

# Technology Trend Analysis Summary and Report

Nishant Vishwakarma 24/05/2023

## OUTLINE



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

#### **EXECUTIVE SUMMARY**



This Project's Main Focus is About to Summarize

- 1. Current Market Technology Trend Summary
  - Top Programming Languge
  - Top Database Language & Platforms

- 2. Future/Potential Trend of Tecnology
  - **Top Programming Languge** 
    - **Top Database Language & Platforms**

## INTRODUCTION



In This Analysis we Use Visualization to Find Insight

From the Data

We Know that World is Shifting towards Technology

And Even in the Technology Field Things Move and Change Fast to Be in Top we will find

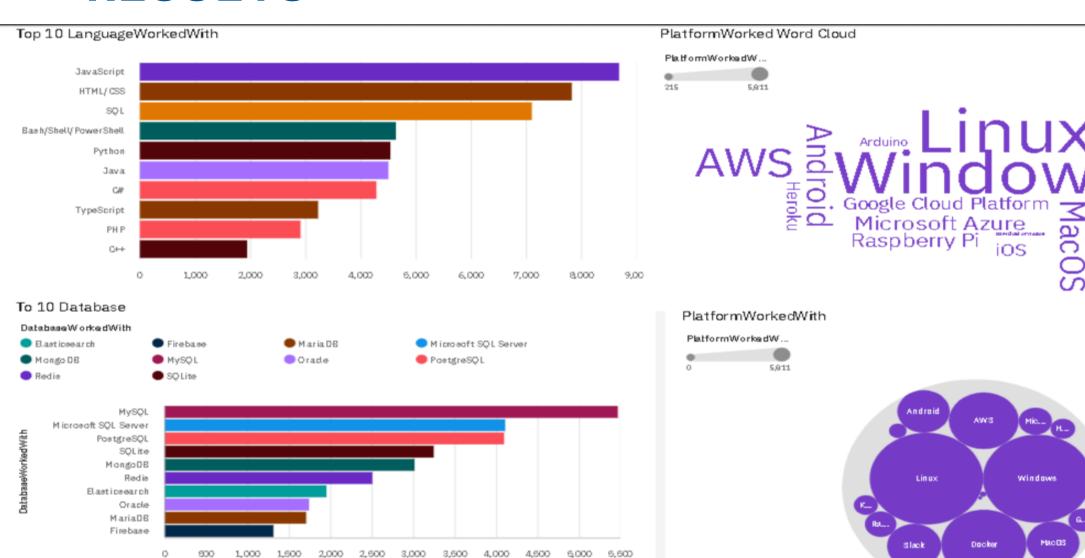
- What are the Popular Technology Market and Field
- What are the Popular Demanding Skills need to Develop
- What Are the Sentiment of the Developer and Market

# **METHODOLOGY**



- Data Collection
  - Api
  - Csv file
- Data Exploration
- Data Cleaning
- Data Visualization

#### **RESULTS**



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0

1,000

1,500

2,000

2,500

DatabaseWorkedWith (Count)

3,000

3,500

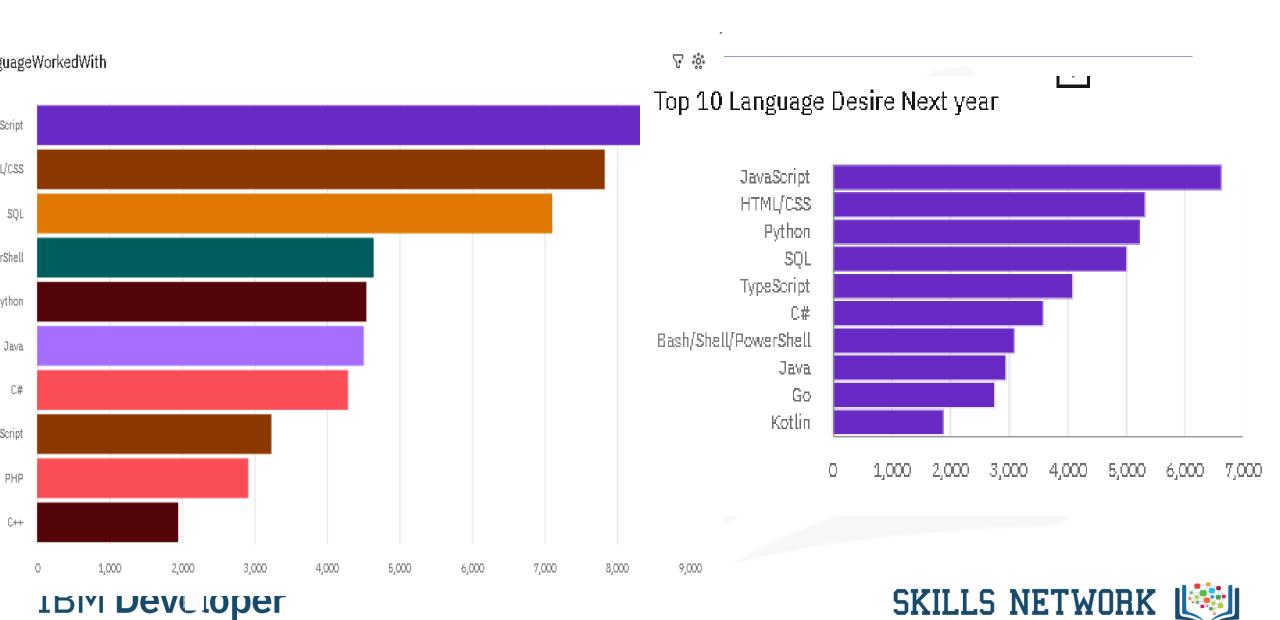
4,000

5,000

5,500



## PROGRAMMING LANGUAGE TRENDS



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

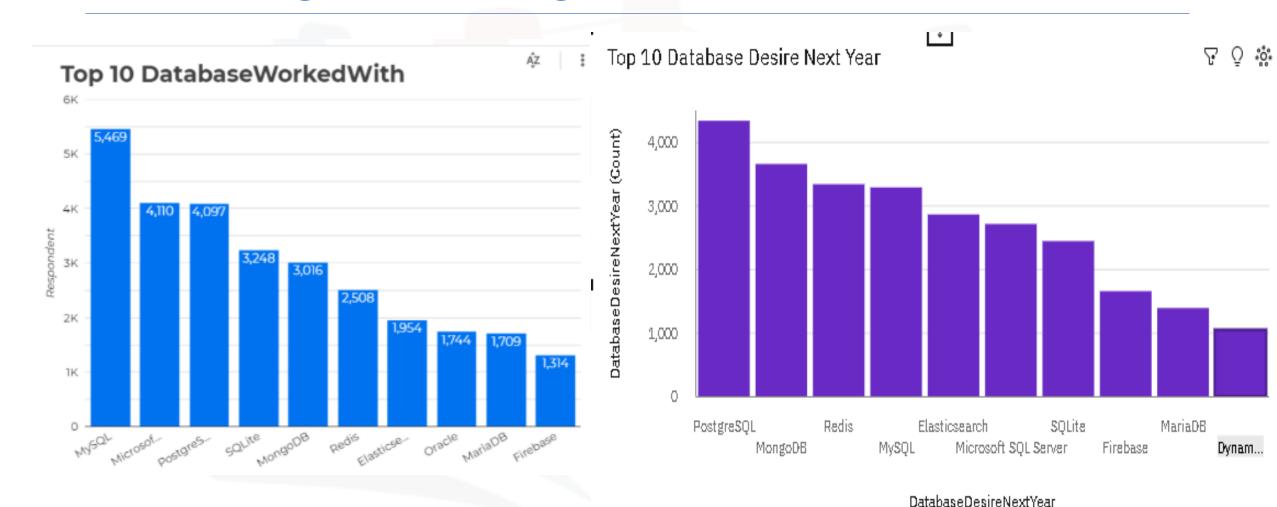
#### **Findings**

- 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 Al and ML in rising demand, Python is best choice

## DATABASE TRENDS



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# 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

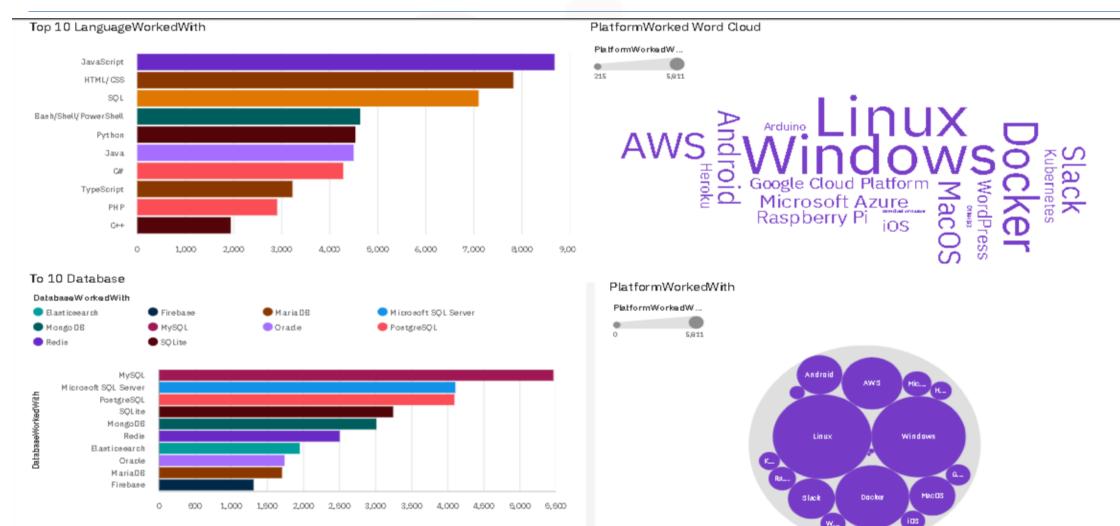
## **DASHBOARD**



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## DASHBOARD TAB 1

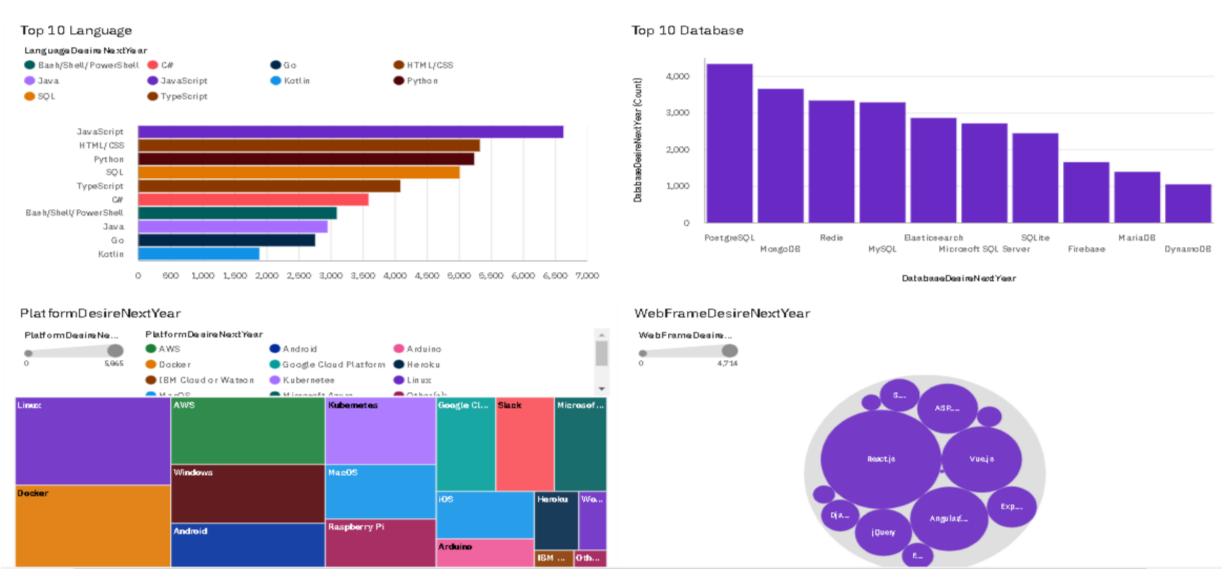
DatabaseWorkedWith (Count)



**IBM Developer** 

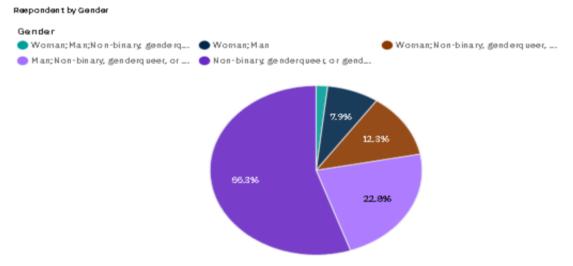


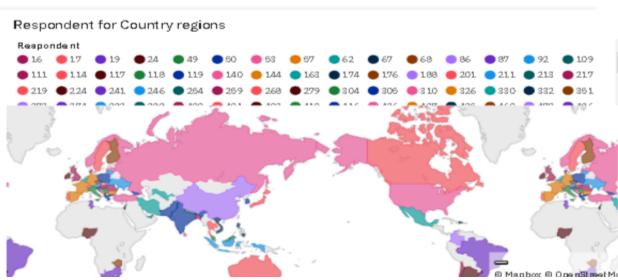
## DASHBOARD TAB 2



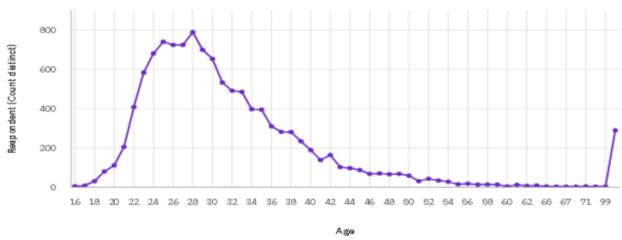
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## DASHBOARD TAB 3



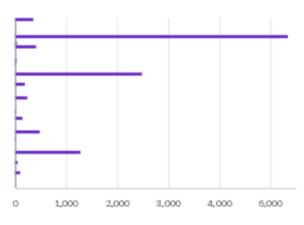


#### Respondent by Age



#### Respondent by EdLevel and Gender

Associate degree | Man Associate degree | (no value) Bachelor's degree (BA, BS, B.Eng., etc.) | Woman Bachelor's degree (BA, BS, B.Eng., etc.) | (no value) Master's degree (MA, MS, M.Eng., MBA, etc.) | Man Master's degree (MA, MS, M.Eng., MBA, etc.) | Woman;... Other doctoral degree (Ph.D, Ed.D., etc.) | Non-binary... Primary/elementary sphod | (no value) Professional degree (JD, MD, etc.) | Woman; Man Secondary school (e.g. American high school, German ... Some college/university study without earning a degree... Some college/university study without earning a degree... (no value) | Woman



Respondent (Count)





#### **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 ever 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

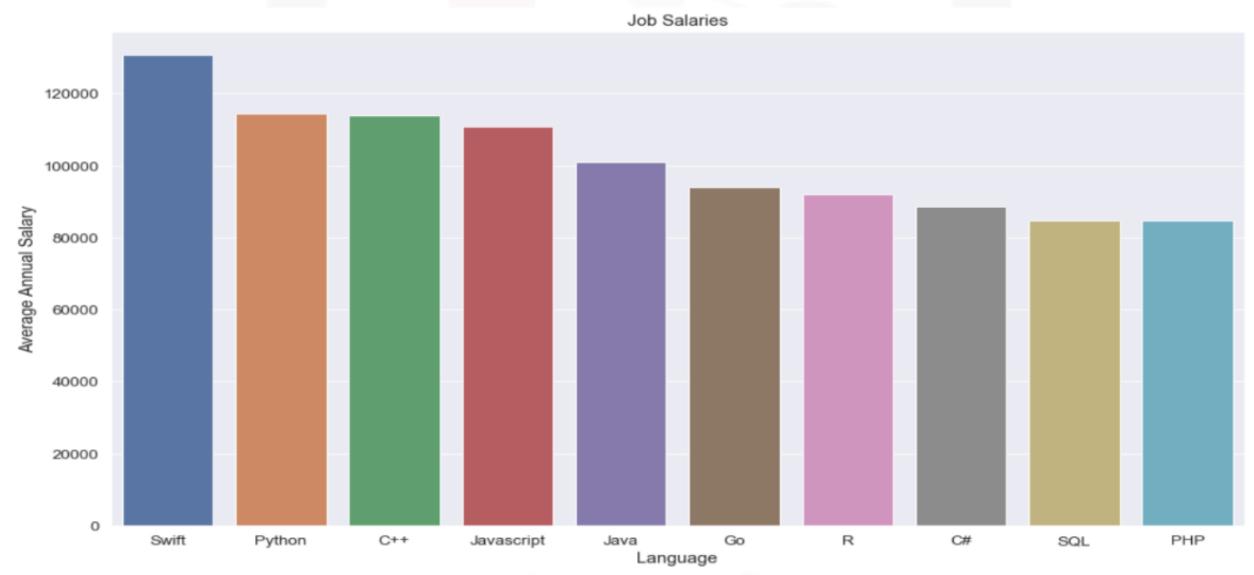
- Demographics overview
- Actions to be taken
- In future, incorporate Machine Learning to predict trends and salaries

## **APPENDIX**



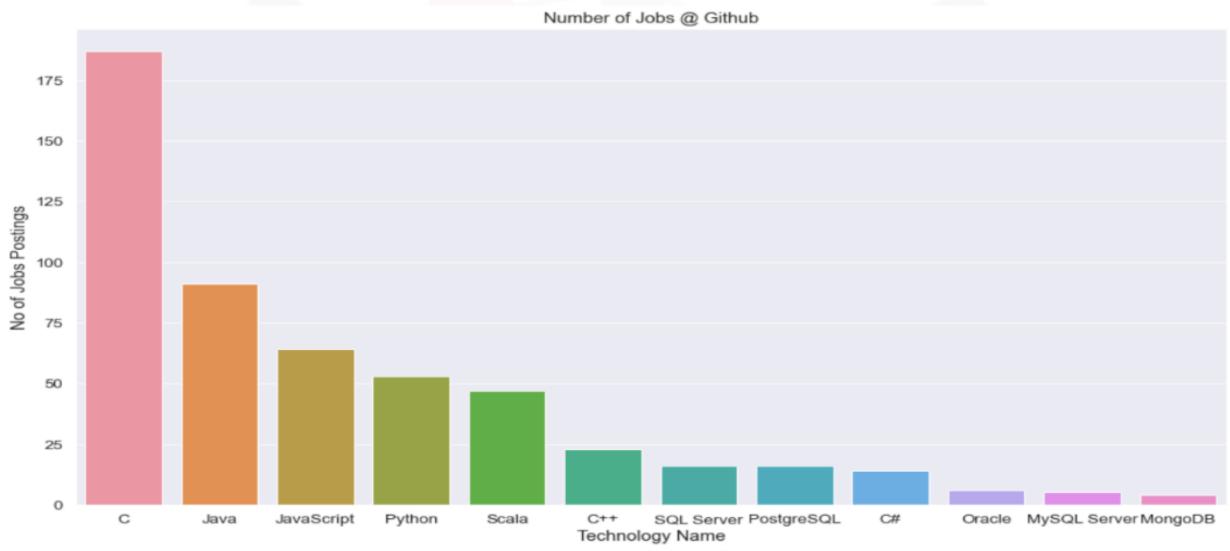
 Include any relevant additional charts, or tables that you may have created during the analysis phase.

## JOB POSTINGS



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### POPULAR LANGUAGES



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