<TITLE> Stack Overflow Developer Survey Results- 2019

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OUTLINE

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- Methodology
- Results
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- Discussion
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EXECUTIVE SUMMARY

- The report gives an understanding of the current top trending languages and database used.
- Additionally, the report also show the forecast the top future languages and databases which might be in trend.
- The report also consist of the demographics from which this survey is conducted.
- At the end of the report, graphs show the average annual salary of a person as per programming languages known. Also, job postings mentioned on the Git-Hub.

INTRODUCTION

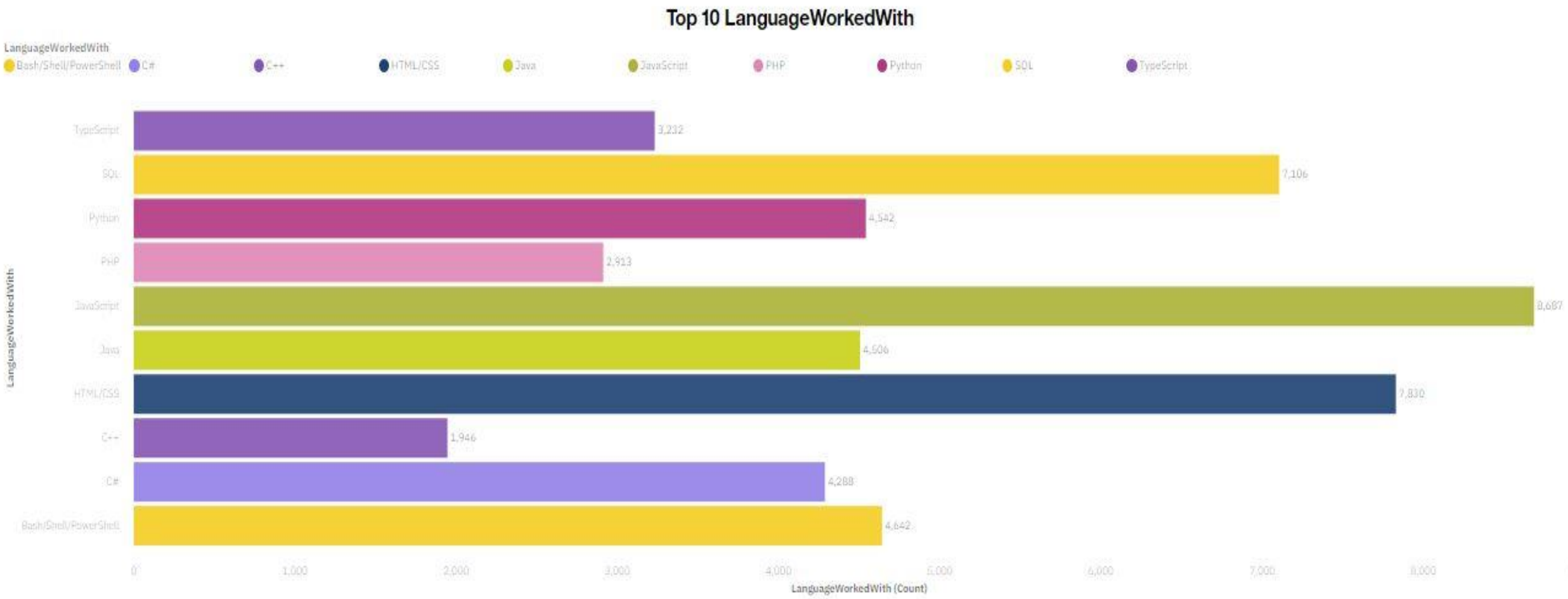
- After reading the report, the reader will be able to get a insight of the current popular languages and database's that are in demand in the market.
- The reader will also learn about the future trending programming languages and databases.
- Additionally, the report also give an information in regards to the Web frameworks that are in demand currently. Also, futuristically which web frameworks will be desired by the market.
- The database for this report was collected by Stack overflow in 2019. The database was built by doing a survey. Report is based on the below two databases.
    - Current_Technology_Trend
    - Future_Technology_Trend
    - Demographics

METHODOLOGY

- The databases, was built by doing a survey which was done by Stack Overflow in 2019.
- There were around 90,000 developers who had taken part in a 20 minute survey.
- The survey covers everything from the developer's favorite technologies to their job preferences.
- Last 2 slides which shows the Git-Hub job listings and average annual salary:
  - Using Git-Hub Job API on the Git-Hub job posting site, data was collected.
  - Similarly, using Web-Scraping, popular languages vs. annual salary bar graph was built.

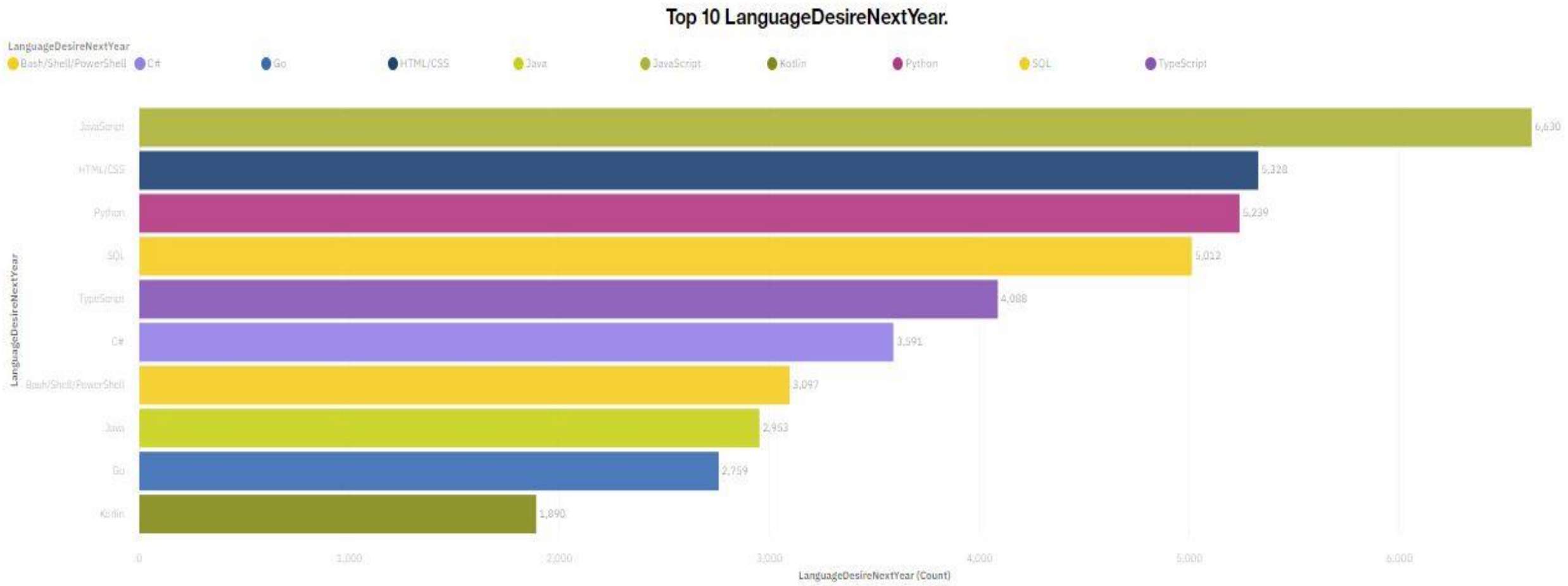
PROGRAMMING LANGUAGE TRENDS

Current Year:



PROGRAMMING LANGUAGE TRENDS

Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

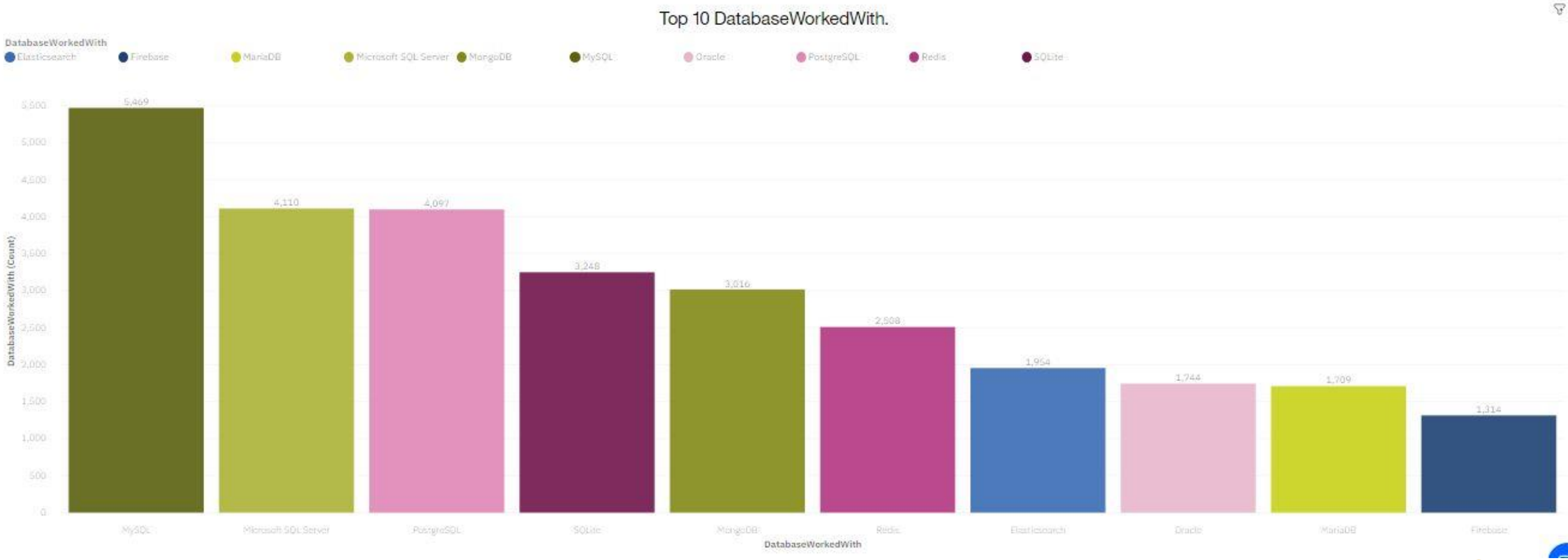
- From the Current Year graph, it is clear top 3 leading languages are Javascript,SQL and HTML/CSS
- Bottom 3 languages are, C++,C# and Typescript.
- Python,Java,Powershell/Shell/Powershell are almost trending at same level which is between 4,506-4,642 (Count of no people working on this languages)

Implications

- From the Next Year Graph,Javascrip,HTML/CSS and Python will be the trending languages of the future. In this Trend, SQL has been replaced by Python in top 3.
- Bottom 3 languages are Java,Go,Kotlin. Therefore, the language from the Current Year Graph which was C++ has been outdated and replaced.
- Typescript and C# which were at bottom of the current graph has moved up. Hence, it shows the demand for this languages will increase in the near future.

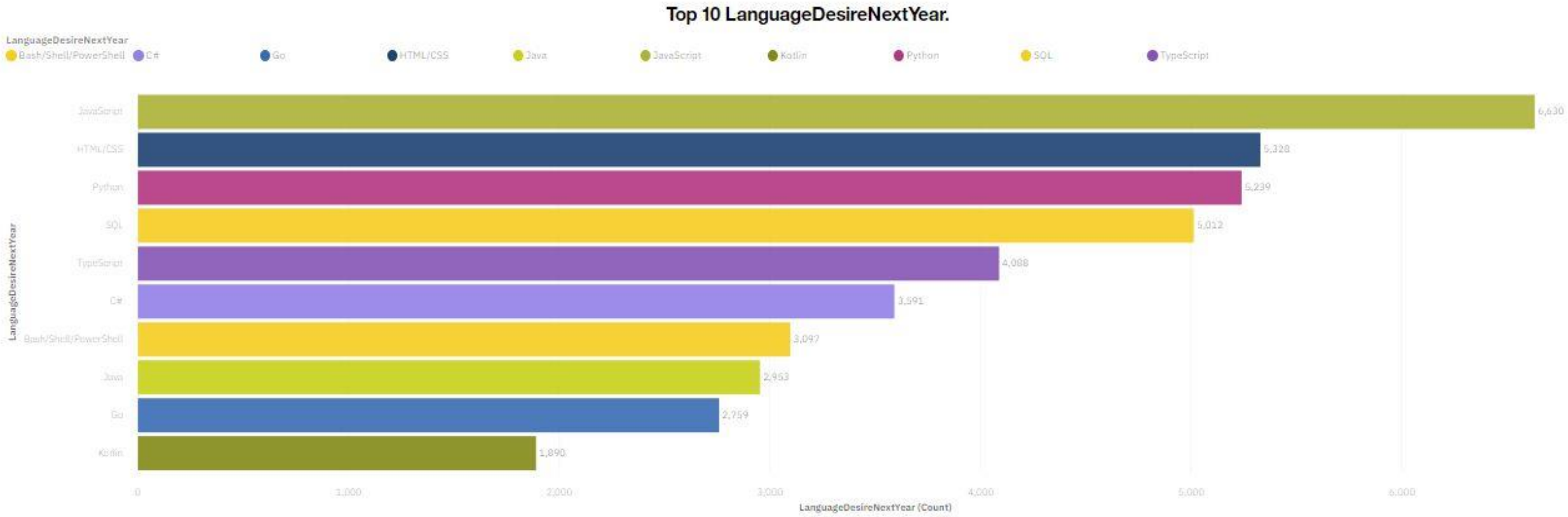
DATABASE TRENDS

Current Year



DATABASE TRENDS

Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Top 3 databases which are current in trend are MySQL, Microsoft SQL Server,PostgreSQL.
- Bottom 3 databases are MongoDB,Redis,Elastic search.
- Microsoft SQL and PostgreSQl are at the same level which is ranging from 4097 and 4110 (This denotes no of users). MySQL is way ahead of these 2 databases at 5,649.

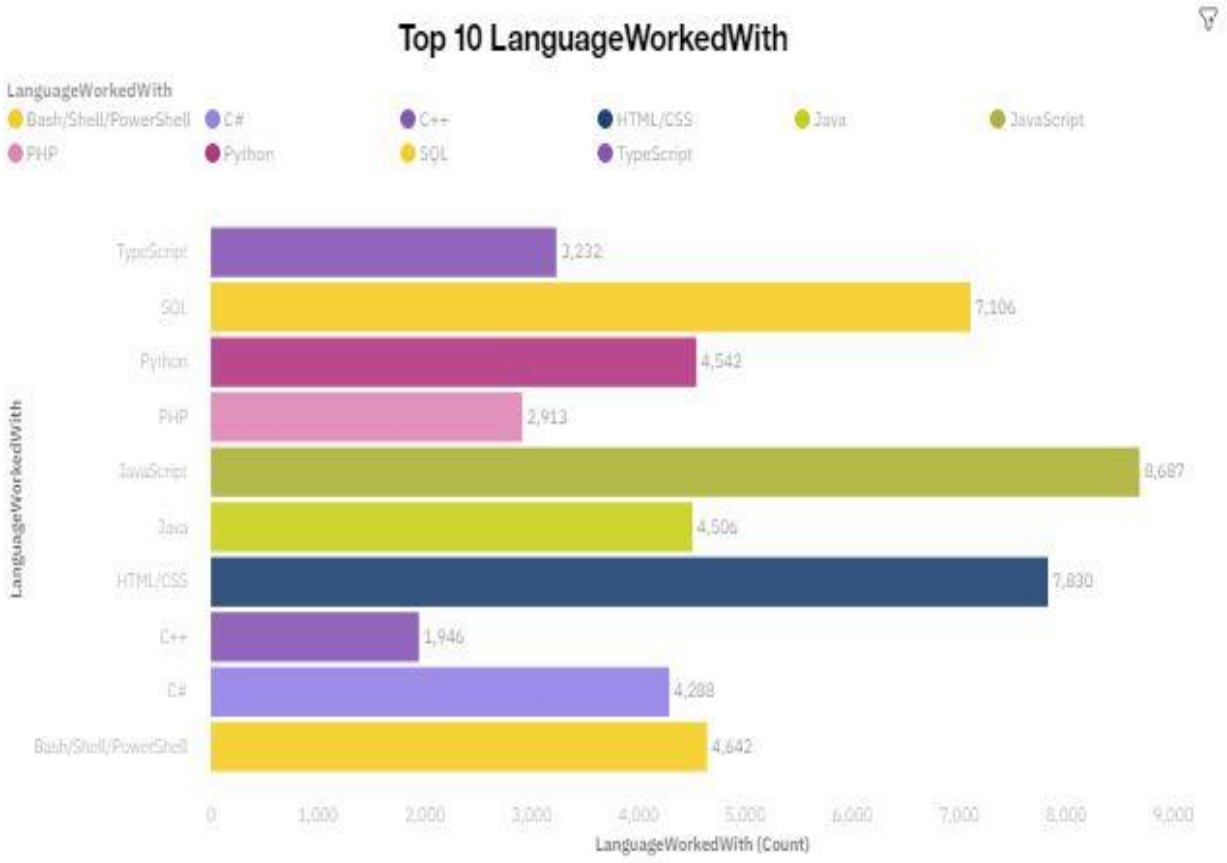
Implications

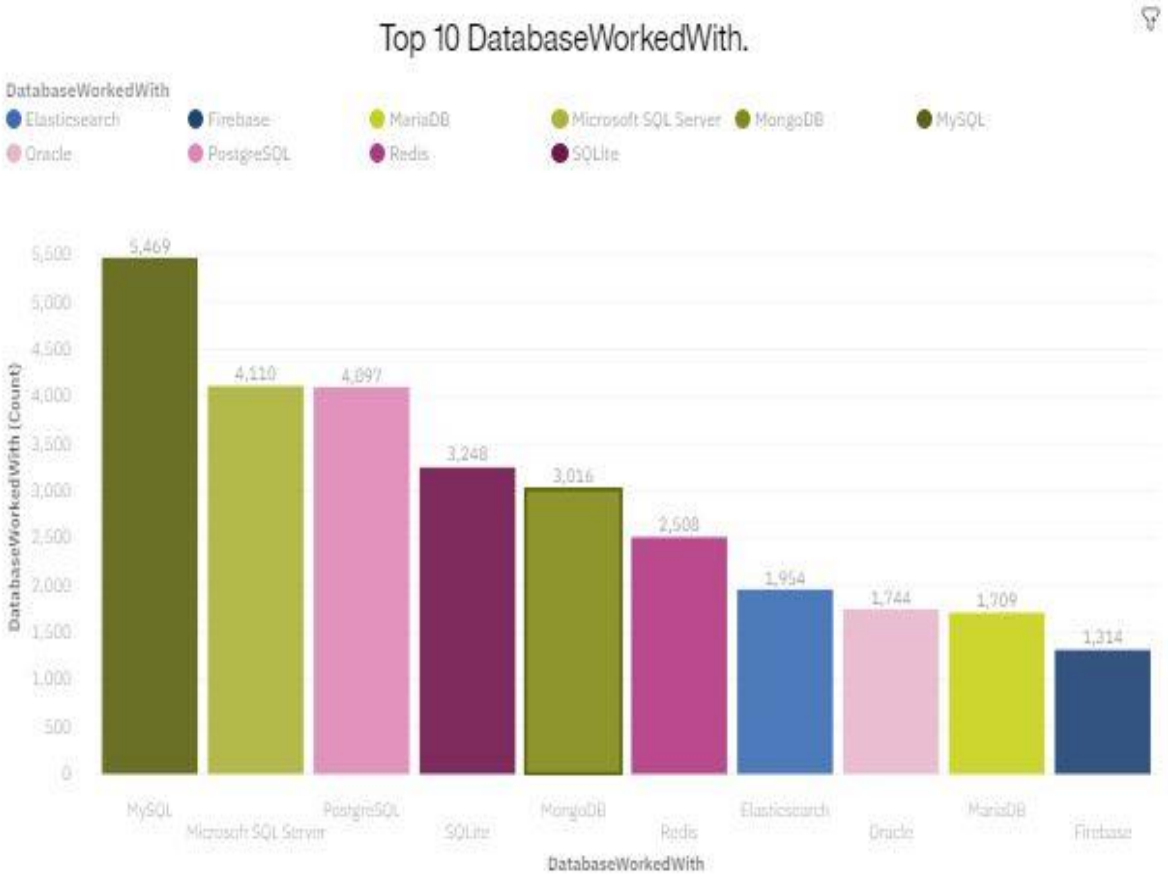
- Top 3 Databases for the Next Year, PostgreSql,MongoDb,Redis.
- It is clear, bottom the languages such as MongoDB, Redis which were at the bottom in the current year graph. Futuristically, the user base for these database will increase significantly.
- There is significant decline in the user base for the databases of MySQl and Microsoft SQL.

DASHBOARD

https://dataplatform.cloud.ibm.com/dashboards/1a3f6685-7e16-443c-98f8-21981cb3cb92/view/7066d53660ad28f677c1d0e4079a2c5478667059b7bb875180d67b4908327597a86a4599c87c1958da450431f4bd465f9c

DASHBOARD TAB 1

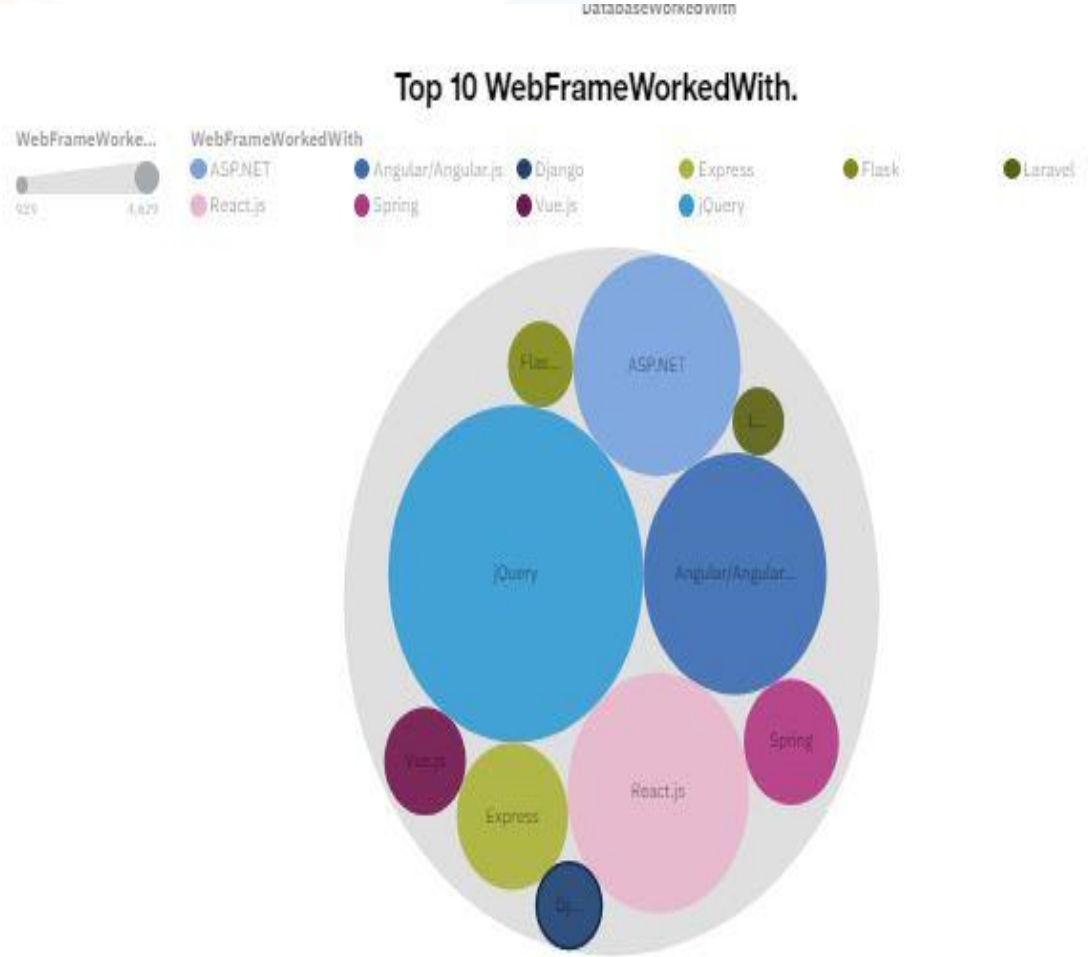




IBM Developer

SKILLS NETWORK

DASHBOARD TAB 1



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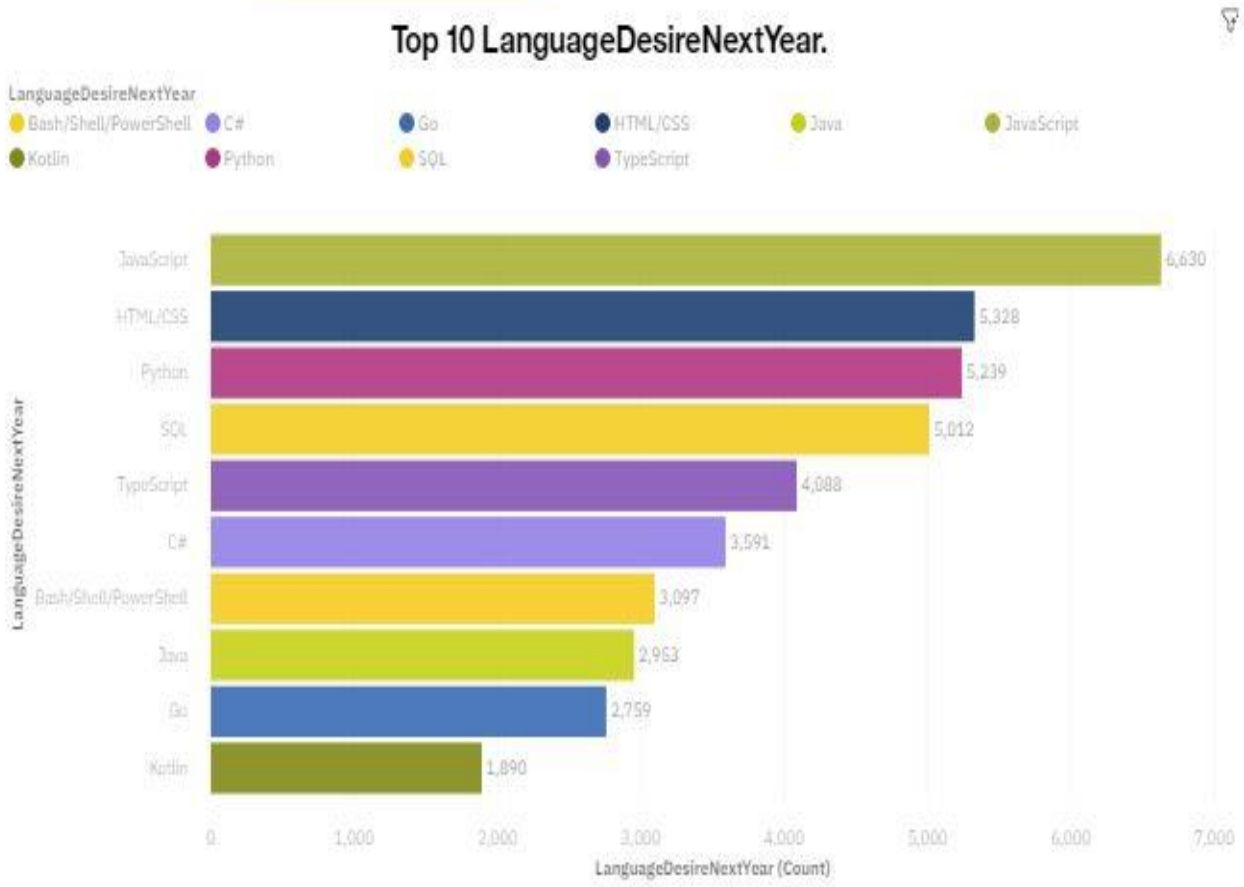

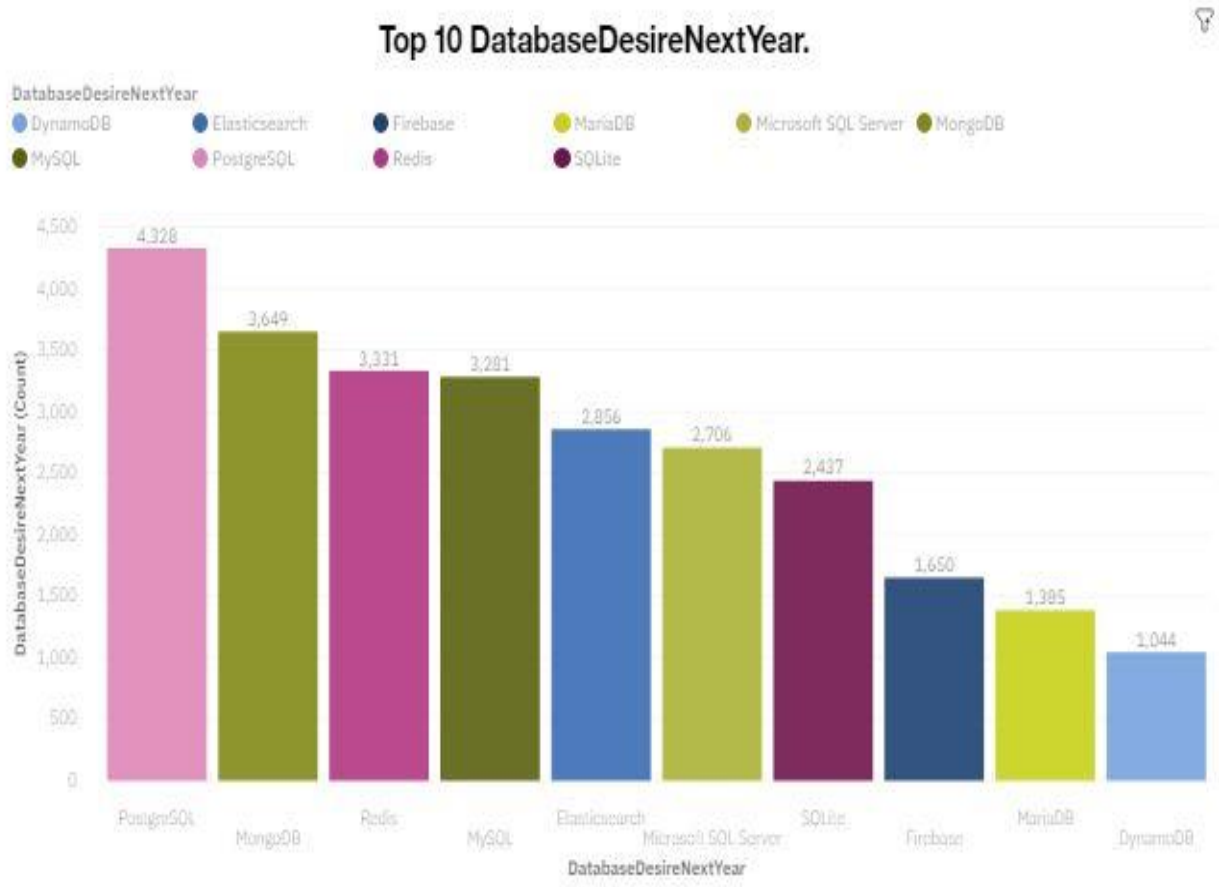

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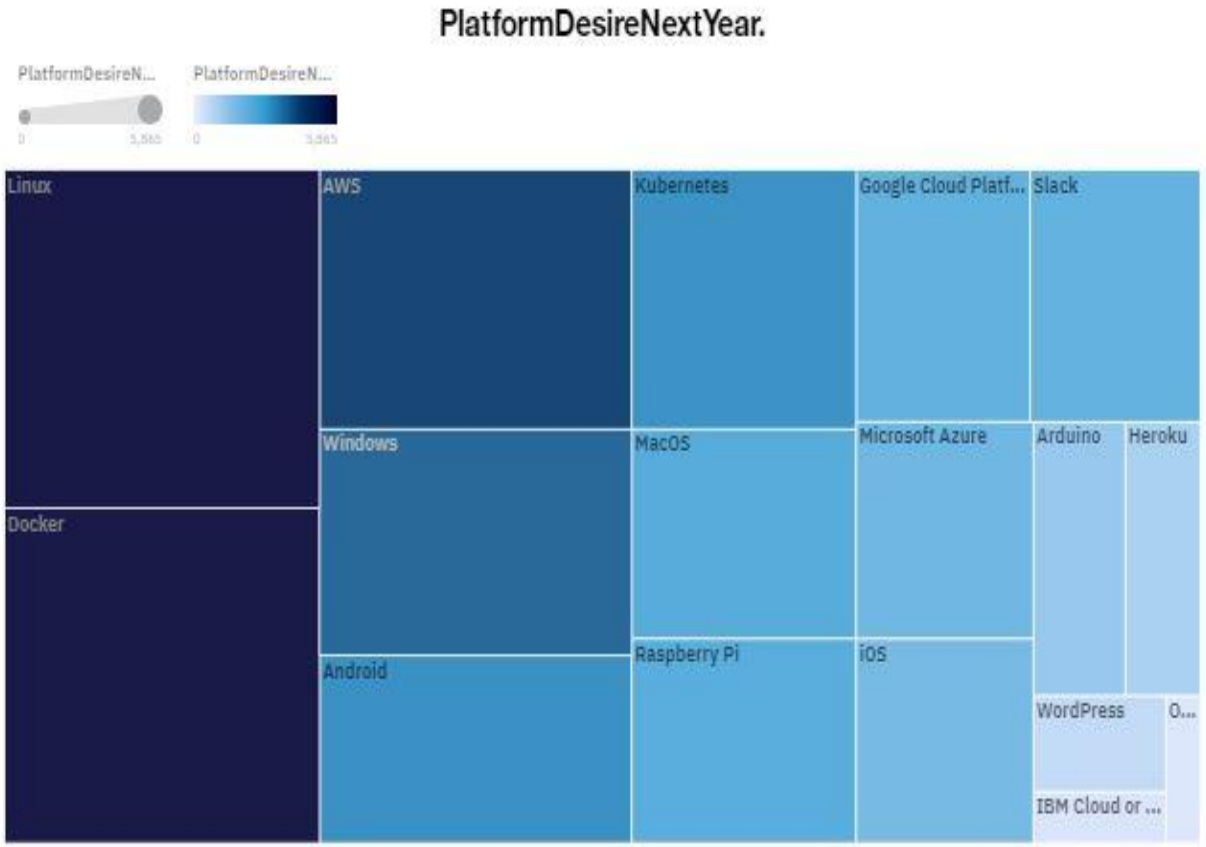
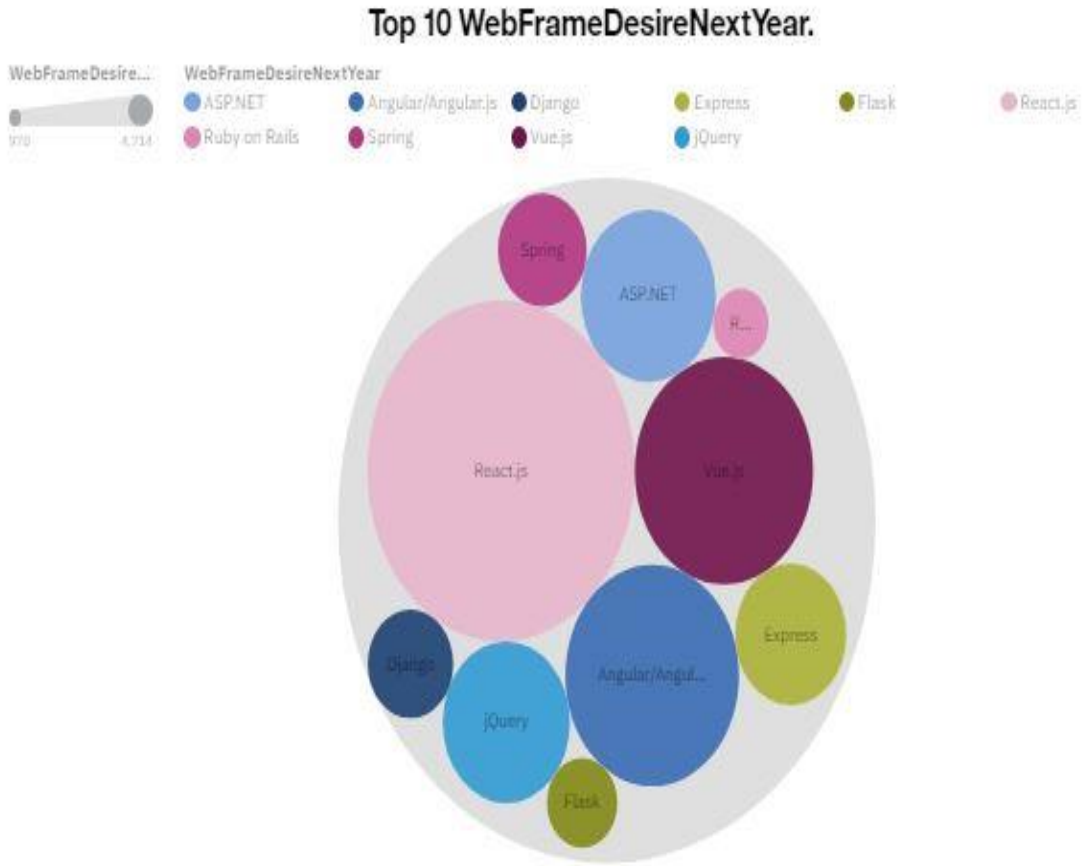
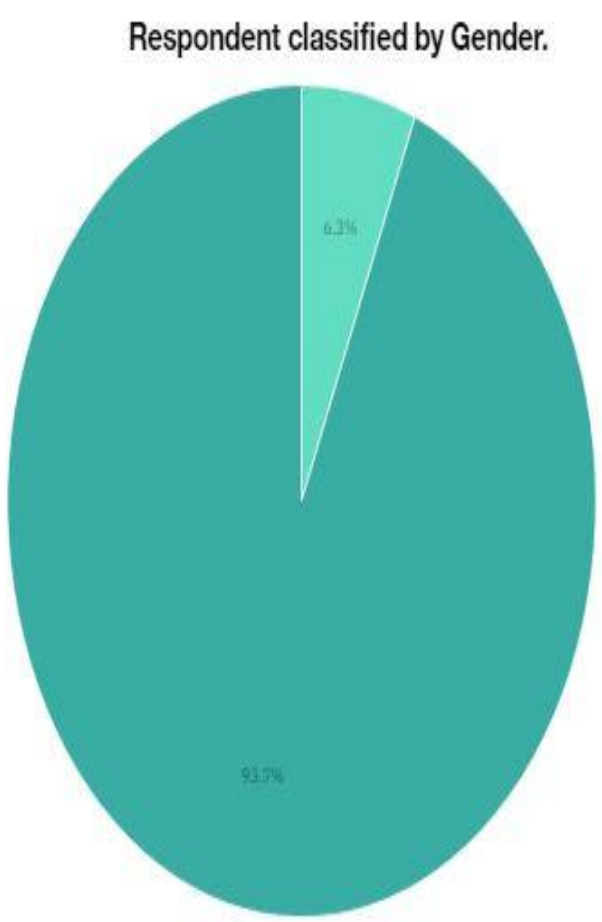
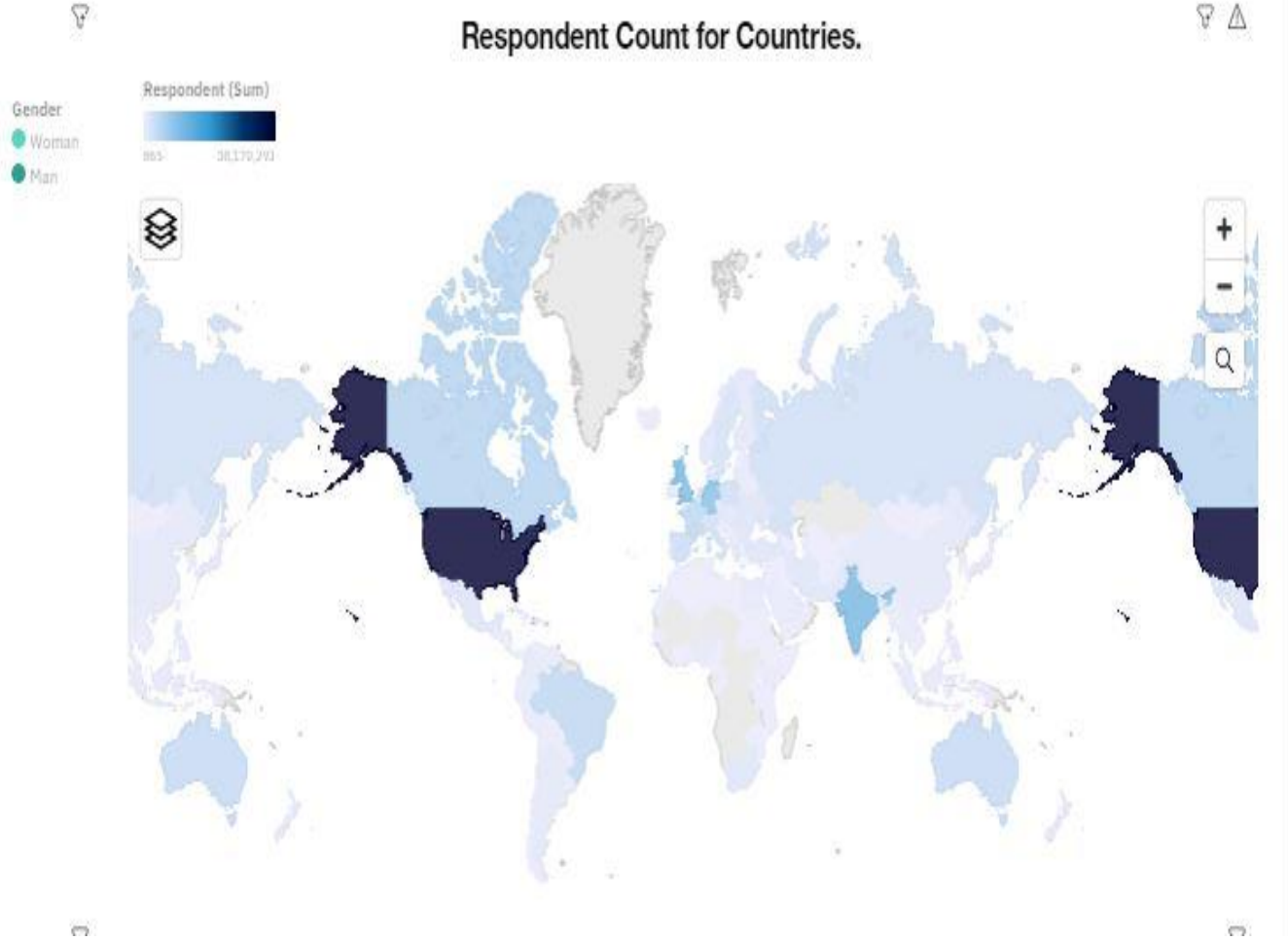




DASHBOARD TAB 3





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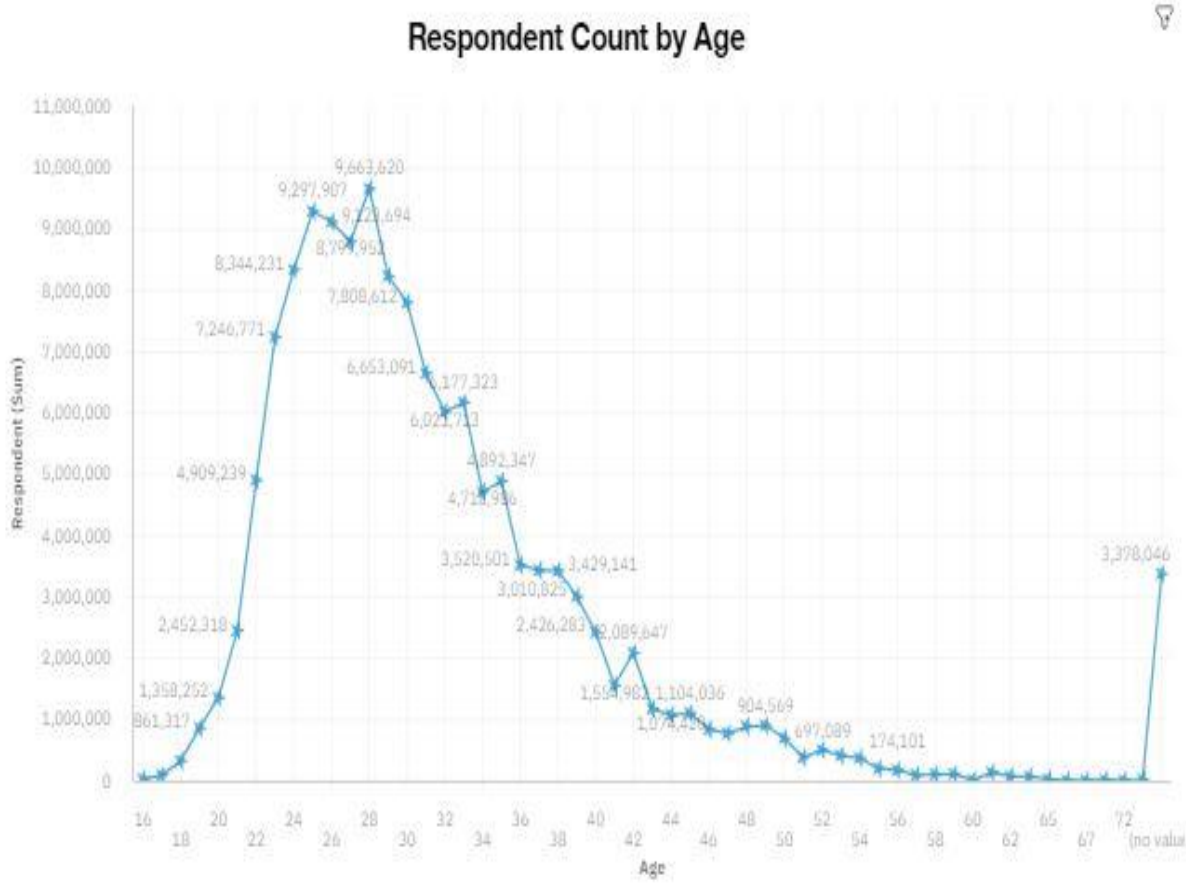
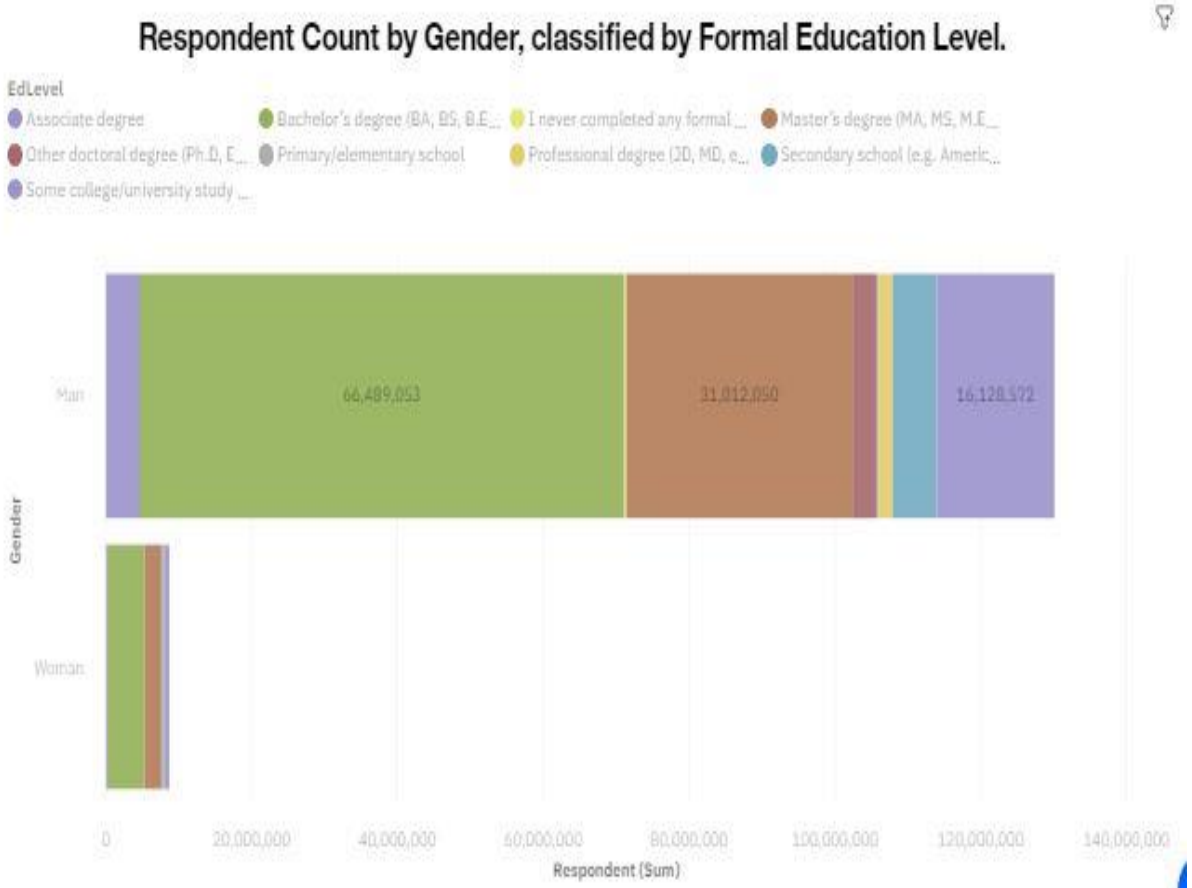




DISCUSSION

- In the Dashboard 3, from the pie graph it is visible respondent count was 93% male as compare to only 7% female.
- Additionally, the majority of the age group which participated in the survey was between 20-40 yrs.
- Also, majority of the respondents who participated has completed only their Bachelor’s Degree followed by Master’s Degree.

OVERALL FINDINGS & IMPLICATIONS

Findings

- In Current Year Languages, Javascript,SQL,HTML/CSS are most preferred languages by the users.
- In the Current Year Databases, MySql,Microsoft SQL Server and Postgresql are the most preferred databases by the users.
- User's mostly prefer Linux, Windows and Docker as a platform to work with currently.
- Webframework which are currently popular are Jquery,Angular/Agnular js and React.js.
- Majority of the users participated in the survey were male candidates.
- Most of the users resided in USA. Hence, it clearly shows survey was conducted for US only.

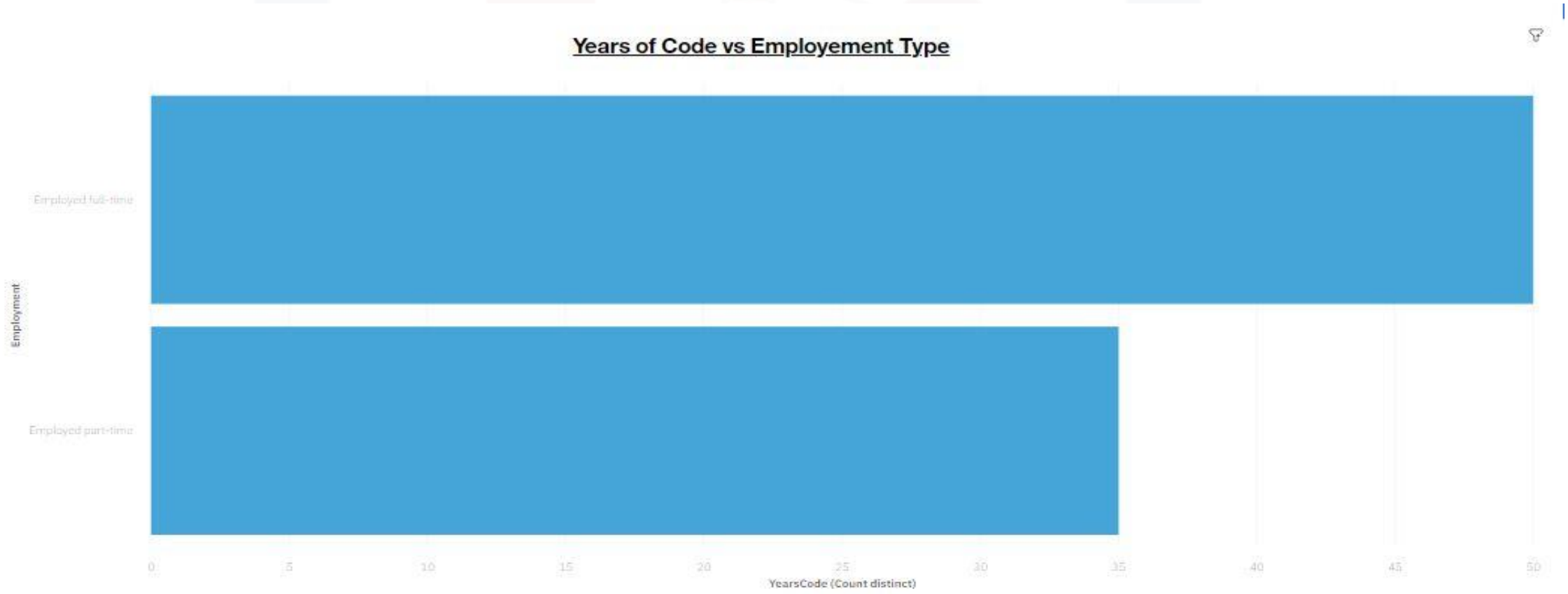
Implications

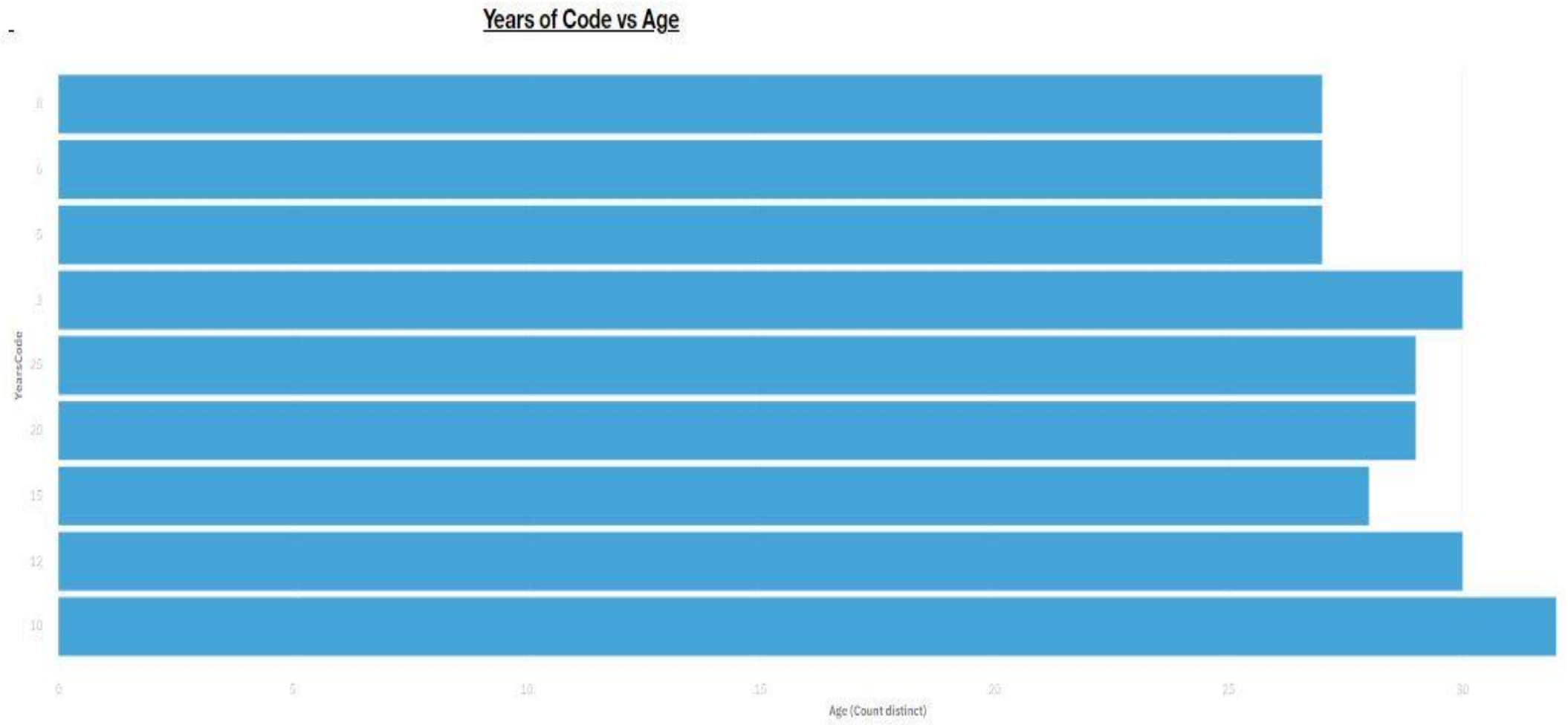
- In the Next Year Languages, it is clearly visible that python will be able to gain significant amount of users due to its simplicity to learn easily.
- Postgresql will become most used database and Mysql will be loosing it's user base dramatically.
- Linux and Docker still remains the favorites among the users as a platform to work on.
- For web frame work, React.js will be popular and massive amount of users prefer to use this framework in the near future. Followed by, Angular/Angular.js and Vue.js

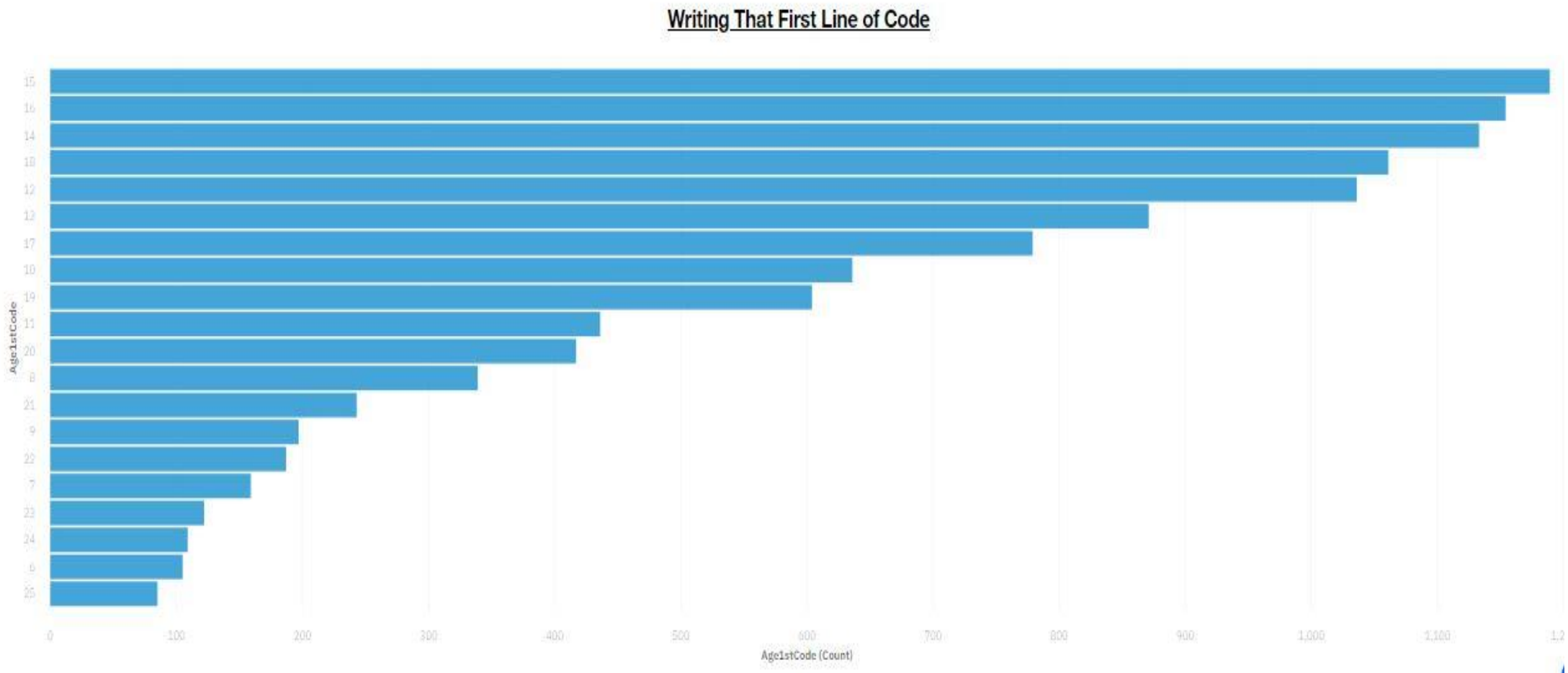
CONCLUSION

- Python, the fastest growing major language, has risen in the ranks of the survey. Knocking off Java. It is ranked 2nd on the table behind Rust.
- Linux is again the most loved platform development, followed by Docker.Wordpress is the most dreaded development platform. Many users prefer to start with Docker and AWS.
- React.js and vue.js are both most loved and most wanted frameworks by developers. While Drupal and jQuery are most dreaded.
- About three-fourths of professional developers who took our survey are younger than 35.

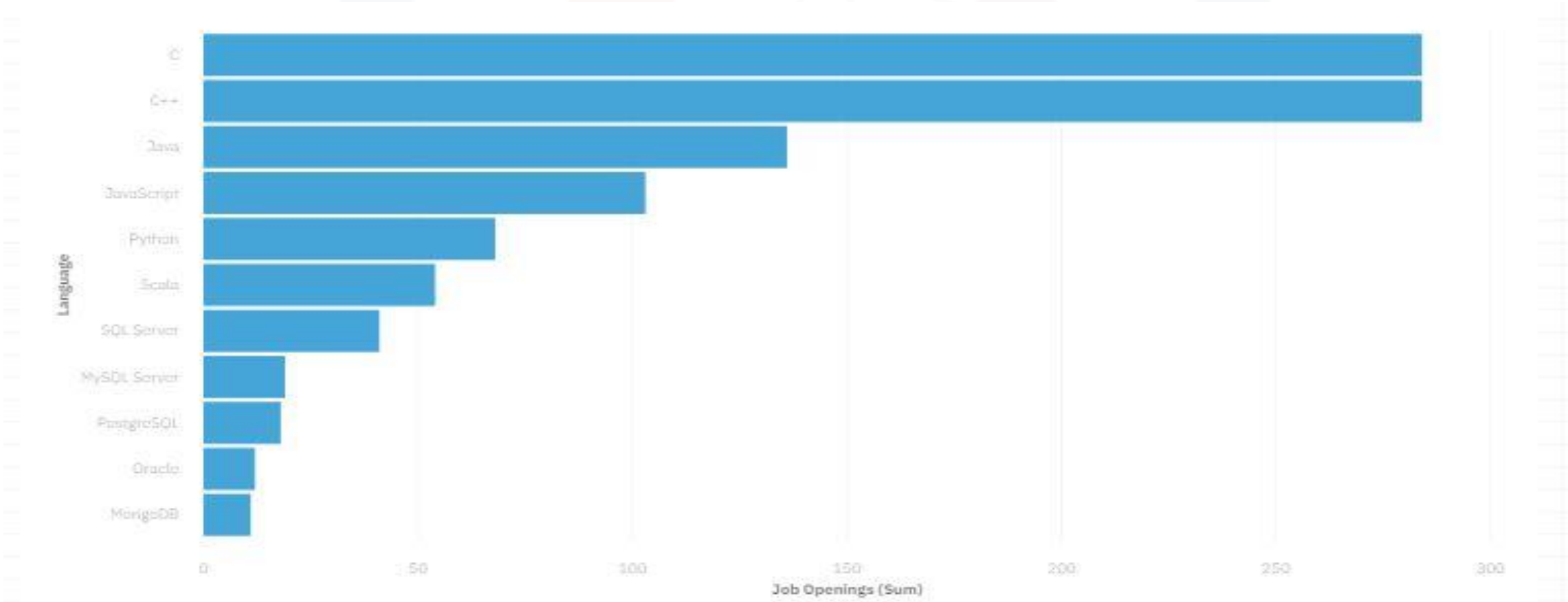
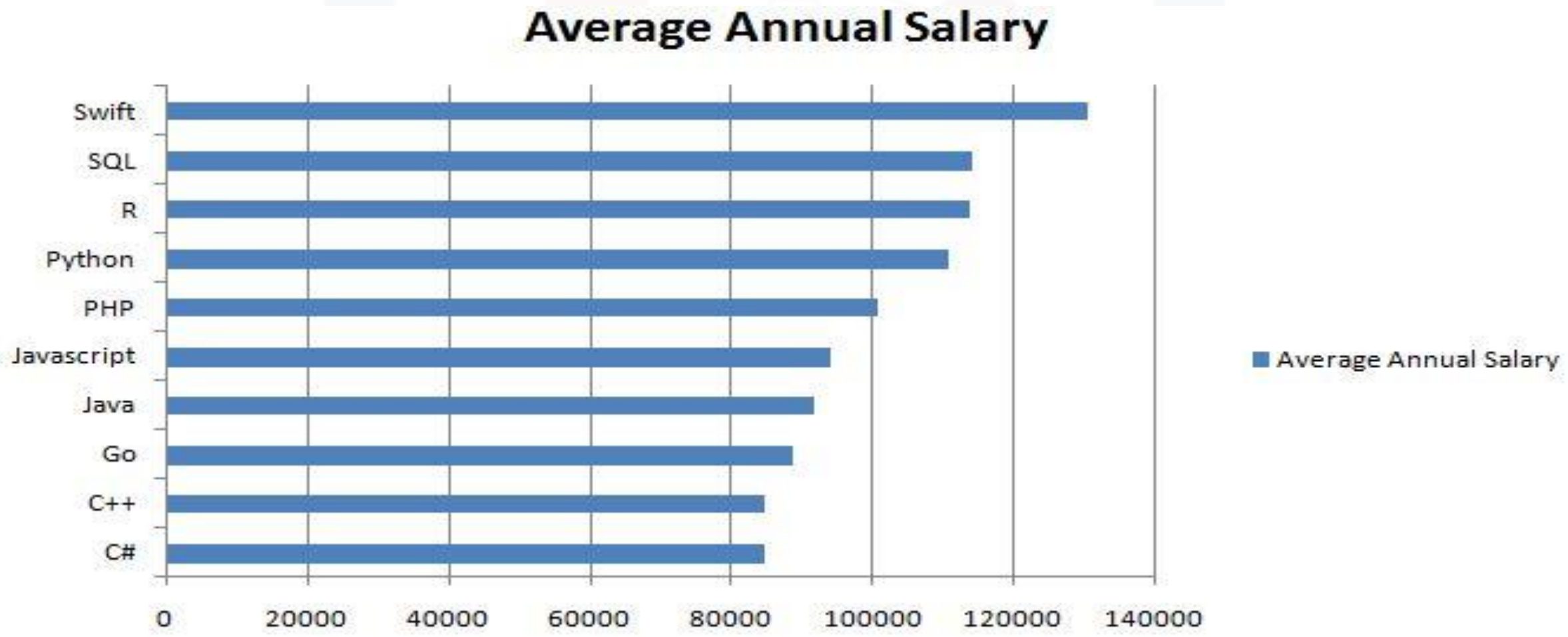
APPENDIX


Years of Code vs Employement Type
Employed full-time
Employed part-time
Employment
0
5
10
15
20
25
30
35
40
45
50
YearsCode (Count distinct)


Years of Code vs Age
YearsCode
8
6
5
3
25
20
15
12
10
0
5
10
15
20
25
30
Age (Count distinct)


Writing That First Line of Code
AgelstCode
15
16
14
18
12
13
17
10
19
11
20
8
21
9
22
7
23
24
6
25
0
100
200
300
400
500
600
700
800
900
1,000
1,100
1,2
AgelstCode (Count)

GITHUB JOB POSTINGS



POPULAR LANGUAGES