as the most frequently used language among respondents in the current year.
- Programming language Python emerged as one of the most desired languages among respondents in the next year.
- Programming language like C++ are not widely preferred particularly among developers.

Implications:

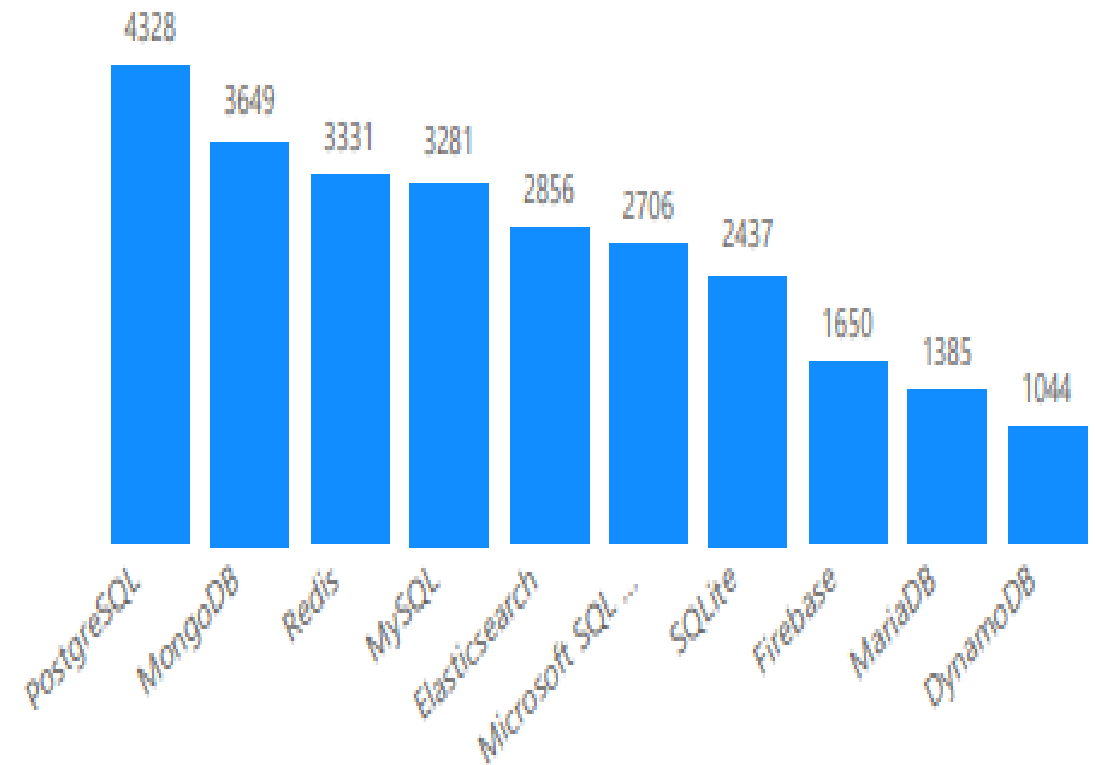
- opportunities exist for innovation in emerging programming languages to meet evolving business and consumer needs and preferences.

DATABASE TRENDS

Top 10 Database Worked With



Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings:

- Databases such as MySQL, Microsoft SQL emerged as the most prevalent databases among respondents.
- Most respondent desired to learn PostgreSQL and MongoDB database in the next year while few prefer DynamoDB.

Implications:

- Addressing security concerns, promoting affordability, and enhancing user education are key areas for stakeholders to focus on to motivate respondents to choose a database.

DASHBOARD



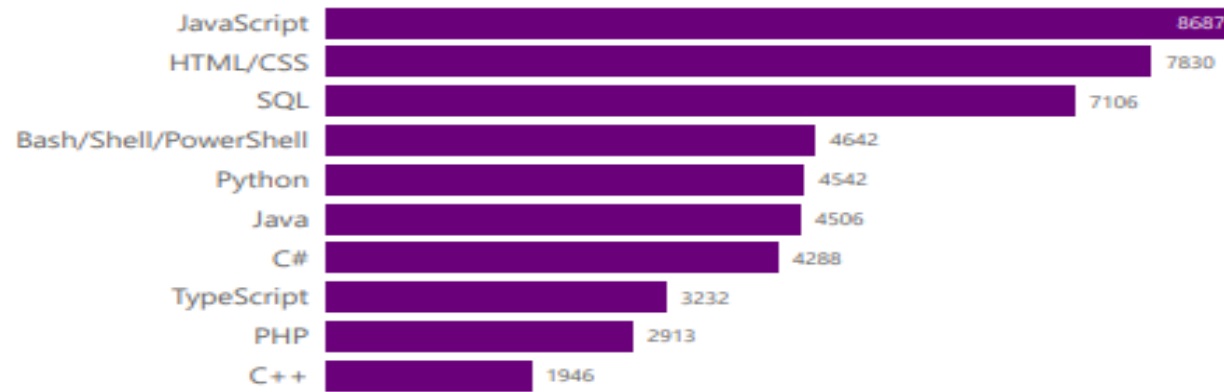
Click on the below link for more details on the dashboards



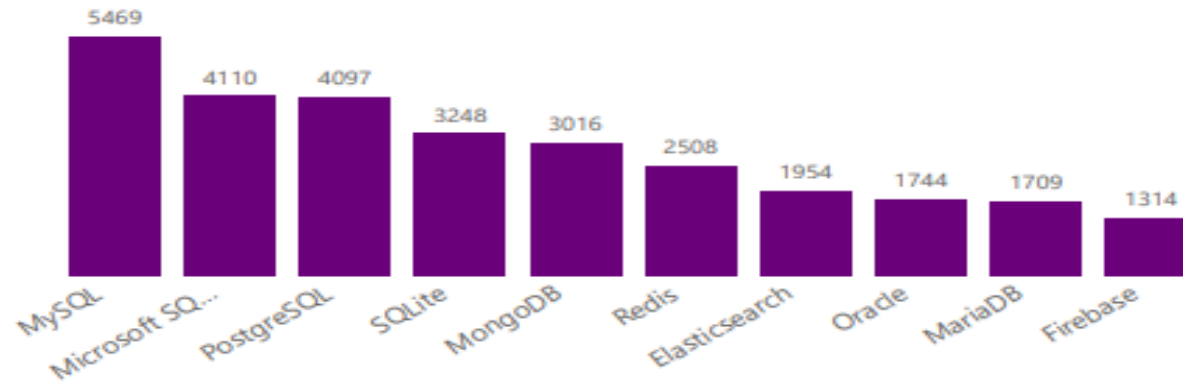
<https://github.com/Maina31/maina007/blob/main/Dashboard.%20maina.K.pdf>

DASHBOARD TAB 1

Top 10 Language Worked With



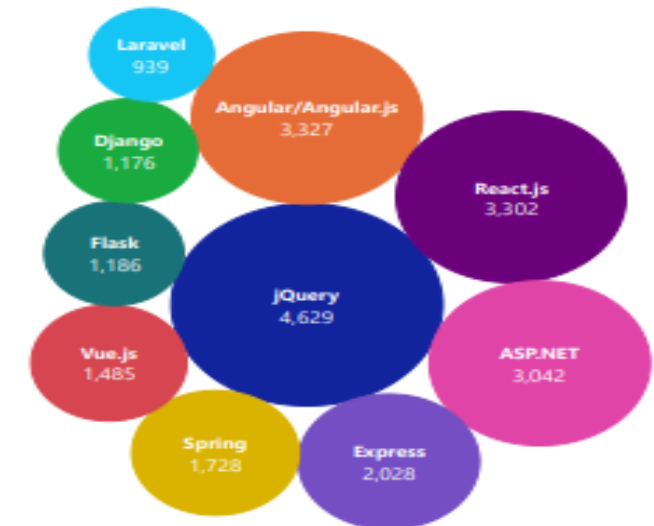
Top 10 Database Worked With



Platform Worked With

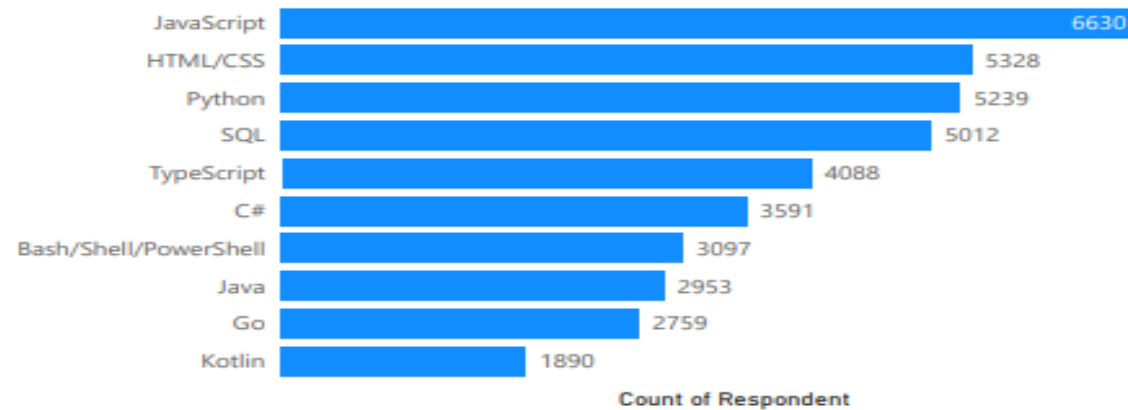


Platform Worked With.

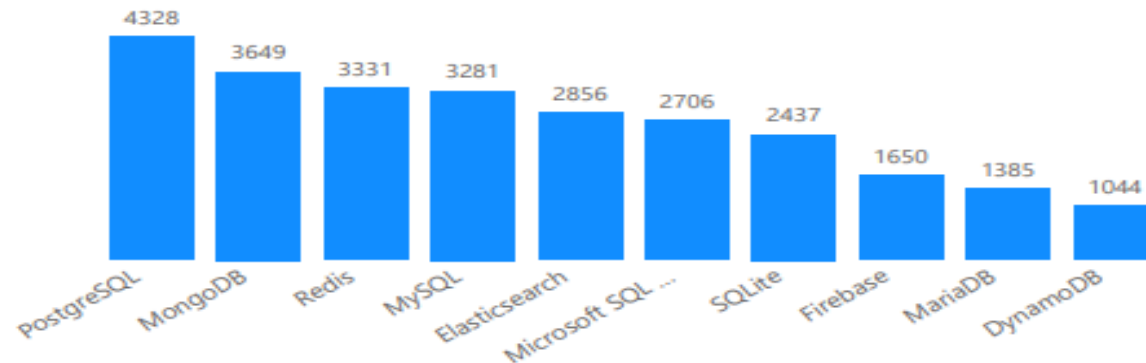


DASHBOARD TAB 2

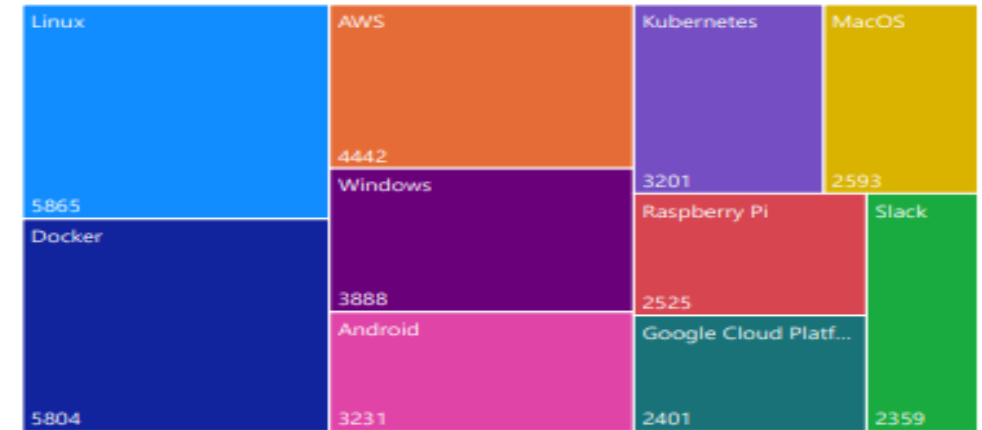
Top 10 Language Desire Next Year



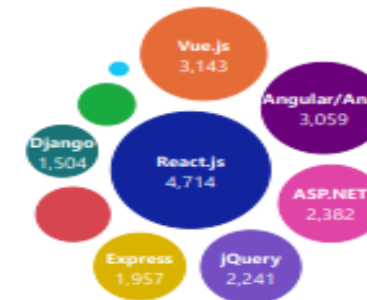
Top 10 Database Desire Next Year



Platform Desire Next Year.

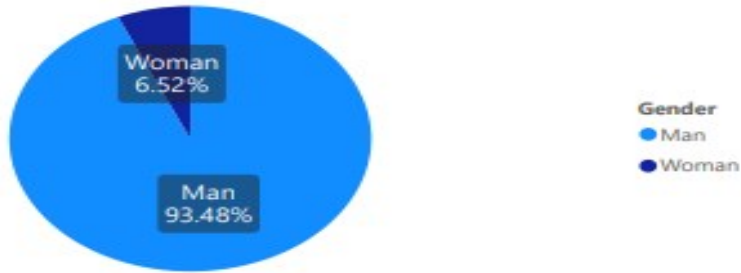


Top 10 WebFrame Desire Next Year

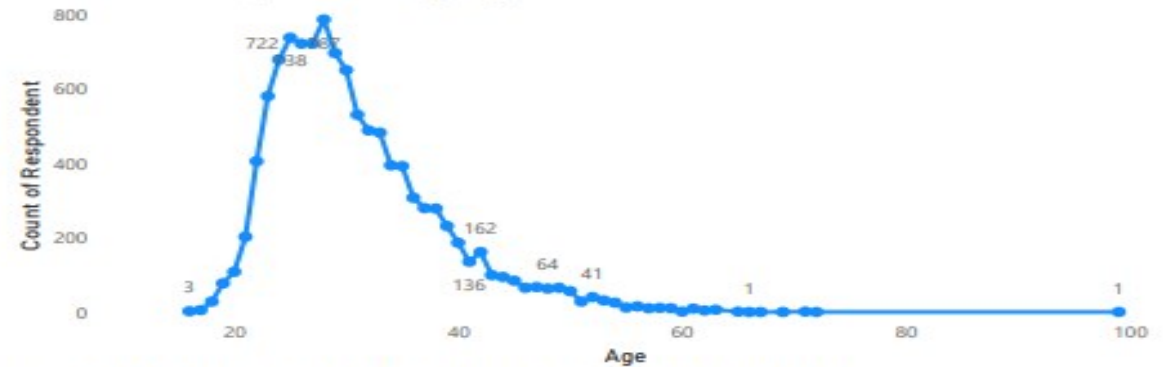


DASHBOARD TAB 3

Respondent classified by Gender



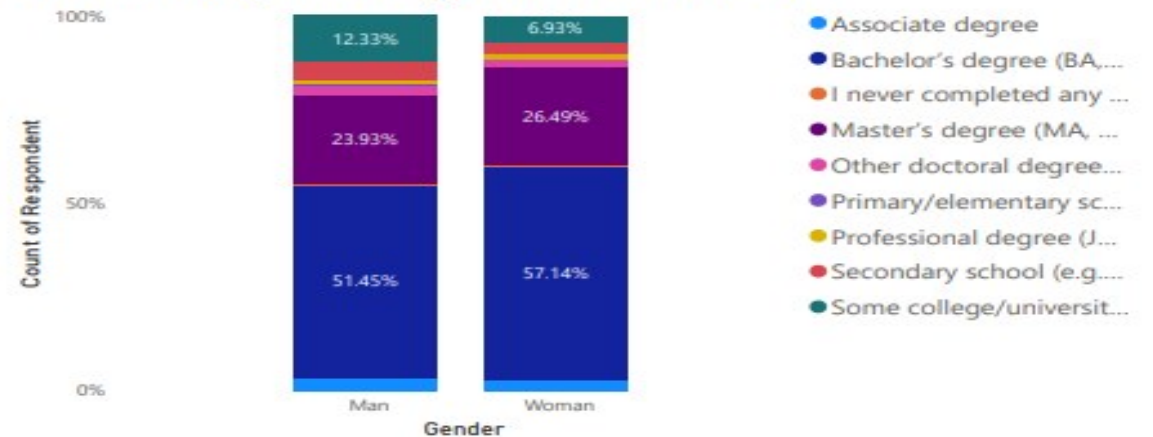
Count of Respondent by Age



Count of Respondent by Country



Count of Respondent by Gender and EdLevel



DISCUSSION



One of the key aspects revealed by the survey is the strong correlation between programming language preferences and database choices. Respondents often select programming languages based on their compatibility with specific database systems. For example, developers working with relational databases such as MySQL or PostgreSQL tend to favor languages like SQL for its native support and optimized syntax for database interactions. Similarly, developers leveraging NoSQL databases like MongoDB often opt for programming languages with flexible data structures and dynamic typing, such as Python or JavaScript.

OVERALL FINDINGS & IMPLICATIONS

Findings

1. Understanding the relationship between databases and programming languages is essential for developers to build robust and scalable applications.
2. certain programming languages are favored for their effectiveness in interacting with databases.
3. languages with strong database libraries and frameworks, such as Python with SQL Alchemy or Java are popular choices for building database-driven applications.

Implications

implications of databases and programming languages on the report extend across various aspects of software development;

- technology selection,
- skill development,
- integration considerations,
- Programming tool evaluation
- innovation and research

CONCLUSION



- By understanding the preferences, challenges, and emerging trends, developers can make informed decisions when selecting the appropriate programming language and database for their projects.
- As technology continues to evolve, adapting to new paradigms and embracing innovative solutions will be key to driving progress and innovation in the field of databases and programming languages.
- By leveraging the insights from the survey findings, stakeholders can make informed decisions to optimize their development processes, enhance project outcomes, and stay ahead in a rapidly evolving technological landscape.
- ensuring data integrity, security, and scalability remains paramount, requiring developers to carefully design and implement database schemas and access control mechanisms

APPENDIX

