



Developer Survey Emerging Skills & Techs

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30th, June, 2021

OUTLINE



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EXECUTIVE SUMMARY



- Presentation to convey the analysis report that investigate the emerging skill and technology in the IT industry.
- Aim of the analysis is to identify the emerging trend in the It industry, pertaining to-
 - Programing Language
 - Databases
 - Software Platform
 - Web frame
 - Highest salary in market for programing language
- This presentation communicate which may help industry professional and those who want to start carrier in the IT industry.

INTRODUCTION



- They adynamic trend of different tools / software's available for the professional in the IT industry.
- Outcome to assist the IT Professional and the recruiter to get a glance on the future expectation.
- Professional can up skill based on different emerging tools, programing language, software and many more techs.
- The study gives an insight on-
 - The tope programing language, databases, flatform and web framework in demand of today market.
 - We also got insight about the tope programing language, databases, flatform and web framework in future.

METHODOLOGY



- Data Source
 - GitHub job posting website
 - Stack Overflow website
 - IBM website
- Data Exploration and Wrangling
 - Find and remove duplicate values
 - Find and remove missing values
 - Find and fill missing values
- Data Normalizing
 - Identify and handling outlier
 - Correlation
- Data Visualization
 - Using python libraries (Matplotlib and Seaborn)
 - Using Cognos Dashboard Embedded

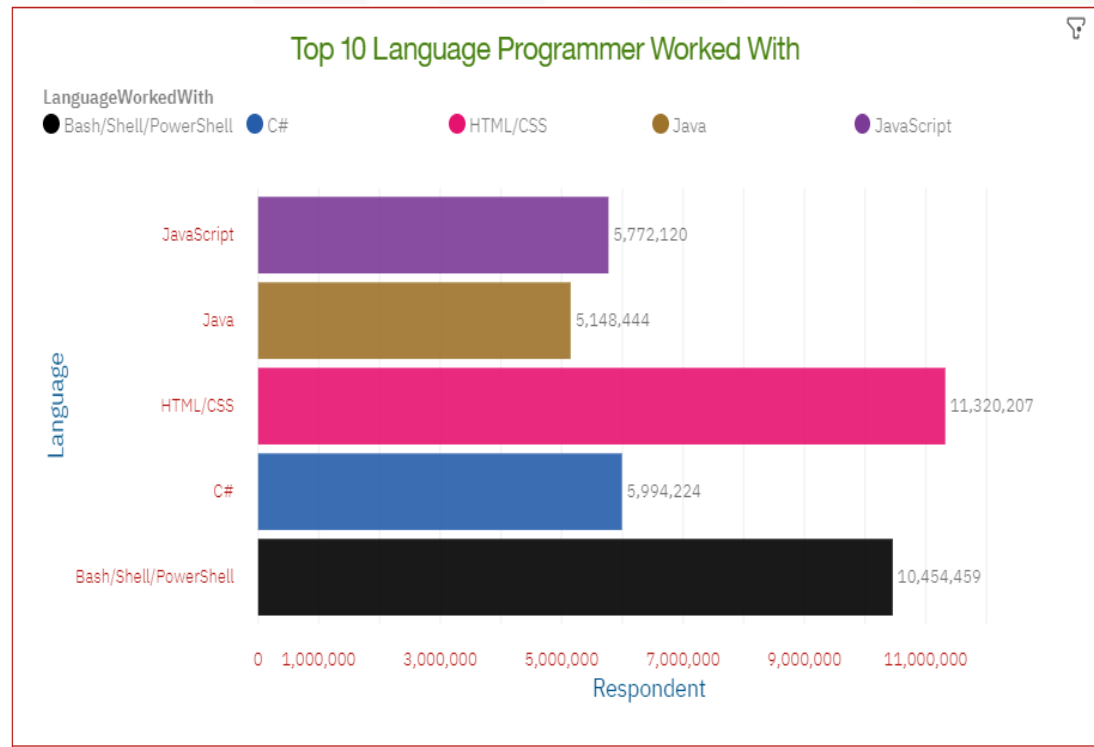
RESULTS

↑↓	Respondent	LanguageWorkedWith	LanguageD...eNextYear	DatabaseWorkedWith	DatabaseD...eNextYear	PlatformWorkedWith	PlatformD...eNextYear	WebFrame...rkedWith
	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓
	Null	Null	Null	Null	Null	Null	Null	Null
	4	C	C	MySQL	MySQL	Linux	Linux	Null
	4	C++	C#	SQLite	SQLite	Windows	Windows	Null
	4	C#	JavaScript	Null	Null	Null	Null	Null
	4	Python	SQL	Null	Null	Null	Null	Null
	4	SQL	Null	Null	Null	Null	Null	Null
	9	Bash/Shell/PowerShell	Bash/Shell/PowerShell	DynamoDB	PostgreSQL	AWS	AWS	Express
	9	C#	C	PostgreSQL	Redis	Docker	Docker	Ruby on Rails

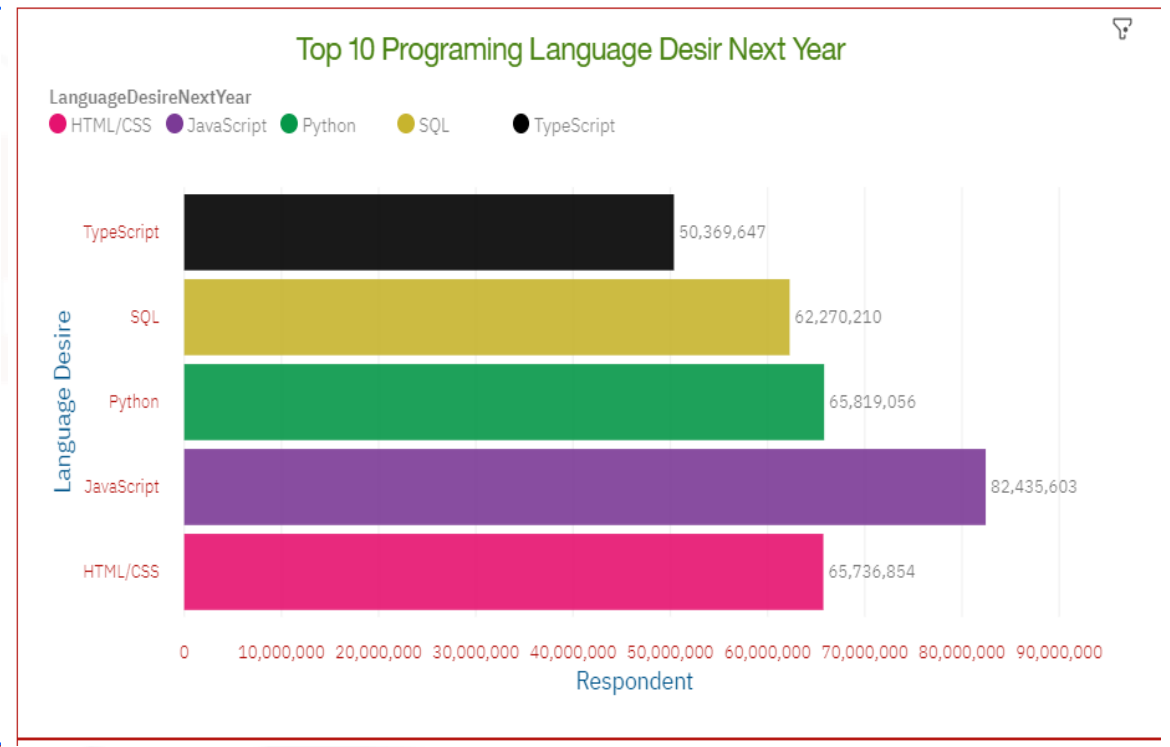
Result derived from the dataset shown above will be presented in the coming slides.

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

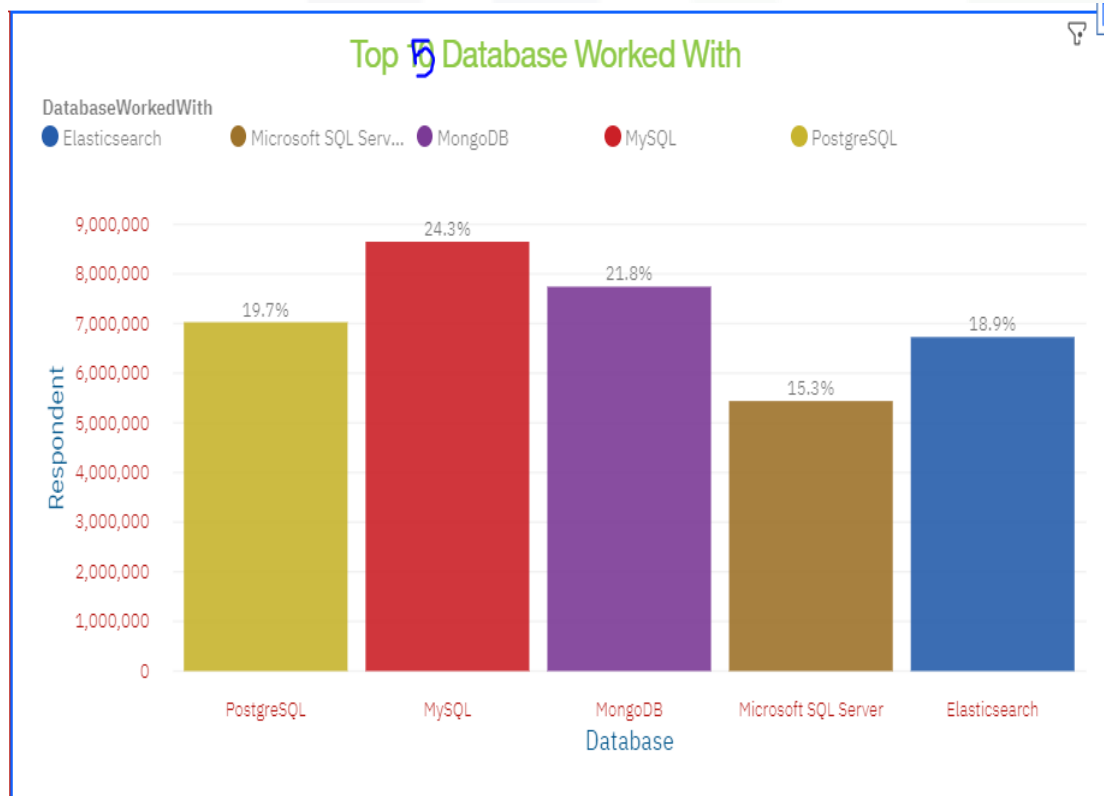
- HTML/CSS and bash/shell/PowerShell are most in demand programming language in today market
- increase in interest to learn the python, JavaScript amongst developers
- C# and Java are not priorities in coming years

Implications

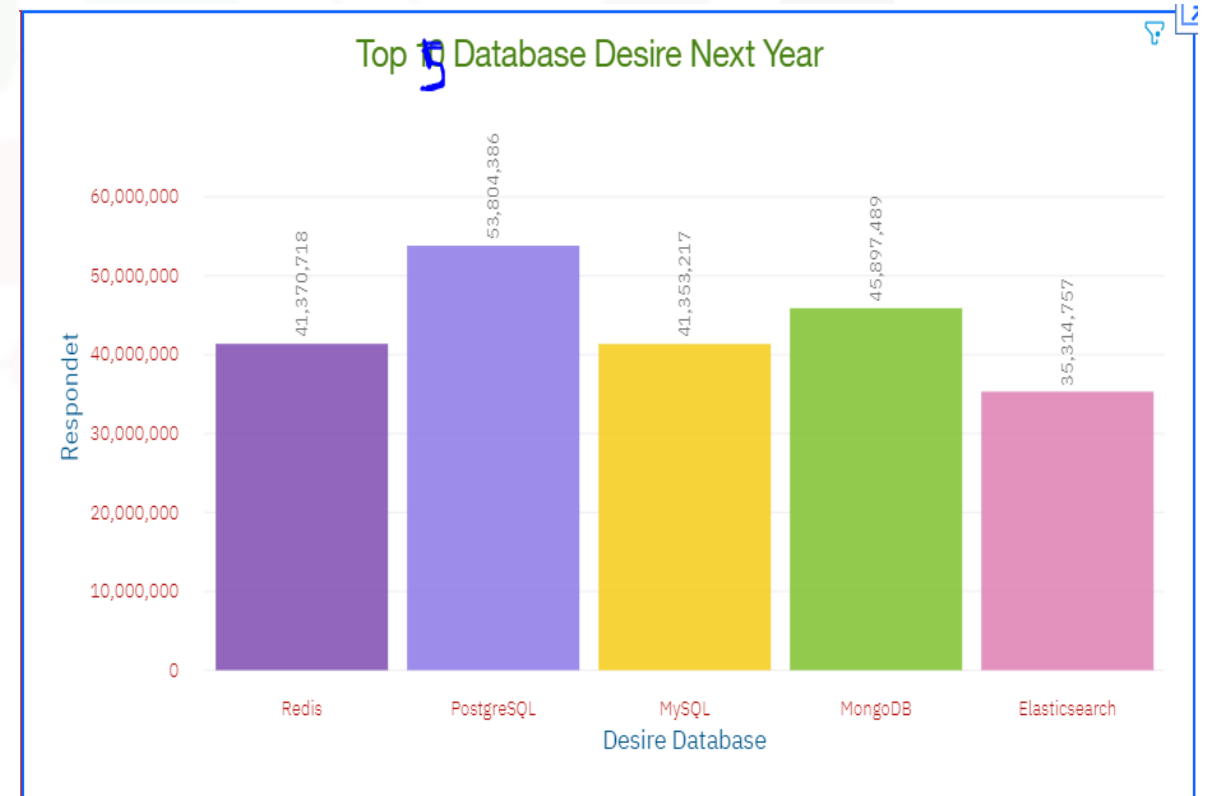
- JavaScript, Python, SQL should be give priority to the professional
- Training and skill development in python, SQL, and JavaScript can help an organization and professional to keep up with the market trend.
- Knowledge of the TypeScript should be added.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL and MongoDB are the most in demand databases.
- PostgreSQL is most desired database among other for developers.
- MongoDB is the most emerging database for the coming years.
- Microsoft SQL server should be not give priorities in the coming years.

Implications

- NoSQL database is most desire for the future.
- Open source database are more prefer by the companies
- Training and skill development in PostgreSQL and NoSQL database can help an organization and professional to keep up with the market trend.
- PostgreSQL is most desired in the future

DASHBOARD



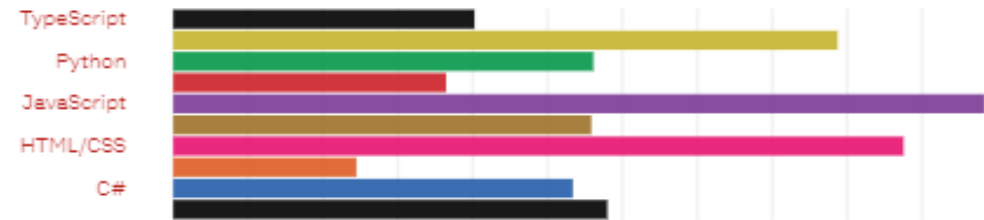
The link to access Dashboard created on the Cognos Analytics can be found [here](#)

Current Technology Usage

Top 10 Language Programmer Worked With

LanguageWorkedWith

● Bash/Shell/PowerShell ● C#



Top 10 Database Worked With

DatabaseWorkedWith

● Elasticsearch

● Firebase

● MariaDB

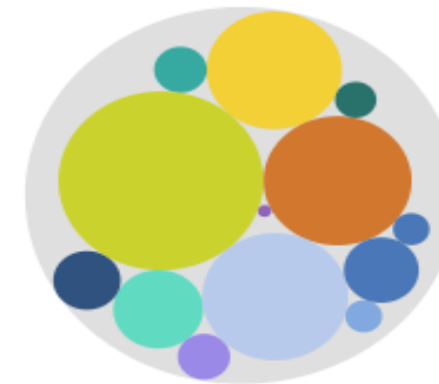
● Microsoft SQL Server



Platform Developers Worked With

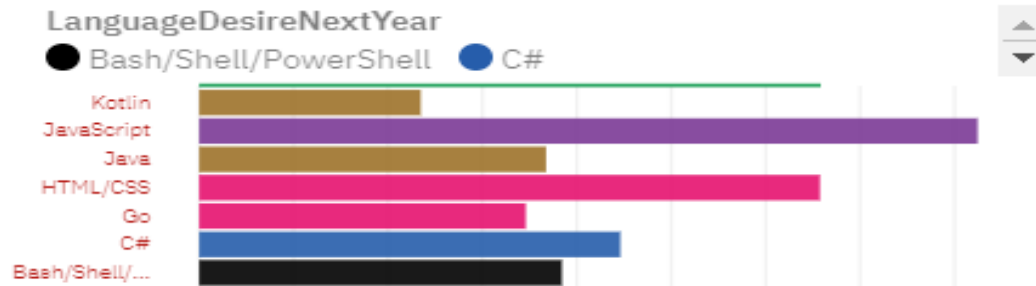


Top 10 Web Frameworks

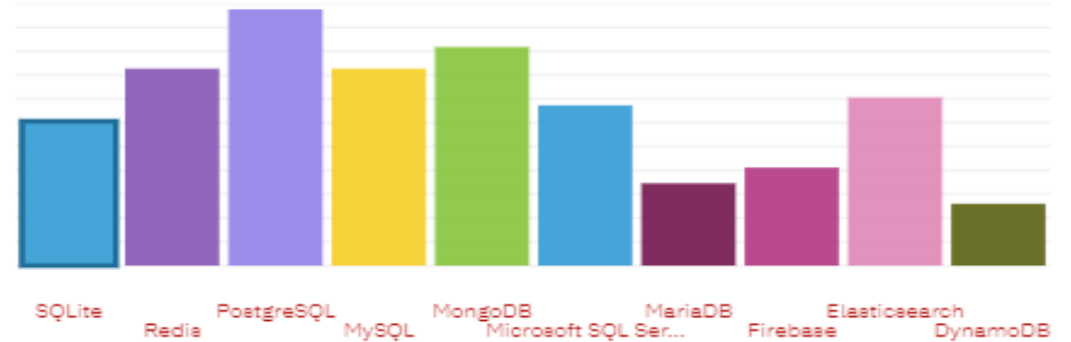


Future Technology Trend

Top 10 Programing Language Desir Next Year



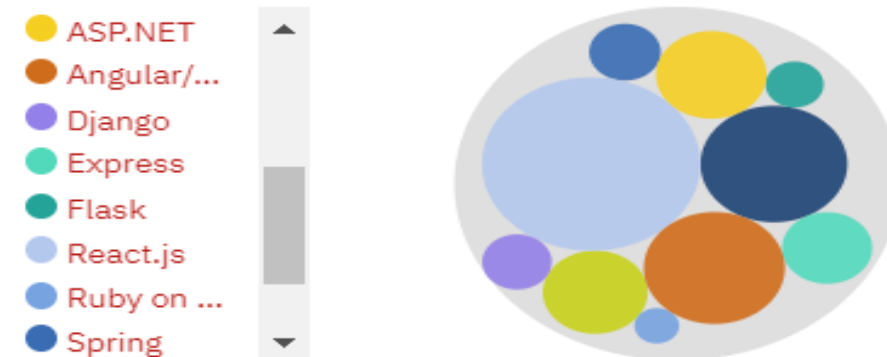
Top 10 Database Desire Next Year



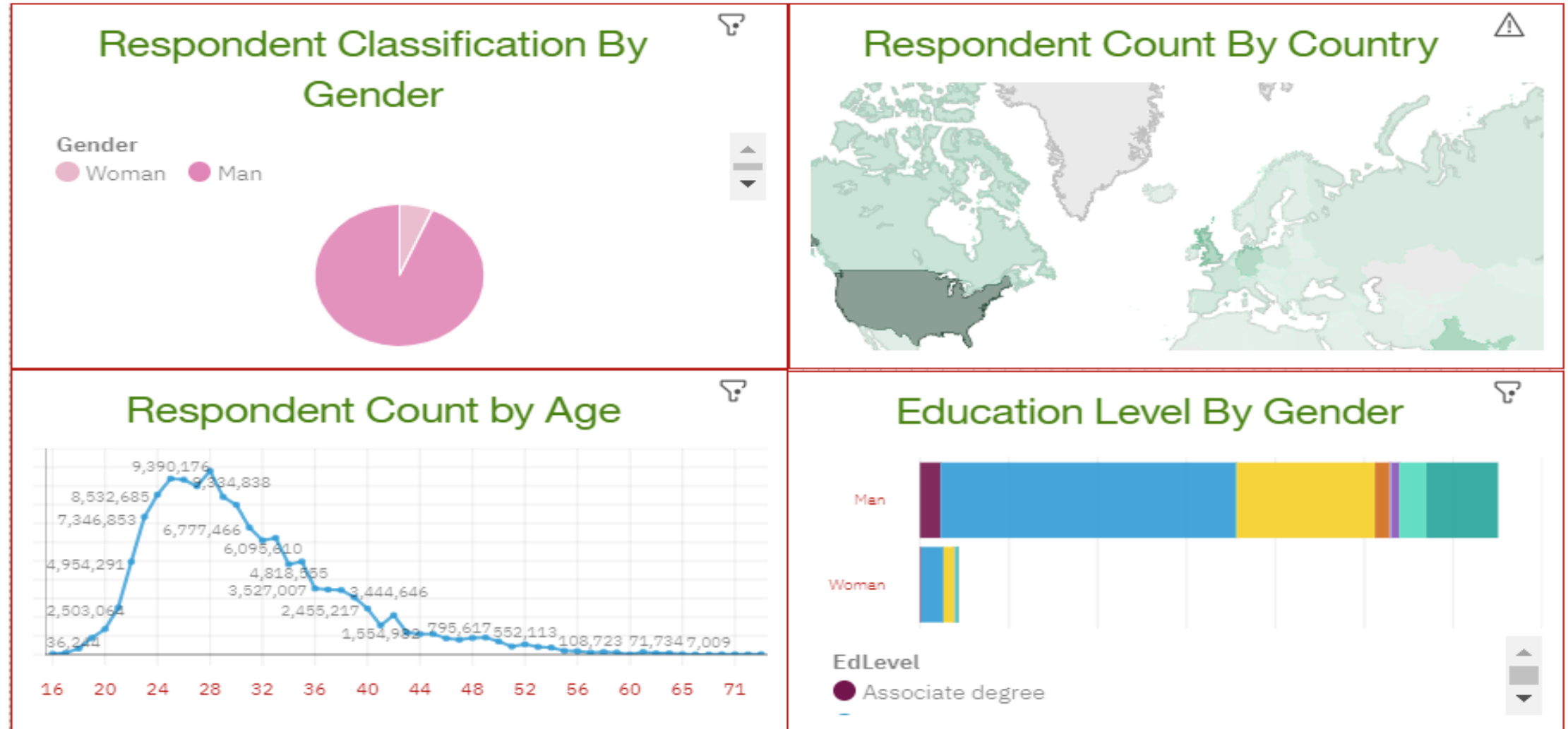
Desire Platform For The Next Year



Top 10 Web Frame Desire Next Year



Demographics Usage of Technology



DISCUSSION



- Analysis shows Python as most sought after language in the future, same goes for PostgreSQL and NoSQL which are the emerging Databases.
- Trend show that Linux, Docker and AWS in growth in the future.
- Demographics shows need there is more need for the women in the IT industry.
- Most respondent are in 20's or early 30's and with full fledged degrees which calls for diversity and to inculcate inclusiveness.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Demographic diversification
- Increase in number of professional's interest to learn, Python, PostgreSQL, NoSQL database.
- Emerging Technologies
- Emerging Cloud Technologies.

Implications

- Need of spreading IT industry to other Countries of World and women should be motivated in IT industry.
- Training professional in Python, PostgreSQL, NoSQL database and cloud can help the company keep up with market trends.
- Companies need to adapt trend and upskill professional and keep them motivative and boost performance.
- Gain Knowledge on Cloud application.

CONCLUSION



- IT industry and professional need to be upskill as per emerging trends and market need.
- There is a lots of opportunities for Women in the IT industry.
- Inclusiveness of Professionals from all age group and different educational background.
- Technological wide-spread could generate more job opportunities around the globe.

APPENDIX



- Some interesting findings from the GitHub job posting and popular languages data worth sharing in the coming slides.

GITHUB JOB POSTINGS

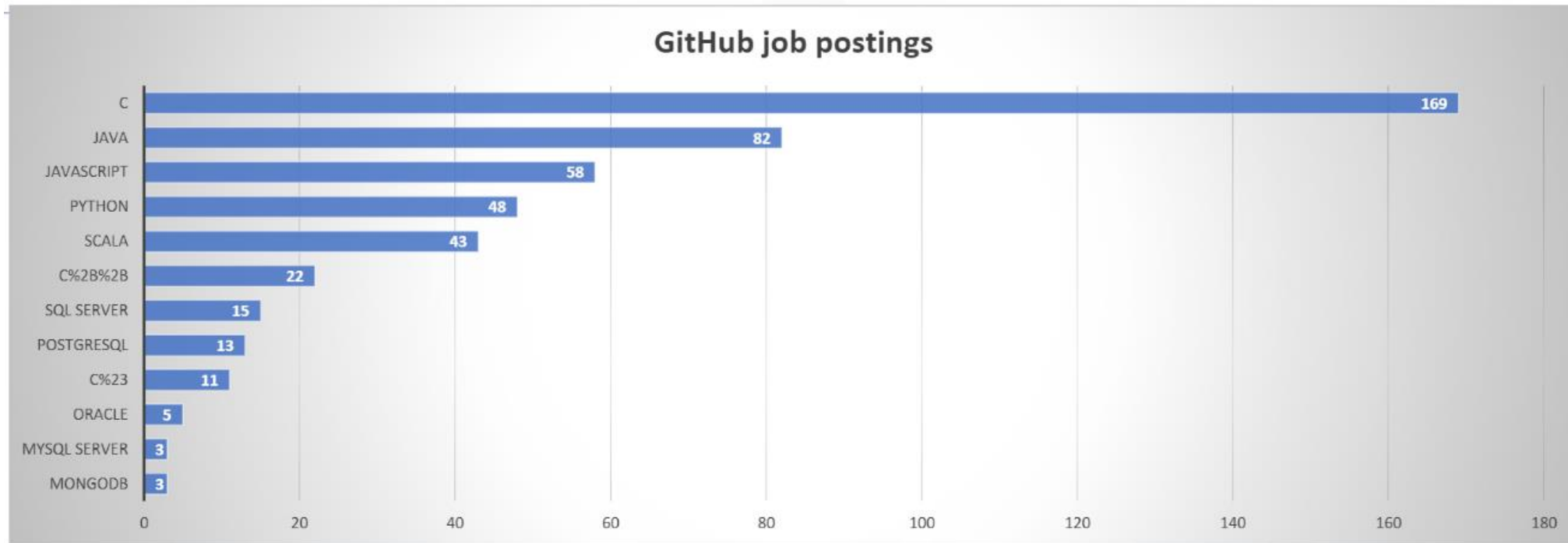
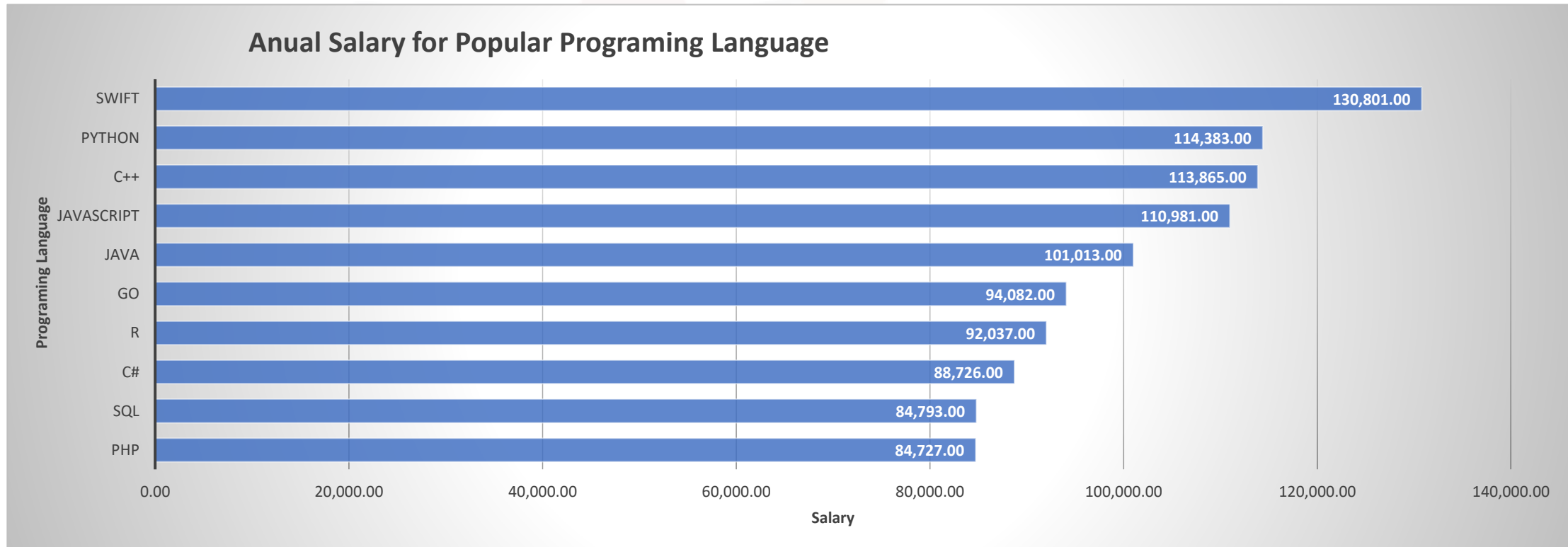


Chart shows that number of job postings on GitHub for C and JAVA languages are the highest but these language are not even in top 5 of 10 languages worked or desired as per the conducted analysis.

POPULAR LANGUAGES



The popular languages data show that the professional who work with SWIFT language are amongst highest paid in the industry followed by professional involved in Python and C++ programming language. Interesting is that SWIFT language was not among the top 10 languages worked or desired as per the conducted analysis.

Thank you !