STACK OVERFLOW DEVELOPER SURVEY

IME INYANG

7TH AUGUST, 2023.

OUTLINE

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

EXECUTIVE SUMMARY

- Data Contextualization and Analysis
- Methodology Description
  - Data gathering
  - Data analysis
  - Data visualization
- Results presentation (supported with graphs and trends)
- Discussion of the overall findings and implications regarding results exposed.
- Final conclusions

INTRODUCTION

- This survey is the most comprehensive and largest survey of people who work with different programming languages (developers) around the world.
- Results are not are not a total representation of everyone in the developer community.
- Trends to predict the next direction for developers.
- Characterization of developers around the globe.

METHODOLOGY

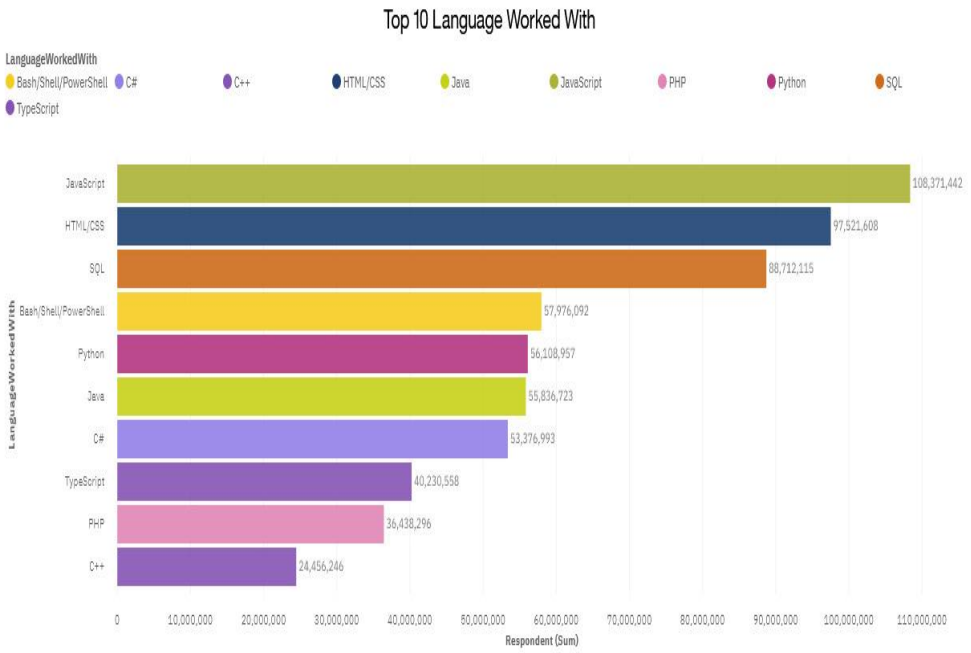
- Collect Data survey & explore its context
  - APIs
  - Web Scraping
  - Request library
- Data Wrangling
- Exploratory Analysis
  - Analyzing data distribution
  - Handling Outliers
  - Correlation
- Data Visualization

  Data distribution, relationships and comparison of data.
- Dashboards

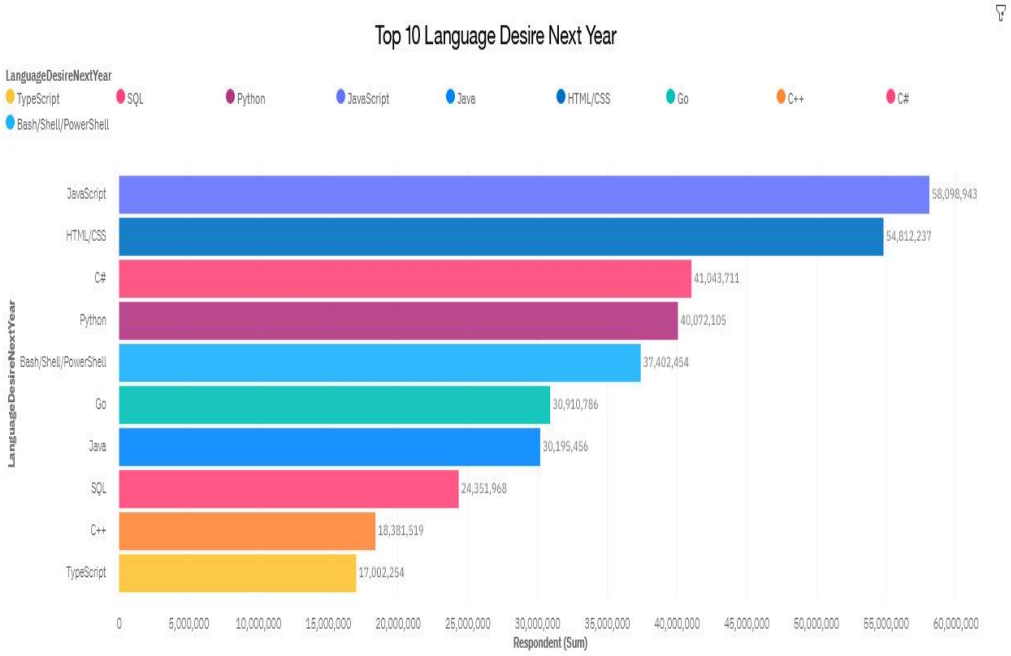
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

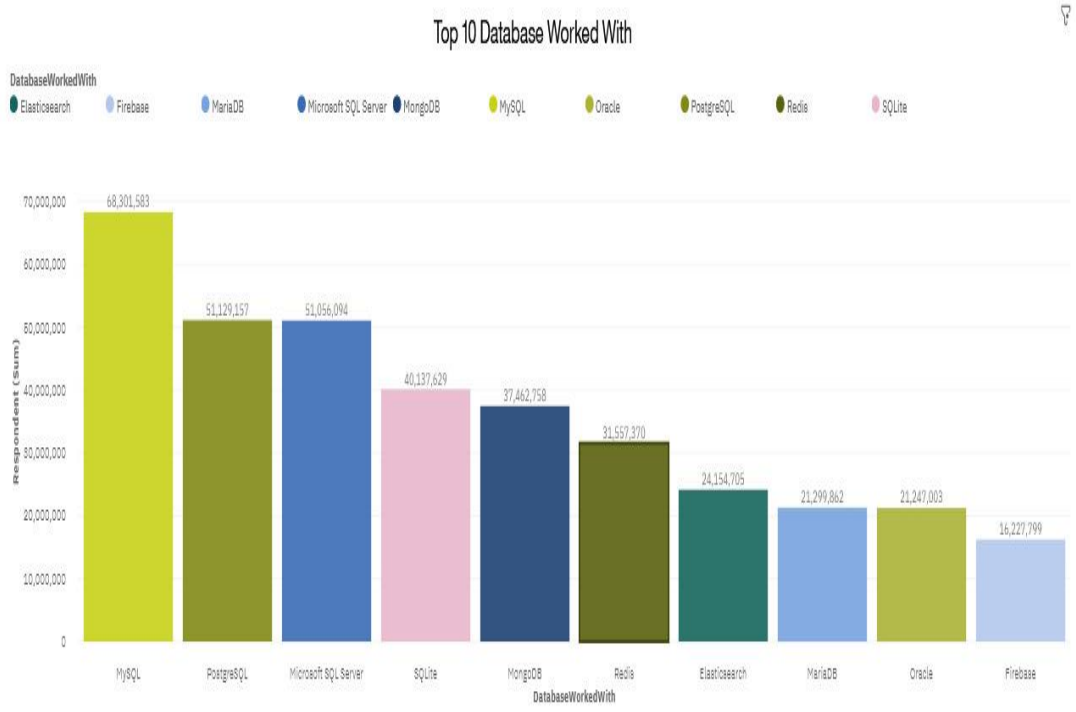
- Javascript remains the leading language even after a great decline.
- There's been in a great interest in C#
- There is a great decline in PHP

Implications

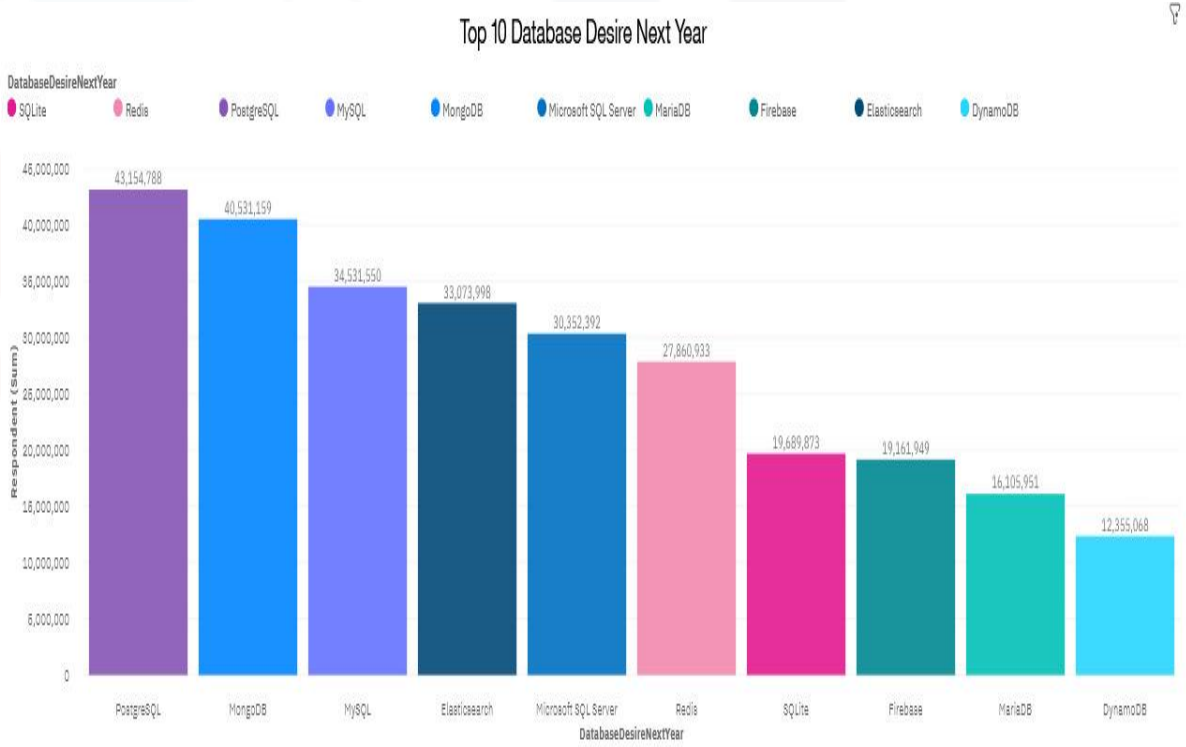
- Possible migration of developers from Javascript to C#

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most used database
- Increasing interest in PostgreSQL and MongoDB
- Lack of interest in Microsoft SQL server and SQLite

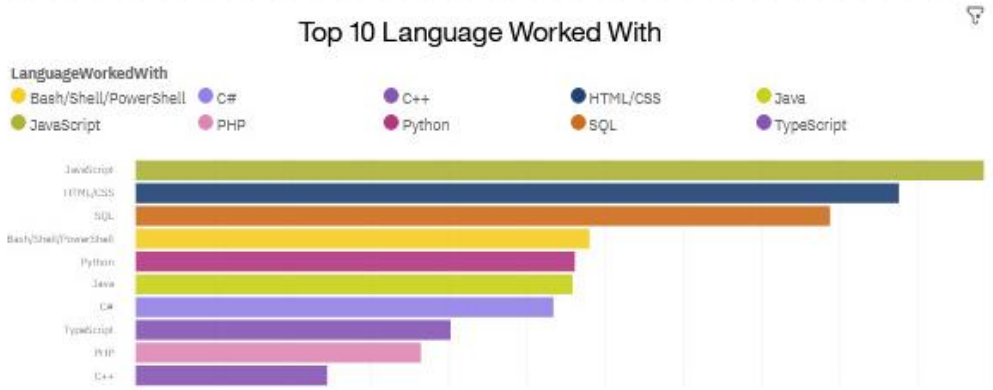
Implications

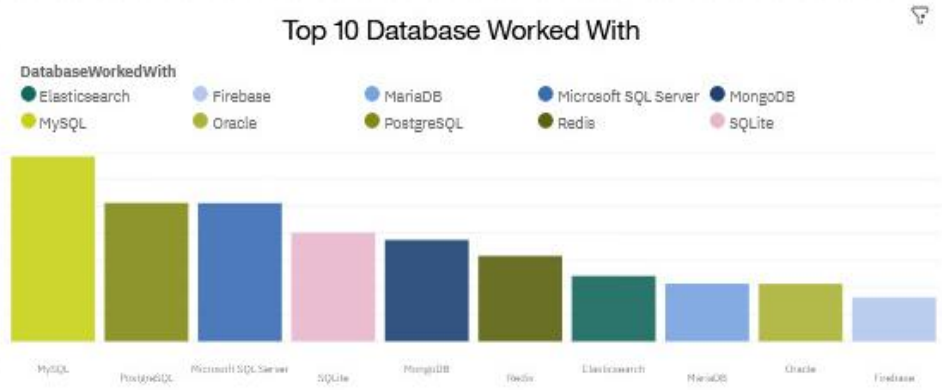
- PostgreSQL and MongoDB establishment in market
- Microsoft SQL server and SQLite losing recognition.

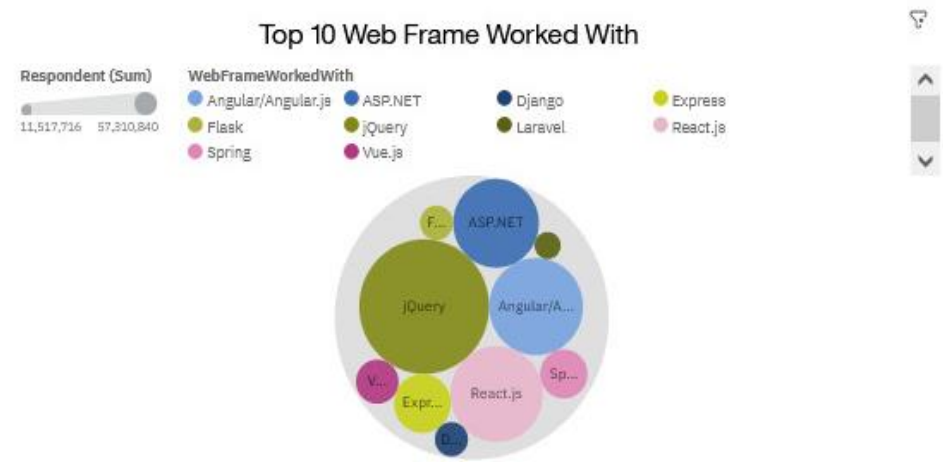
DASHBOARD

https://dataplatform.cloud.ibm.com/dashboards/e00f4b81-957f-47da-b842-711d2d12fa11/view/4021c2256fe90dd37fb7eee407982e047b37770be1bb830480817b490f642597a86d1399c8274f0bd3190d36f4be115fc0

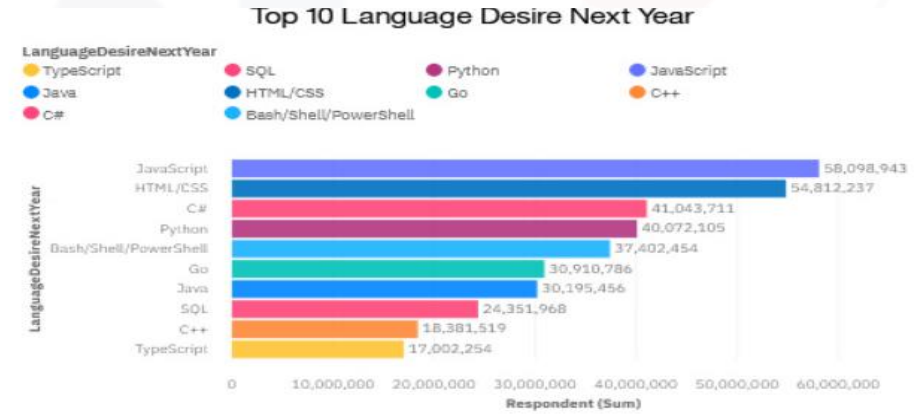
Current Technology Usage

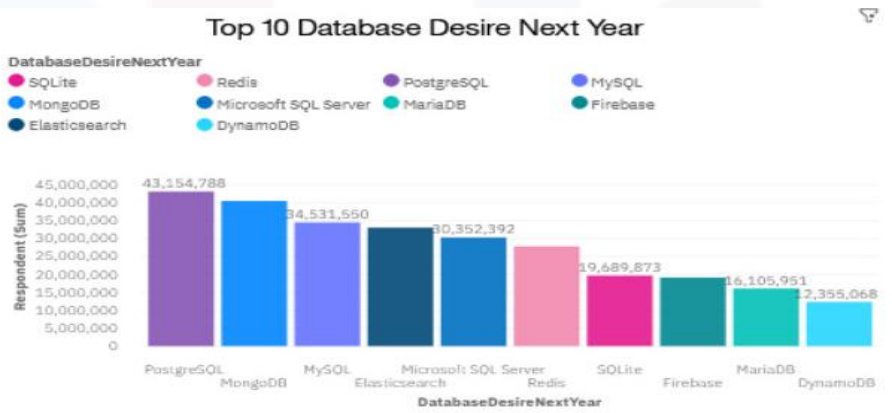


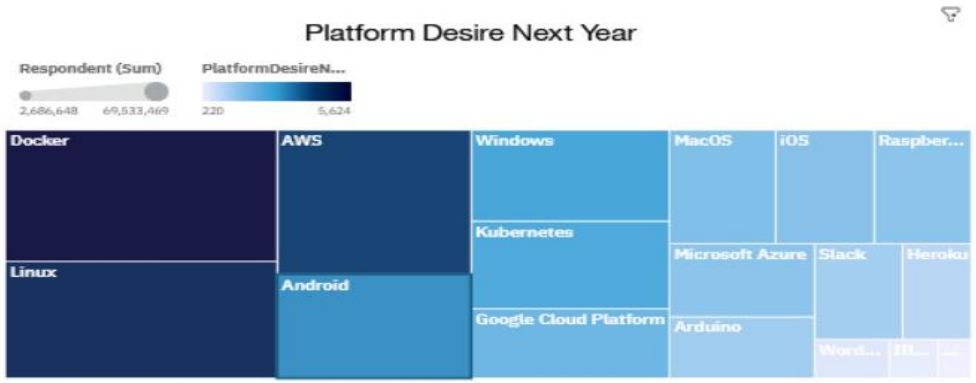


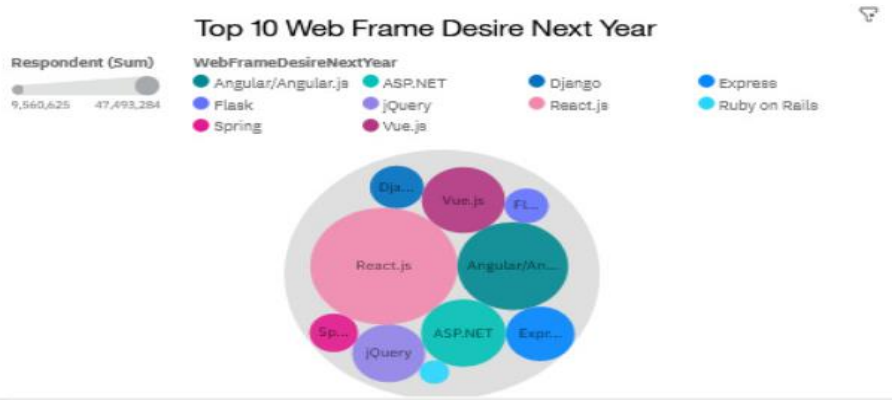


Future Technology Trend

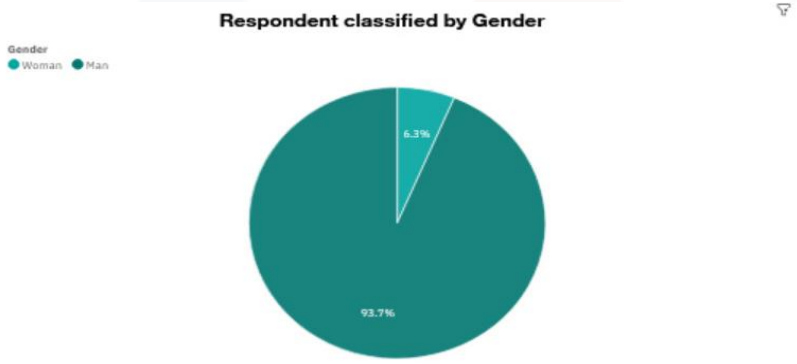


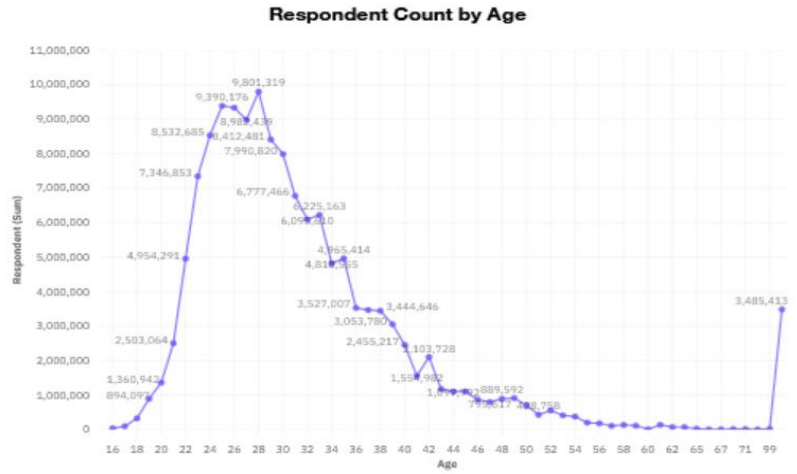


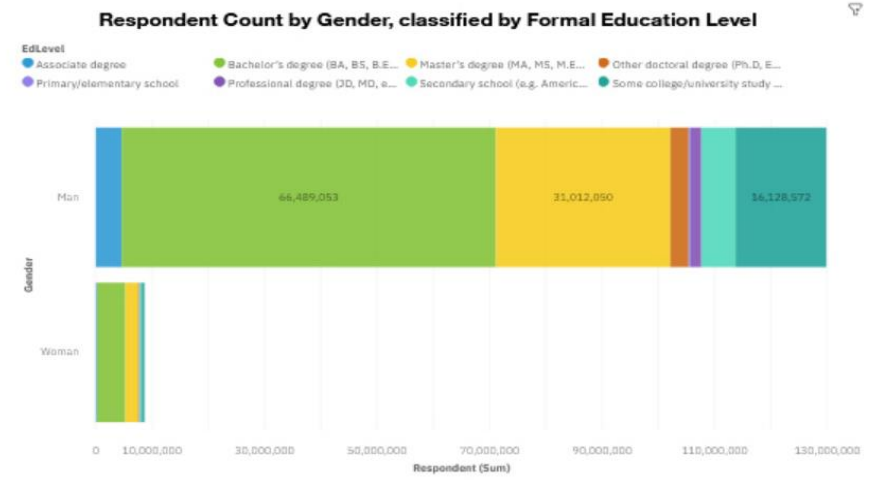




Demographics







DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used language.
- Over 93% young male developers
- Developers mostly in developed countries.
- Majority of developers have Bachelor's degree.

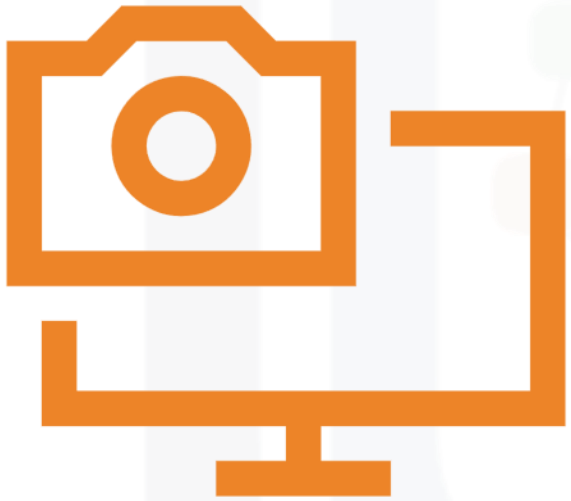
Implications

- JavaScript web frames gaining followers
- Global polarization of developers gender.

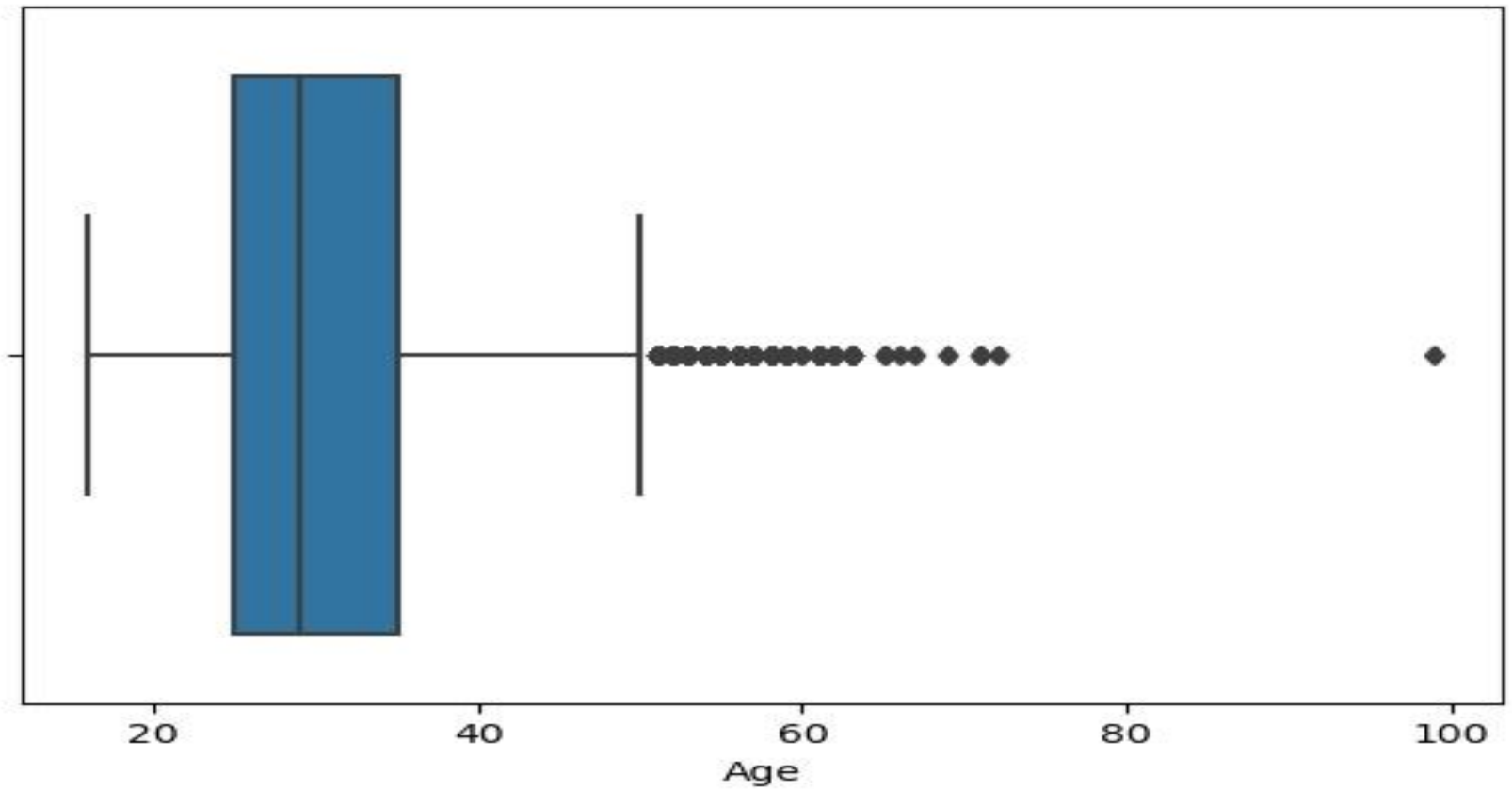
CONCLUSION

- A good of popularity trend of different platforms and languages can be obtained.
- Work has to be done to shift the labor market to developing countries.
- Developers have marked characteristics.

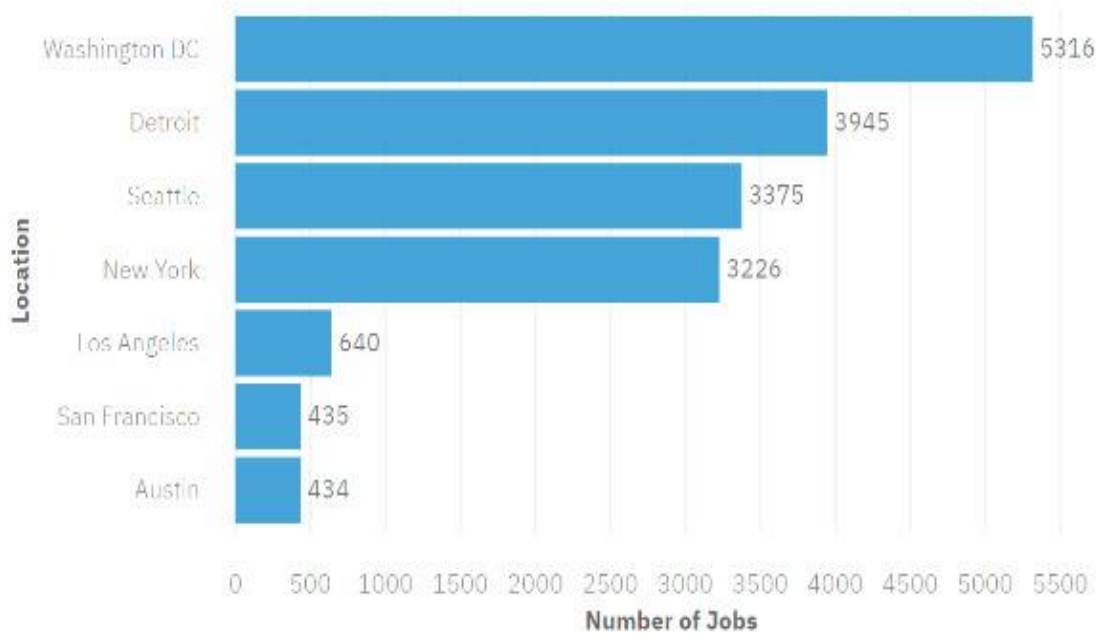
APPENDIX



AGE DISTRIBUTION BOXPLOT



JOB POSTINGS



POPULAR LANGUAGES