



OUR FUTURE TECHNOLOGY

DINH XUAN PHAN ANH

05/06/2023

OUTLINE



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

EXECUTIVE SUMMARY



- Nowadays, with the constant progress of technology, IT recruiting market is becoming more and more competitive
- Therefore, it is important to answer the following questions:
 - What are the most current technology usages?
 - What are future technology trends?
 - What are demographic factors that influence this industry most
- This presentation will answer above questions

INTRODUCTION



- The dataset used comes from website <https://stackoverflow.blog/2019/04/09/the-2019-stackoverflow-developer-survey-results-are-in/>
- The dataset is a survey of 10.000 respondents who is working in IT industry all over the world.
- Many people who intend to engage in this industry will confuse about way too much programming languages, databases, platforms or web frames to study.
- Through this presentation, you can prepare the necessary skills in order to get an IT job as your desire

METHODOLOGY



- This presentation obtains data from an online survey conducted in house teams at PromptCloud and DataStock
- This survey get information from over 10.000 respondents from all over the world with abundant demographic information
- The dataset was wrangled by me for appropriate statistical comparison. Therefore the data was used for visualizations will be quite different from original version
- This data is analyzed by performing simple numerical comparison upon respondents' answers to find out the most popular technologies

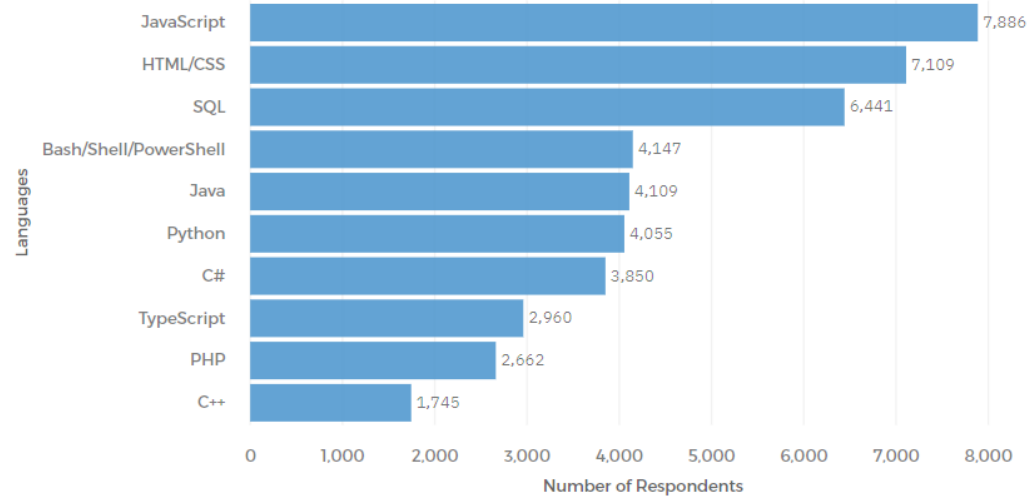
RESULTS



PROGRAMMING LANGUAGE TRENDS

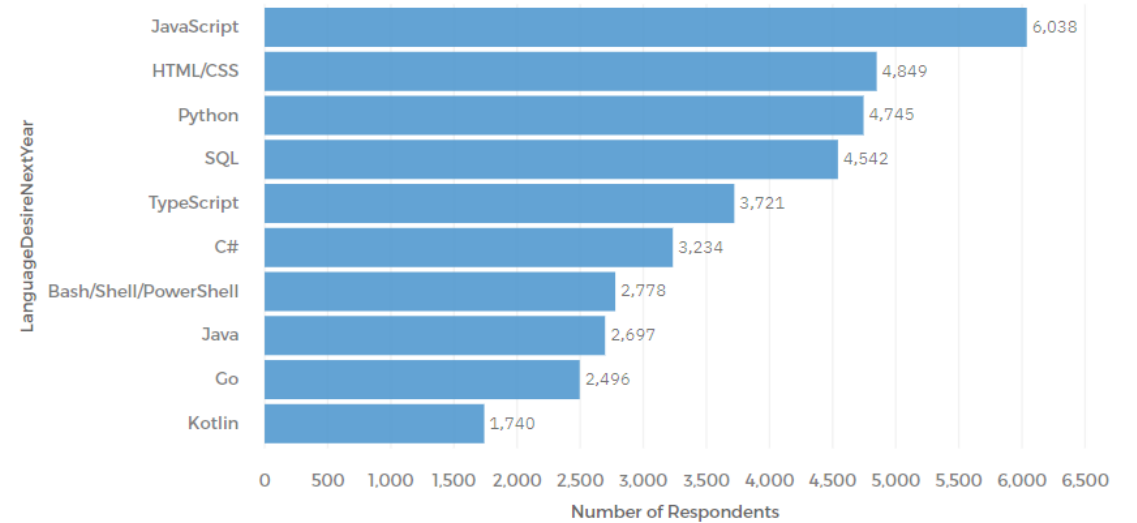
Current Year

Top 10 languages respondents worked with



Next Year

Top 10 languages respondents desire to learn next year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript, HTML/CSS and SQL are the most used languages
- Low-level languages such as C++ or even C (which is not appeared in the list) are least popular
- Python is the most prominent language which can overcome top 3 above because the amount of respondents wishing to learn this language in future is very high

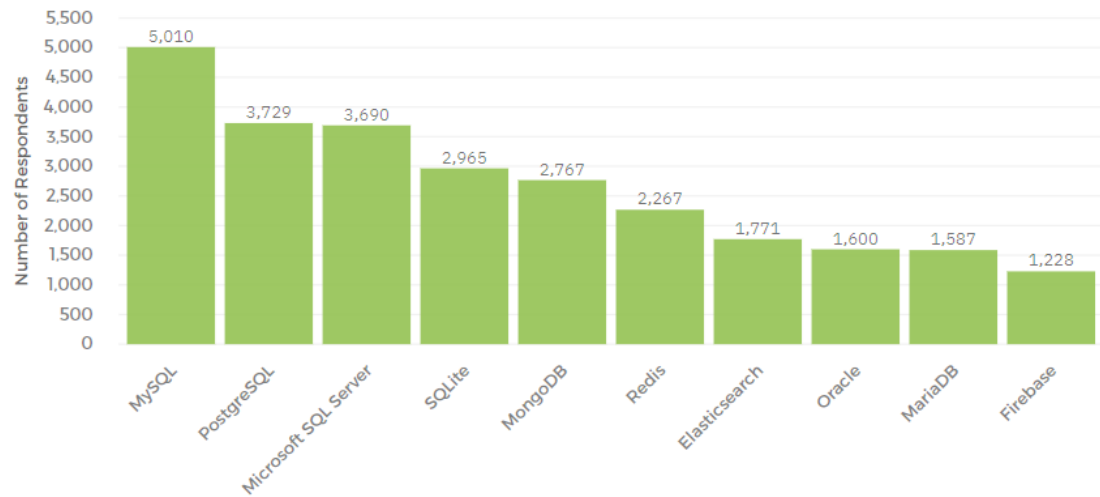
Implications

- As the job positions of SE, FE and Dev is currently very popular
- Low-level languages mainly used for mobile dev, embedded and electrical programming are hard to work
- With the emergence of Data and AI industry, the demand for Python will dramatically increase in the future

DATABASE TRENDS

Current Year

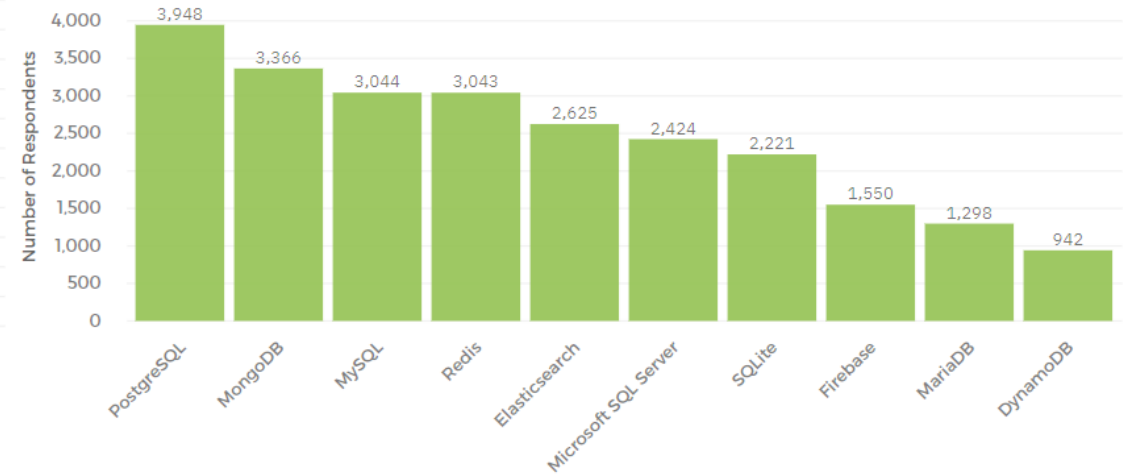
Top 10 databases respondents worked with



DatabaseWorkedWith

Next Year

Top 10 databases respondents desire to learn next year



DatabaseDesireNextYear

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- RDBMS is dominating as current year chart showed
- The desire chart witness the significant progressive of NoSQL databases such as MongoDB, Redis and Elasticsearch

Implications

- The industry is still favoring jobs working with software or web
- The need for using NoSQL databases will increase in the future to serve emerging industries such as AI, Data and Cloud

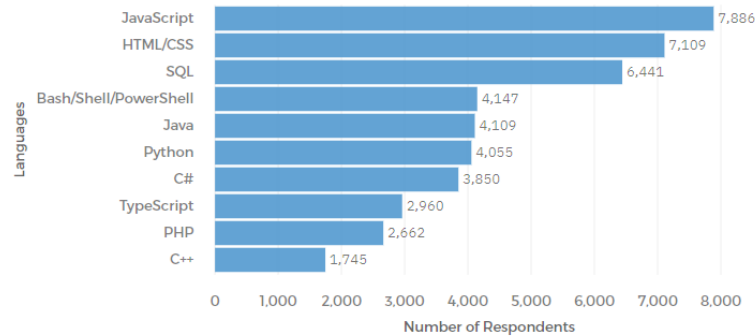
DASHBOARD



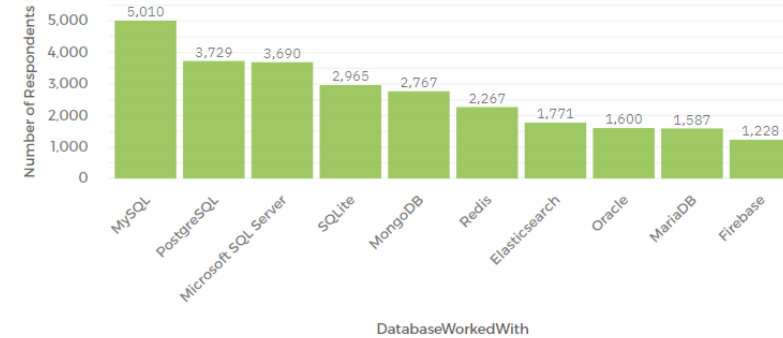
<https://dataplatform.cloud.ibm.com/dashboards/99e55cca-8058-446d-a3b6-352f4662ce61/view/003fa0170ca3629116f7e6e407cf7904783e2359b5bb8551848d7b490d682797f06146c3c87a4e5cd3430632f2e8125ac1>

DASHBOARD TAB 1

Top 10 languages respondents worked with



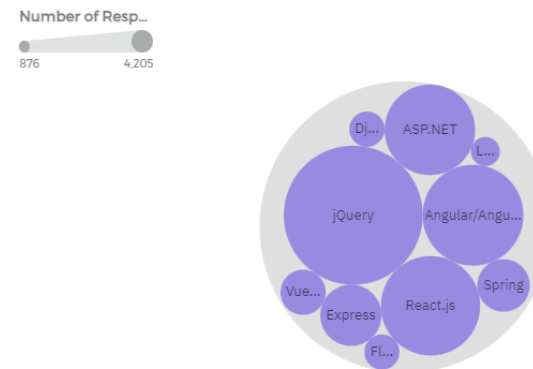
Top 10 databases respondents worked with



Platforms respondents worked with

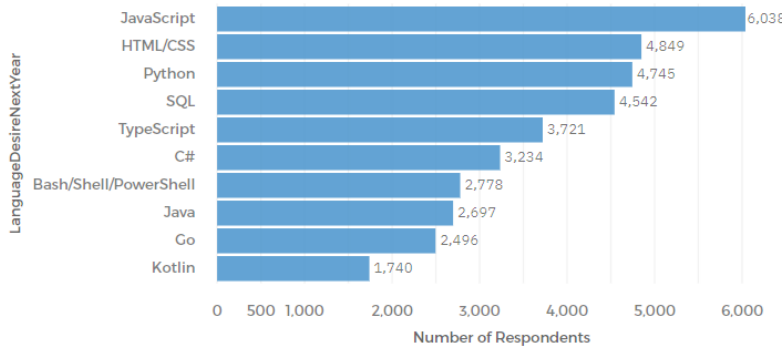


Top 10 webframes respondents worked with

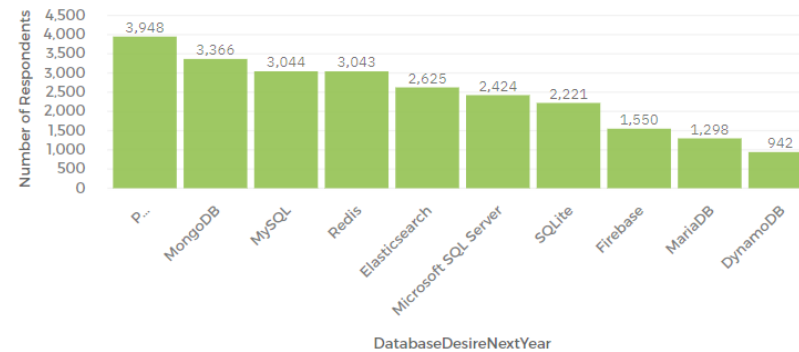


DASHBOARD TAB 2

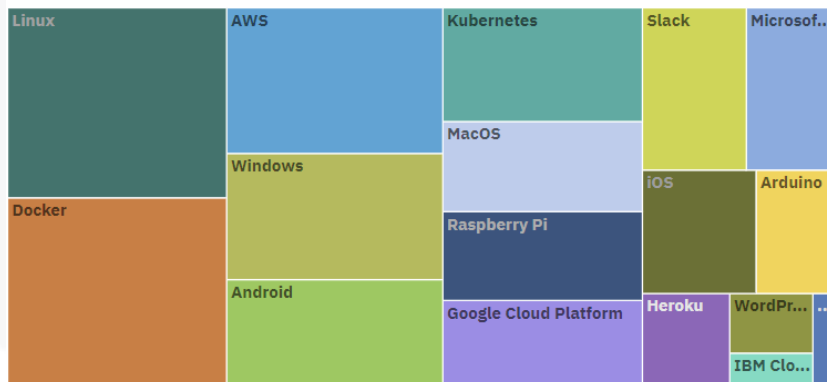
Top 10 languages respondents desire to learn next year



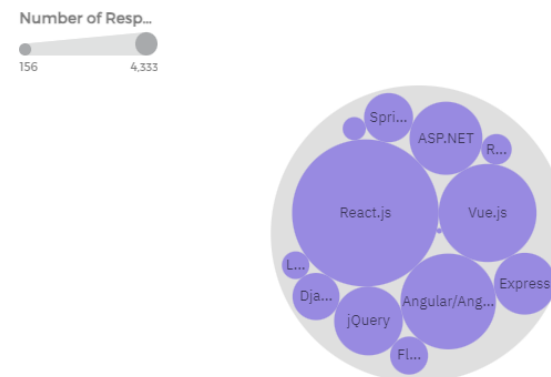
Top 10 databases respondents desire to learn next year



Top 10 platforms respondents desire to learn next year



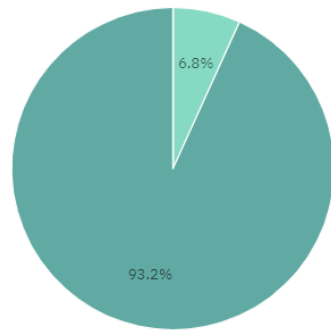
Top 10 webframes respondents desire to learn next year



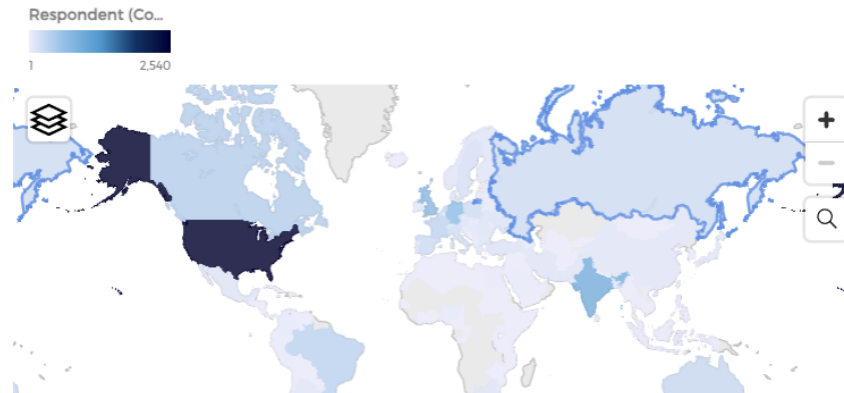
DASHBOARD TAB 3

Distribution of respondents by genders

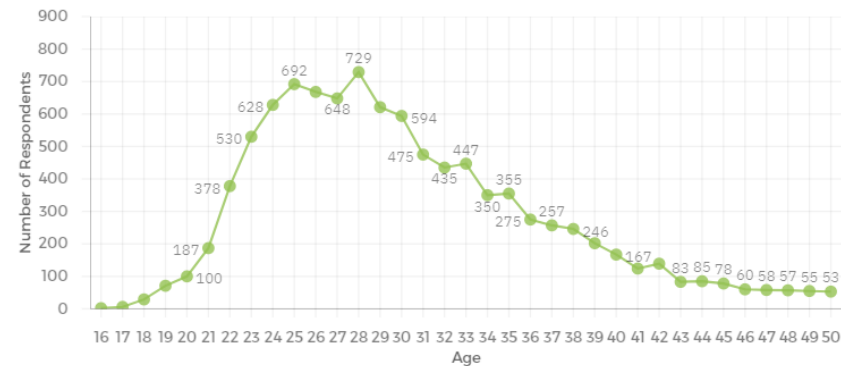
Gender
● Woman ● Man



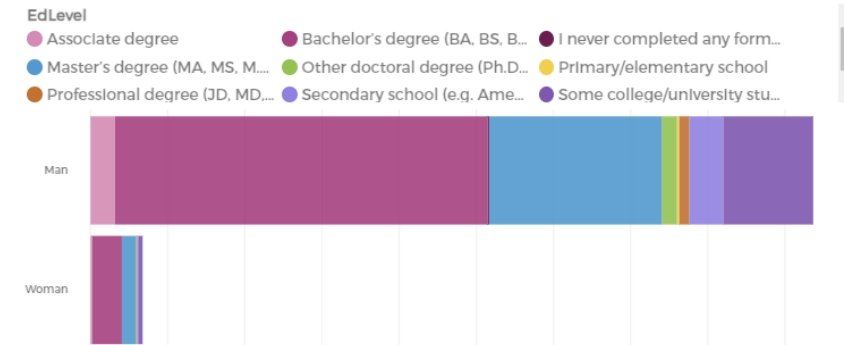
Number of Respondents by countries



Age distribution by number of respondents



Number of Resonpents by Gender, classified by Formal Education Level



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- The traditional technologies which are invented in such a long period is still the most popular nowadays
- Python and NoSQL databases will be future
- Man is still dominant in this industry with age range from 23 – 33. United States is still a paradise land for the ones who want to find a job in this industry

Implications

- If you are a newbie in this industry, don't hesitate to start your journey with the familiar and traditional technology because the current market still have high demand for these technologies
- If you experience in this industry for such a long time, try to learn new technology each day in order not to be outdated
- However, there is still 686 respondents in our survey who are women. Therefore, no matter is your gender, age and where you from; as long as you try your best, you can still have opportunity in this industry

CONCLUSION



- Learn technology foundation and explore future technologies are steps for your successful career in this industry
- The age from 23 – 33 is the best period for you progress, so try your best to do above steps when you're in these age ranges
- Try to get at least a Bachelor' degree to attract recruiters because as survey, most of respondents have Bachelor's degree

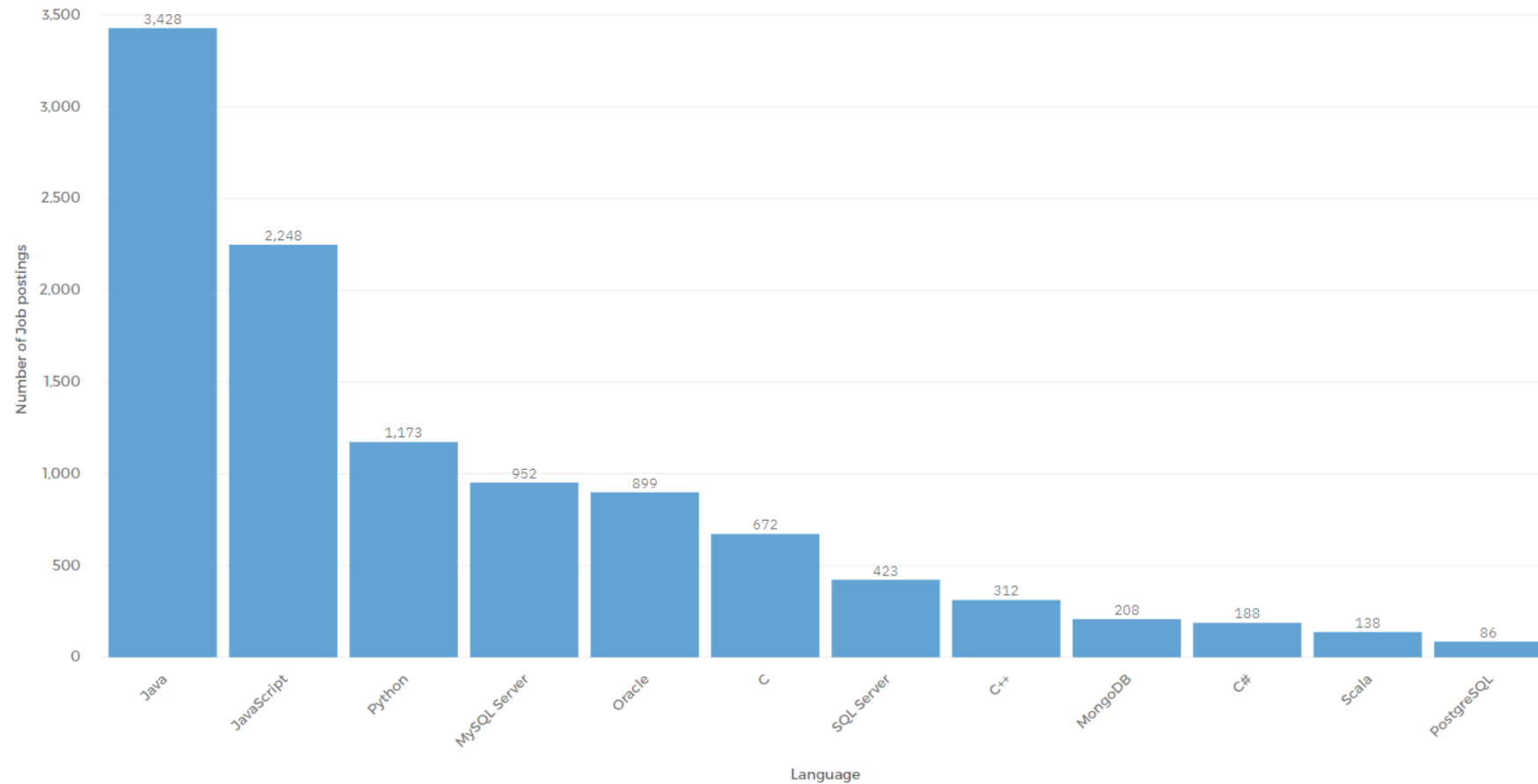
APPENDIX



- This appendix will show number of job postings and average salary by languages.
- The data was collected from website <https://www.kaggle.com/promptcloud/jobs-on-naukricom>

JOB POSTINGS

Number of job posting by languages



POPULAR LANGUAGES

