

# Technology Trends & Analysis Presentation

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1st December 2024

# OUTLINE



- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization Charts
  - Dashboard
- 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

## **METHODOLOGY**



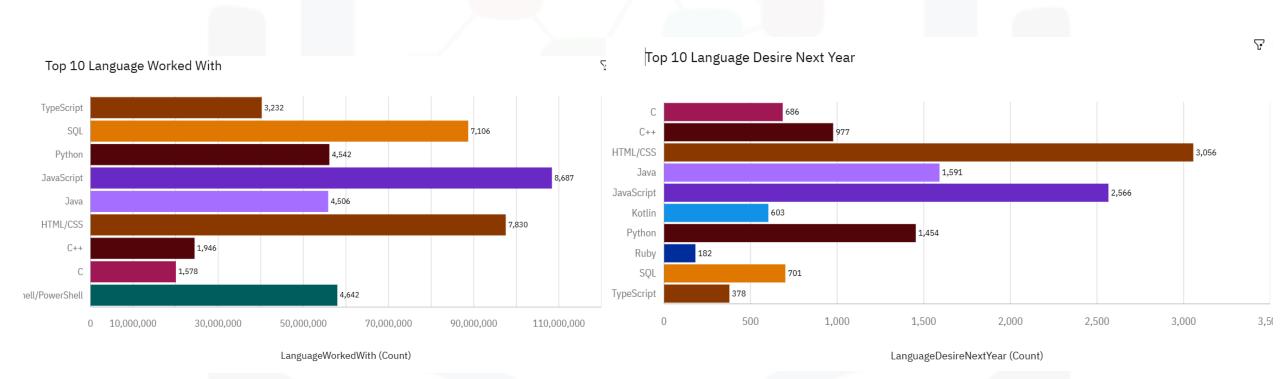
- Data Collection Sources Stack Overflow Developer 2019 Survey GitHub Job Postings **Programming Languages Annual Salary**
- **Data Exploration**
- Data Cleaning
- **Data Visualization**
- Presentation

# **RESULTS**

	Respondent	LanguageWorkedWith	LanguageDesireNextYear	DatabaseWorkedWith	DatabaseDesireNextYear
1.	25142	R			
2.	25142	Python			
3.	25142	C	С		
4.	25142	Go	Python		
5.	25142	C++	C++		
6.	25142	HTML/CSS	R		
7.	25142	PHP			
8.	25142	Bash/Shell/PowerShell	Bash/Shell/PowerShell	PostgreSQL	PostgreSQL
9.	25141	C#	F#		Microsoft SQL Server
10.	25141	JavaScript			
11.	25141	TypeScript			
12.	25141	HTML/CSS			Redis
13.	25141	Java			
14.	25141	Python			
15.	25141	SQL			

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## PROGRAMMING LANGUAGE TRENDS



#### PROGRAMMING LANGUAGE TRENDS - FINDINGS & **IMPLICATIONS**

#### **Findings**

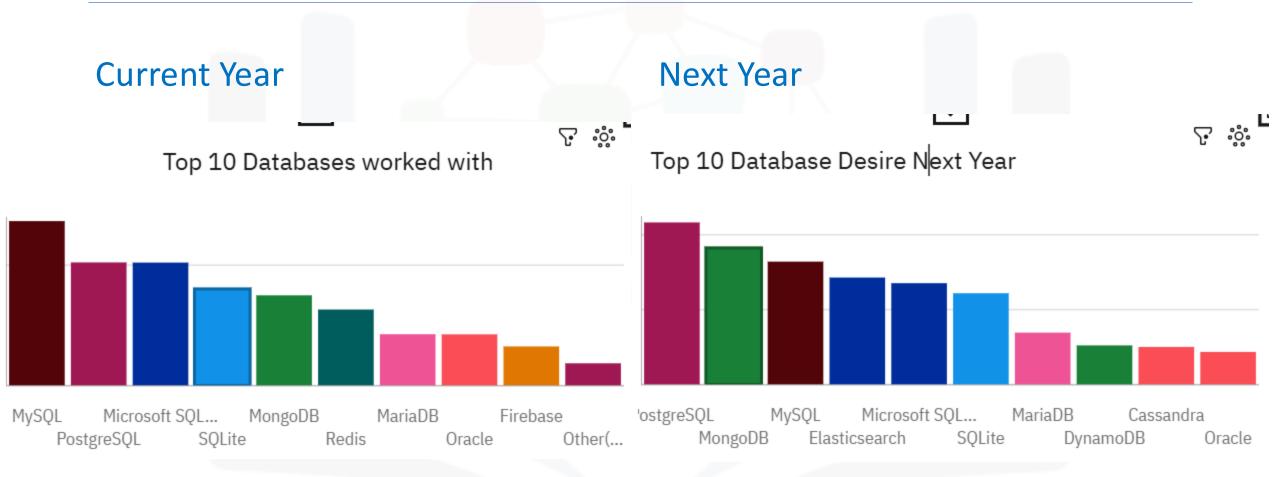
- JavaScript, HTML/CSS, SQL are top 3 this year
- Python and Typescript becoming popular next year
- PowerShell edged out in next year

#### **Implications**

- Web development are still in high demand
- Big Data technology in companies still requires SQL
- With AI and ML in rising demand, Python is best choice



## DATABASE TRENDS



# DATABASE TRENDS - FINDINGS & **IMPLICATIONS**

#### **Findings**

- MySQL most popular
- Behind is Microsoft SQL
- MongoDB and Redis are upcoming favorites
- New kid on the block: Elasticsearch

#### **Implications**

- Open source databases are still preferable in companies
- NoSQL databases will make an impact for storing non relational data
- Redis supports abstract data types
- Pre tuned search to website, app, or ecommerce store



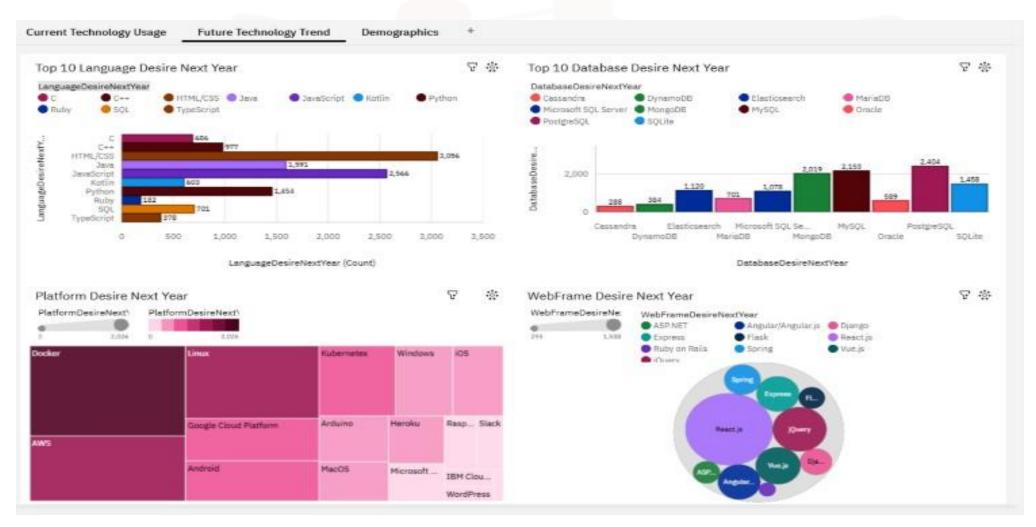
# **DASHBOARD**



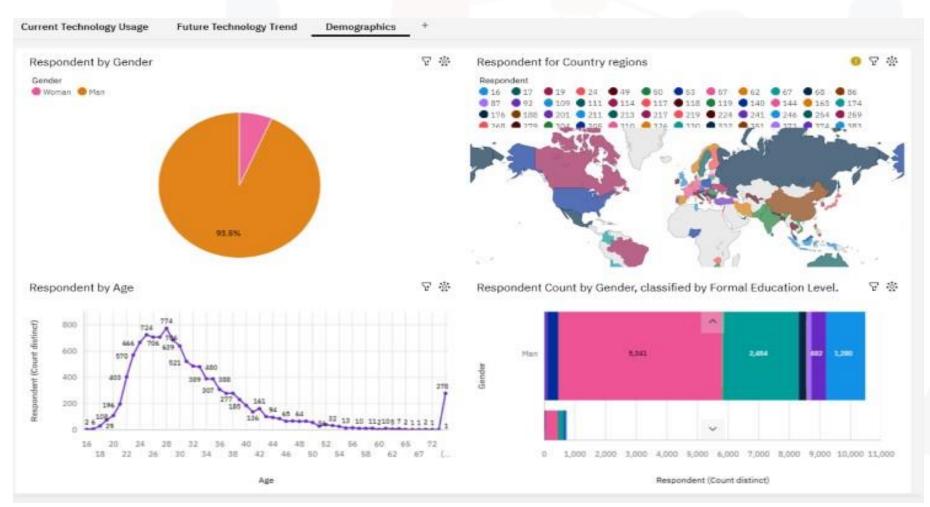
## DASHBOARD TAB 1



## DASHBOARD TAB 2



## DASHBOARD TAB 3



## **DISCUSSION**



- Technology Trends now and future
- Training and Reskilling workers
- Females participation 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
- Platforms like Docker and AWS are growing

#### **Implications**

- Companies need to be flexible and adjust to rapid changes
- Need to spread technology out to lagging countries
- Impact of job hiring's
- Shift to faster app deployments and cloud services in future



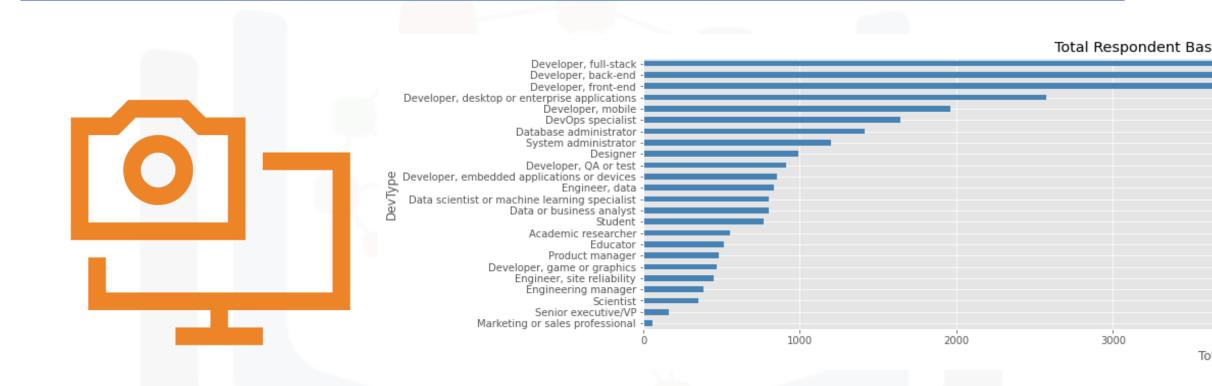


## CONCLUSION

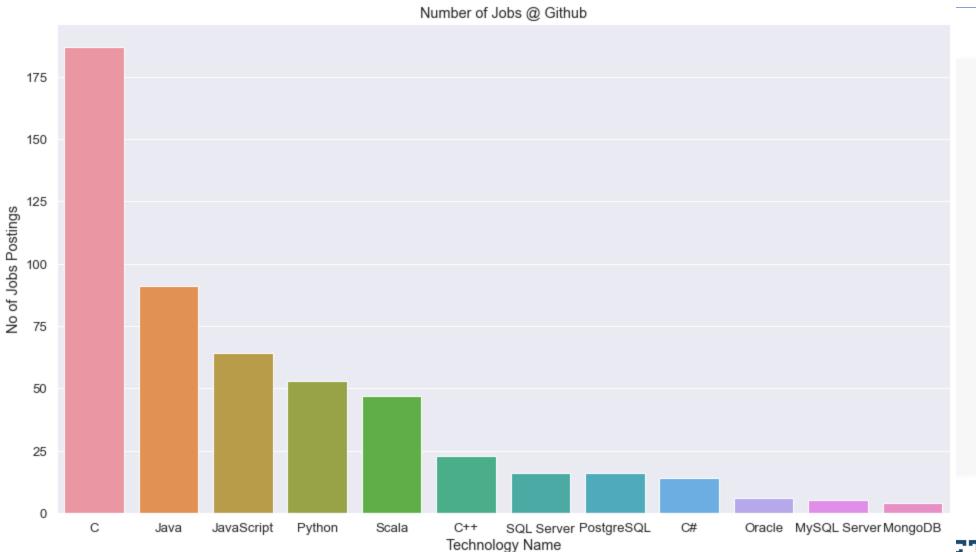


- Technology Trends for current and next year
- Programming Languages, Database and Platform overview
- Demographics overview
- Actions to be taken
- In future, incorporate Machine Learning to predict trends and salaries

## **APPENDIX**



## JOB POSTINGS



# POPULAR LANGUAGES

