STACK OVERFLOW DEVELOPER SURVEY 2019

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OUTLINE

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

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EXECUTIVE SUMMARY

- Data contextualization and analysis goal

- Methodology description
  - Data gathering
  - Data analysis
  - Data visualization

- Results shows the graphs and trend supported by various graphs

- Discussion of overall findings and implications regarding the results previously exposed

- Final conclusions of the findings in Dataset.

INTRODUCTION

- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world

- Reuslt don't represent everyone in the developer community evenly

- Nearly 90,000 developers responded

- Trends
  - Technology worked with
  - Future technology to work

METHODOLOGY

- Collect survey data
  - Web scraping
  - APIs
  - Request library
- Data wrangling
- Exploratory Data Analysis (EDA)
  - Distribution
  - Outlier Handling
  - Correlation
- Visualization
  - Distribution of data
  - Relationship
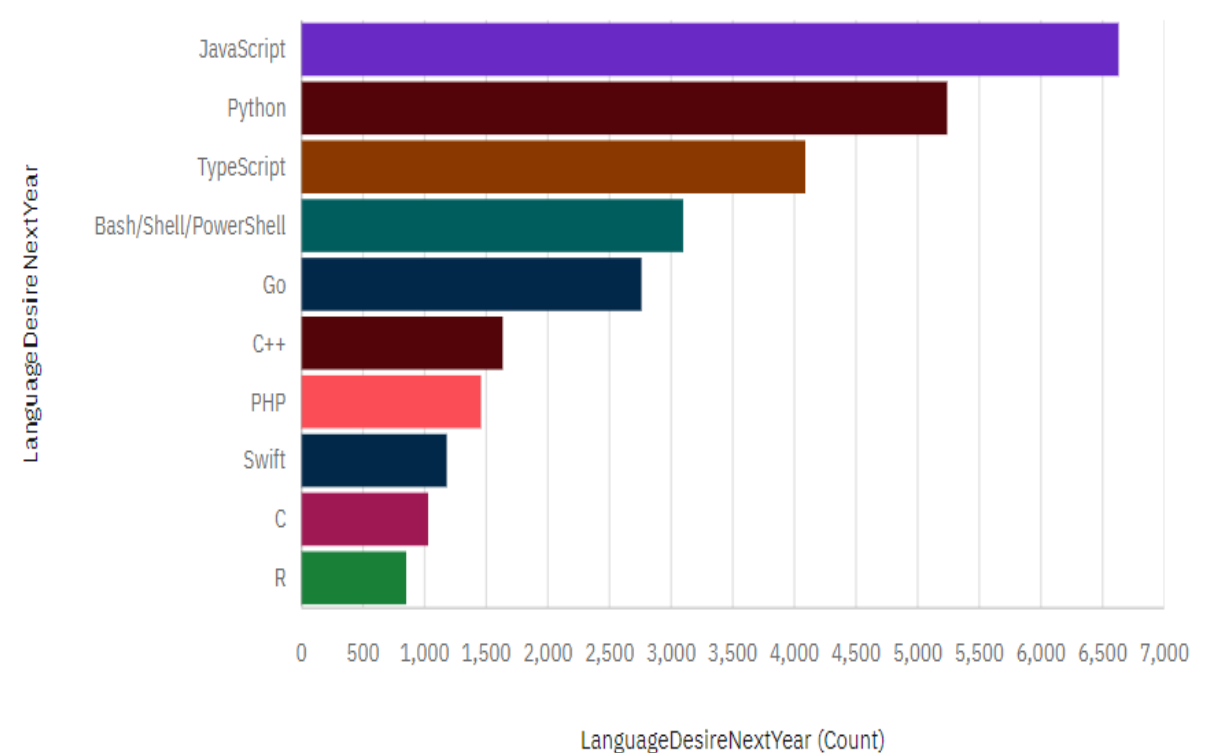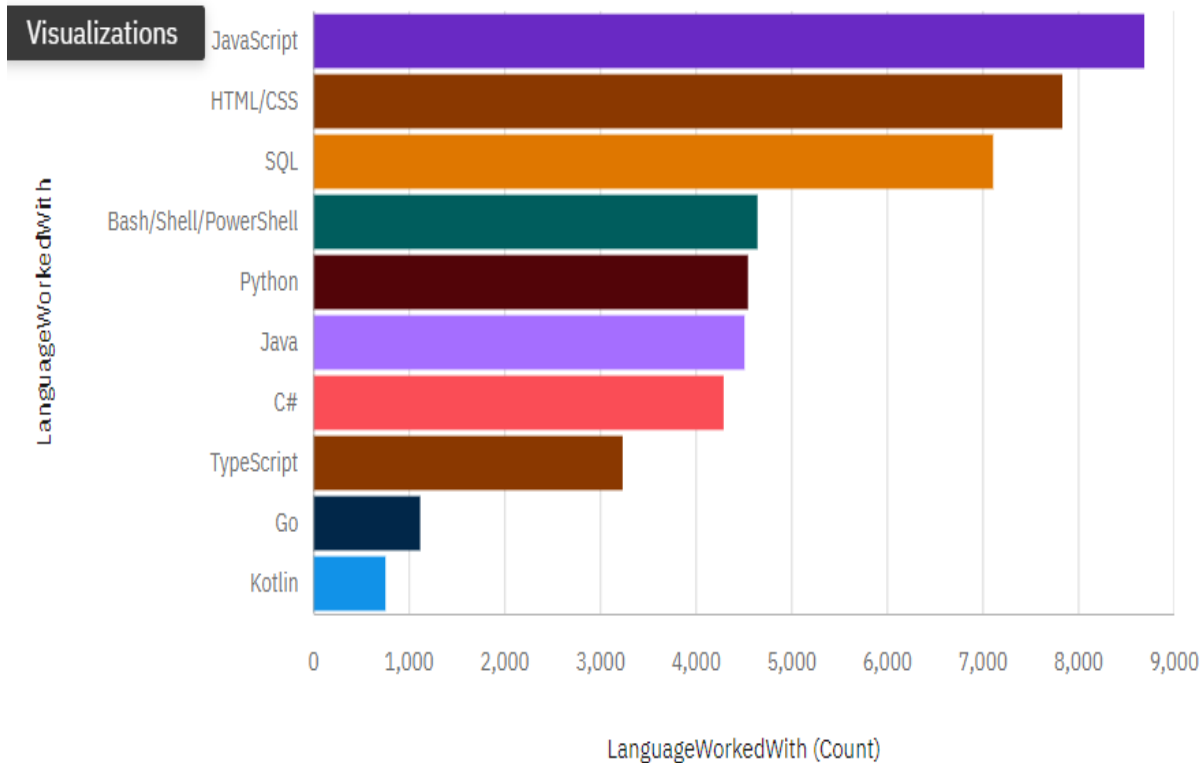 - Comparison
  - Composition
- Dashboards

RESULTS

PROGRAMMING LANGUAGE TRENDS

Top 10 Language Worked with

Top 10 Language Desire Next Year

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript leading
- HTML,SQL might not use very much
- Python might lead but Kotlin will jump it's place significanlty

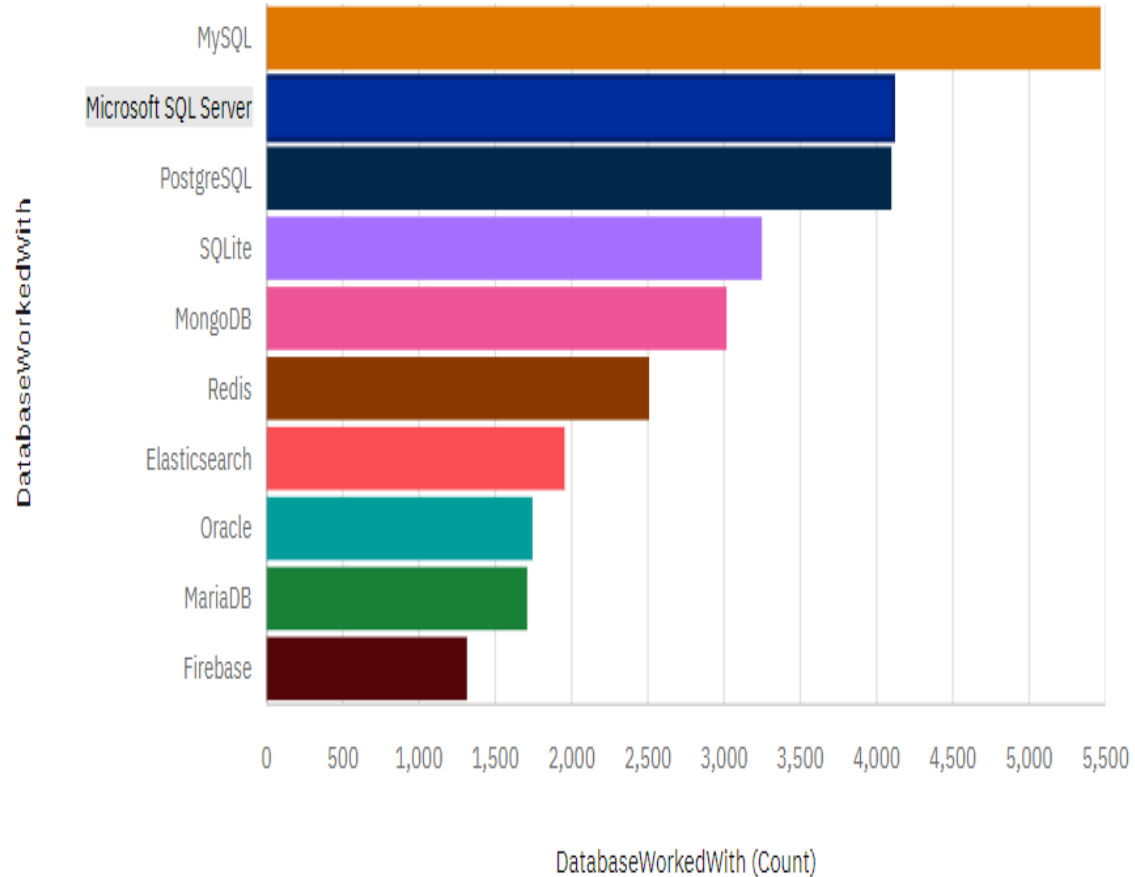Implications

- Possibility of learning New language among the developers and the future technology will worked on that language

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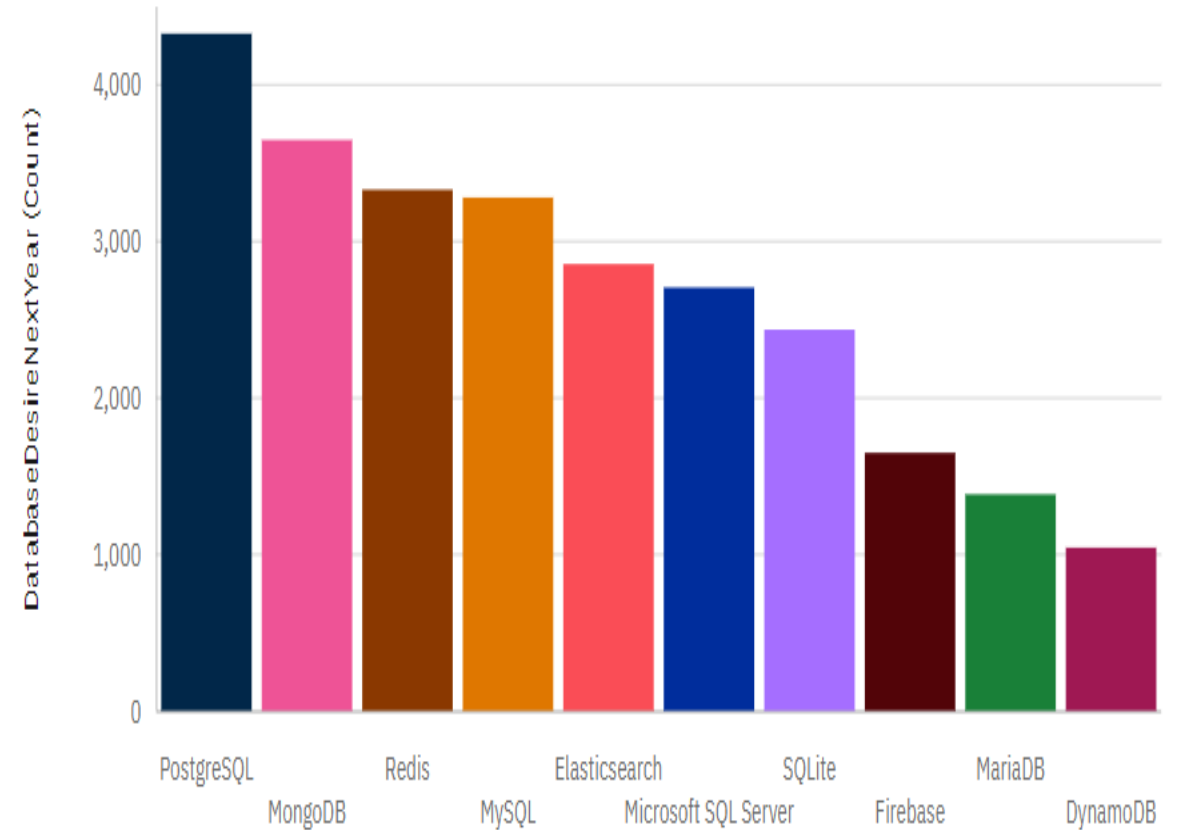# DATABASE TRENDS

Current Year

Next Year

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL as most used database.

- Lack of interest in Microsoft SQL Server and SQLite.

- Increasing interest in PostgreSQL and MongoDB.

Implications

- Microsoft SQL Server and SQLite losing ground in the market.

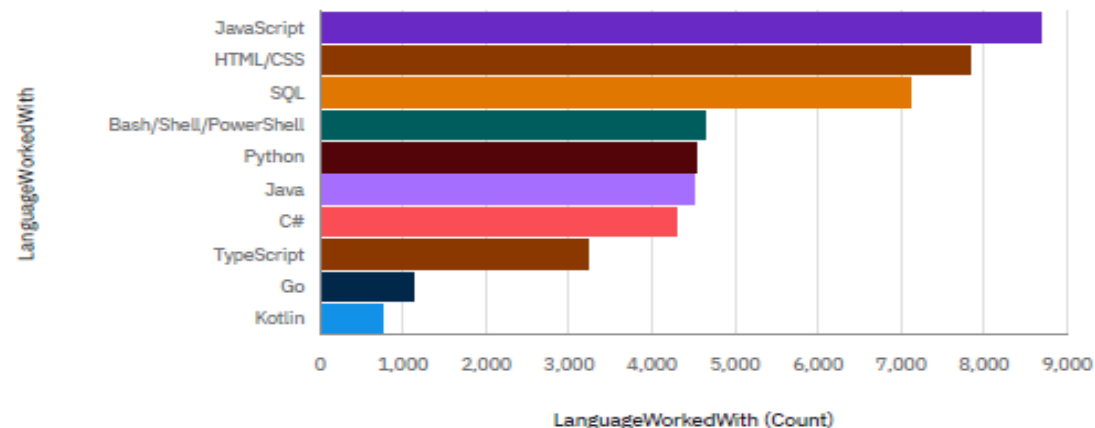- PostgreSQL and MongoDB establishment in the market.

DASHBOARD

https://eu2.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2Fcapstoe%2Bproject%2BStack%2Boverflow%2Bdataset&action=view&mode=dashboard&subView=model0000018faf1cc329_00000000
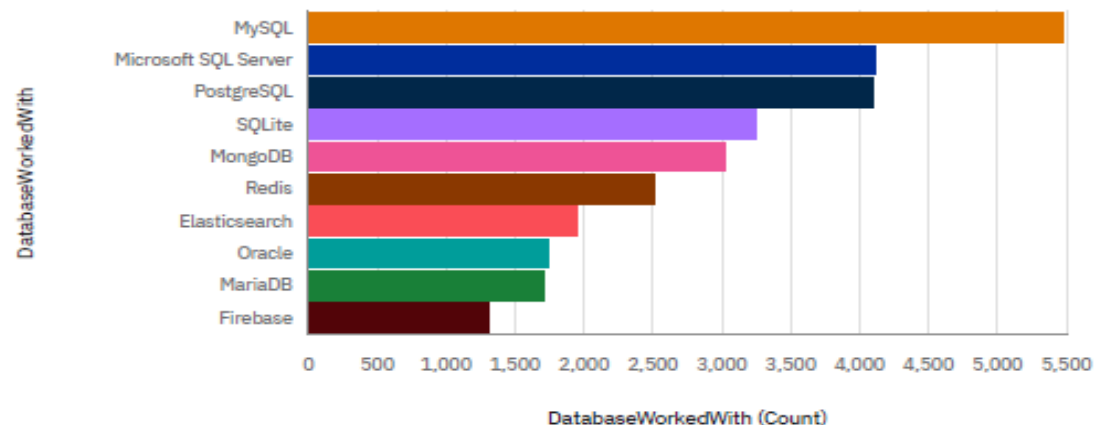
DASHBOARD TAB 1

Current Technology Usage

Top 10 Language Worked with   1

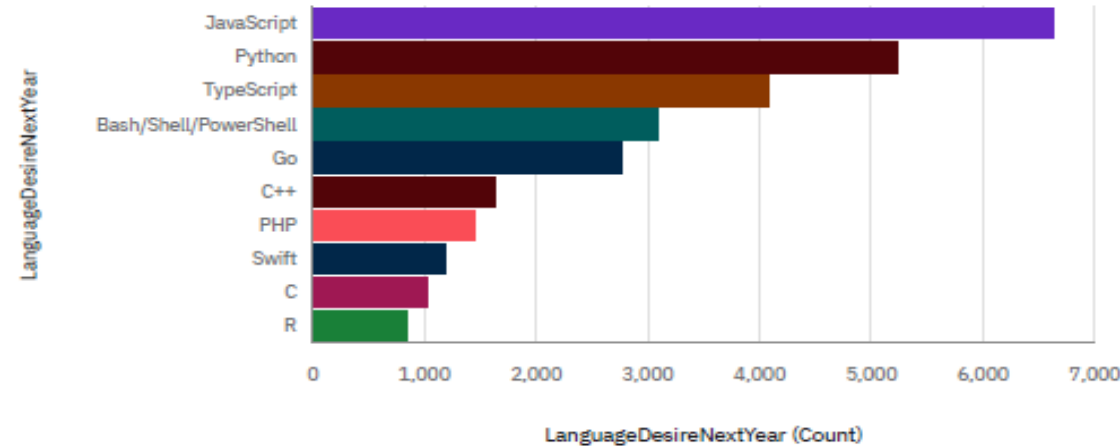### Top 10 Database Workedd   2

Platform Worked With

Top 10 Webframbed Work With

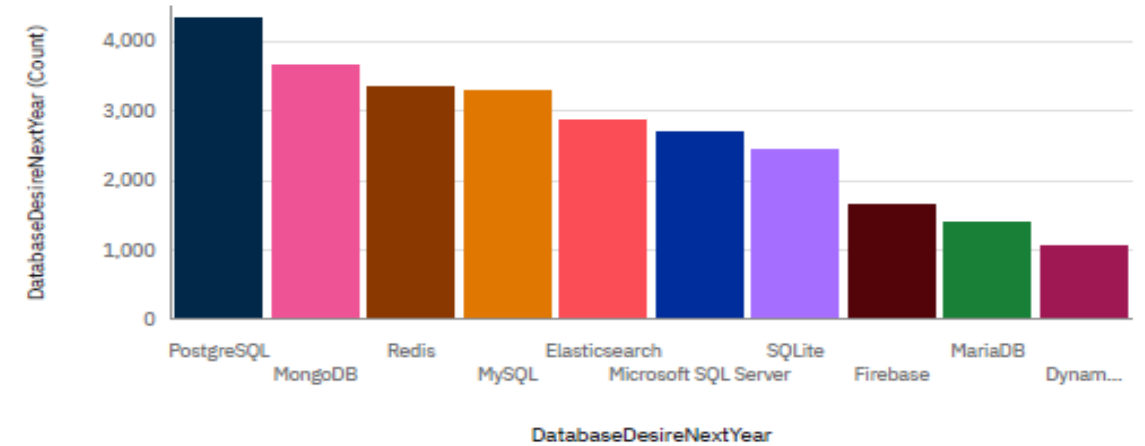**IBM Developer**

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DASHBOARD TAB 2

Future Technology Trend

Top 10 Language Desire Next Year
3

Top 10 Database Desire Next Year
4

Platform Desire Next Year
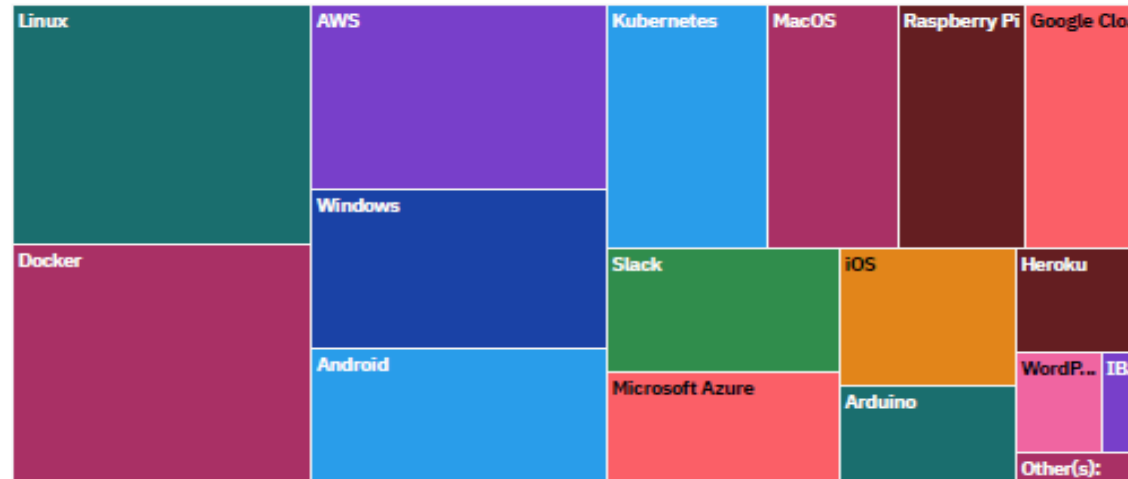
Webframe Desire Next Year
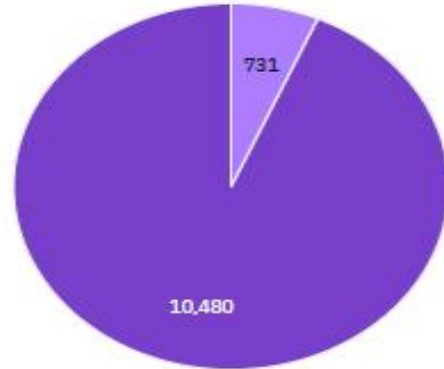

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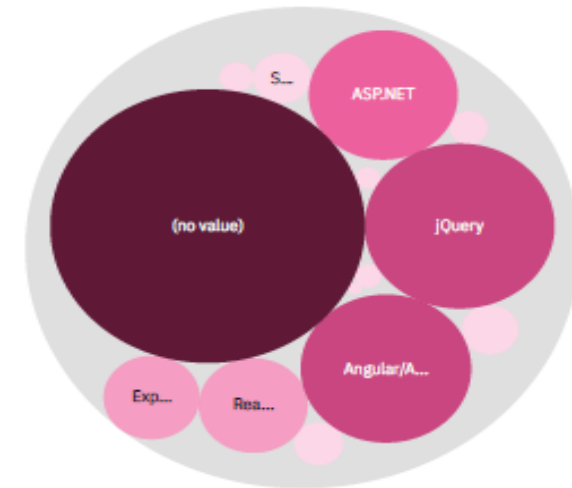
DASHBOARD TAB 3

Demographics

Gender by Gender

Gender
● Man ● Woman

Respondent Count by Age

Respondent count for countrys

Country (Count)
1   3,127

Country (Count)
1   3,127

© Mapbox © OpenStreetMap

Gender by Gender colored by EdLevel   6

EdLevel
● Associate degree   ● Bachelor's degree (BA, BS, B.Eng...   ● I never completed any formal edu...
● Master's degree (MA, MS, M.Eng.,...   ● Other doctoral degree (Ph.D, Ed.D...   ● Primary/elementary school
● Professional degree (JD, MD, etc.)   ● Secondary school (e.g. American ...   ● Some college/university study wit...

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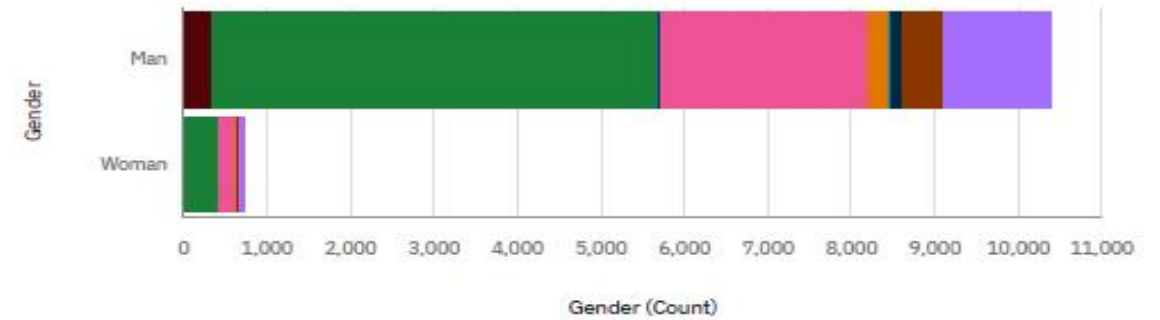
DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used and TypeScript getting popular.

- Over 90% young male developers.

- Developers mostly located in developed countries.

Implications

- JavaScript and TypeScript web frames gaining followers.

- Global polarization of developers location and gender.

- Young developers without postgrad studies on its majority.
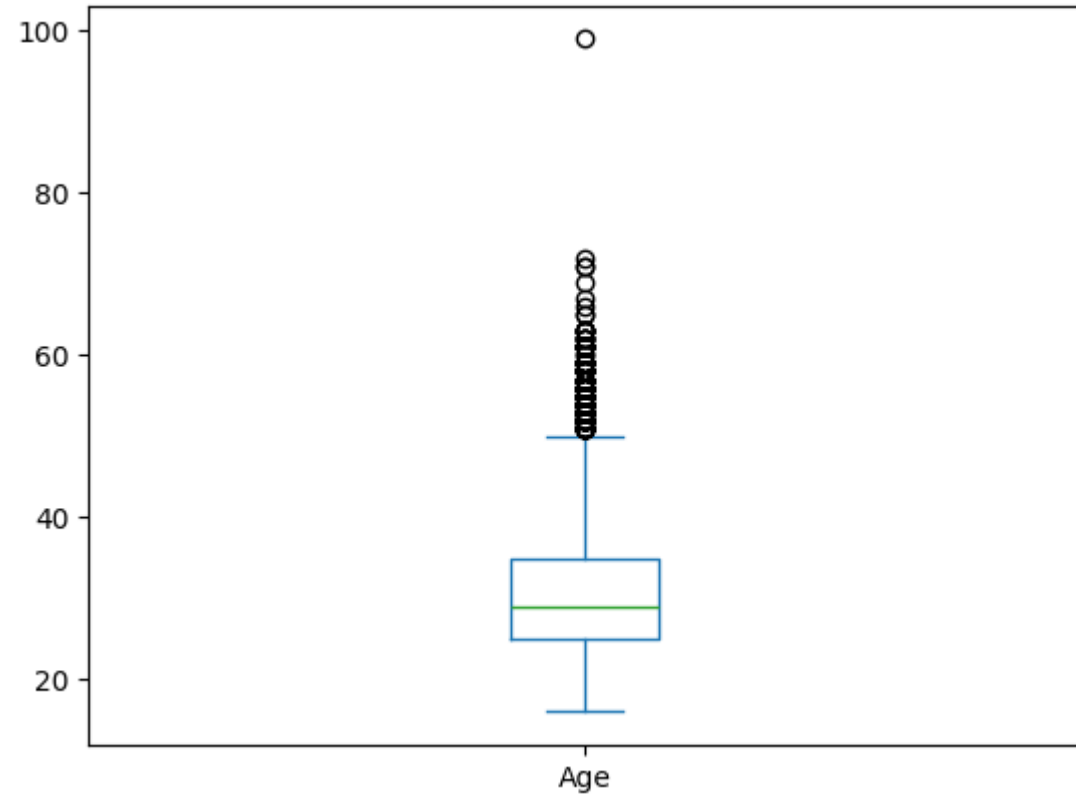
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CONCLUSION

- Developers are people with very marked characteristics.

- A good idea of popularity trends of different tools, platforms and languages can be obtained.

- There is a job to be done to spread accessibility of this labor market to countries in development.

APPENDIX

Box plot of Age groups of Developer

POPULAR LANGUAGES