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 & analysis goal.
- Methodology
  - Data Collection
  - Data Analysis
  - Data Visualization
- Results presentation supported with graphs & trends.
- Discussion of overall findings & implications regarding the result previously exposed.
- Final conclusion 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.

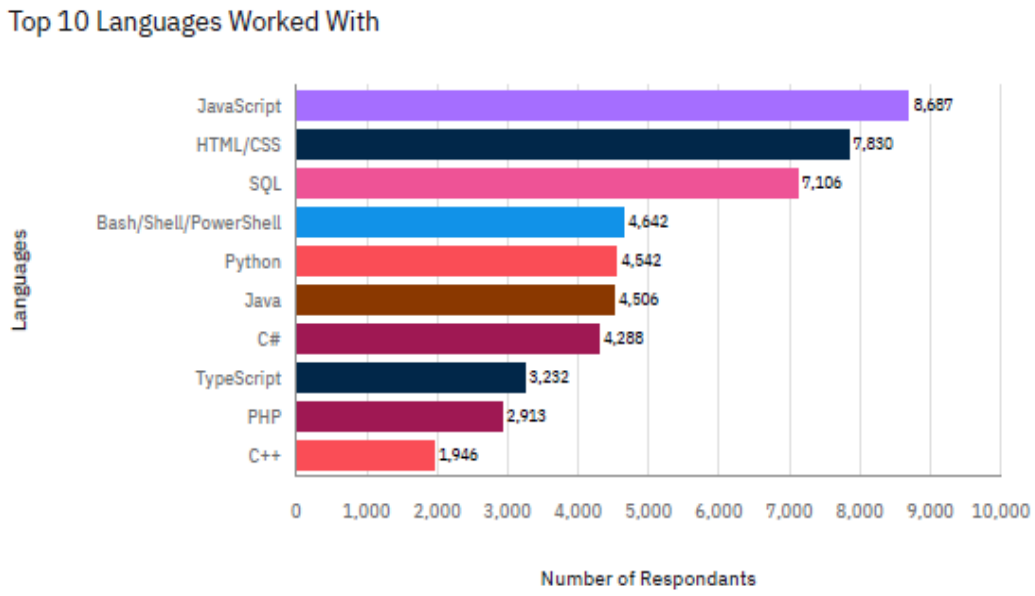
METHODOLOGY

- Collect survey data & explore its content
  - API
  - Web Scrapping
  - Request Library
- Data Wrangling
- Exploratory Data Analysis
  - Analyzing data distribution
  - Handling outliers
  - Correlations
- Data Visualization
  - Highlight distribution of data, relationships, the composition & comparison of data
- Dashboard

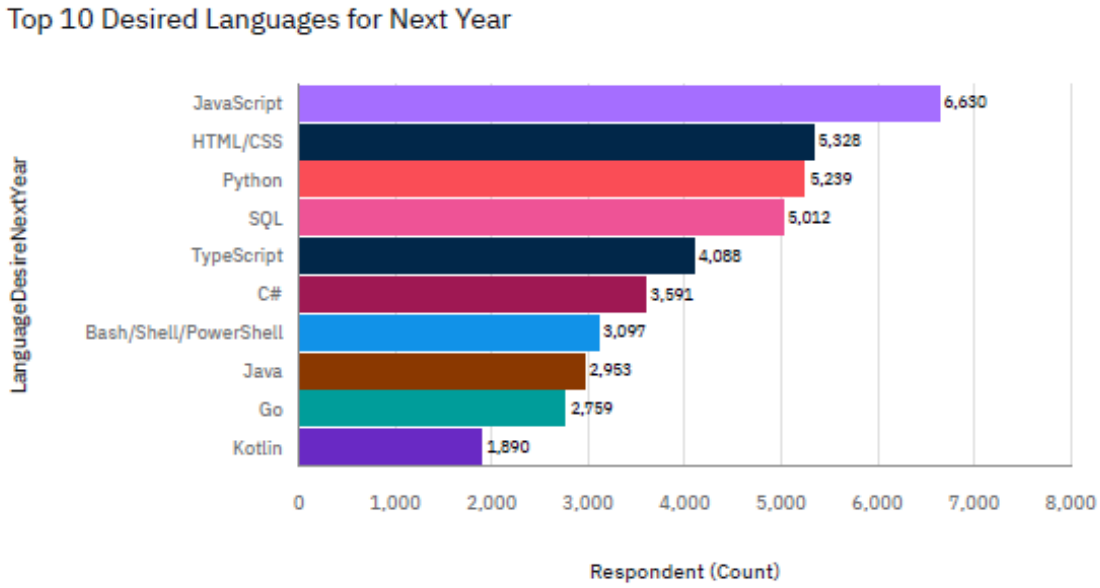
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

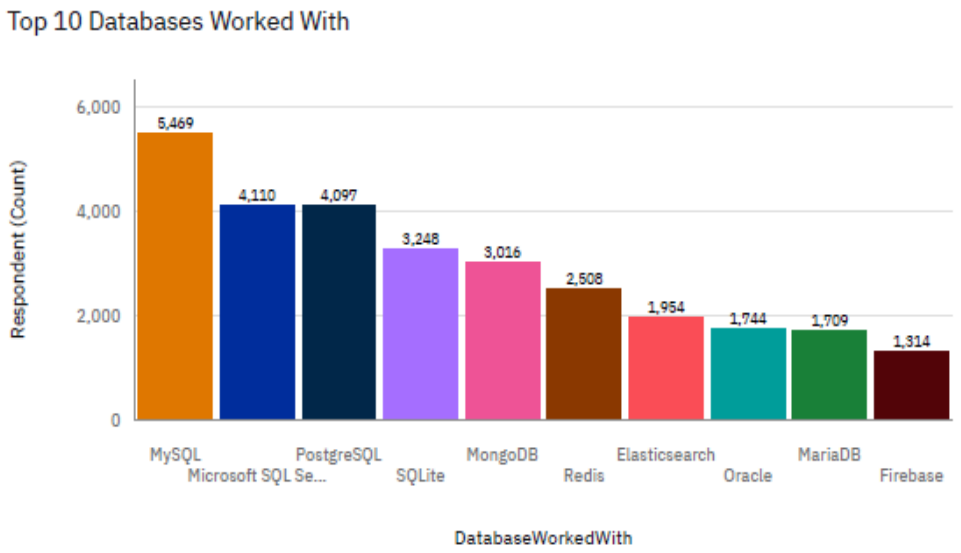
- JavaScript seems to keep as leading language.
- Python is the fastest growing language
- Most of the developers have keen interest in TypeScript

Implications

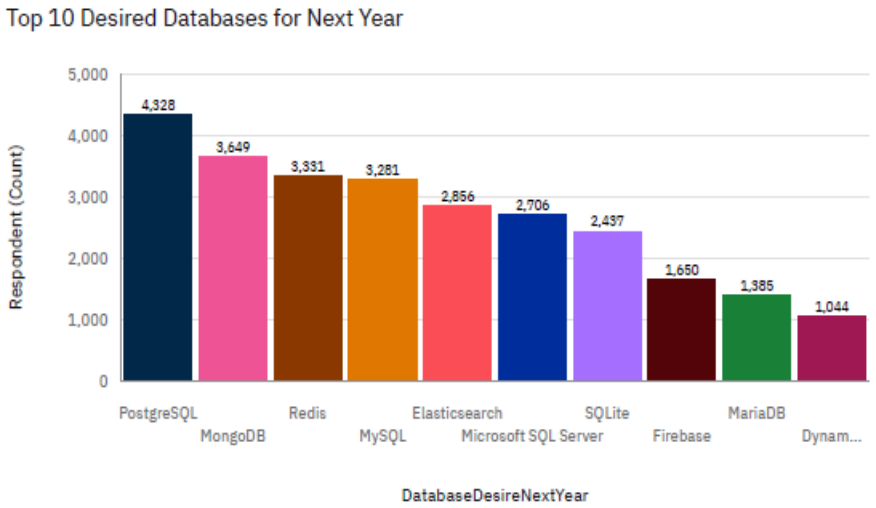
- Possible developers migration from JavaScript to TypeScript.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used database.
- Lack of interest in Microsoft SQL Server & SQLite.
- Increasing interest in PostgreSQL and MongoDB.

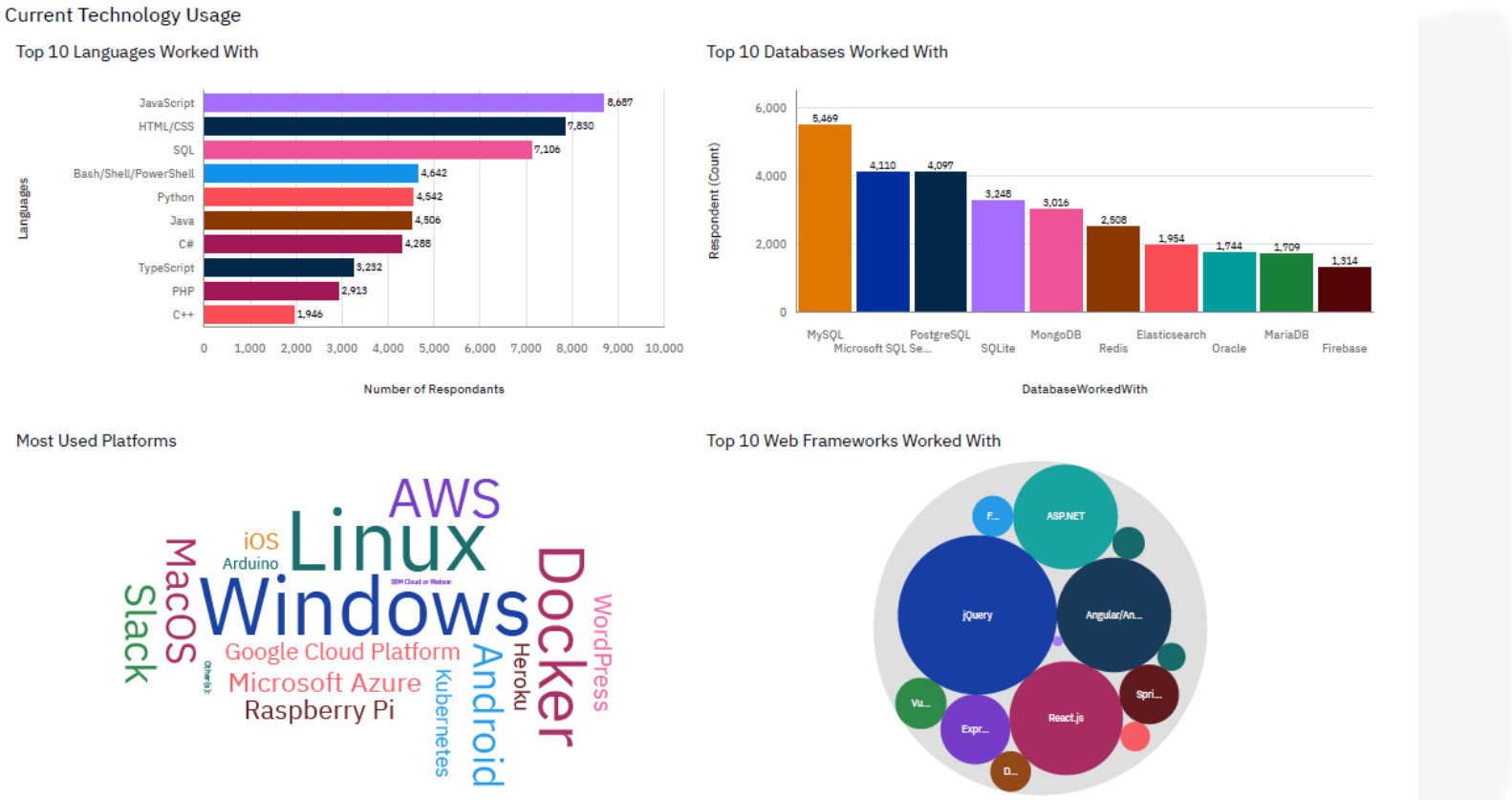
Implications

- Microsoft SQL Server & SQLite losing ground in the market.
- PostgreSQL & MongoDB establishment in the market.

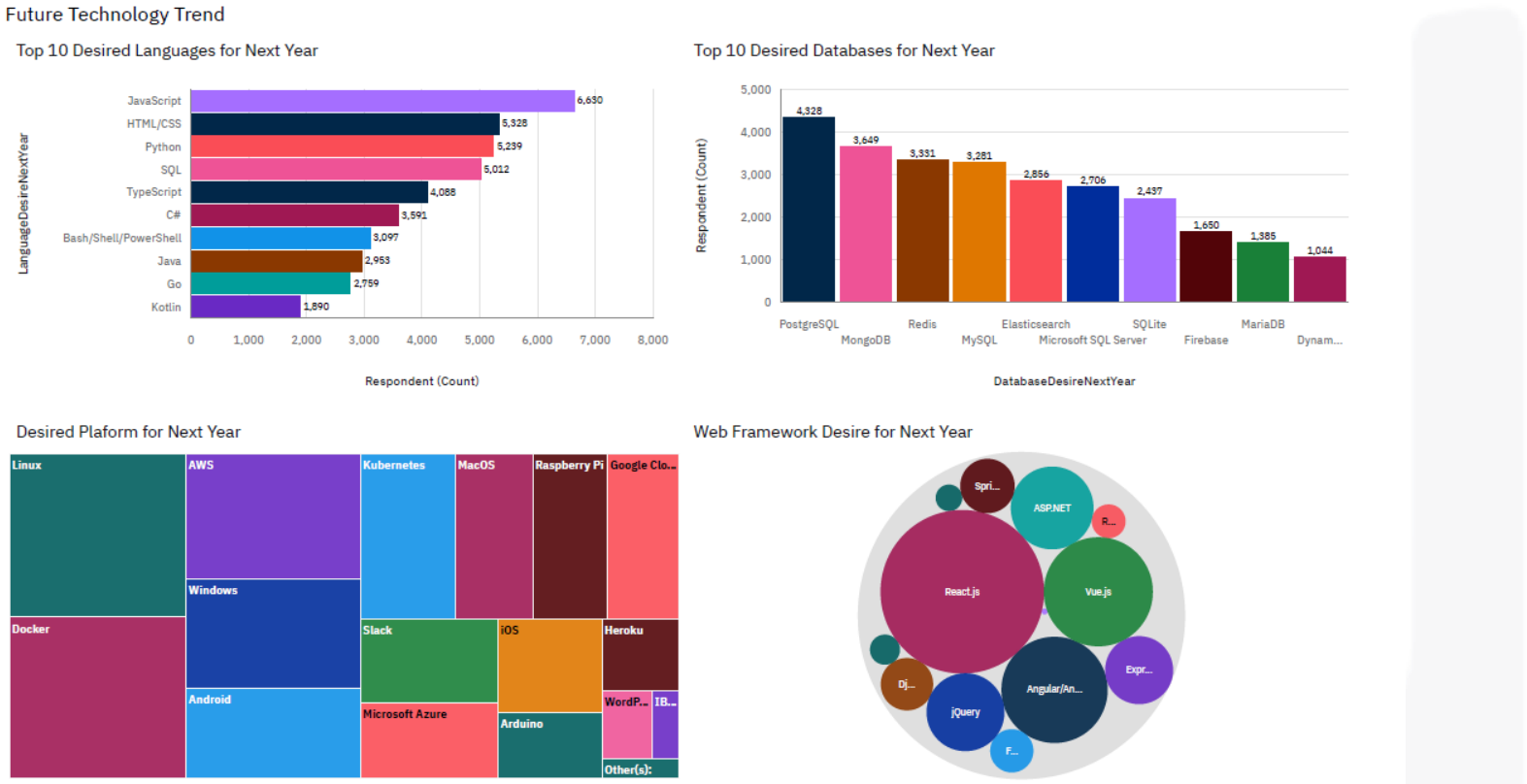
DASHBOARD

Dashboard GitHub Link :
https://github.com/sheershp24/ibm_data_analyst_capstone_project/blob/main/Cognos%20Dashboard.pdf

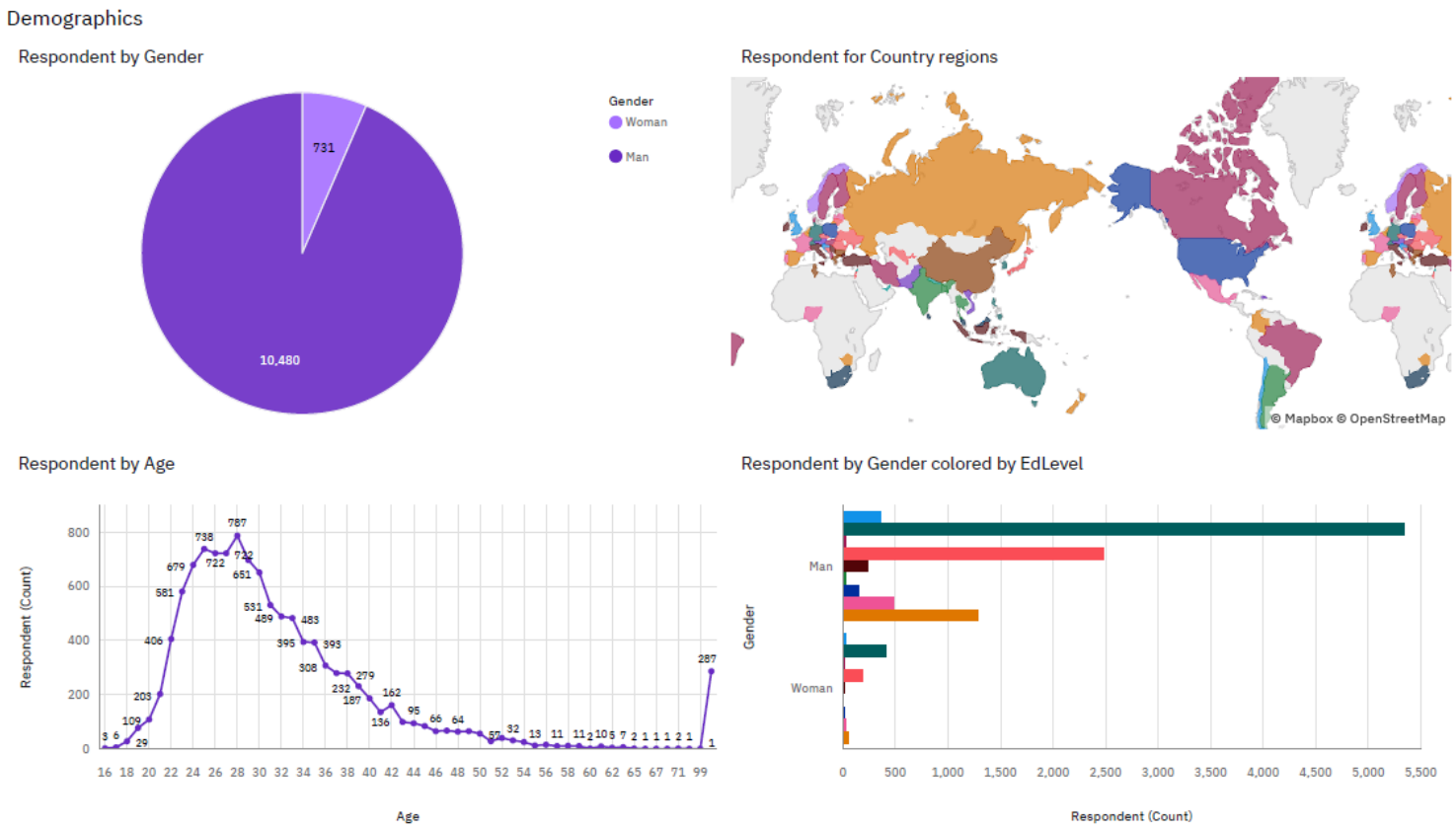
Current Technology Usage



Future Technology Trend



Demographics



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used & TypeScript getting popular.
- Over 90% of developers are young males.
- Developers mostly located in developed countries.

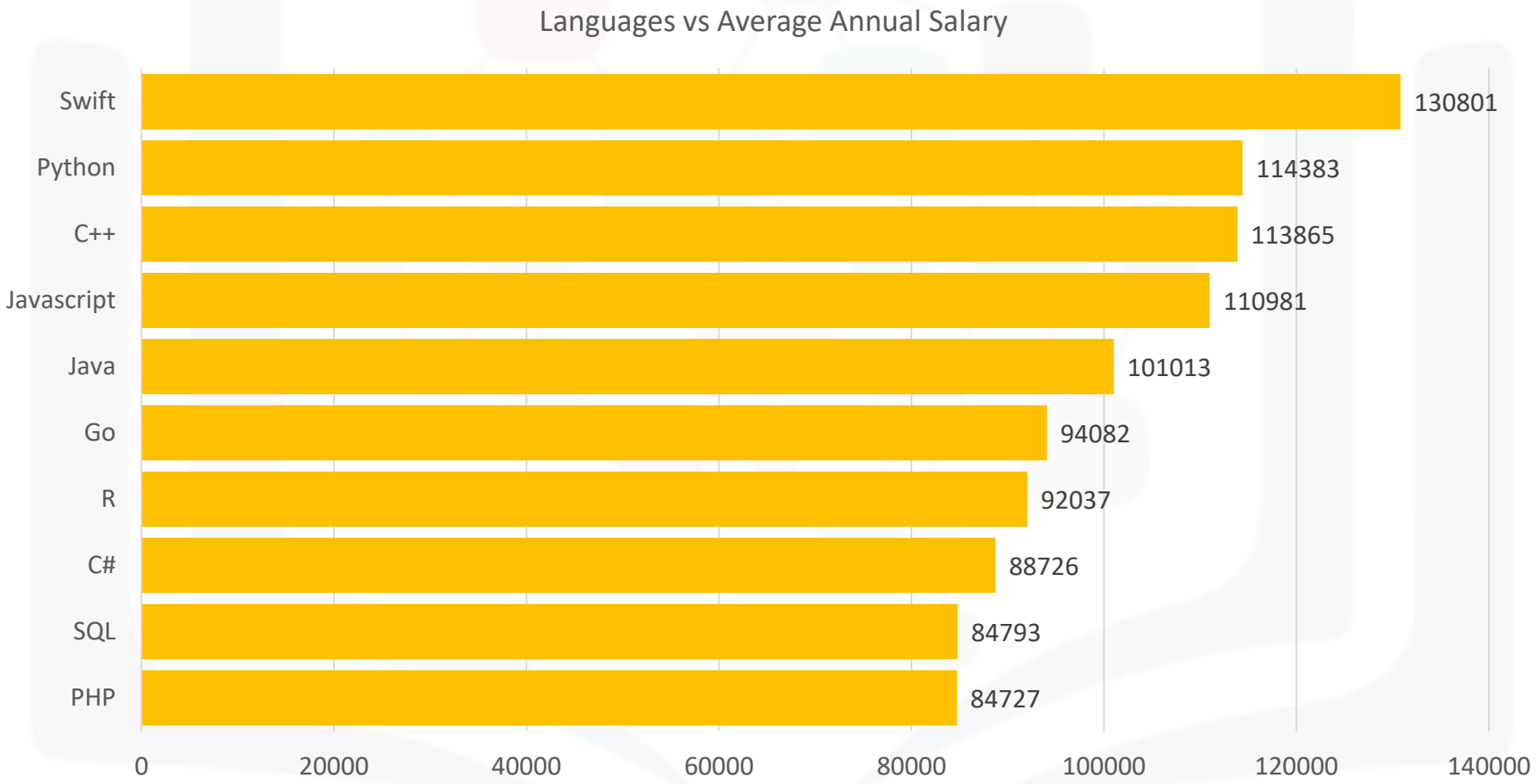
Implications

- JavaScript & TypeScript web frameworks are gaining more attention.
- Global polarization of developers location & gender.
- Young developers without postgrad studies on its majority.

CONCLUSION

- Developers are people with very marked characteristics.
- An increasing popularity for web frameworks, tools and languages related to web applications like JavaScript & TypeScript.
- There is still a lot of work to be done in order to encourage woman to start learning at least one programming language.

APPENDIX

JOB POSTINGS

POPULAR LANGUAGES