



Technology Trend & Analysis Presentation

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12-Aug-2024

OUTLINE



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

EXECUTIVE SUMMARY



- Trends in programming languages and databases
- Demographics survey
- Technological gap in countries
- Gender gap in jobs

INTRODUCTION



About:

Analyzing the trends in software development

Purpose:

- Identify skill requirements for future
- What are the top programming languages in demand ?
- What are the top database skills in demand ?
- What are the popular IDEs

Audience:


Human Resource and IT Head Department

METHODOLOGY



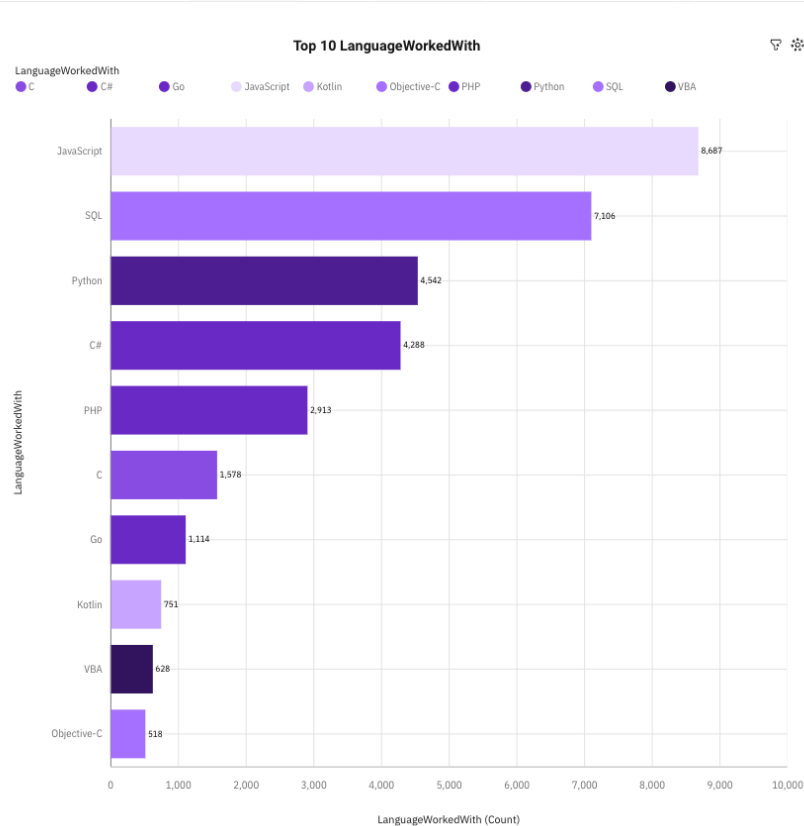
- Data Collection Sources
 - Stack Overflow Developers 2019 Survey
 - GitHub Job Postings
 - Programming Languages Annual Salary
- Data Exploration
- Data Cleaning
- Data Visualization
- Presentation

RESULTS

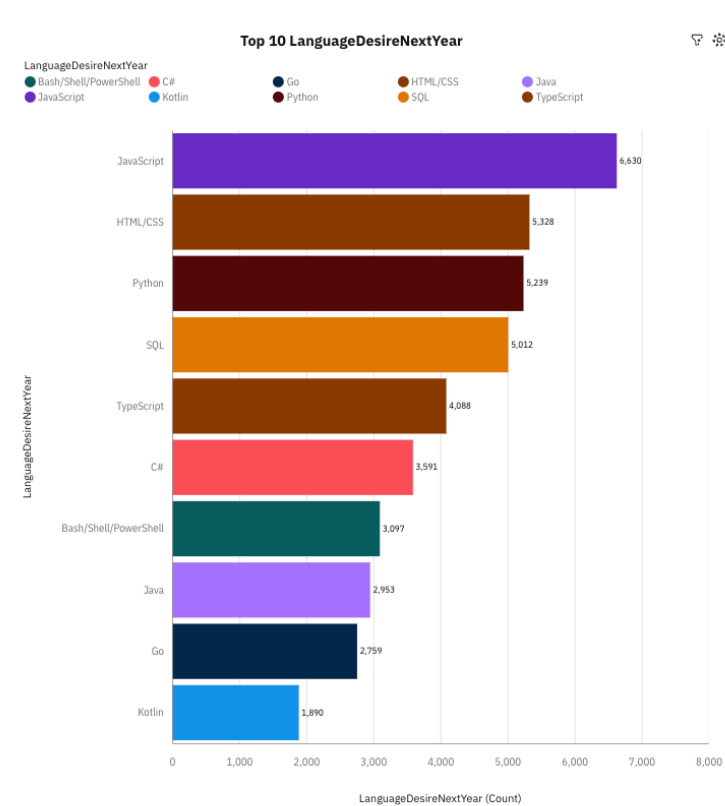
	Row Id	Respondent	LanguageWorkedWith	LanguageDe...eNextYear	DatabaseWorkedWith	DatabaseDe...eNextYear
	1	4	C	C	MySQL	MySQL
	2	4	C++	C#	SQLite	SQLite
	3	4	C#	JavaScript	Null	Null
	4	4	Python	SQL	Null	Null
	5	4	SQL	Null	Null	Null
	6	9	Bash/Shell/PowerShell	Bash/Shell/PowerShell	DynamoDB	PostgreSQL
	7	9	C#	C	PostgreSQL	Redis
	8	9	HTML/CSS	HTML/CSS	SQLite	SQLite
	9	9	JavaScript	JavaScript	Null	Null
	10	9	Python	Ruby	Null	Null
	11	9	Ruby	Rust	Null	Null
	12	9	Rust	SQL	Null	Null
	13	9	SQL	TypeScript	Null	Null
	14	9	TypeScript	WebAssembly	Null	Null
	15	9	WebAssembly	Other(s):	Null	Null
	16	9	Other(s):	Null	Null	Null
	17	13	Bash/Shell/PowerShell	Bash/Shell/PowerShell	Couchbase	Firebase
	18	13	HTML/CSS	HTML/CSS	DynamoDB	MySQL
	19	13	JavaScript	JavaScript	Firebase	Redis
	20	13	PHP	Rust	MySQL	Null

PROGRAMMING LANGUAGE TRENDS

- Top 10 Language Worked with



- Top 10 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

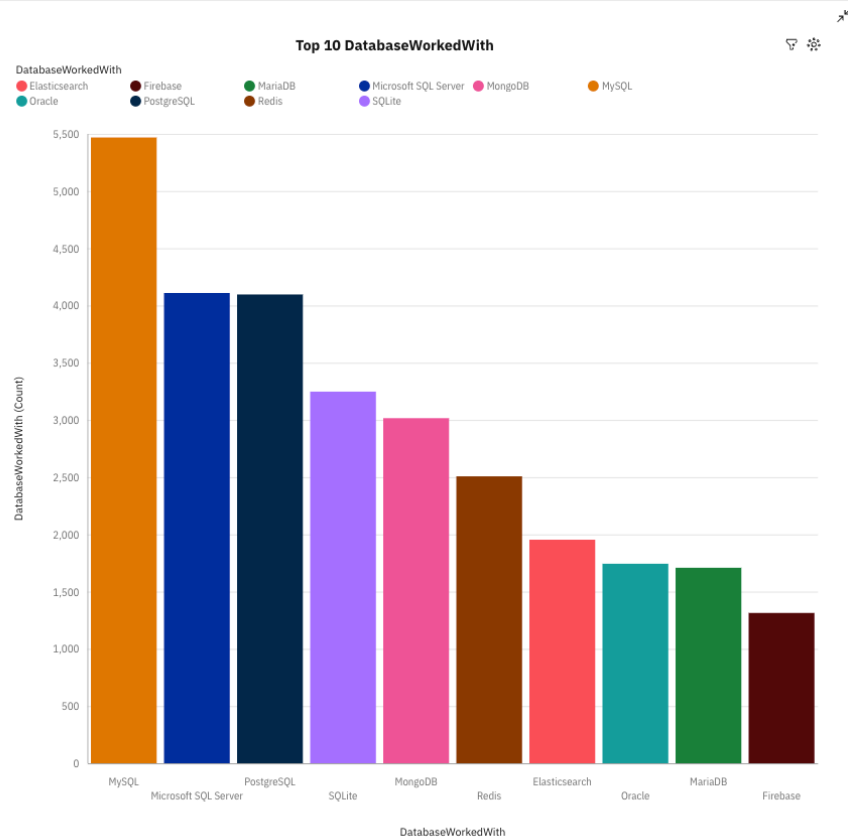
- JavaScript, HTML/CSS & Python are top 3 this year
- JavaScript, HTML/CSS & Python will continue to be a top choice in the year ahead

Implications

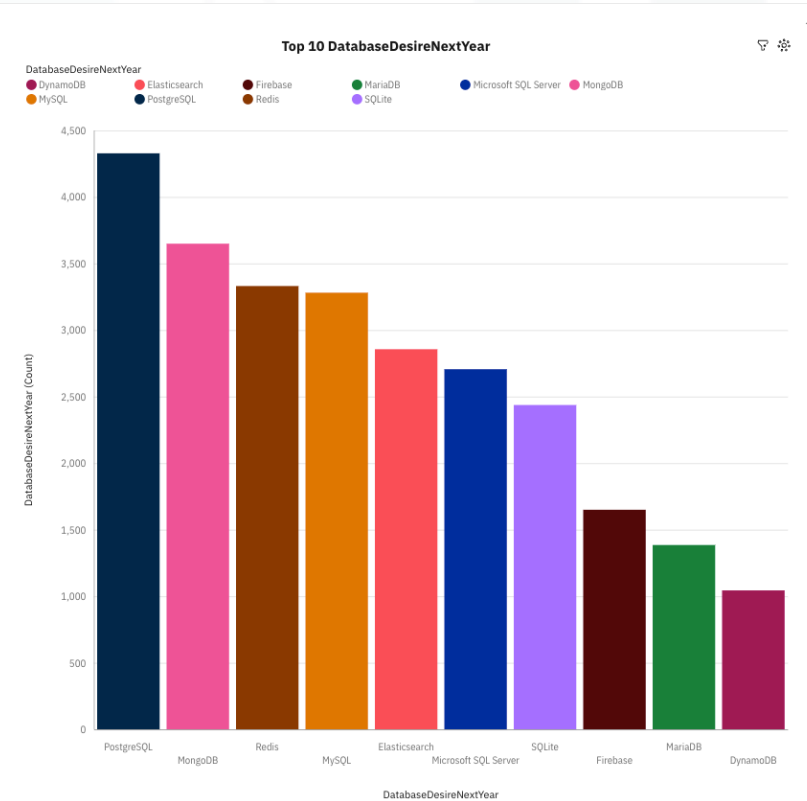
- Web development are still in high demand
- With AI and ML in rising demand, Python is best choice

DATABASE TRENDS

- Top 10 Data Base Worked with



- Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL most popular this year
- MongoDB and Redis are upcoming favorites
- Elasticsearch Will be more popular next year

Implications

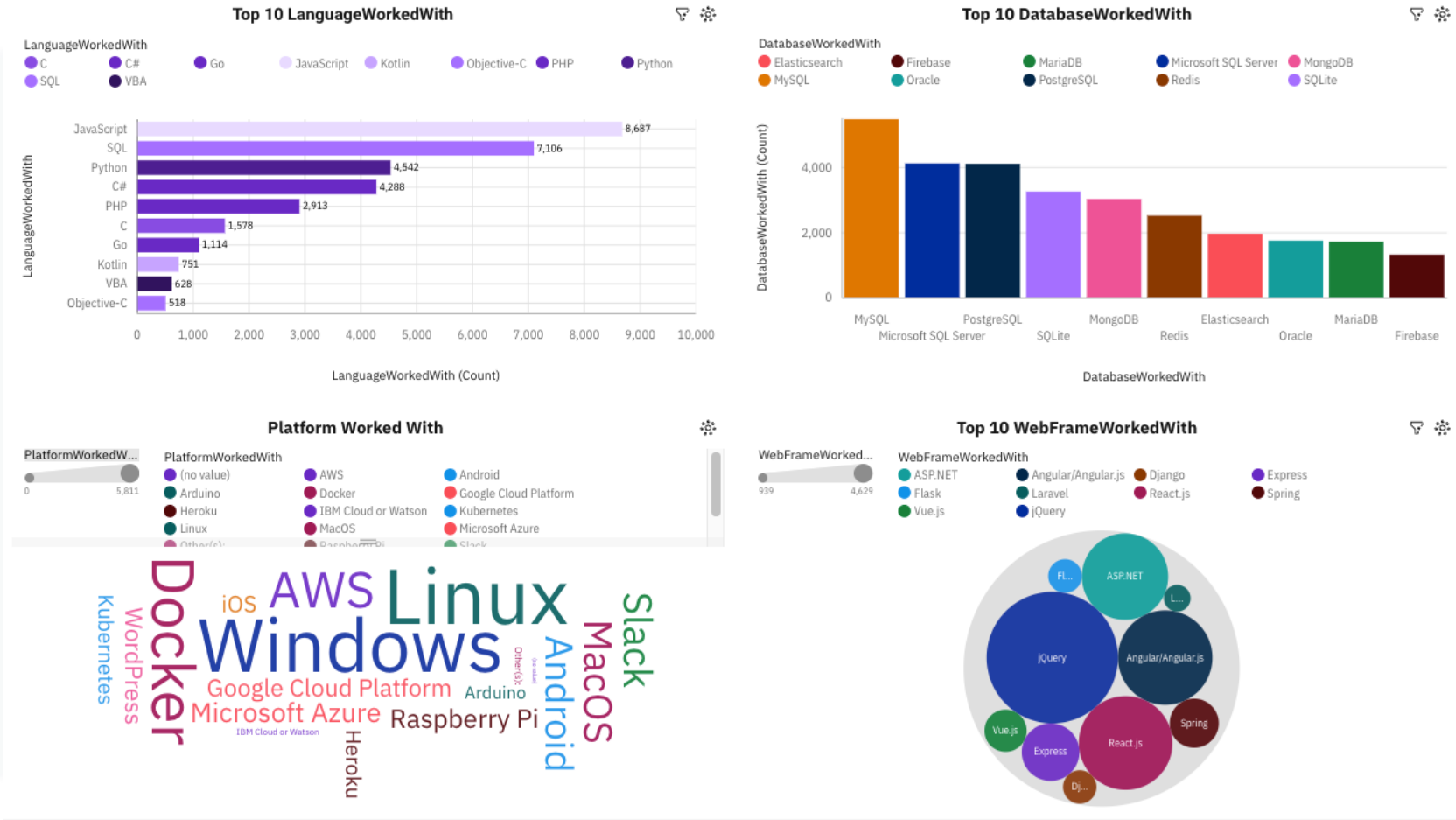
- Open source database are still preferable in companies
- NoSQL databases will make an impact for storing non relational data
- Redis supports abstract data types

DASHBOARD

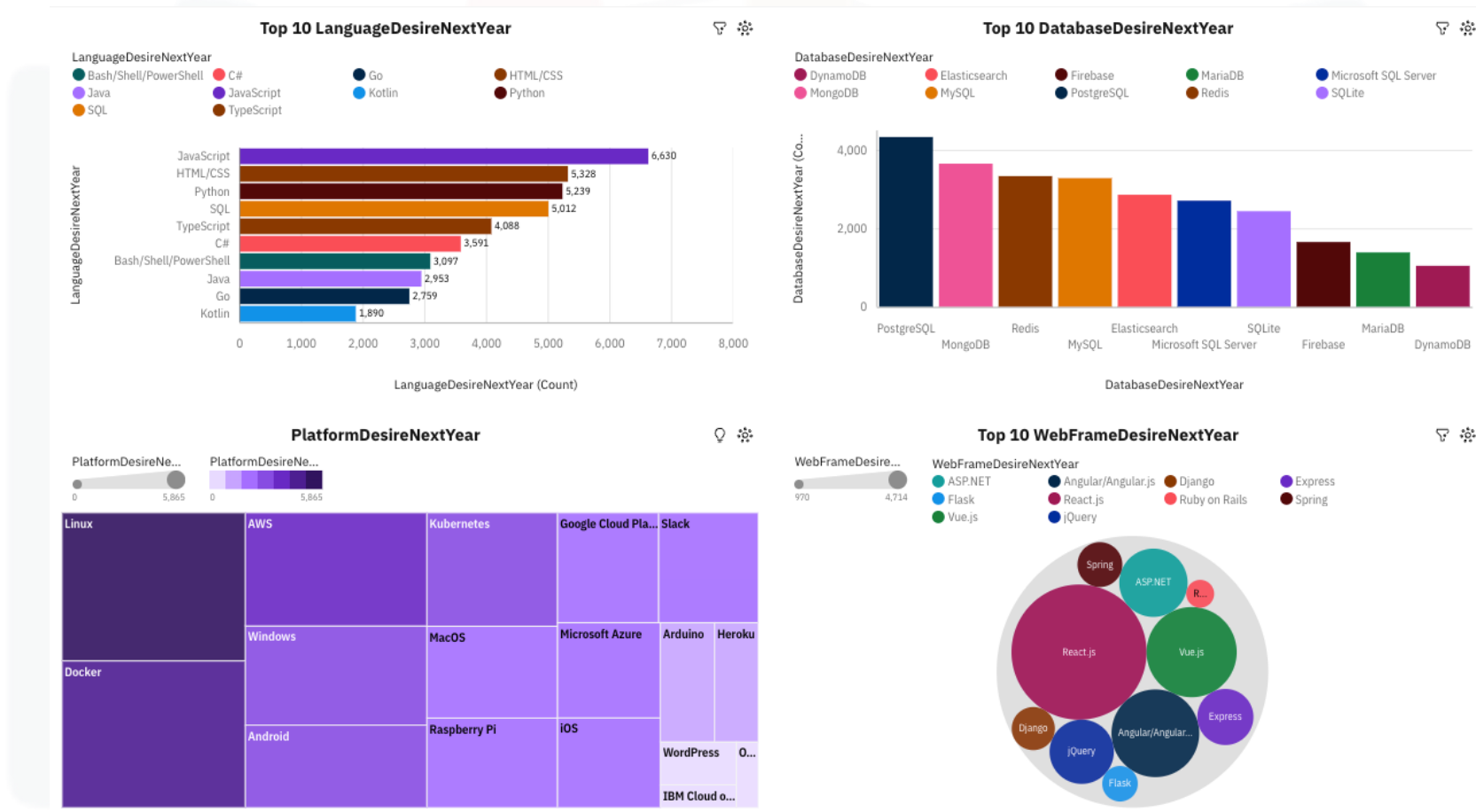


https://github.com/muhmdimrn/Peer-Graded-Assignment-Part-A---Building-A-Dashboard-With-IBM-Cognos-Analytic/blob/main/Peer-graded%20Assignment_%20Peer-Graded%20Assignment_%20Dashboards.pdf

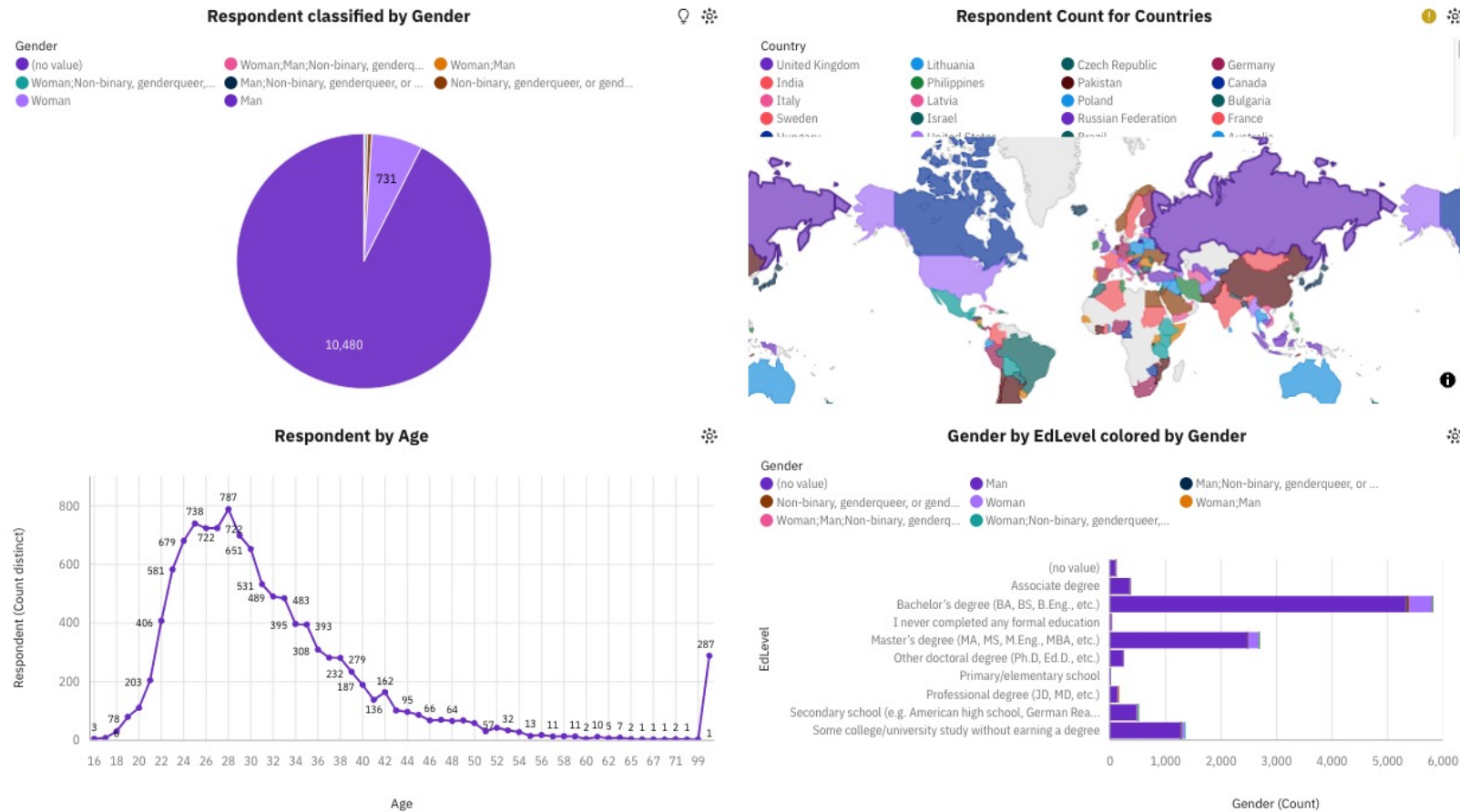
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- Technology Trends now and future
- Training and Reskilling workers
- Females participating 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

Implications

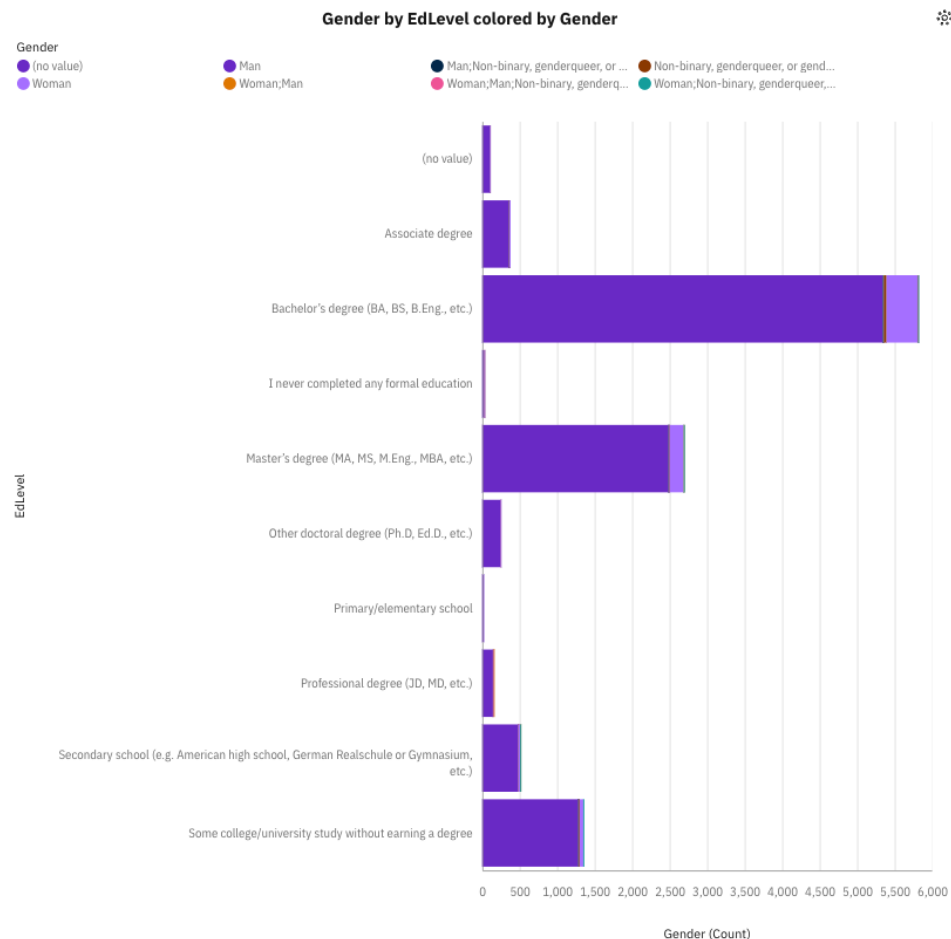
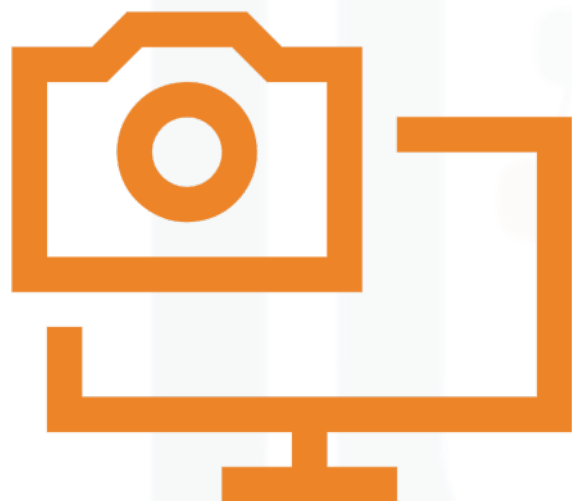
- Companies need to be Flexible and adjust to rapid changes
- Need to spread technology out to lagging countries
- Impact of job Hiring's

CONCLUSION

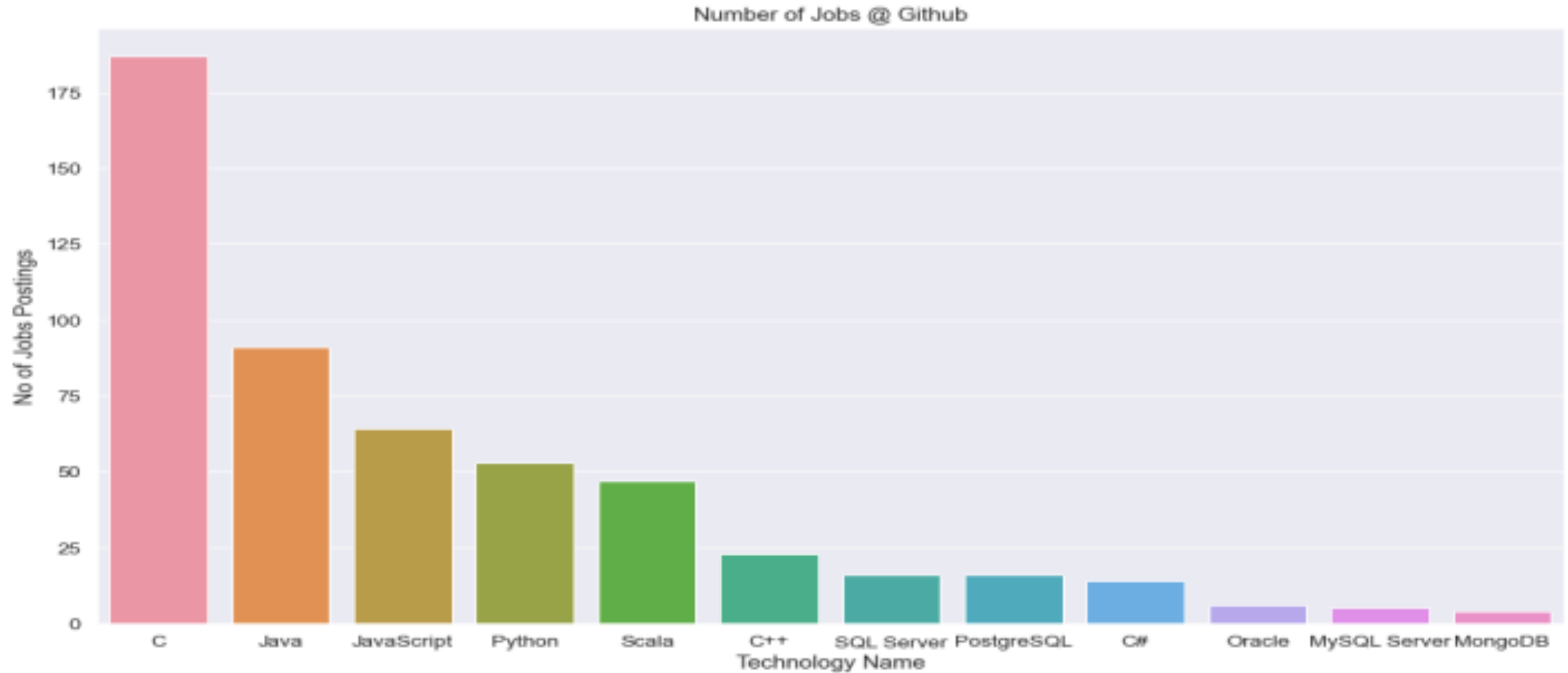


- Technology trends for current and next year
- Programming Languages, Database and Platform overview
- Demographics overview
- In future, incorporate ML(Machine Learning) to predict trends and salaries

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

