STACK OVERFLOW DEVELOPER SURVEY 2019

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OUTLINE

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

EXECUTIVE SUMMARY

- Data contextualization and analysis goal.
- Methodology description.
  - Data gathering.
  - Data analysis.
  - Data visualizations.
- Results presentation supported with graphs and trends.
- Discussion of overall findings and implications regarding the results previously exposed.
- Final conclusions of the carried-out research.

INTRODUCTION

- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- Results don't represent everyone in the developer community evenly.
- Nearly 90,000 developers.
- Trends to predict where the developers are going.
- Characterization of developers around the globe.

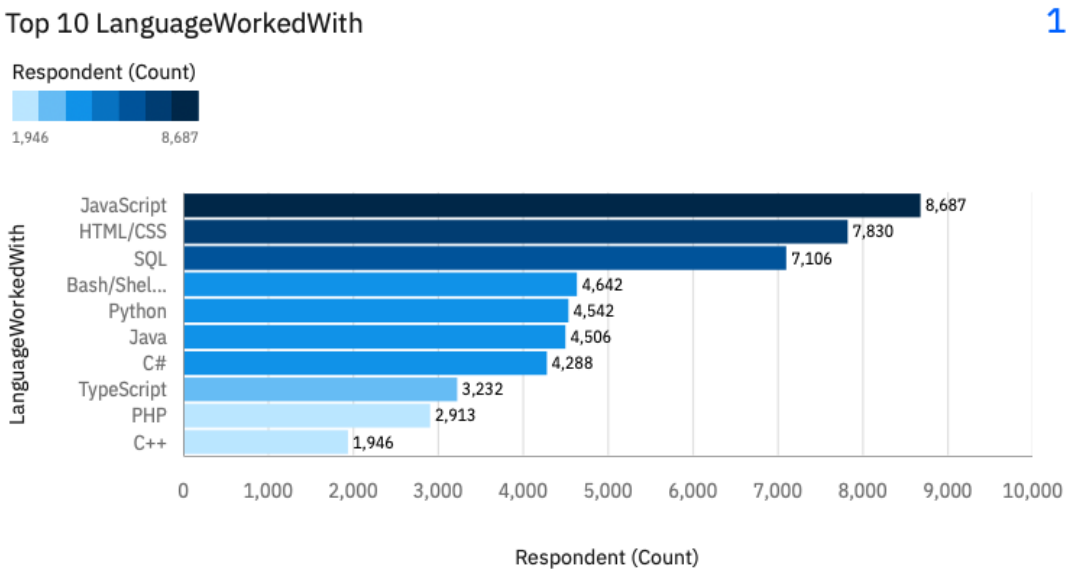
METHODOLOGY

- Collect survey data & explore its content
  - Web Scraping
  - APIs.
  - Request library.
- Data Wrangling
- Exploratory data analysis
  - Analyzing data distribution.
  - Handling outliers.
  - Correlations.
- Data Visualization
  - Highlight distribution of data, relationships, the composition and comparison of data.
- Dashboards

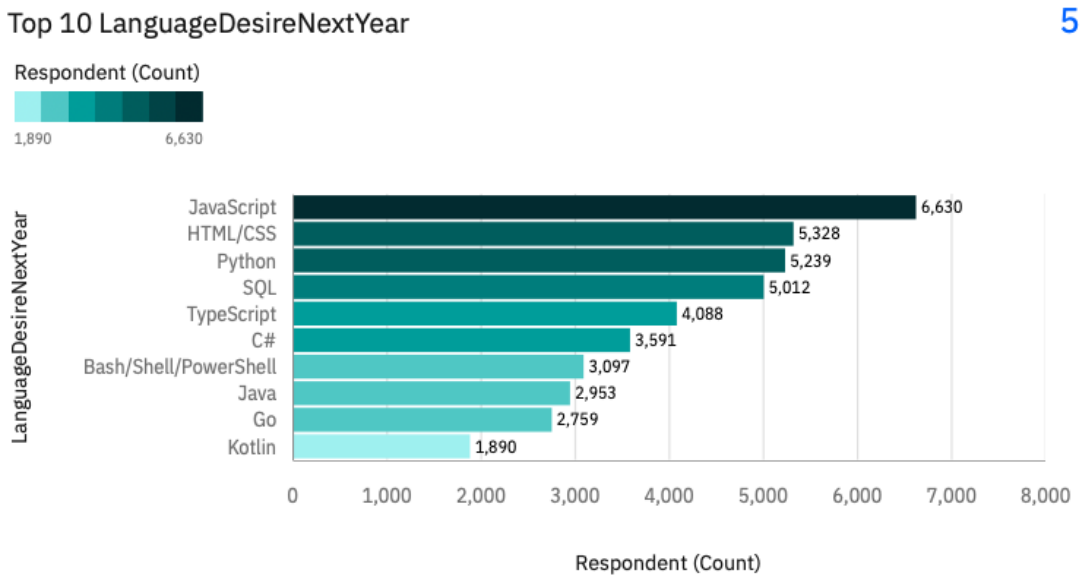
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

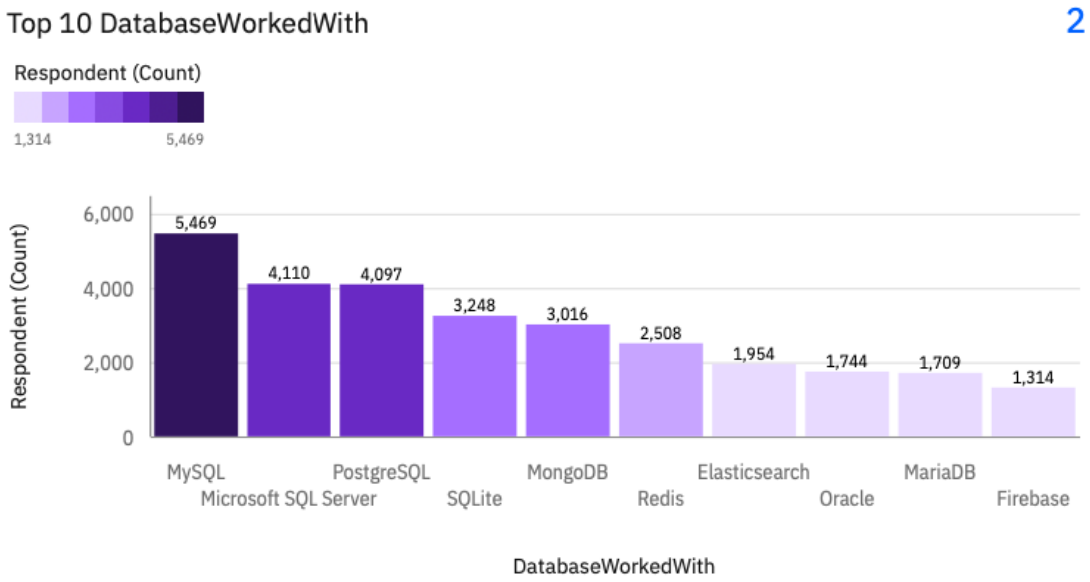
- The top two, JavaScript and HTML/CSS, keep it in place.
- Python is growing rapidly and is in third place.
- PHP will no longer be in the top 10.

Implications

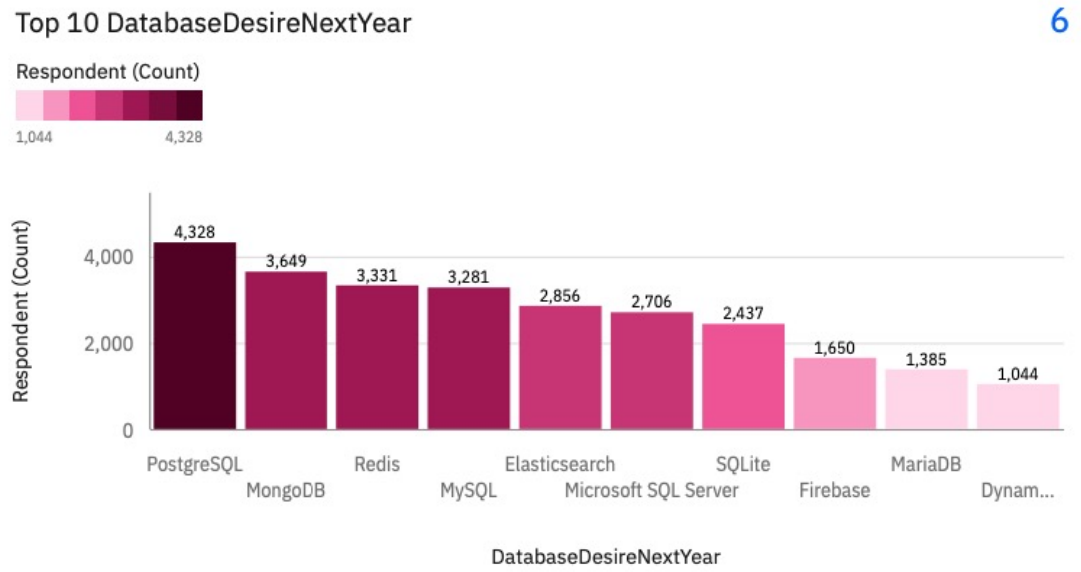
- Demand for Python has increased as data utilization has become commonplace in the business domain.
- The proliferation of the Node.js platform has reduced the demand for PHP, as JavaScript can now be used on the server side.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL, MongoDB, and Redis have grown to become the Top 3.
- MySQL's ranking is dropping, but demand is still there.
- Firebase is also growing.

Implications

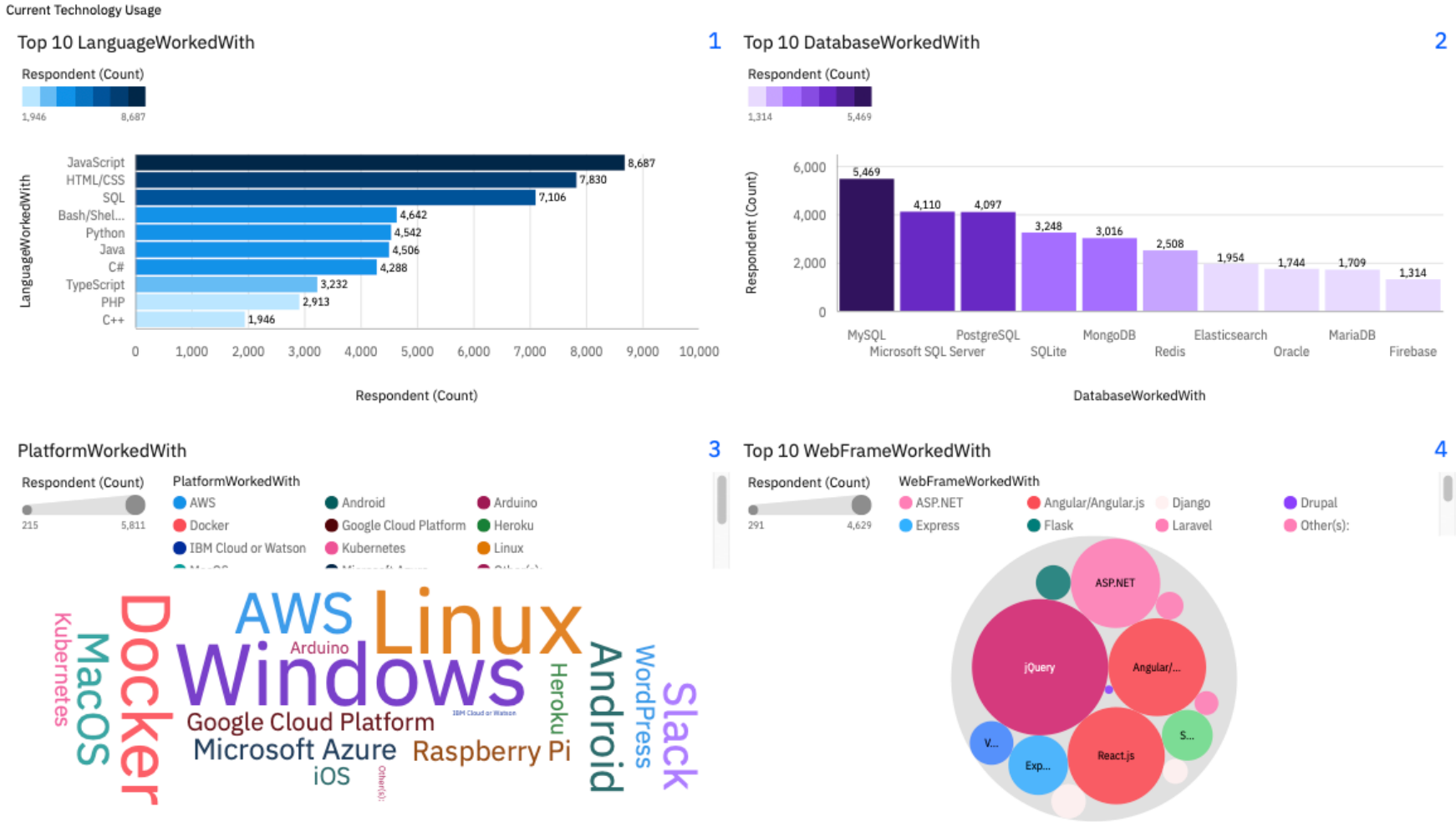
- PostgreSQL is growing in popularity due to its scalability, ease of querying, and support for many different types of data.
- Firebase is considered to be growing because it does not require back-end processing.

DASHBOARD

https://github.com/Rion-Sato/Peer_Graded_Assignment_Dashboards/blob/main/Peer-Graded%20Assignment.pdf

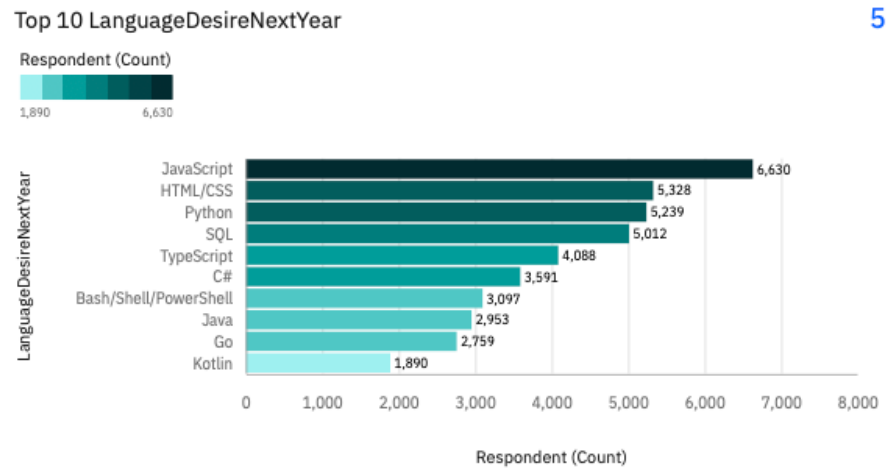
Note:
This is a GitHub link that includes a PDF of the Dashbord I created with Cognos Analytics due to an issue with IBM Cloud not being available.
Please grade the application based on this PDF.
I have read officially on the discussion forum that there is no point deduction for using this method.

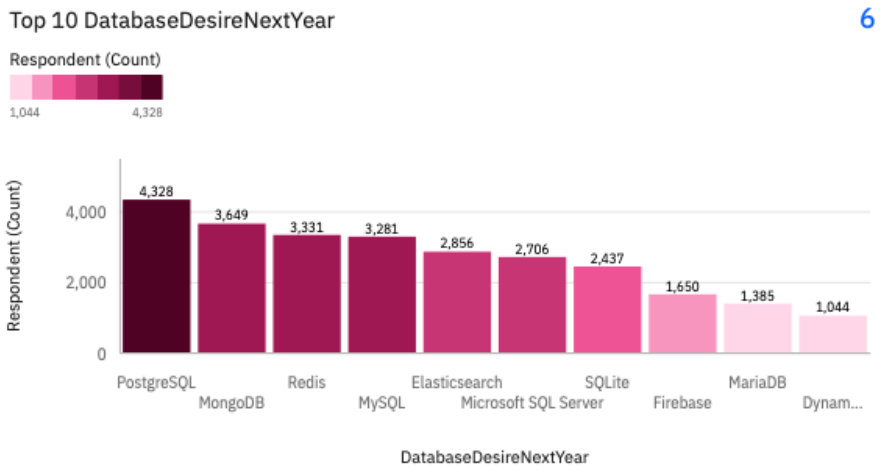
DASHBOARD TAB 1

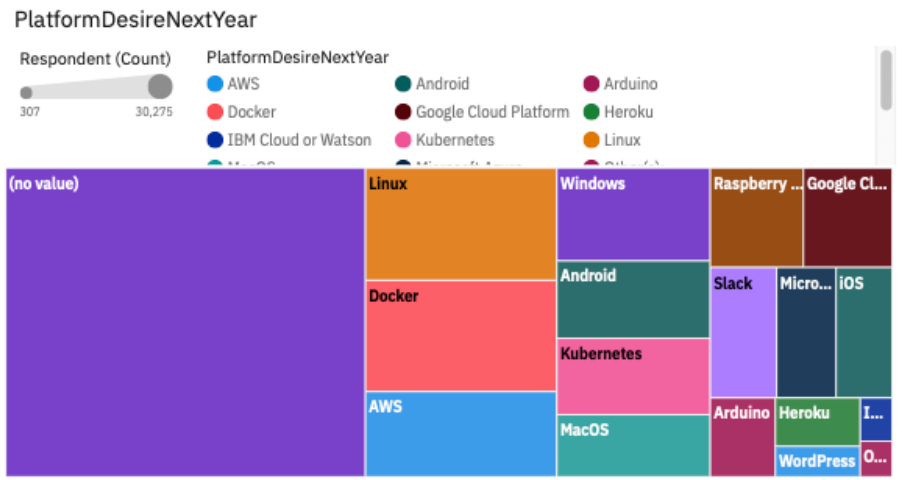


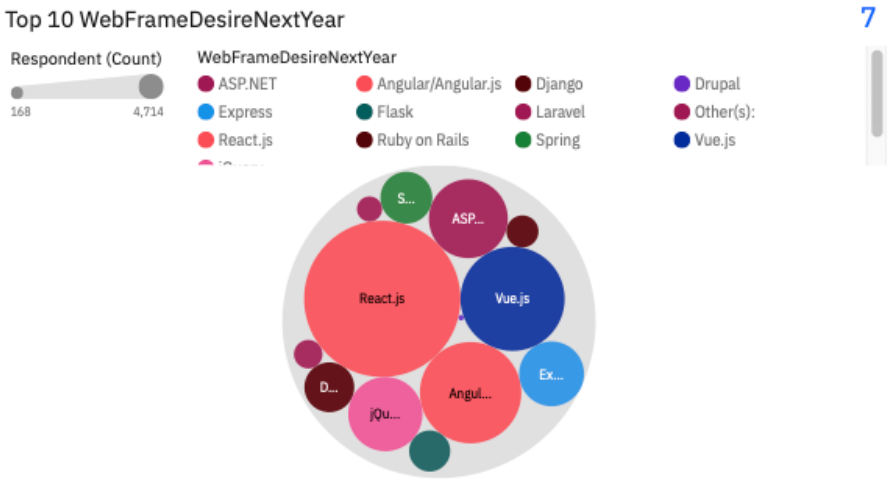
DASHBOARD TAB 2

Future Technology Trend





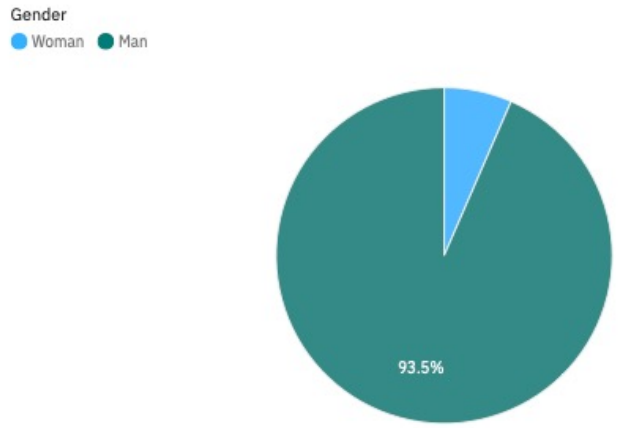




DASHBOARD TAB 3

Demographics

Respondent classified by Gender



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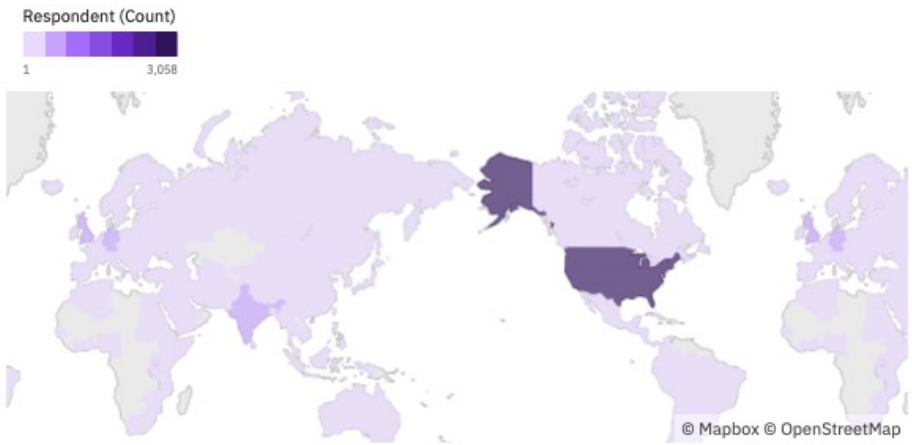
Respondent Count for Countries



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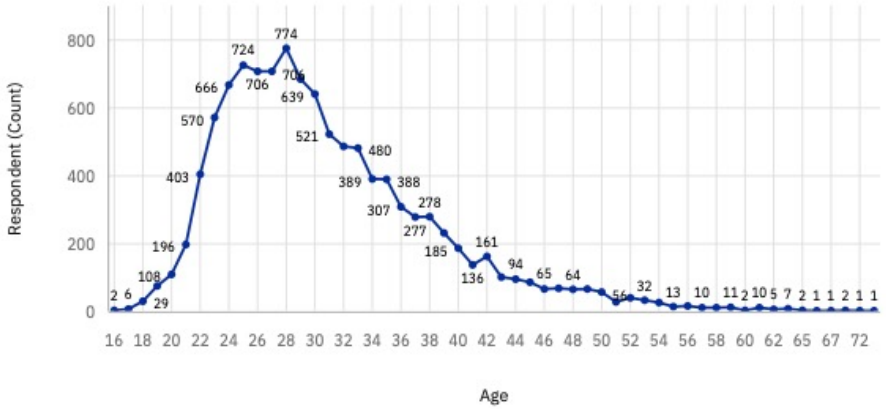
Respondent Count by Age



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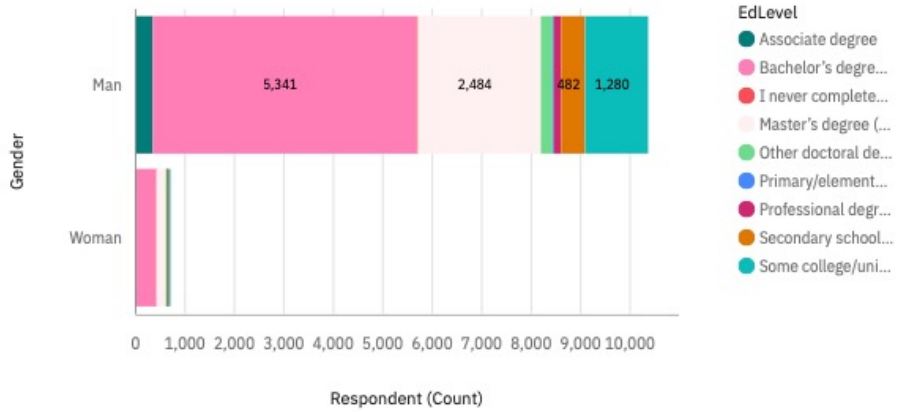
Respondent Count by Gender, classified by Formal Education Level



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DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used and HTML/CSS getting popular.
- Over 90% young male developers.
- Developers mostly located in developed countries.

Implications

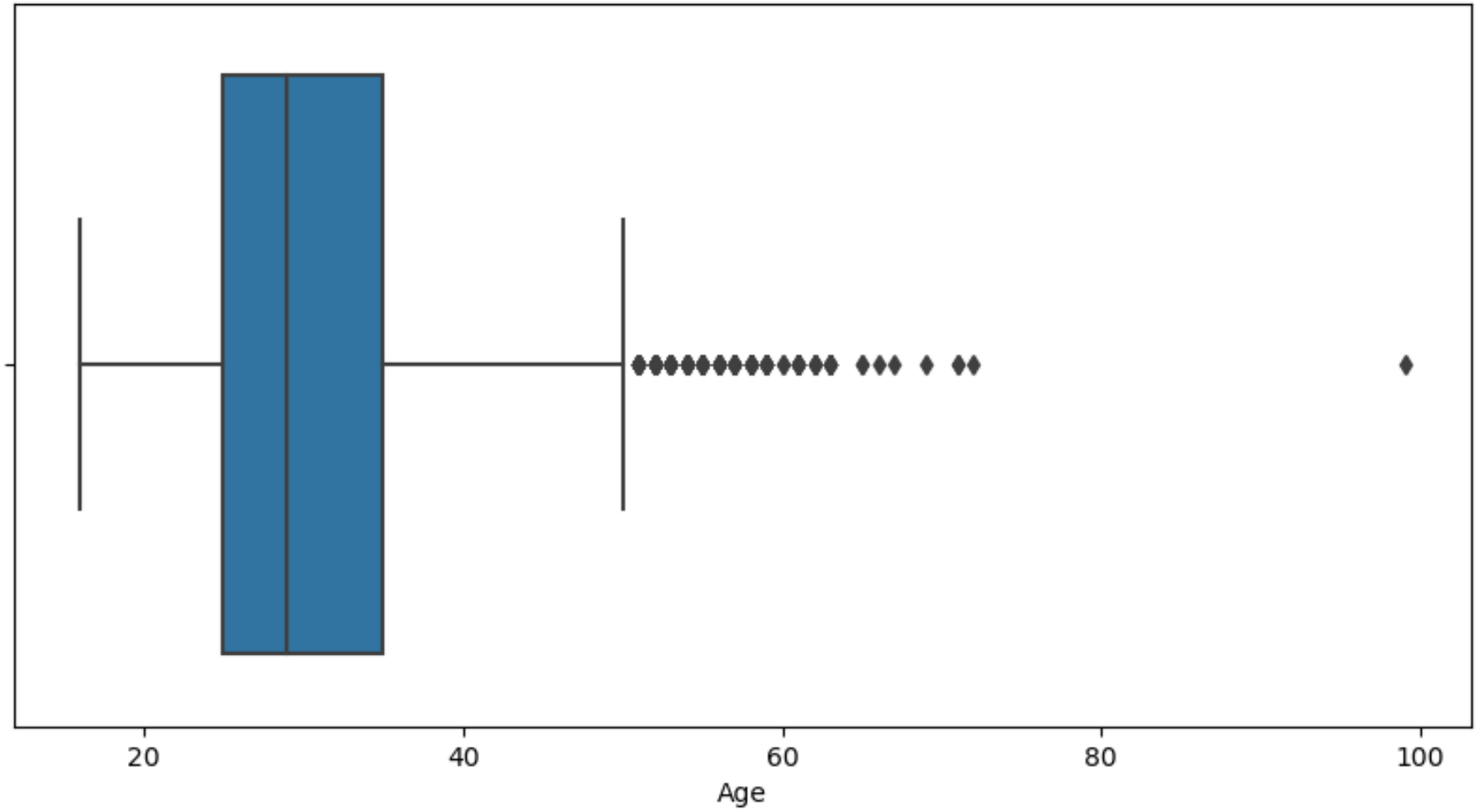
- JavaScript and HTML/CSS web frames gaining followers.
- Global polarization of developers location and gender.
- Young developers without postgrad studies on its majority.

CONCLUSION

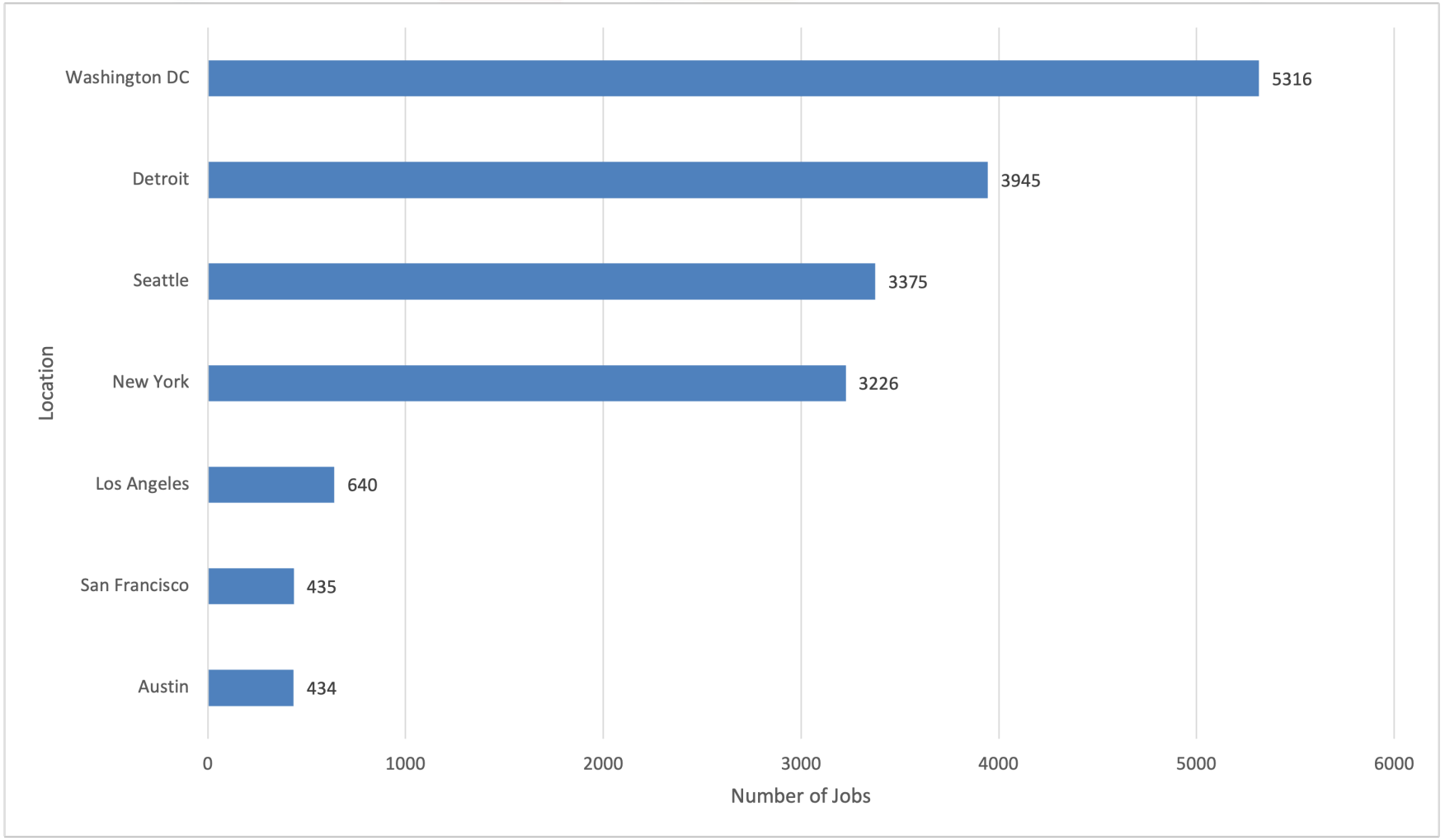
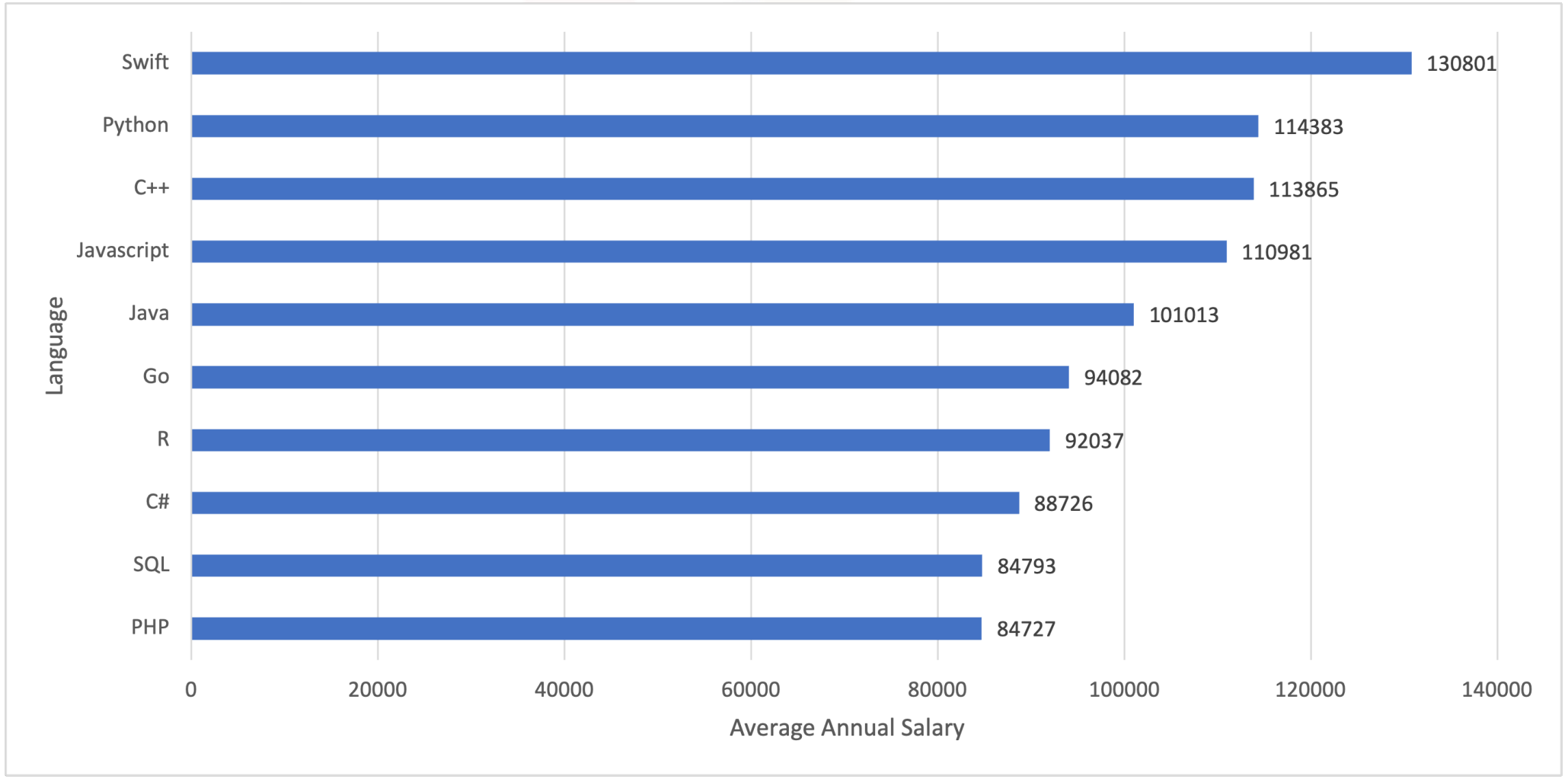
- Developers are people with very marked characteristics.
- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- There is a job to be done to spread accessibility of this labor market to countries in development.

APPENDIX

AGE DISTRIBUTION BOXPLOT



JOB POSTINGS



POPULAR LANGUAGES