



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



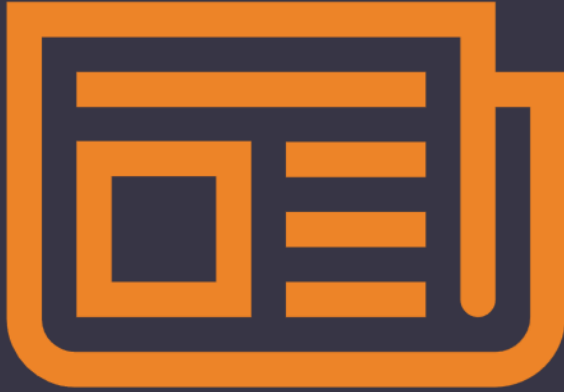
- Data Contextualizing and Analysis
- Methodology description
 - Data Gathering
 - Data Analysis
 - Data Visualization
- Results Presentation supported with graphs and trends
- Discussion of overall findings and Implications regarding the results previously exposed
- Final conclusions of the carried 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
- Prediction about Developers
 - Trends to predict where the Developers are going
 - Charecterization of Developers all around the world

METHODOLOGY



1. Collect survey data & explore it's content

- Web Scraping
- APIs
- Request Library

2. Data Wrangling

3. Exploratory Data Analysis

- Analyzing Data Distribution
- Handling Outliers
- Correlations

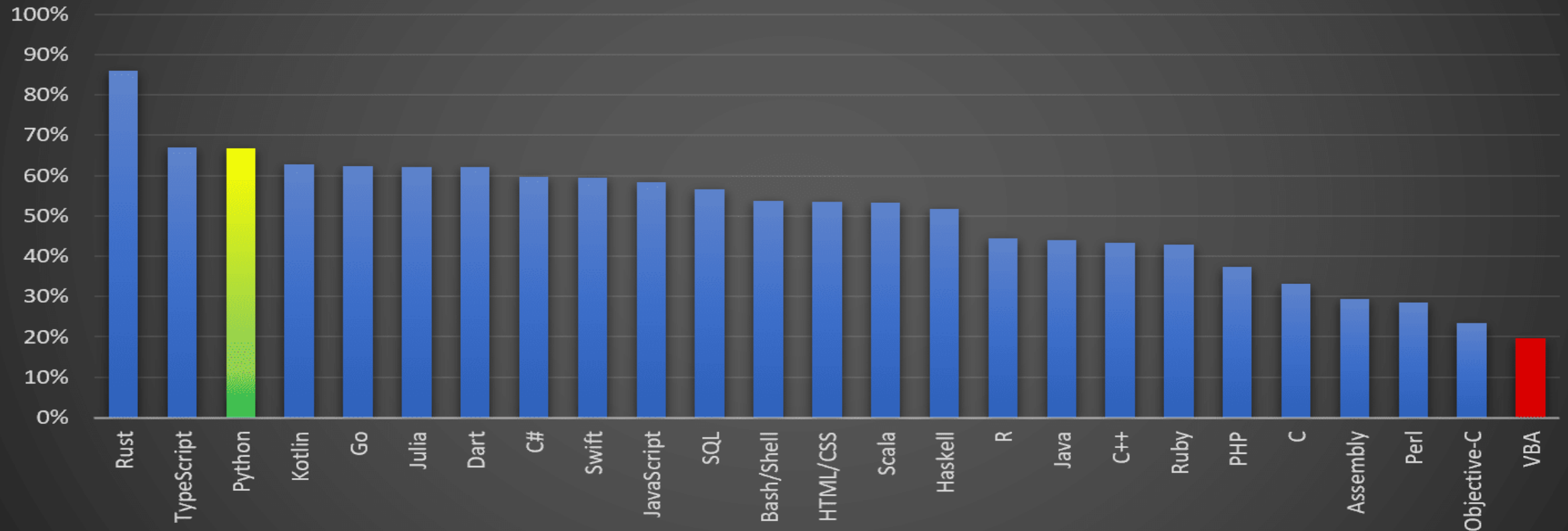
4. Data Visualization

- Highlight distribution of data ,relationships, the composition and comparison of data

5. Dashboards

RESULTS

Stack Overflow Developer Survey Most Loved Languages

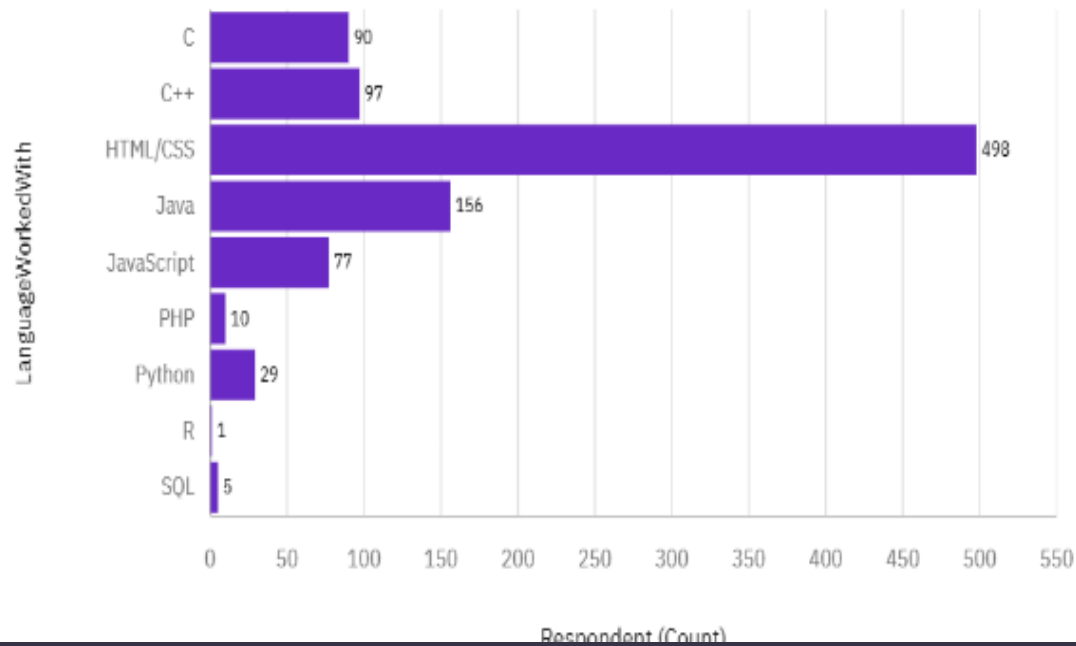


PROGRAMMING LANGUAGE TRENDS

Current Year

Current Technology Usage

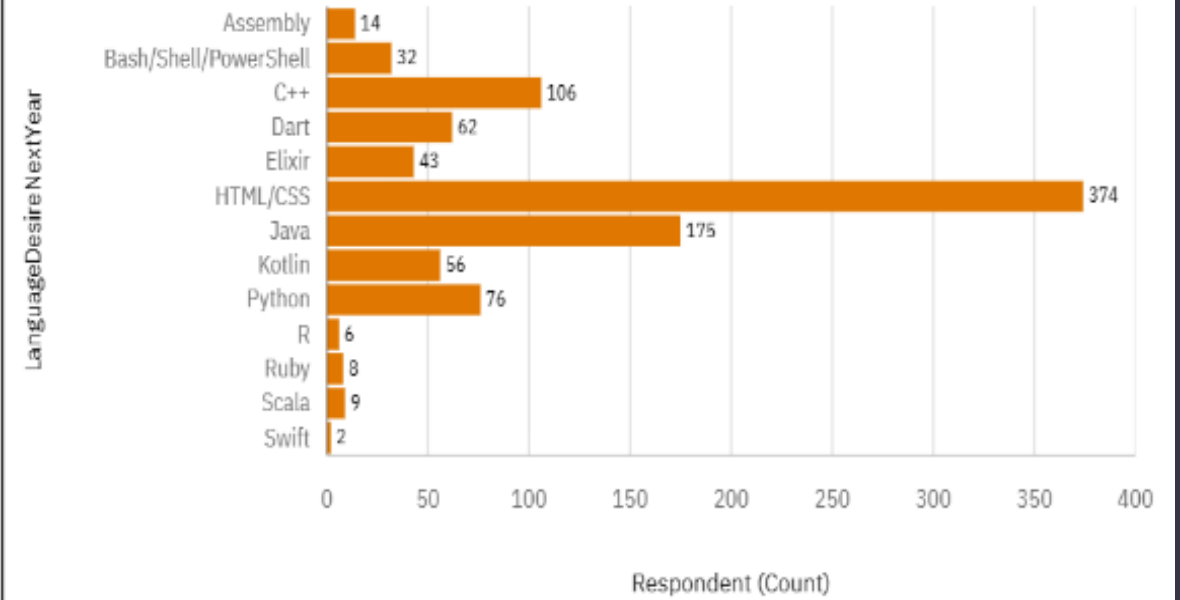
Top 10 Language Worked With



Next Year

Future Technology Trend

Top 10 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- According to the graph HTML language is trending
- Python and Java languages are growing year by year.
- Java script and Python will be the top languages in the coming future.

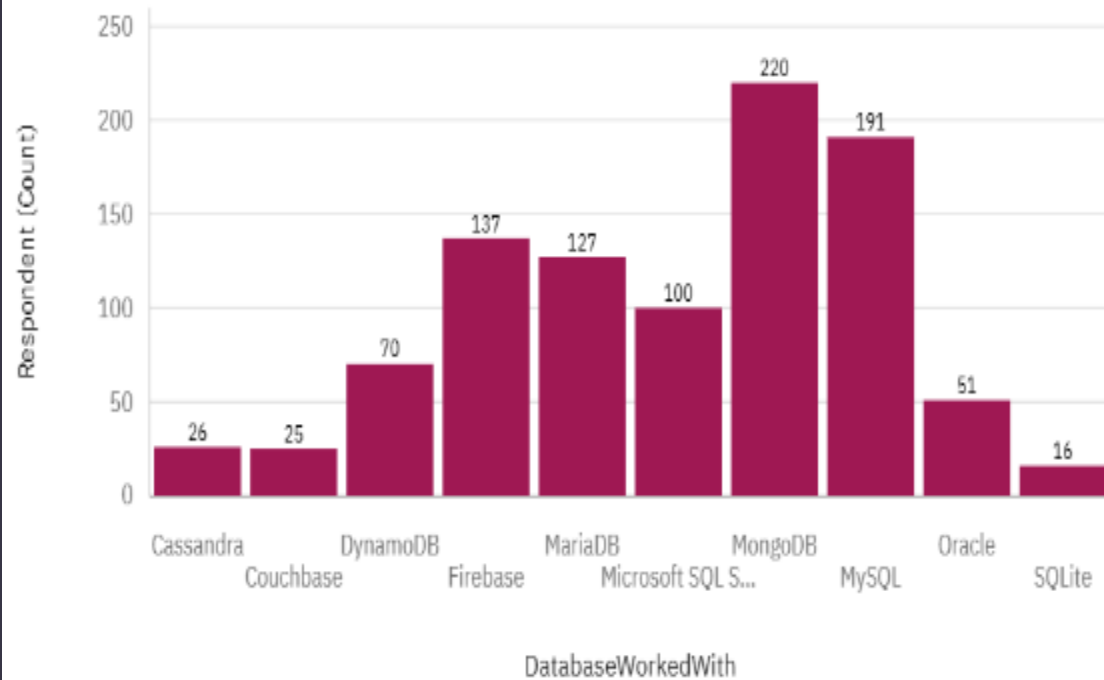
Implications

- Developers may migrate from Java to Python
- Usage of Kotlin is also increasing

DATABASE TRENDS

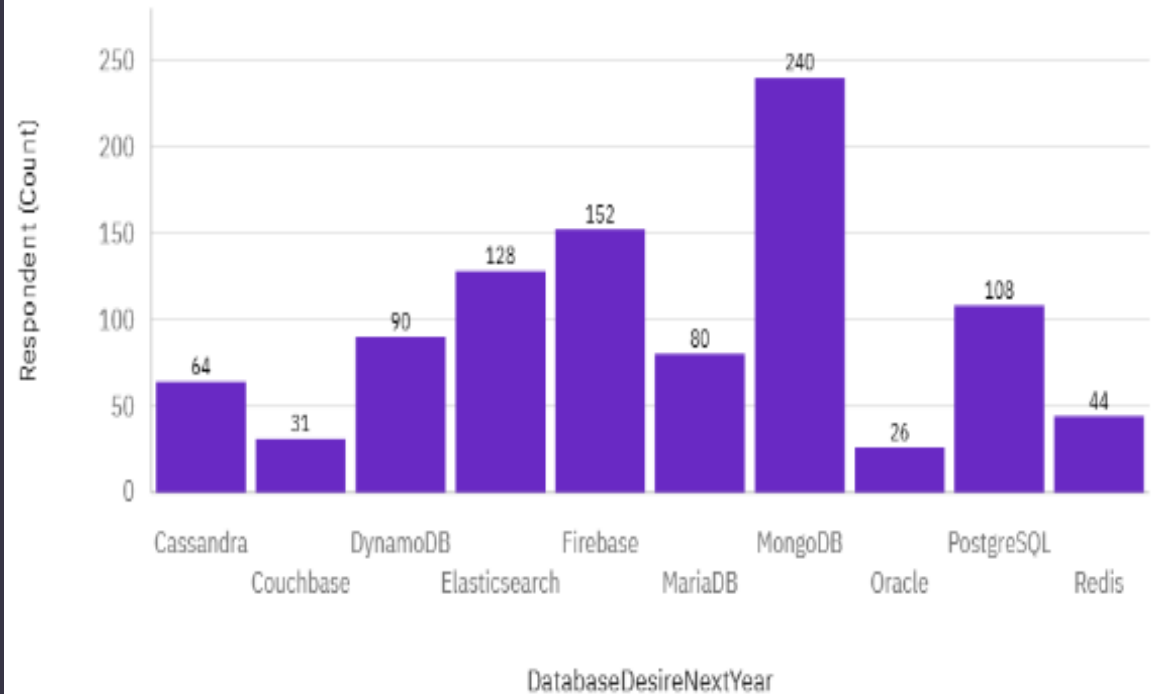
Current Year

Top 10 Databases Worked With



Next Year

Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- According to my findings MongoDB database is trending right now.
- SQL and Firebase databases are about to overcome in the near future.
- Cassandra and SQLite are not as much popular as the other databases.

Implications

- PostgreSQL database usage will likely to increase in the coming time.
- Firebase and DynamoDB users are also increased over the years.

DASHBOARD

GitHub



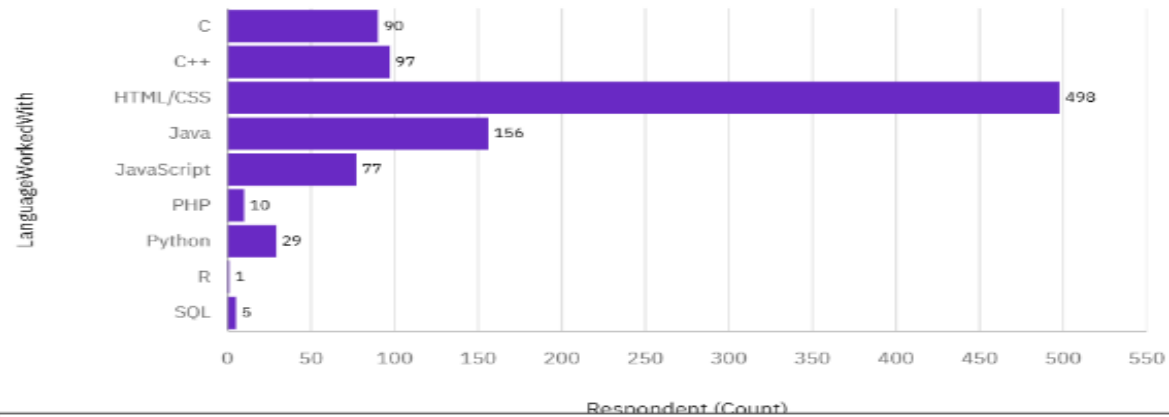
<https://github.com/nadiyagithub123/test1repo/blob/main/Dashboard1.pdf>

<https://github.com/nadiyagithub123/test1repo/blob/main/Dashboard2.pdf>

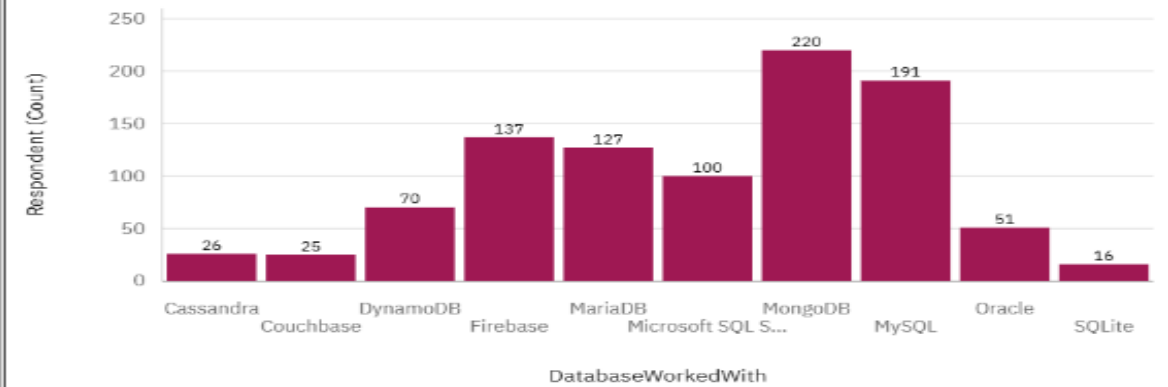
DASHBOARD TAB 1

Current Technology Usage

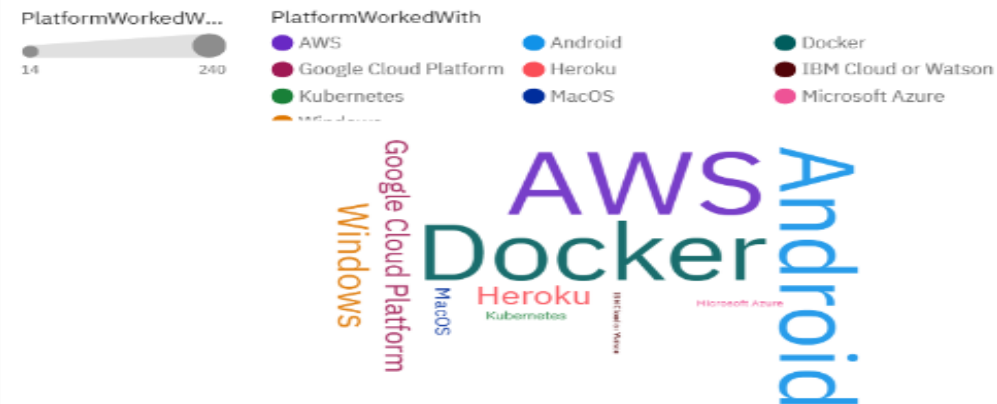
Top 10 Language Worked With



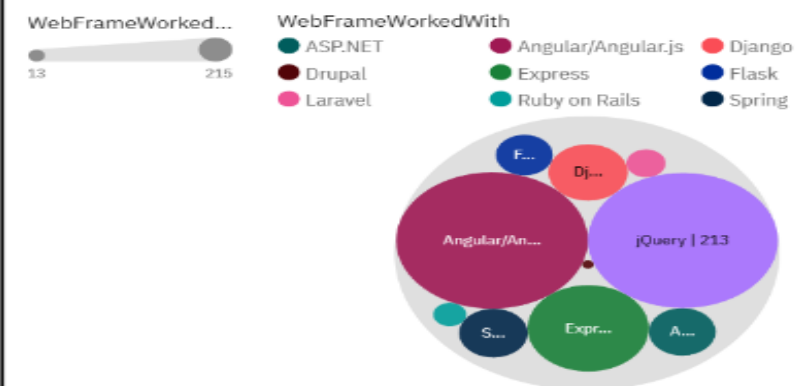
Top 10 Databases Worked With



Top 10 Platform Worked With



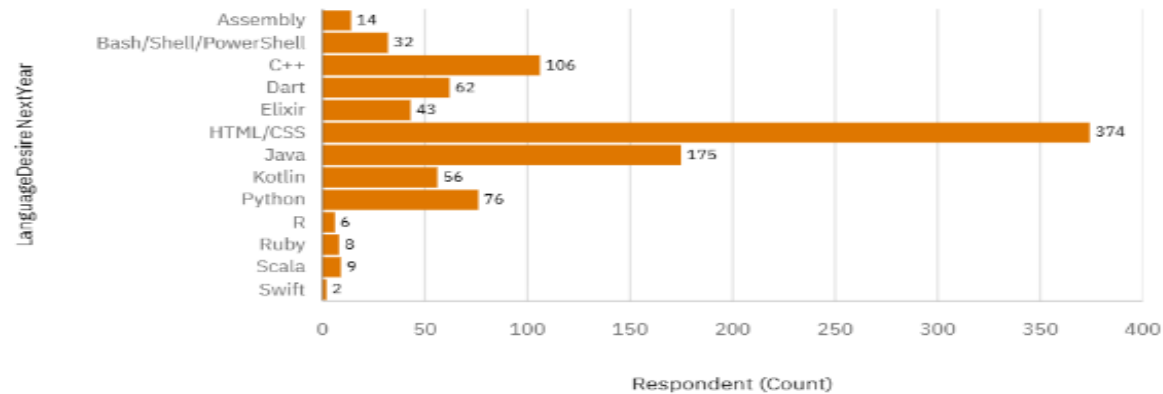
WebFrameWorkedWith hierarchy colored by WebFrameWorkedWith and sized by WebFrameWorkedWith



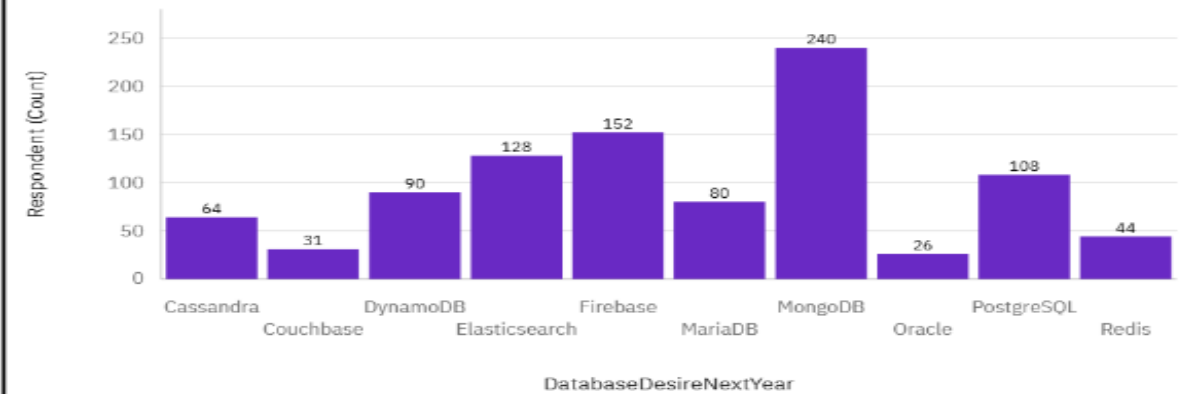
DASHBOARD TAB 2

Future Technology Trend

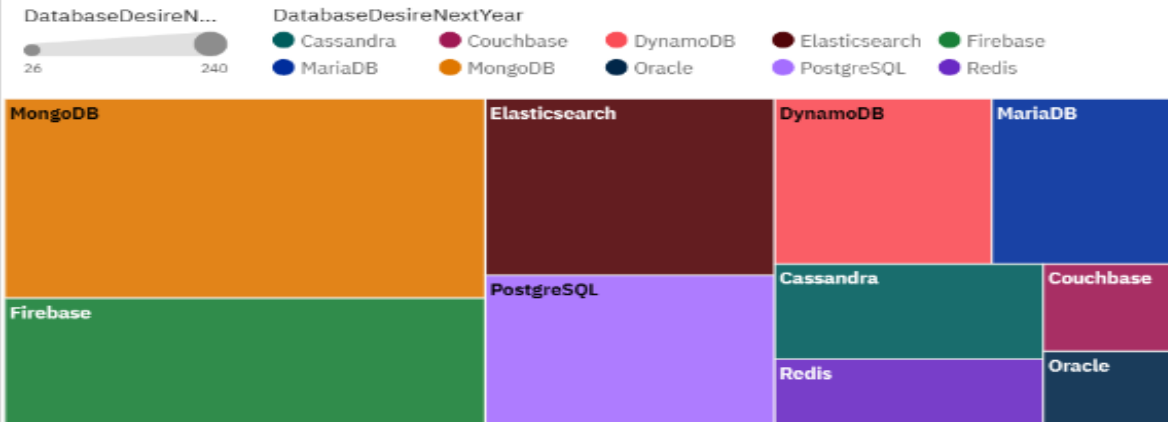
Top 10 Language Desire Next Year



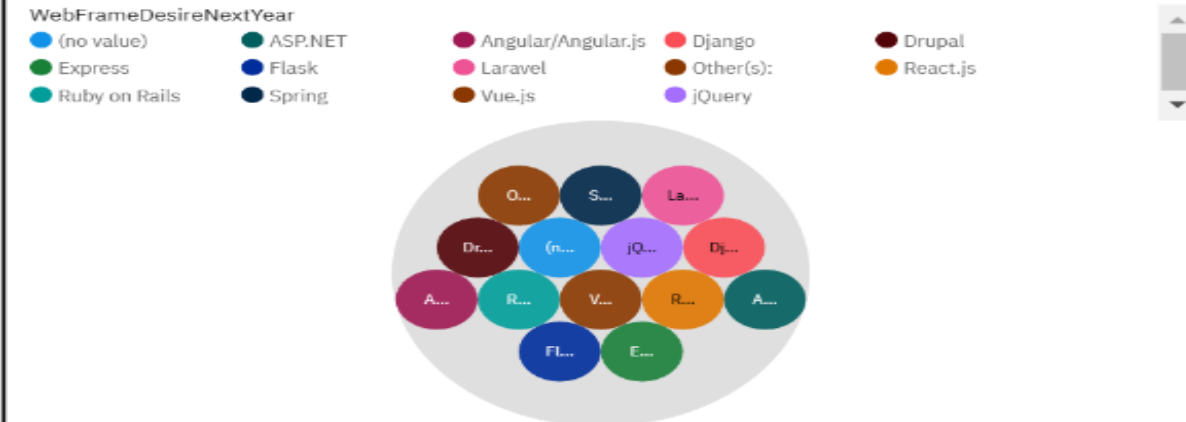
Top 10 Database Desire Next Year



Top 10 Database Desire Next Year



Top 10 Web Frame Desire Next Year

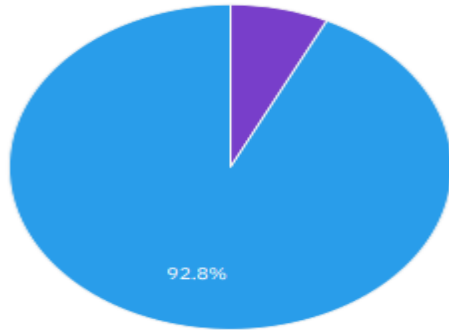


DASHBOARD TAB 3

Demographics

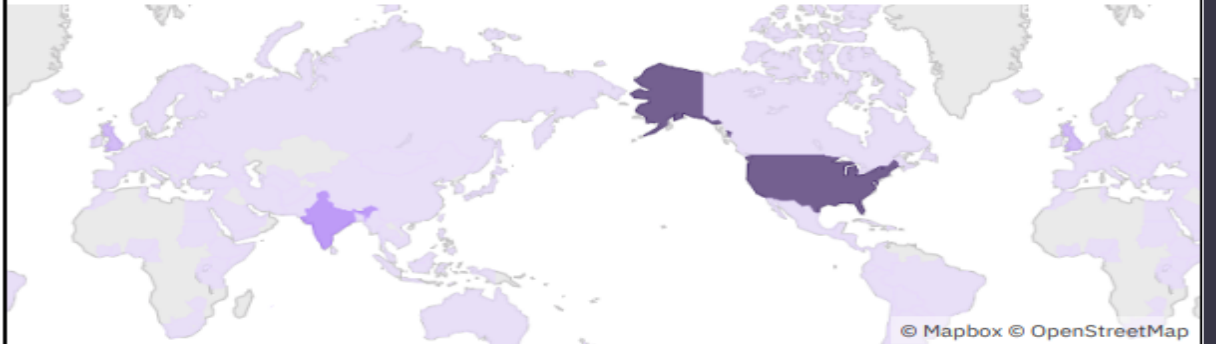
Respondent Classified by Gender

Gender
● Woman ● Man

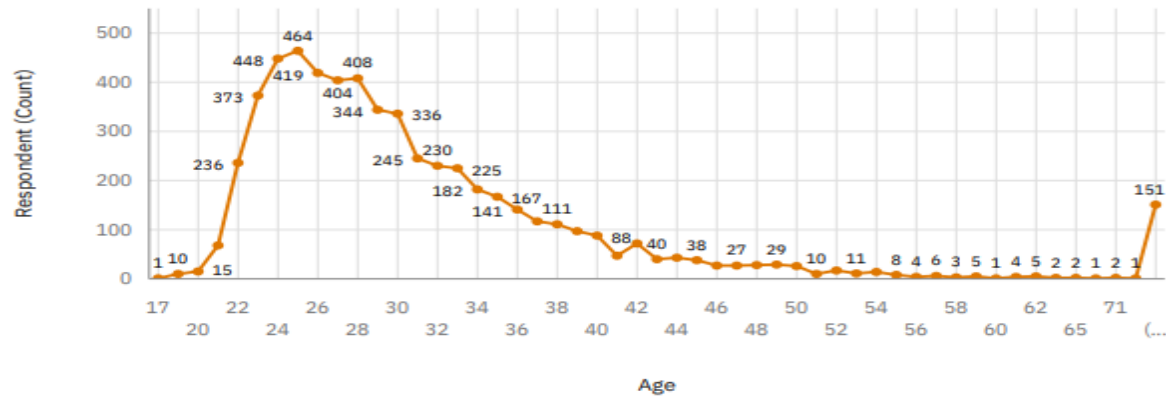


Respondent Count for Country regions

Respondent (Count)
1 1,861

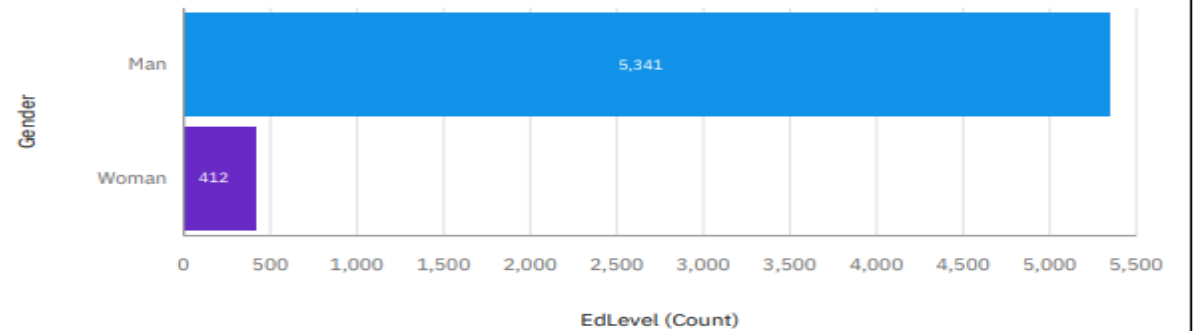


Respondent by Age



Respondent Count by Gender And Formal Education

Gender
● Man ● Woman



OVERALL FINDINGS & IMPLICATIONS

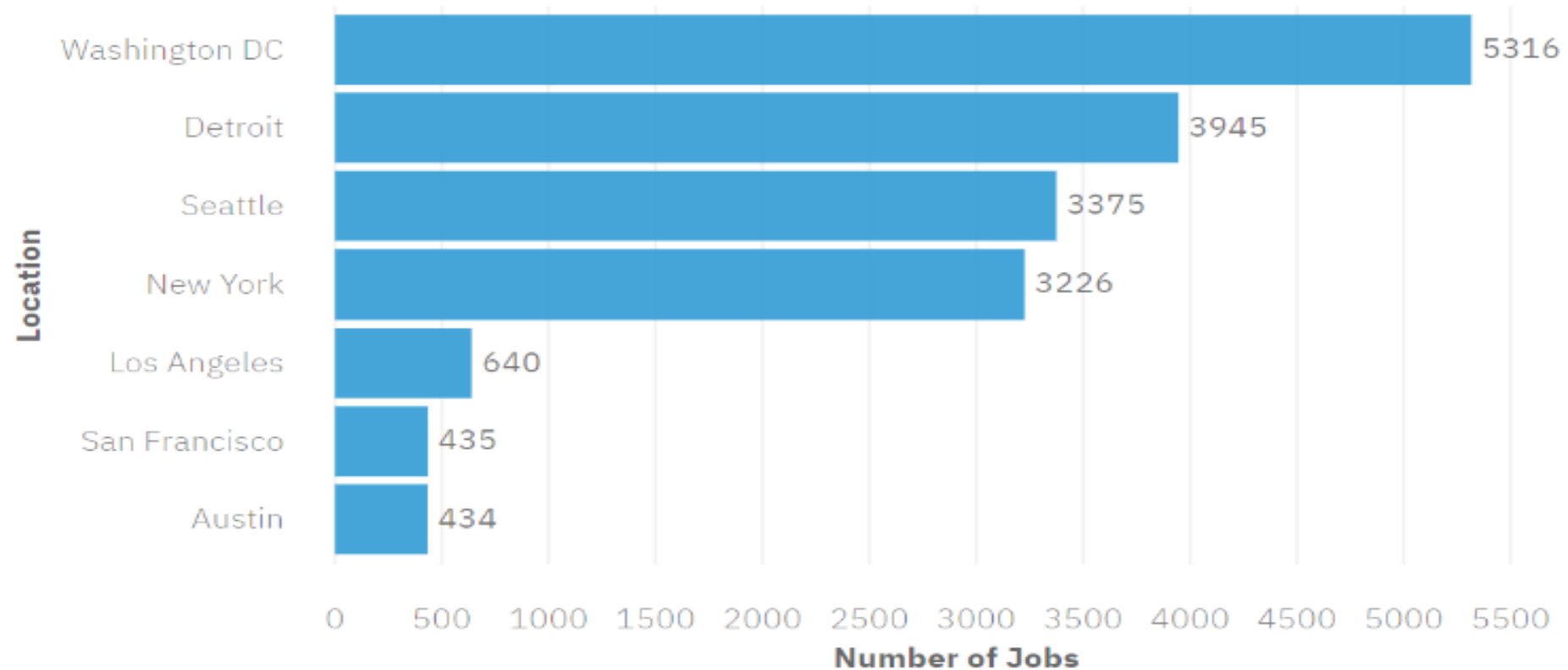
Findings

- According to my Language findings HTML, JAVA AND Python will be the top 3 languages so far.
- According to my Database findings MongoDB, PostgreSQL and Firebase are gaining Developers attention.
- According to my Age and Education findings most of the software users are male with 90% count

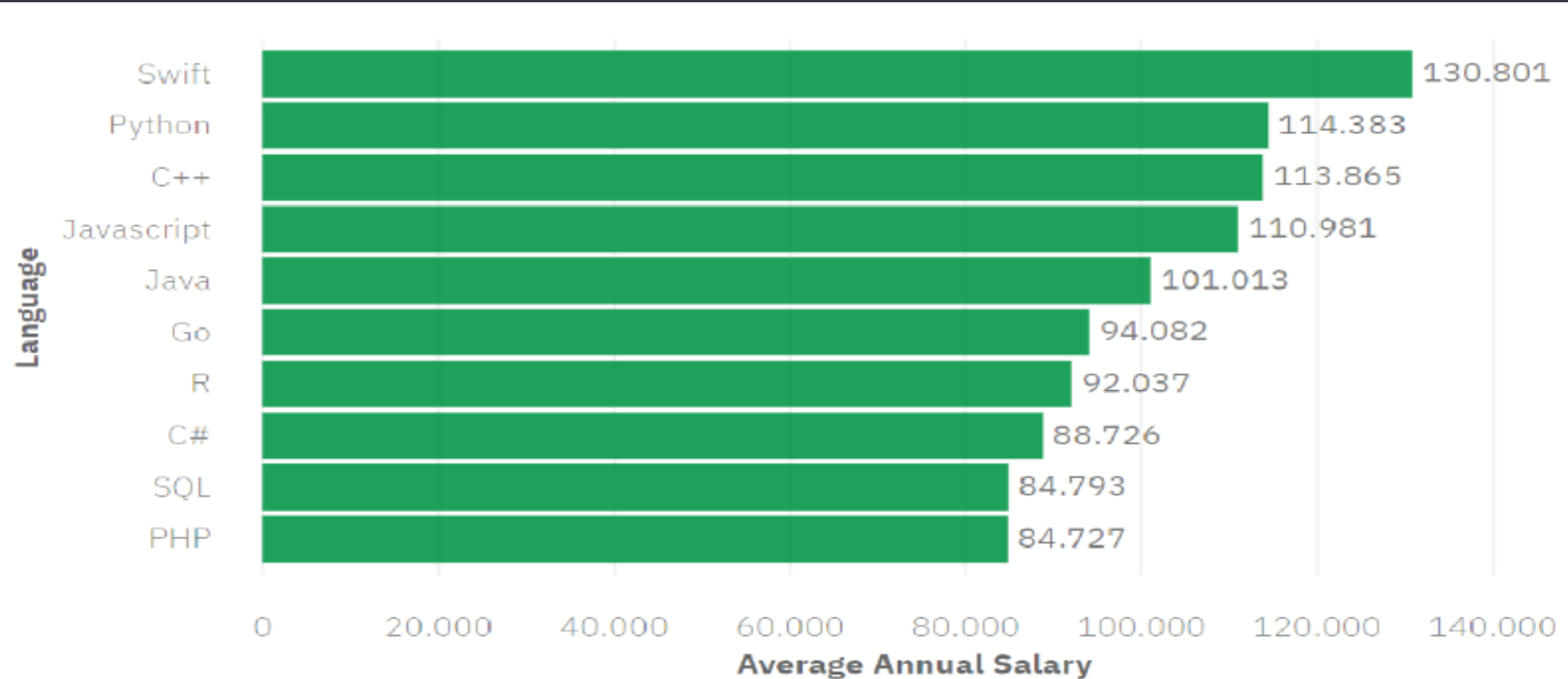
Implications

- AWS ,Android are booming as Platform As A Service Platforms.
- Angular is becoming one of the popular work frames.
- Women should be encouraged to prove themselves towards using different technologies.

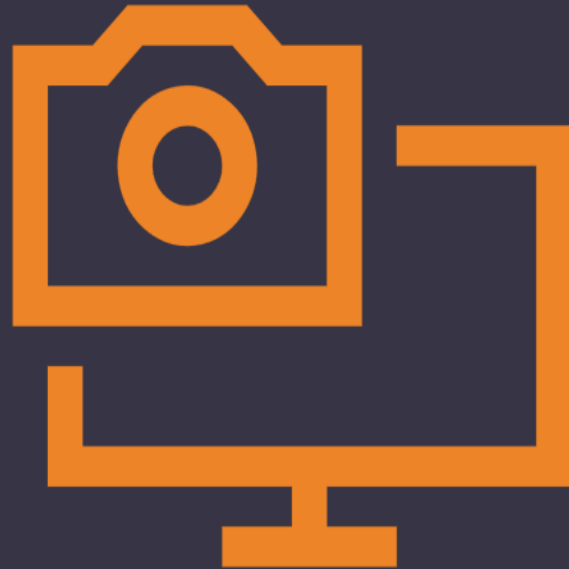
JOB POSTINGS BASED ON THE LOCATION



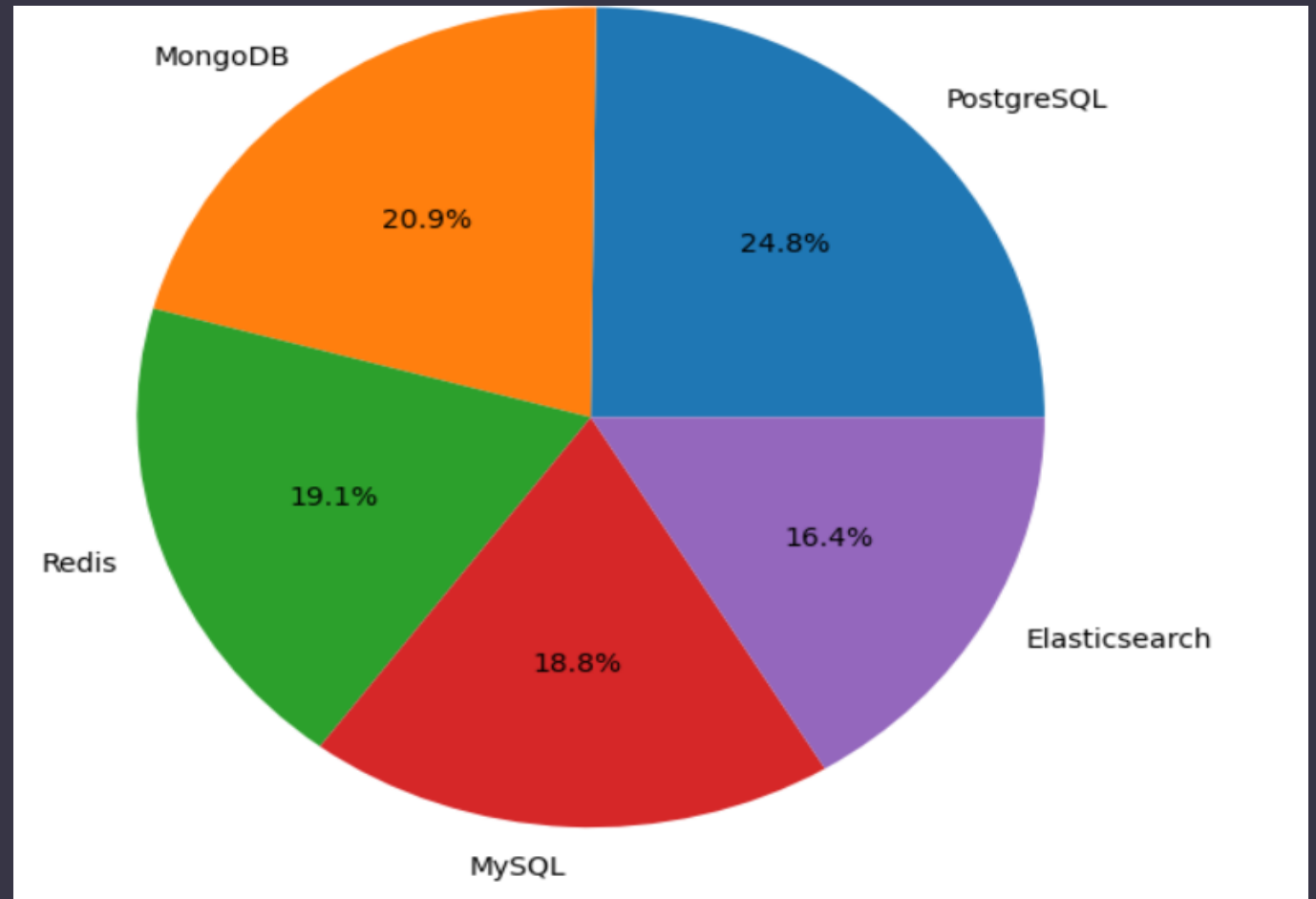
POPULAR LANGUAGES AVERAGE ANNUAL SALARY



APPENDIX



Created a pie chart using different types of databases



DISCUSSION



1. Large majority of Developers should contribute to open source.
2. Developers (Age doesn't matter) should learn a new technology in their free time.
3. Women should be involved in learning new languages and new technologies.
4. Platform as a Service (PAAS) usage is growing comparatively among the years.
5. Java script will be the future of Languages and MongoDB will top the databases over the years.

CONCLUSION



- Developers are people with very marked characteristics.
- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- There is a job to be done to spread accessibility of this labor market to countries under development.
- Gender and Age should not become a barrier to learn new Skills and Technologies.