



Stack Overflow Developer Survey 2019

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OUTLINE



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

EXECUTIVE SUMMARY



- Data Contextualization and Analysis.
- Methodology involved:
 - Data Gathering
 - Data Analysis
 - Data Visualization
- Results are presented and supported with graphs & charts.
- Discussion of overall findings and implications regarding the results.
- Final conclusion of the carried out results.

INTRODUCTION



- Stack Overflow's annual Developer Survey 2019 is the largest and most comprehensive survey for coders around the world.
- Nearly 90,000 developers participated.
- Trends to predict- where are the developers going?
- Characterization of developers around the globe.

METHODOLOGY



- Collected survey data and examined its content by
 - Web Scraping
 - APIs
 - Request Library
- Data Wrangling
- Exploratory Data Analysis(EDA)
 - Analyzing data distribution
 - Handling outliers
 - Correlations
- Data Visualization
 - Highlighted data distribution, relationships, the composition and the comparison of data.
- Dashboard

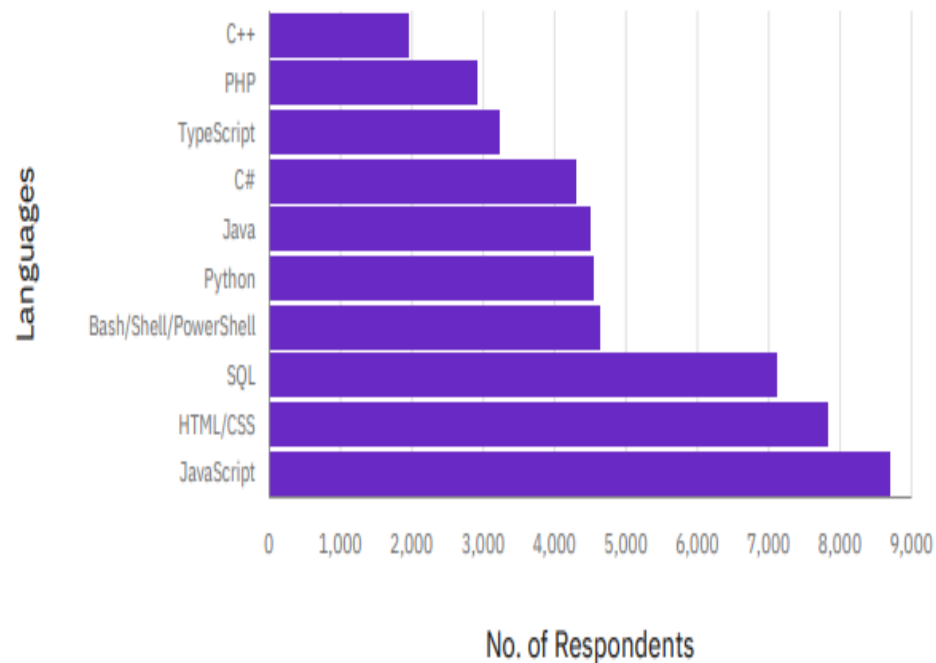
RESULTS

- JavaScript is widely used and Python is the fastest growing language.
- MySQL is the most popular and in-demand database.
- C++ and Php will loose popularity among developers in future.
- Significant gender disparity is evident in the development field. 93.5% developers are male while only 6.5% are female developers.

PROGRAMMING LANGUAGE TRENDS

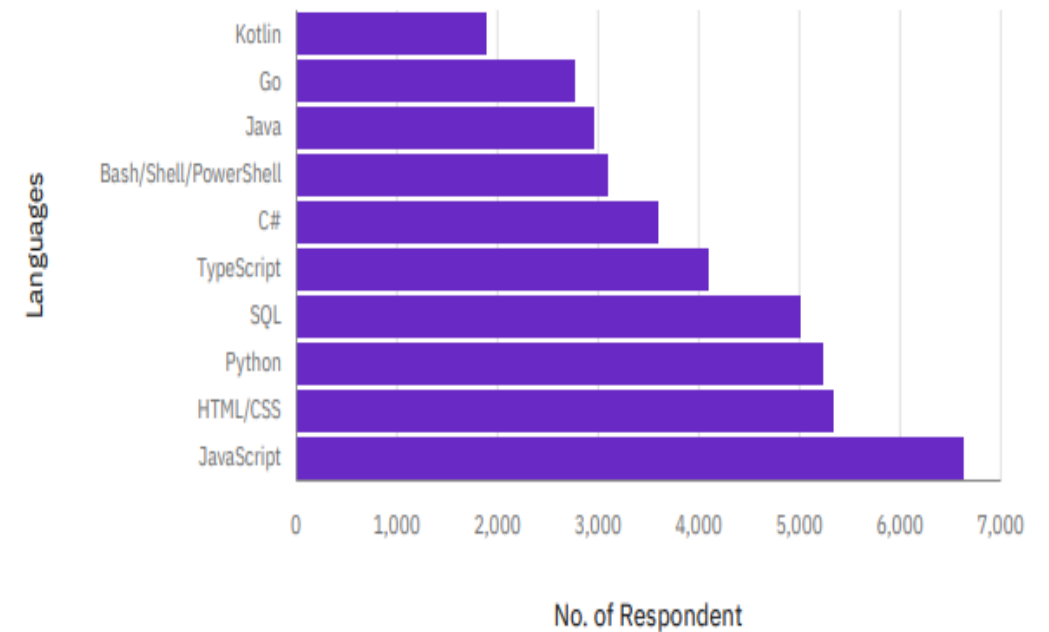
Current Year

Top 10 Languages



Next Year

Top 10 Languages Desired for Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is the most preferred language amongst coders.
- Python is the fastest growing language.
- Noticed growing interest in TypeScript.

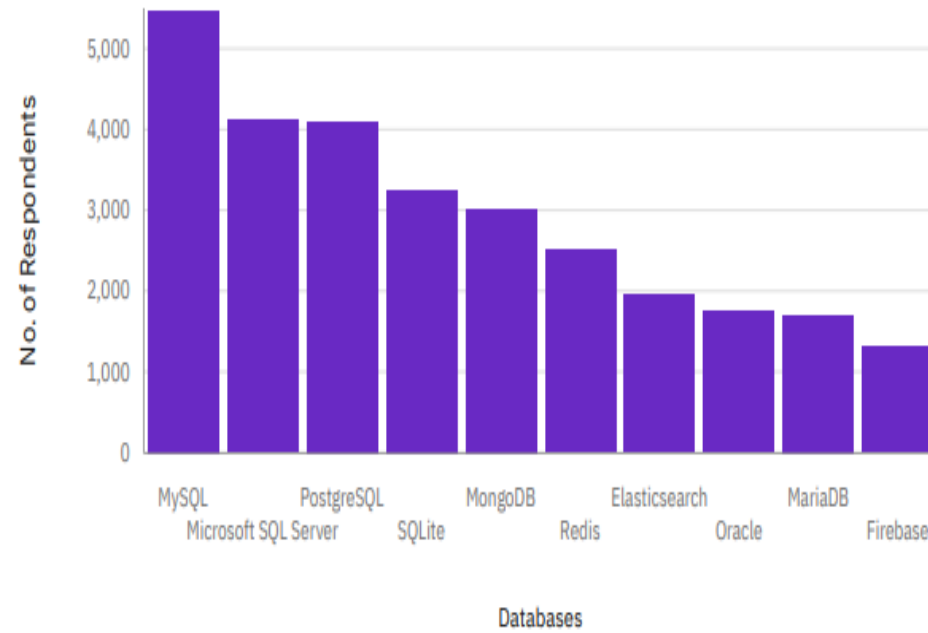
Implications

- Preference of C++ and php can extinct among the coders in the coming years.
- Kotlin and Go have become new area of interest for the coders.

DATABASE TRENDS

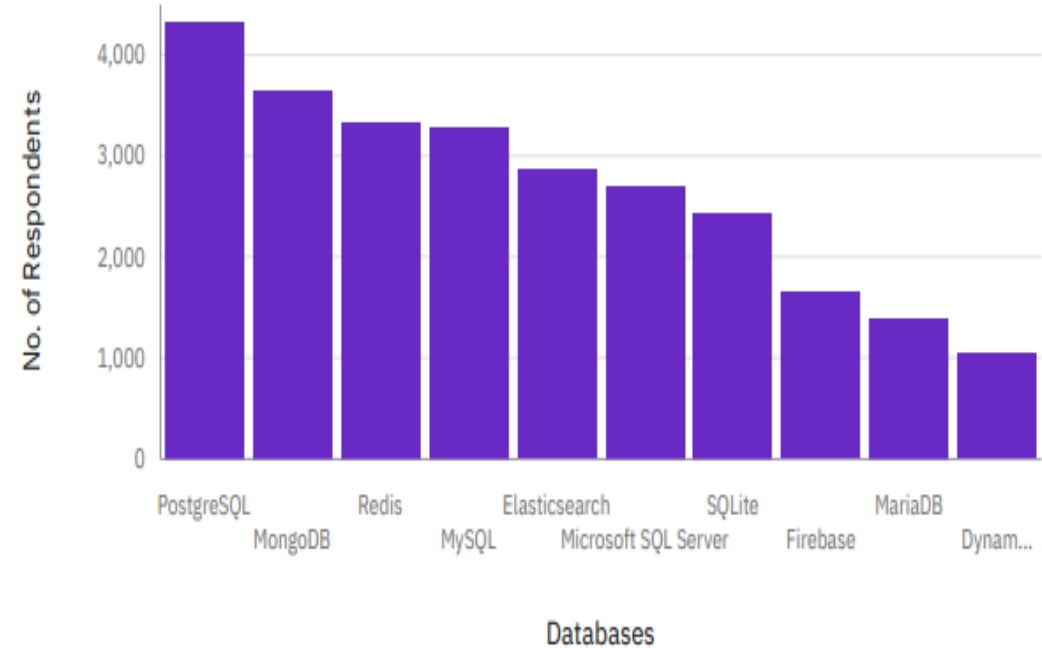
Current Year

Top 10 Databases



Next Year

Top 10 Databases Desired for Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most used database.
- Rapid growth of interest in PostgreSQL and MongoDB.
- The popularity of Oracle has waned among coders.

Implications

- Microsoft SQL Server and SQL Lite losing ground in market.
- Establishment of PostgreSQL and MongoDB in the market.

DASHBOARD

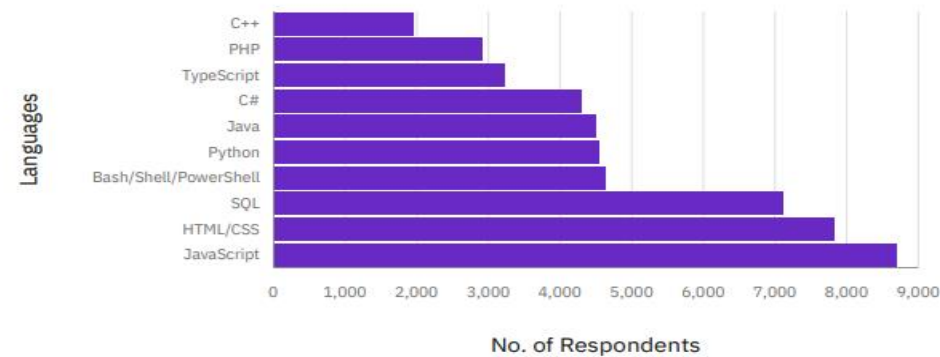
Github Link



<https://github.com/ADITYARANJANUS/IBM-Capstone-Project-Dashboard/blob/main/IBM%20Cognos%20Analytics%20Capstone%20Project%20Dashboard.pdf>

Current Technology Usage

Top 10 Languages



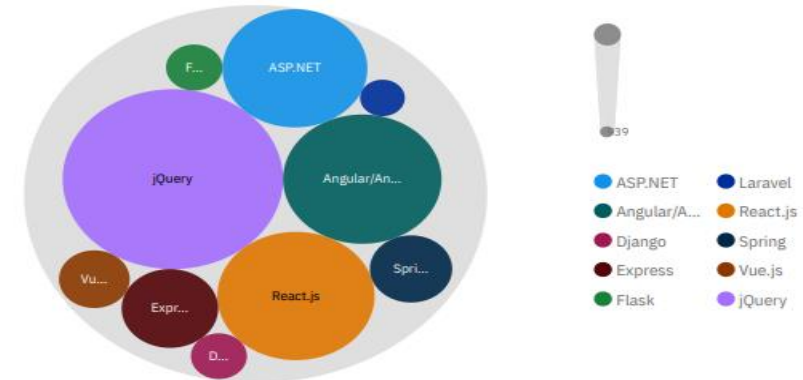
Top 10 Databases



Platforms currently in use

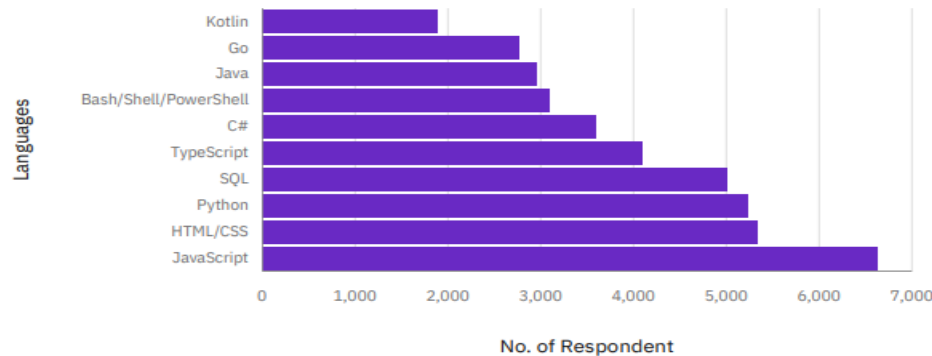


Top 10 WebFrames currently in use

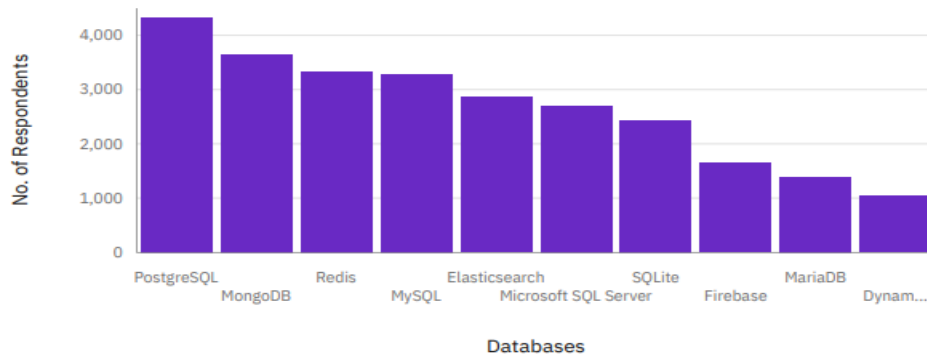


Future Technology Trends

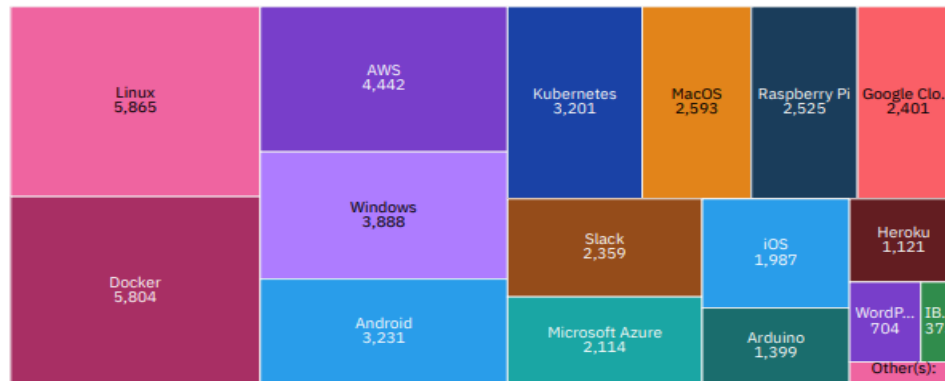
Top 10 Languages Desired for Next Year



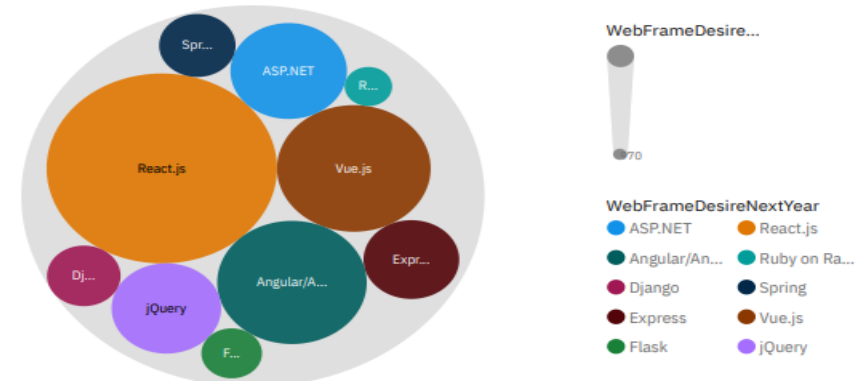
Top 10 Databases Desired for Next Year



Platforms Desired for Next Year

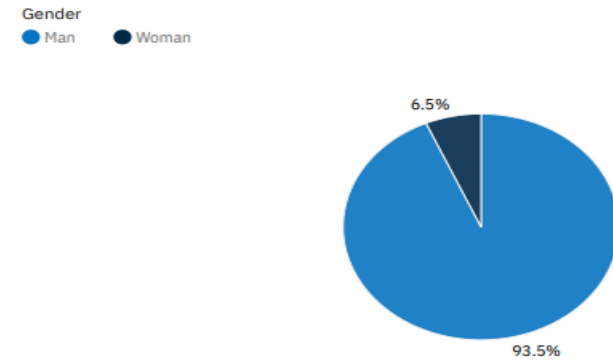


Top 10 WebFrames Desired for Next Year

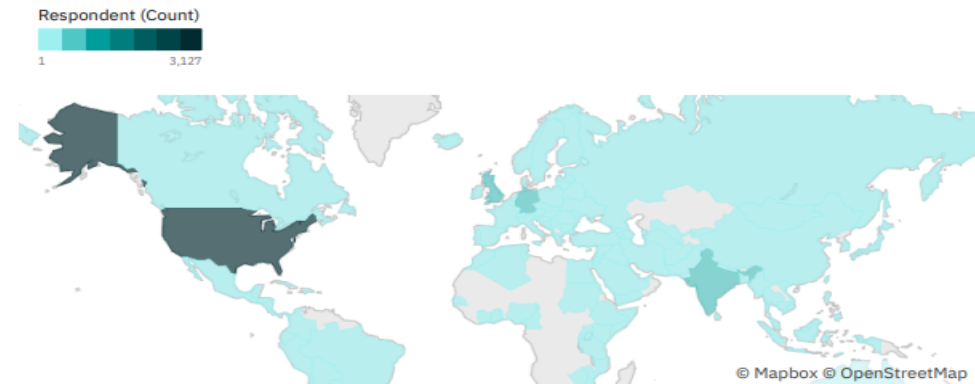


Demographics

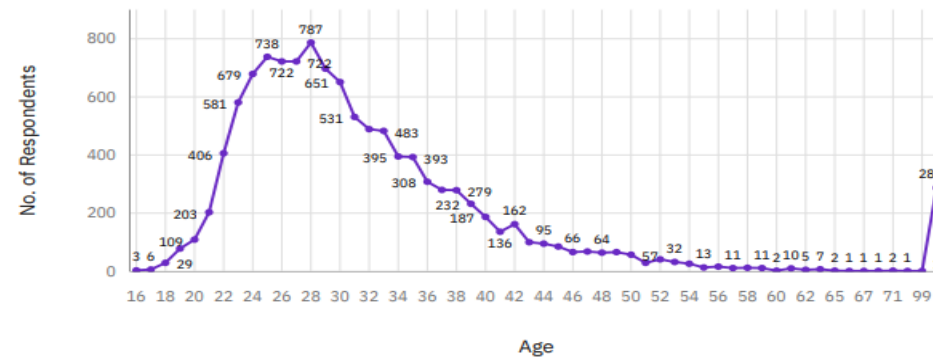
Respondents by Gender



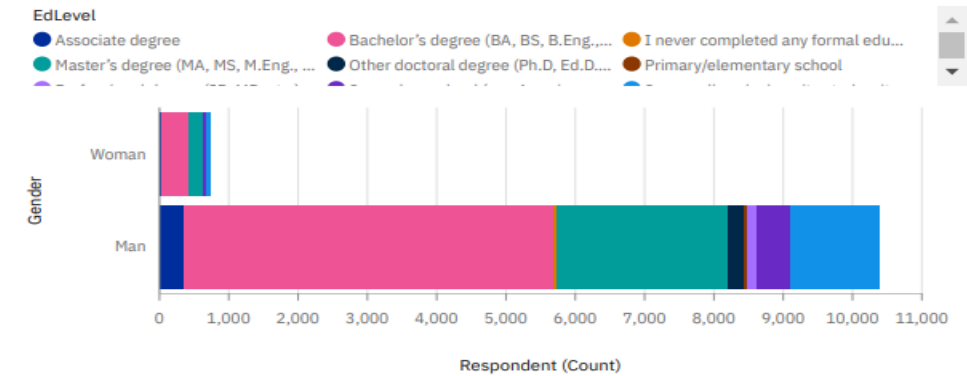
Respondents count for Country



Respondents by Age



Formal Education Level by Gender



DISCUSSION



- According to trends, which is the top most language among coders?
- According to trends, which is the top most database among coders?
- What's the ratio of male and female coders in the development industry?
- Highest education of the coders in the current industry?

OVERALL FINDINGS & IMPLICATIONS

Findings

- Around 90% coders are male in the coding field.
- JavaScript is widely used and Python is the fastest growing language.
- Developers are mostly located in developed countries, like the USA.
- WebFrames like ReactJS, Angular to be widely used in future.

Implications

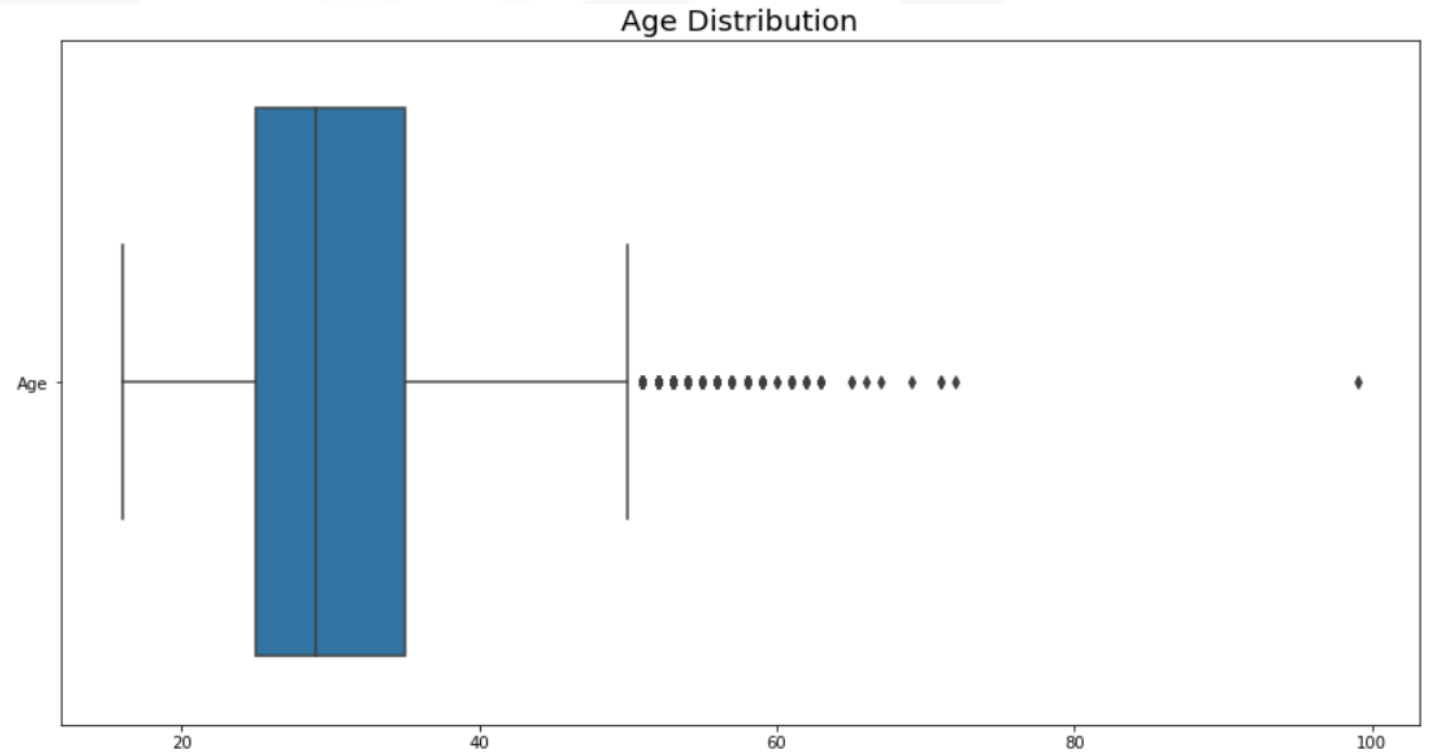
- Decrease in number of jQuery users.
- Platforms like Docker, AWS, Kubernetes will be used widely by coders in the upcoming years.
- Majority of young developers are without postgrad degree.

CONCLUSION



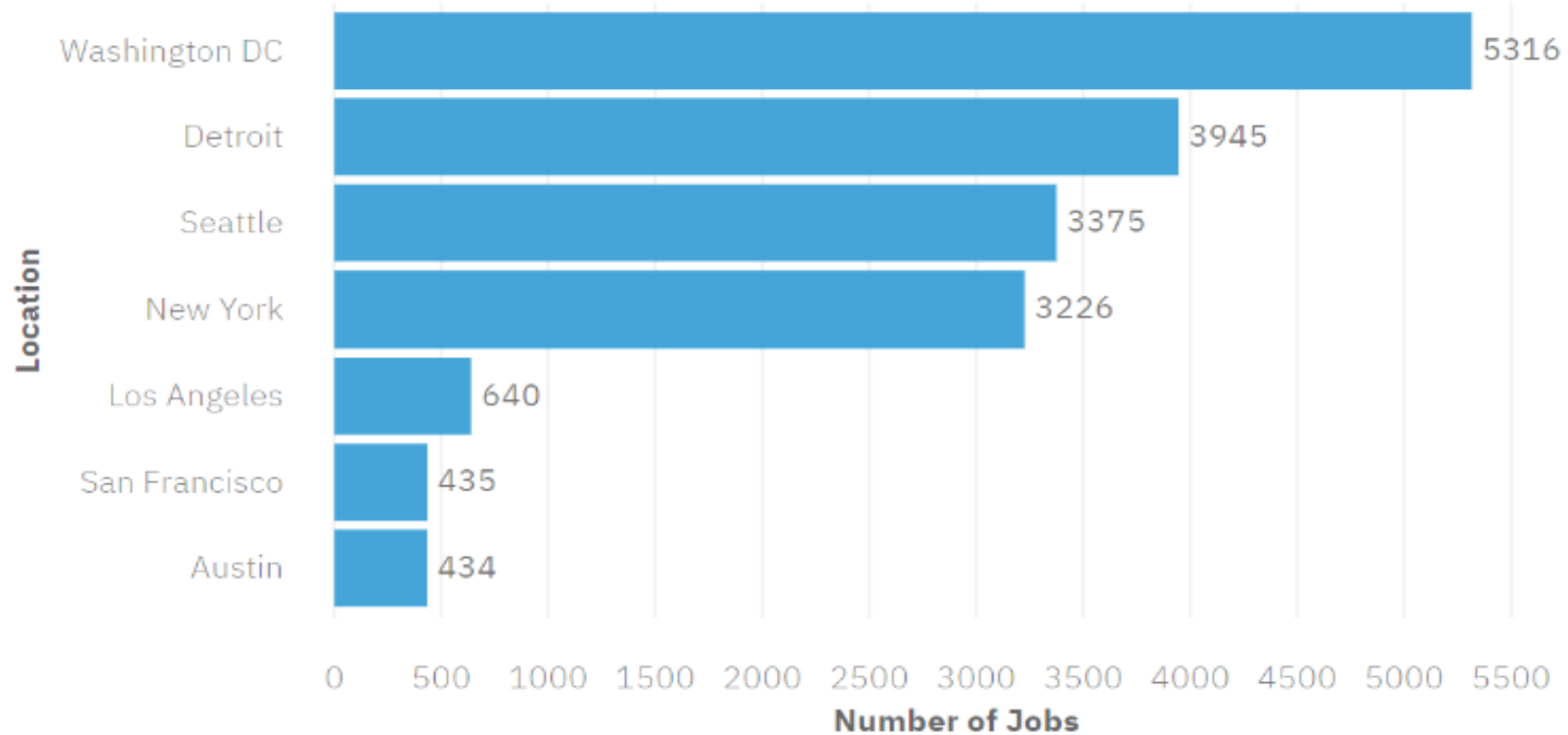
- Developers are people with marked characteristics.
- They are evolving at every stage, according to the market standards/requirement.
- Accessibility of labor market should be spread across the country under development.
- Good idea of popular tools, languages, and platforms can be a plus point for the emerging coders.

APPENDIX



Average age of people working in development field is of 30 years.

JOB POSTINGS



POPULAR LANGUAGES

