Capstone Project

Stack Overflow Developer Survey -2019

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26-12-2021

IBM Developer

SKILLS NETWORK

OUTLINE

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

- ***Current Technology Usage***
  - Top 10 Languages Worked with
  - Top 10 Database Worked with
  - Platform worked with Word-Cloud
  - Top 10 Web-frame Worked with
- ***Future Technology Trend***
  - Top 10 Languages Desired Next Year
  - Top 10 Database Desired Next Year
  - Platform worked with Desired Next Year
  - Top 10 Web-frame Desired Next Year
- ***Demographics***
  - Respondents Classified by Gender
  - Respondent Count for Countries
  - Respondent Count by Age
  - Respondent Count by Gender by Formal Education Level

INTRODUCTION

- The top 10 Programming Languages in demand
- The top 10 database skills in demand.
- The top Platformed utilization.
- The top 10 Web-frame platform in demand

METHODOLOGY

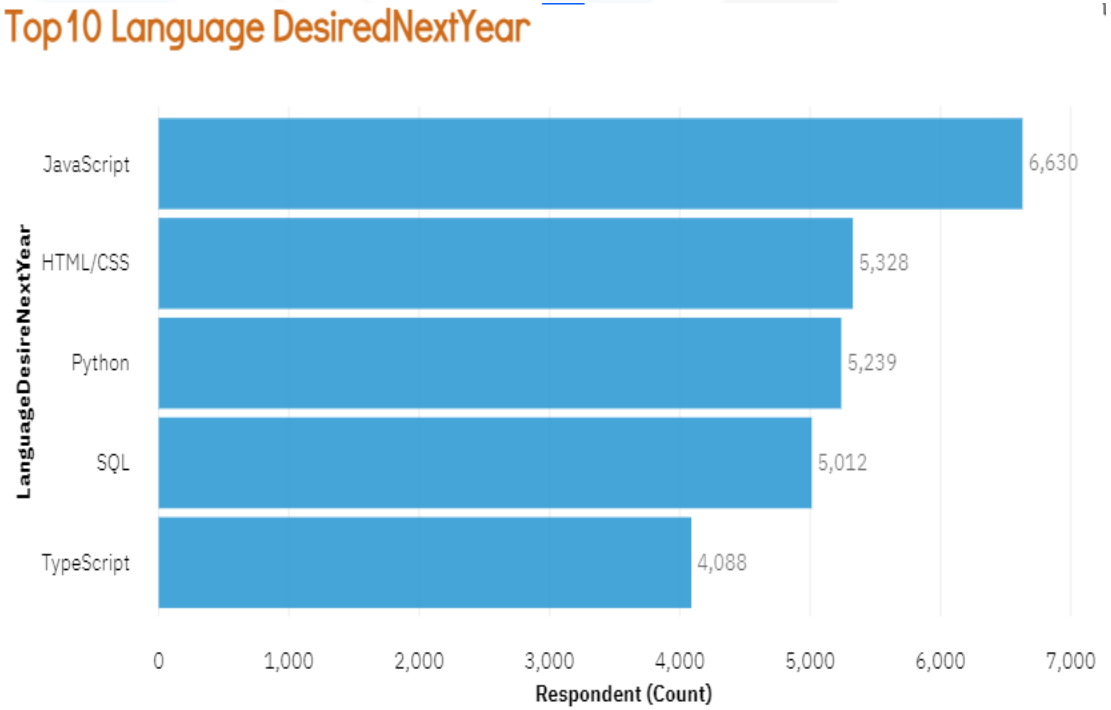
- Collecting Data- ***Stack Overflow Developer Survey -2019***
  - Using – API.
  - Using – Web-scrapping.
- Exploring Data
  - Finding Duplicates & Removing Duplicates.
  - Finding & Imputing Missing Value.
  - Normalizing Data.
  - Handling Outliers.
  - Correlation
- Visualization Data
  - Visualization Distribution, Relation, Composition & Comparison of data.
  - Building Dashboard.

RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year



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PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

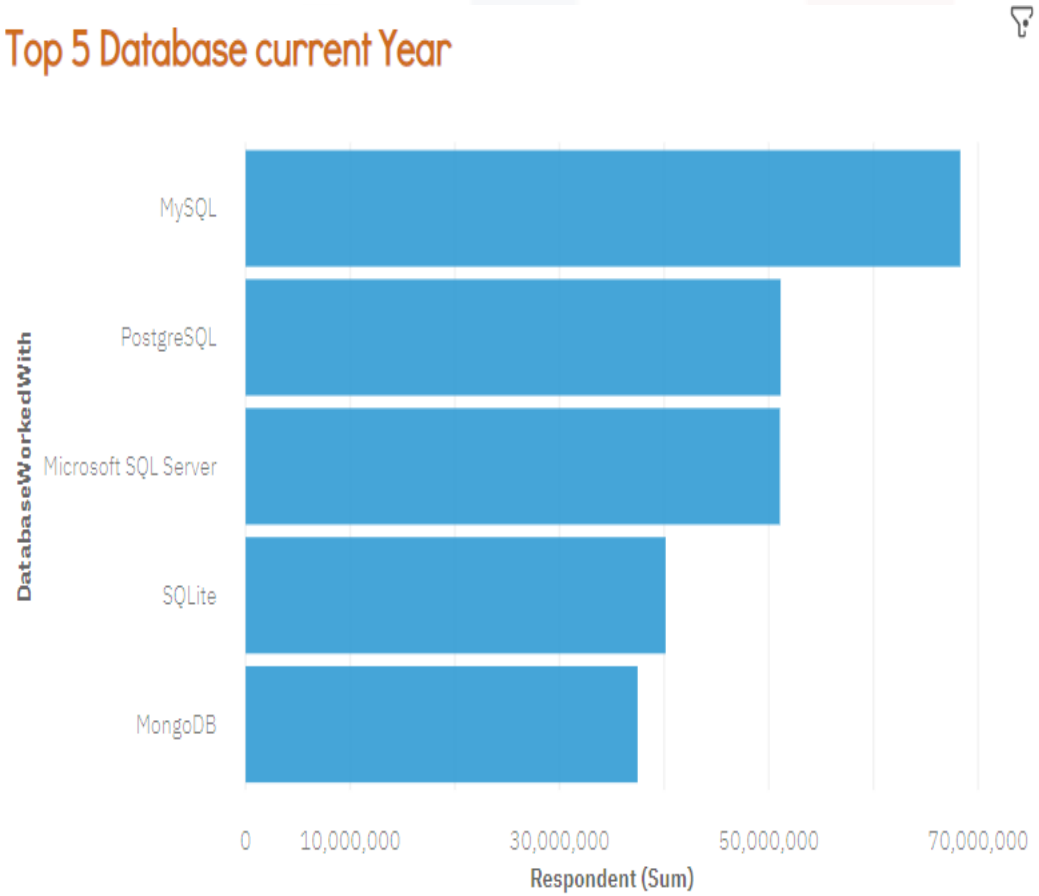
Findings

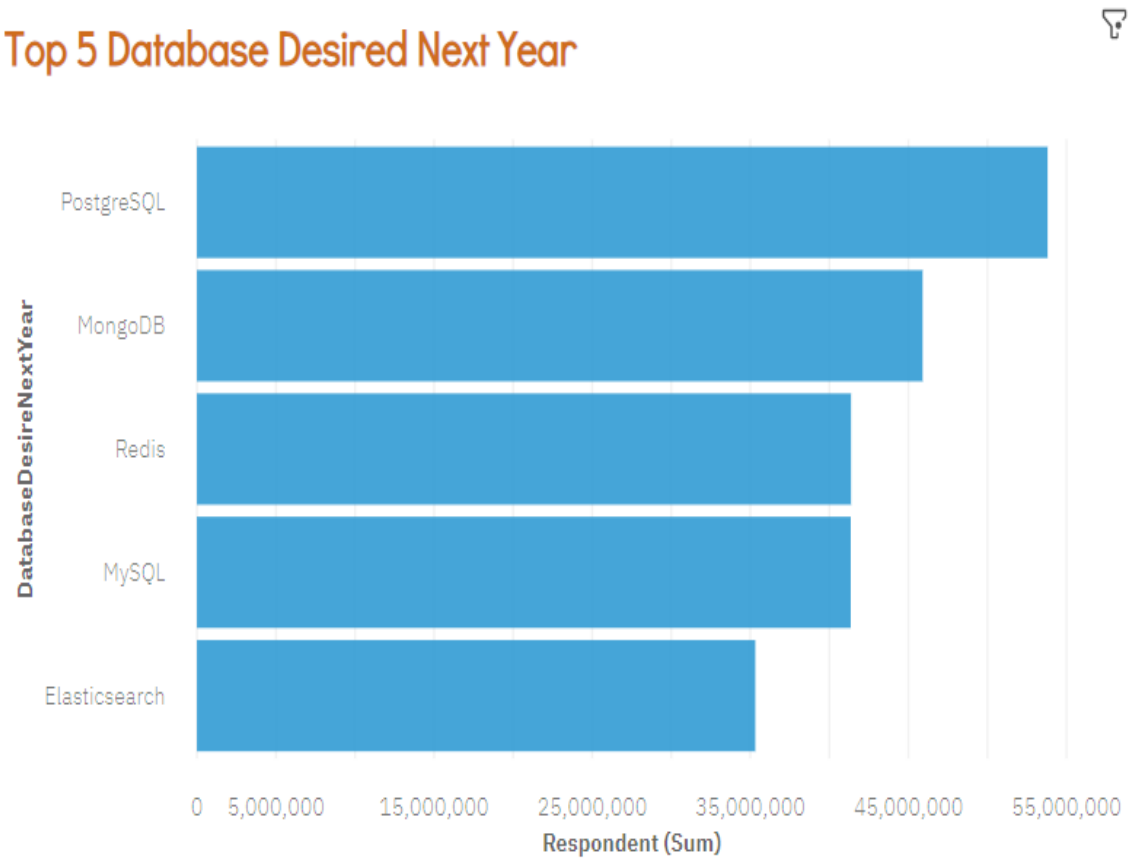
- Java-script appears to be popular choice for current as well future years.
- Web Assembly comes as least popular for current years and VBA appears least choice for next year
- Python and SQL appears to be evergreen mid popular choice for current and next year respectively

Implications

- Java-script is becoming the new upcoming popular demanding programming language among users.
- Web Assembly and VBA has been replaced by other programming languages at most places.
- Python and SQL appears to be evergreen demand Programming languages.

DATABASE TRENDS





DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL comes out to be popular choice for current whereas PostgreSQL overcomes every other in case of desired next year choice.
- Couchbase comes as least popular for current years as well as for next year as well.
- Elasticsearch, Redis & MongoDB comes out to show progressive trends in upcoming years whereas MySQL shows declining trend as compared to current-next years charts.

Implications

- PostgreSQL is becoming the new upcoming popular desired database skills among users replacing MySQL.
- Couchbase has been replaced by other programming languages at most places.
- Elasticsearch, Redis & MongoDB appears to be more popular desired choice as compared to MySQL.

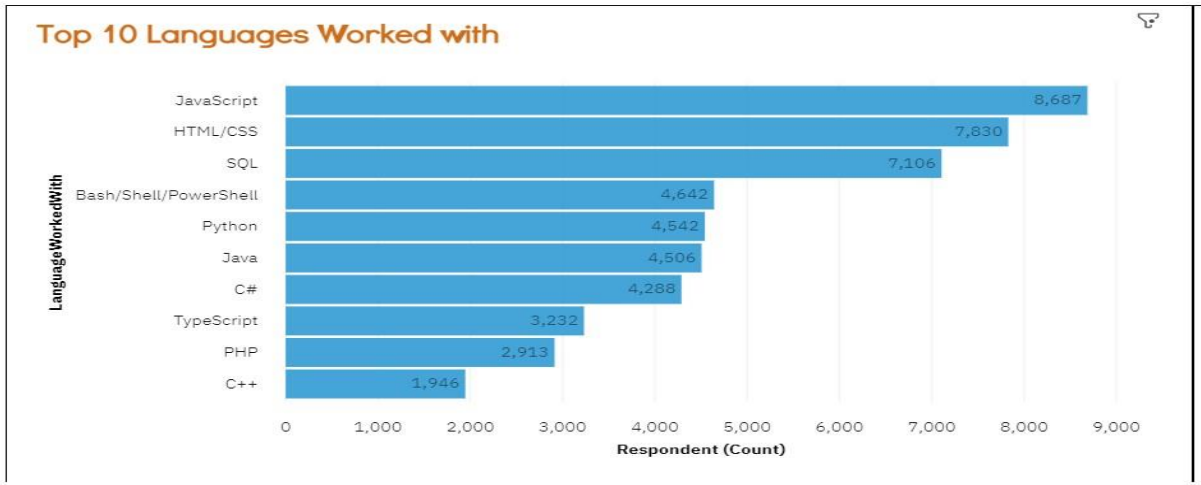
DASHBOARD

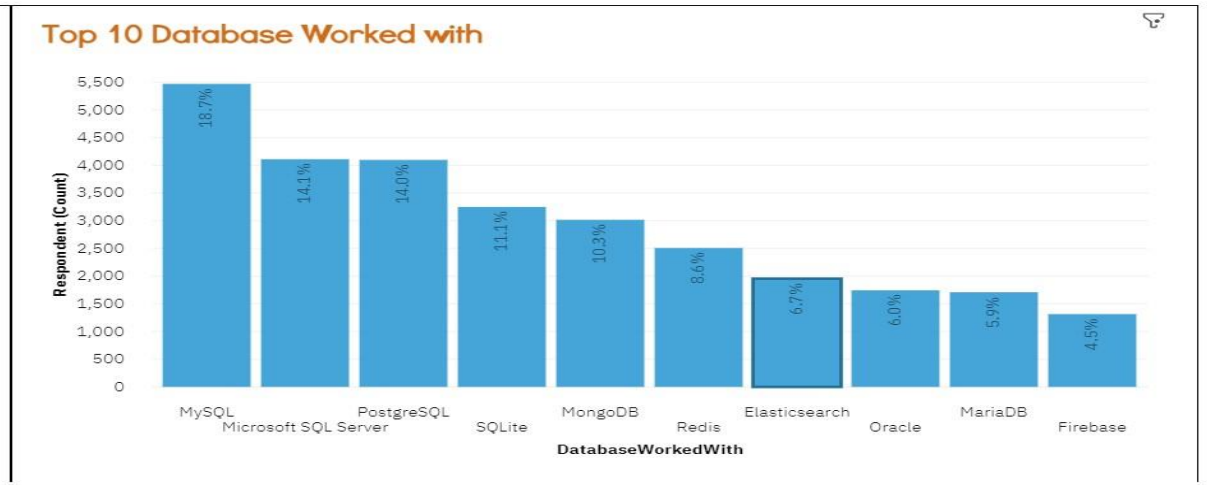
The permanent link of the read-only view of the Cognos dashboard is as follows –

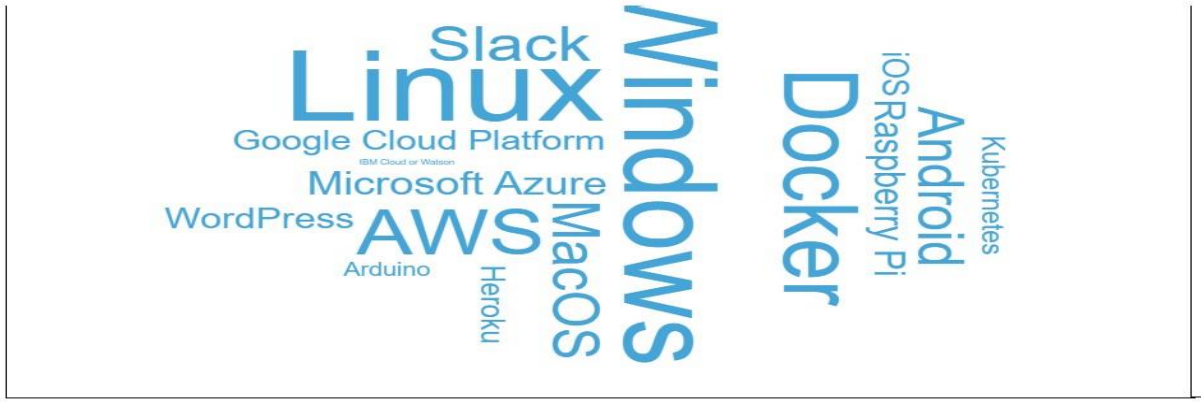
https://dataplatform.cloud.ibm.com/dashboards/ef366ecd-2ab9-404b-8997-66e0eb961ac4/view/6e12d01f65ab75dc67e5cce407982e0629632154e1bb8755d4d07b495b657597a93a17c0c8274b5d8f445735f1e4405d9f

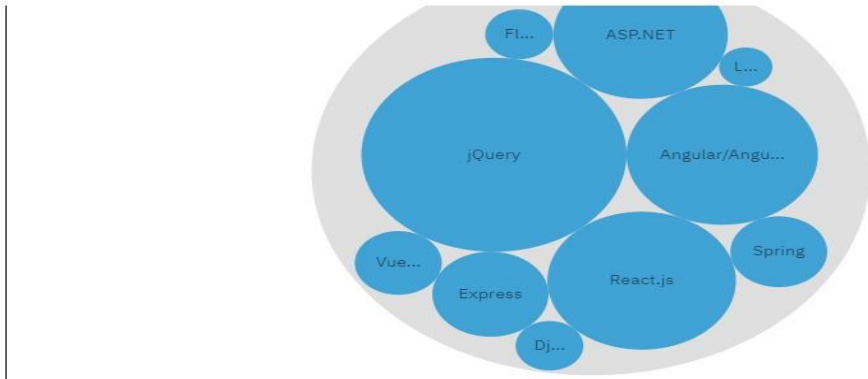
DASHBOARD TAB 1

Current Tecnology Usage | Future Technology Trend | Demographics









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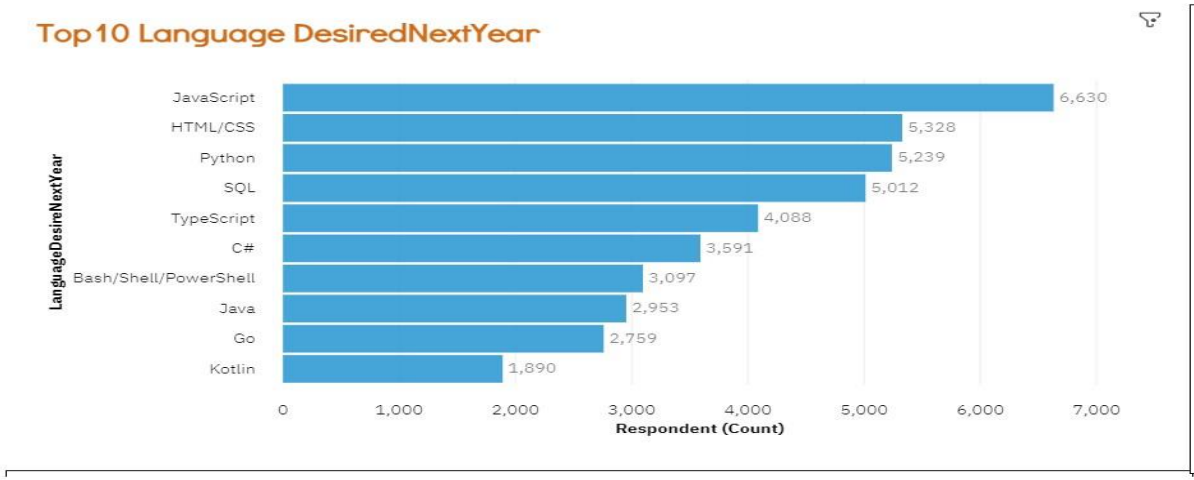
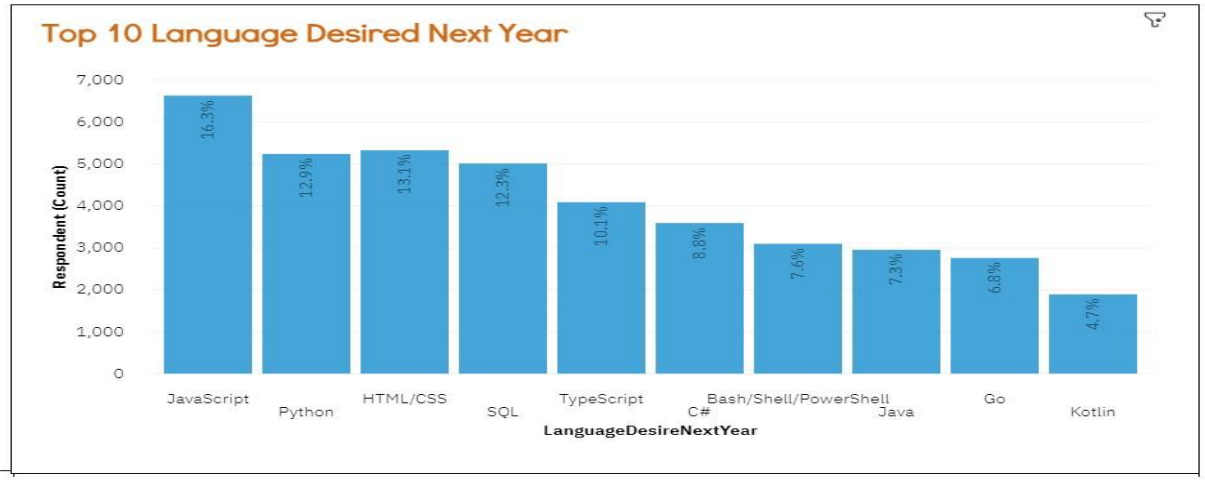
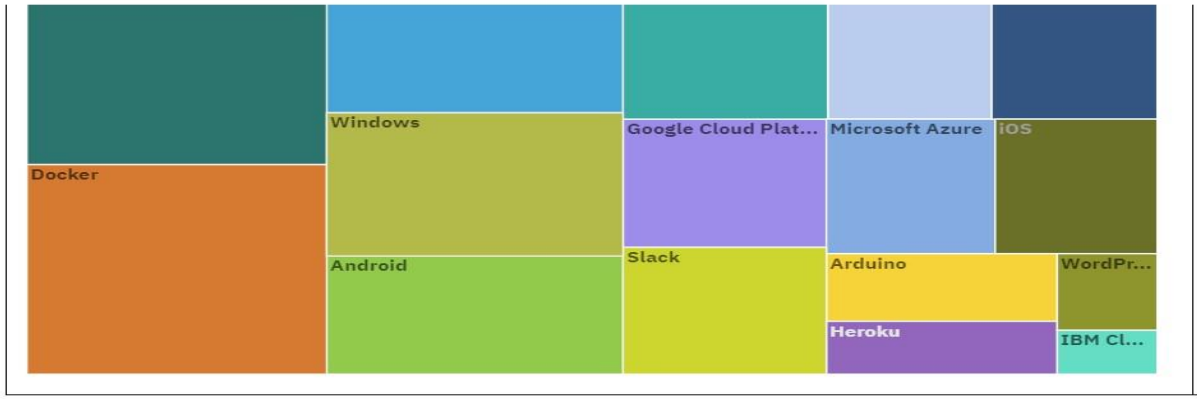
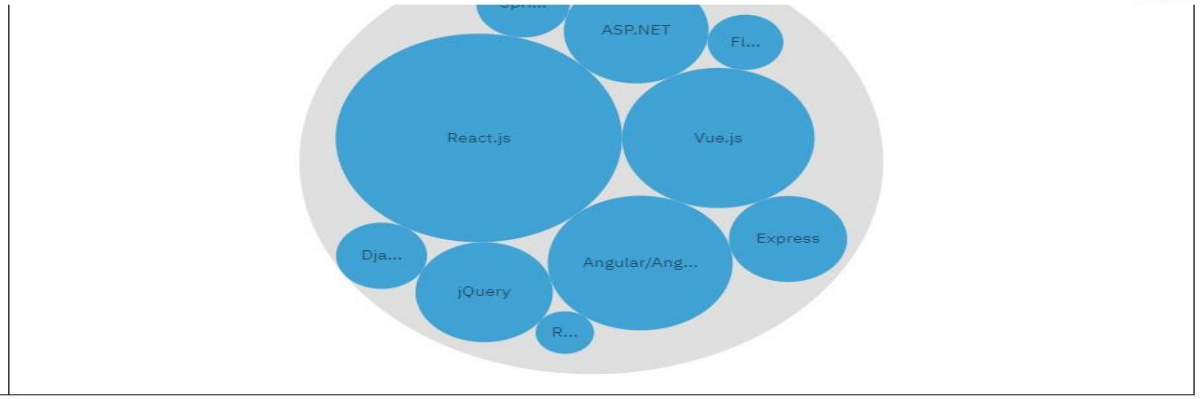
DASHBOARD TAB 2

Current Tecnology Usage | Future Technology Trend | Demographics









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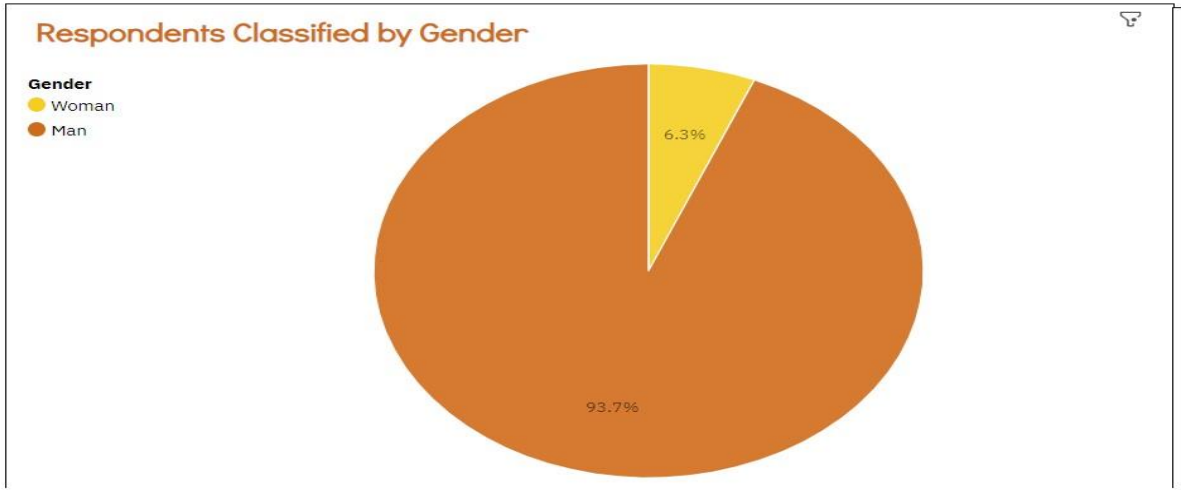
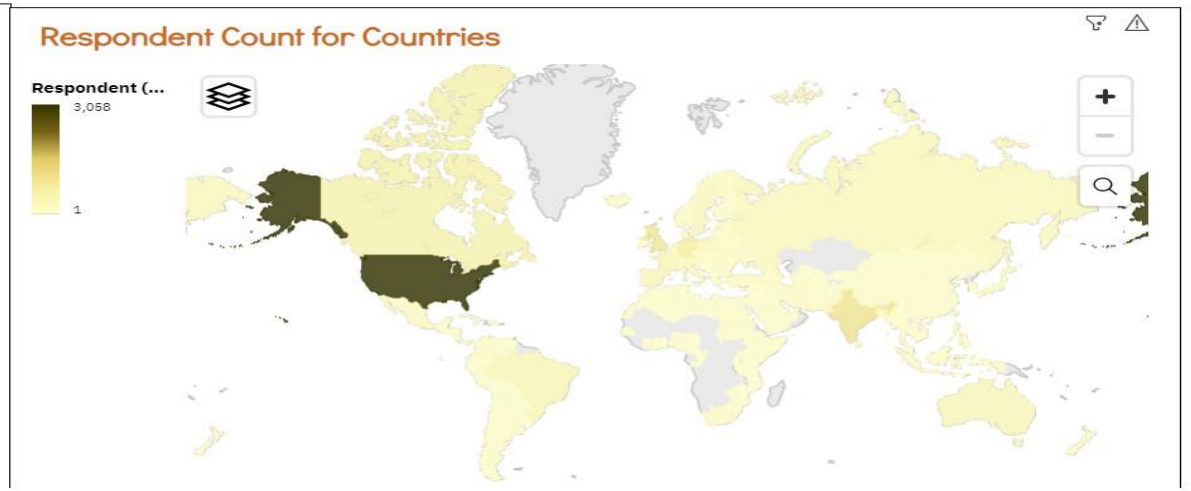
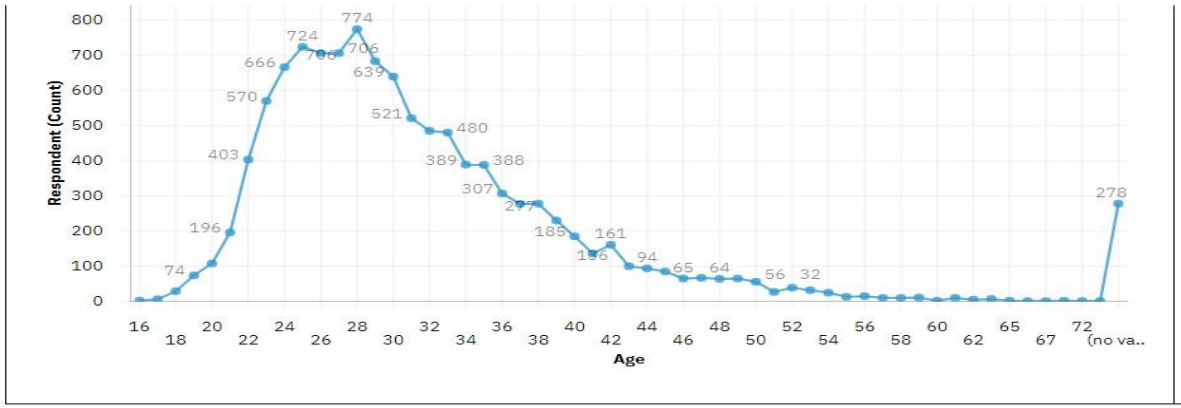
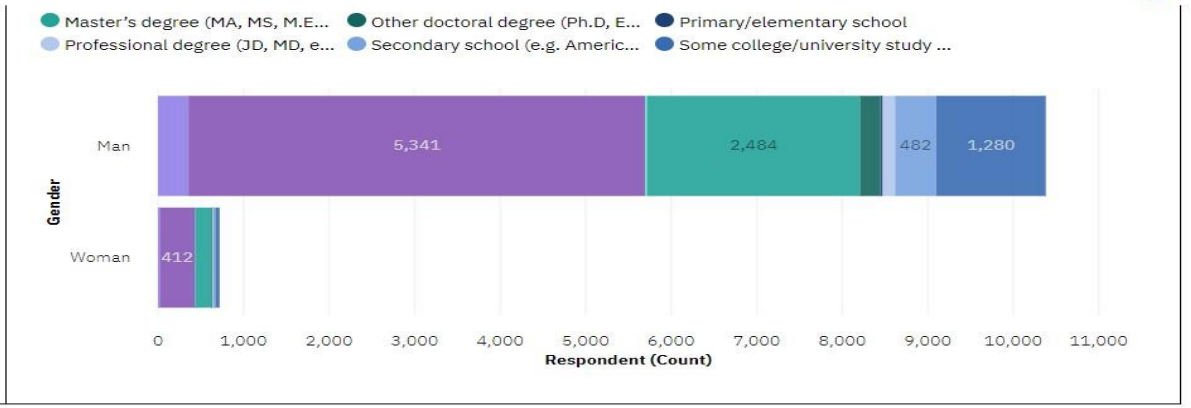
DASHBOARD TAB 3

Current Tecnology Usage | Future Technology Trend | Demographics









DISCUSSION

- All age used for survey
- All gender considered for survey.
- People from different countries were asked for survey.
- Various education level people were included as well.

OVERALL FINDINGS & IMPLICATIONS

Findings

- The upcoming programming trend is for advanced programming languages.
- The upcoming trend for databases is non-relational databases mostly.

Implications

- People are looking for advanced programming languages with easy learning in focus.
- People are looking for big data because it seem to have great future.

CONCLUSION

- The top programming language in demand

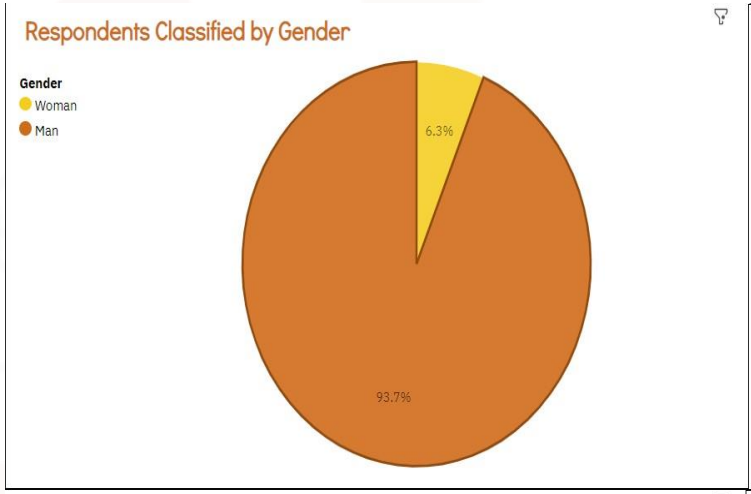
  Present & Future- Java-script.
- The top database skills in demand

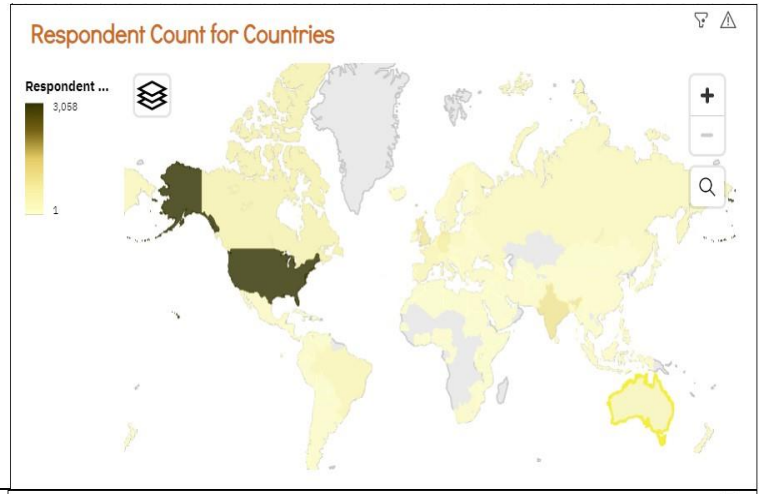
  Present – MySQL ; Future – PostgreSQL.
- Popular Platform

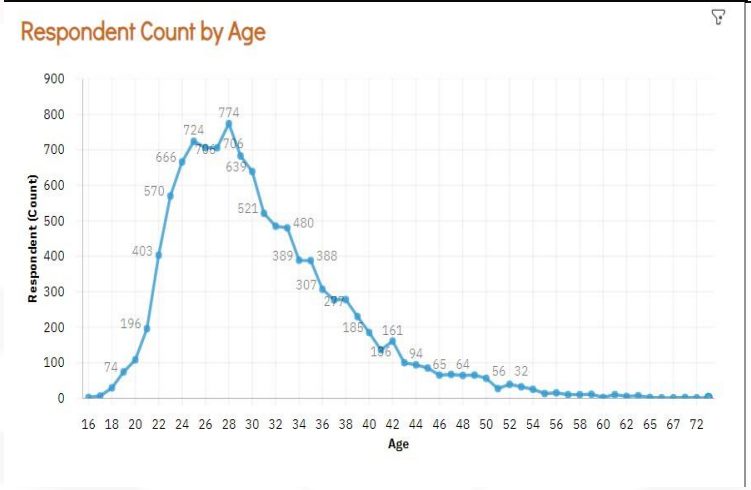
  Present – Windows ; Future – Linux Docker
- The top Web-frame in Demand

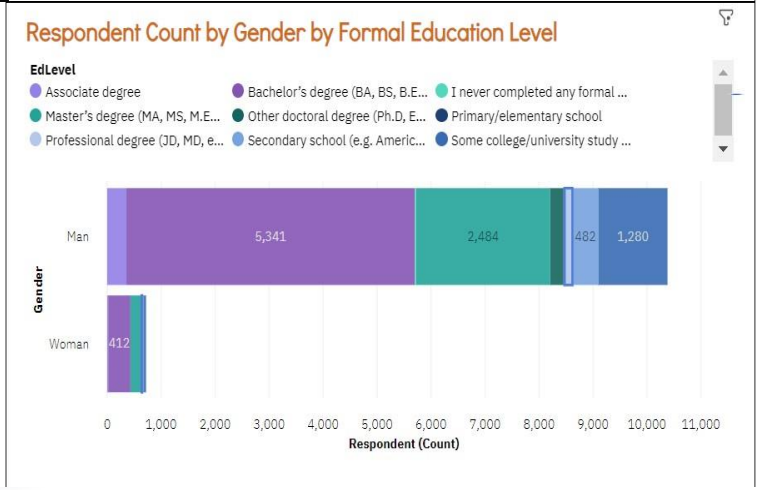
  Present – jQuery ; Future – React.js

APPENDIX









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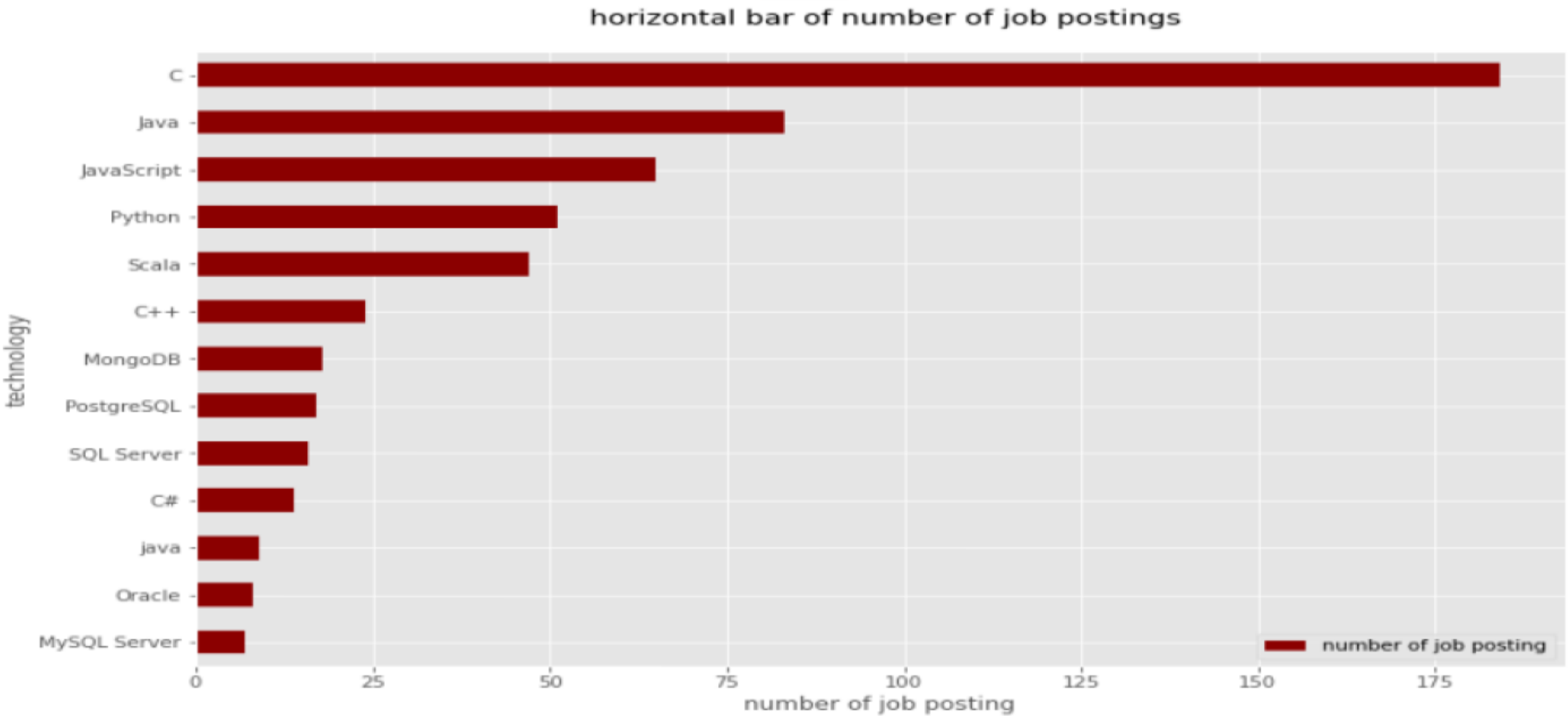

GITHUB JOB POSTINGS

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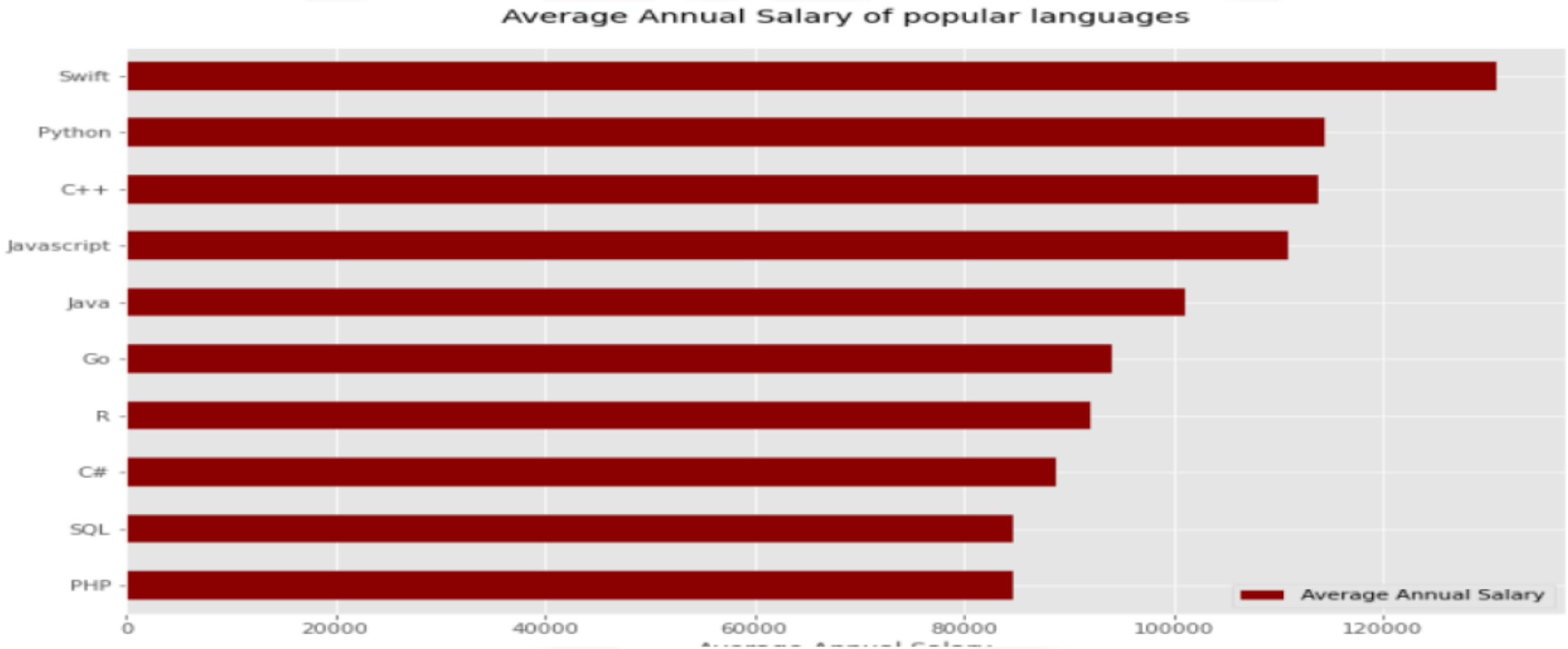
POPULAR LANGUAGES