Analyze of Technology Trends

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- Methodology
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- Discussion
  - Findings & Implications
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EXECUTIVE SUMMARY

- Current Technology Usage Trend
  - Language
  - Database
  - Platform
  - Web Frame
- Future Technology Trend
  - Language
  - Database
  - Platform
  - Web Frame
- Demographic Survey
- Country & Gender Analysis

INTRODUCTION

- The purpose of this analysis is to show current and future technology tools for software developers or people who want to improve themselves in this field.
- Many people want to improve themselves both for the profession they have and for the profession they want to have in the future.
- In order to respond to these needs, various surveys, websites and APIs were used.
- Result of Analyzes ,
  - Top Programming Languages,
  - Databases,
  - Platforms and Web Frames are defined.

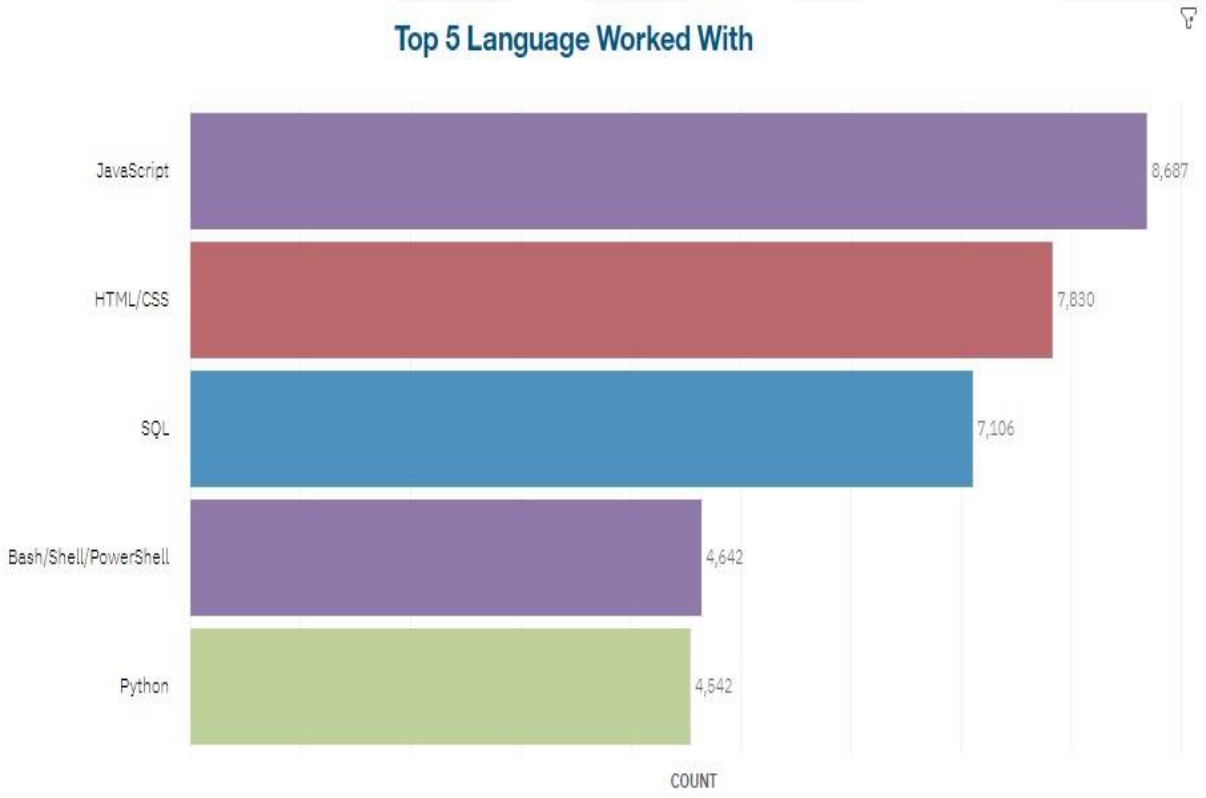
METHODOLOGY

- Data Collection
  - Collecting Data Using APIs
  - Collecting Data Using Web Scraping
- Data Wrangling
- Data Exploration
- Data Visualization
  - Matplotlib & Seaborn
  - IBM Cognos Dashboard
- Presentation

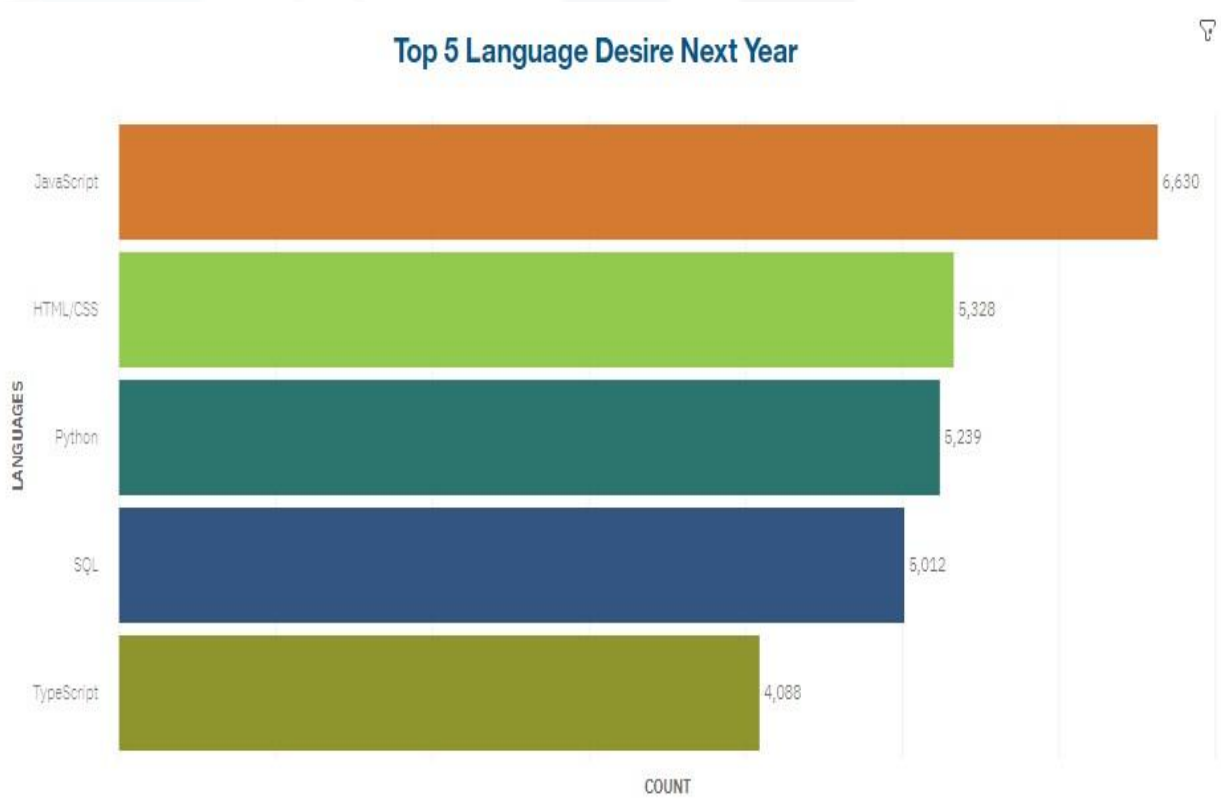
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

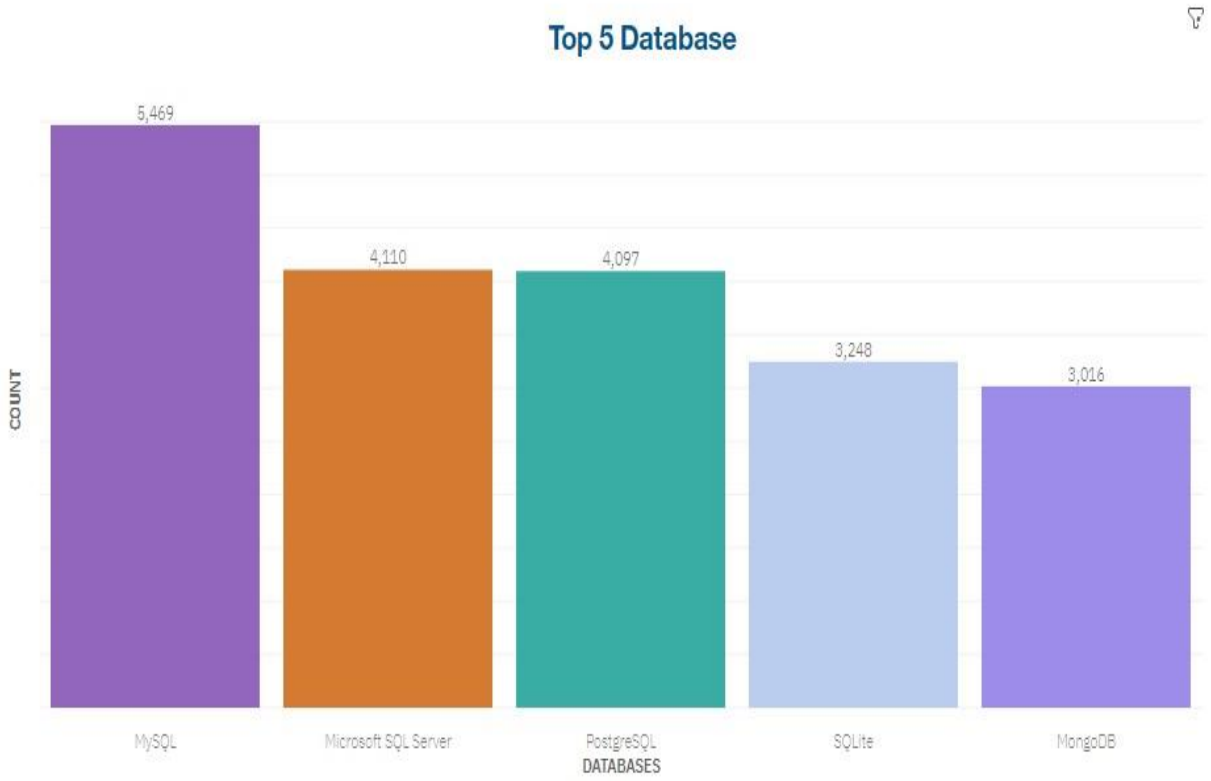
- JavaScript is top trending language in the world
- Python and TypeScript are becoming more popular
- HTML/CSS and SQL will continue to be popular now and in the future.

Implications

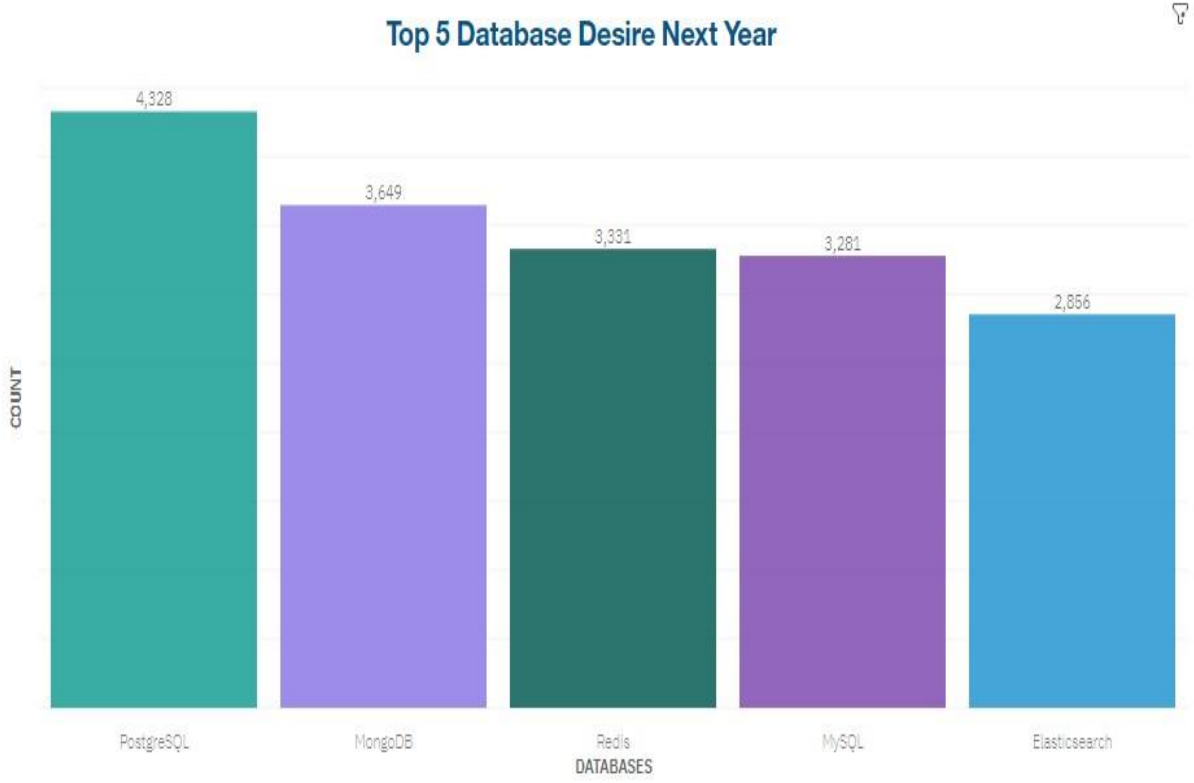
- Web development and Web developers will continue to be in high demand
- There will be a need for more programmers who know Python and TypeScript languages.
- The number of seniors who know HTML/CSS and SQL will increase.

DATABASE TRENDS

Current Year



Next Year



IBM Developer

SKILLS NETWORK

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL and MongoDB are the most wanted databases to learn.
- MySQL is the most popular database.
- Microsoft SQL Server still retains its charm.

Implications

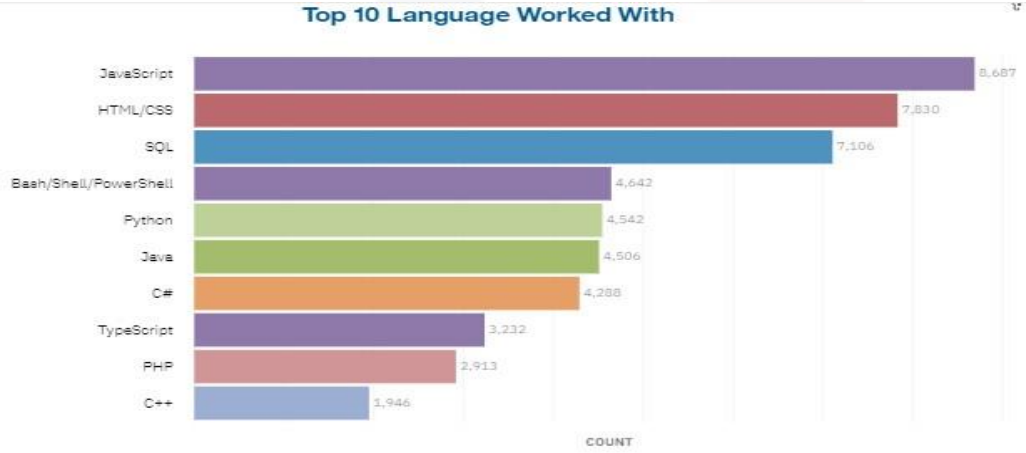
- NOSQL databases will take a huge leap forward in the future.
- OpenSource and web platforms will continue to use MySQL.
- Microsoft SQL Server continues to lose popularity.

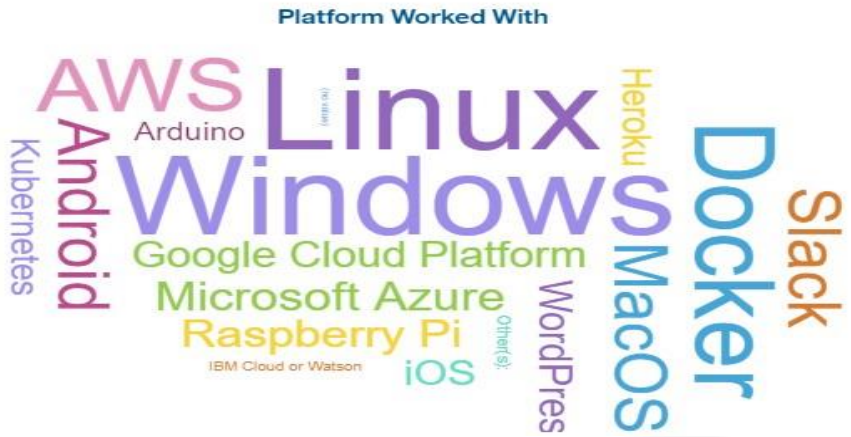
DASHBOARD

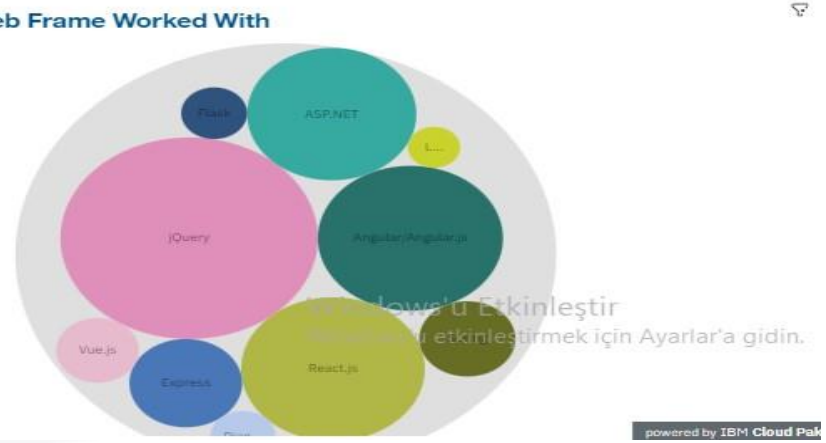
DASHBOARD LINK

TECHNOLOGY TRENDS DASHBOARD

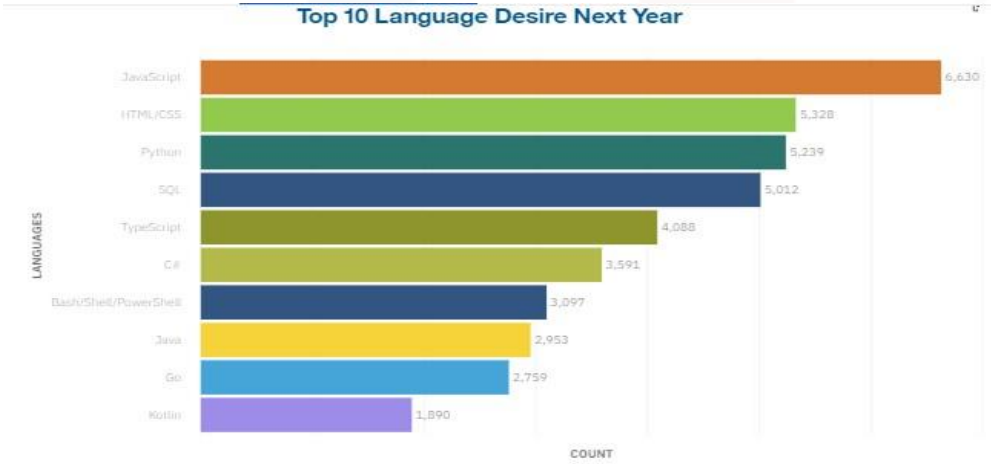
CURRENT TECHNOLOGY USAGE

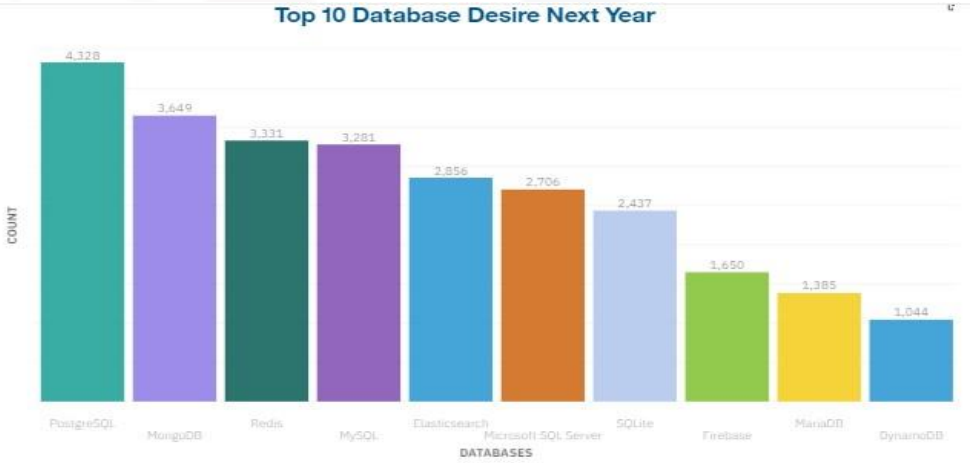


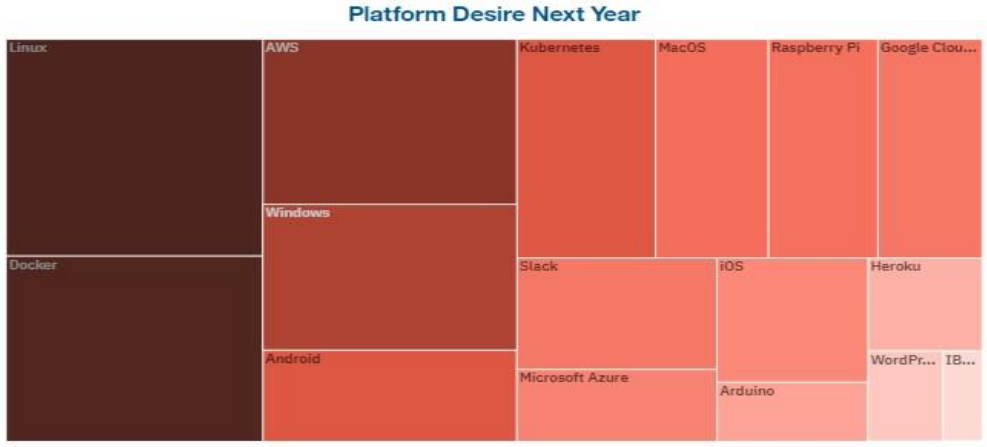


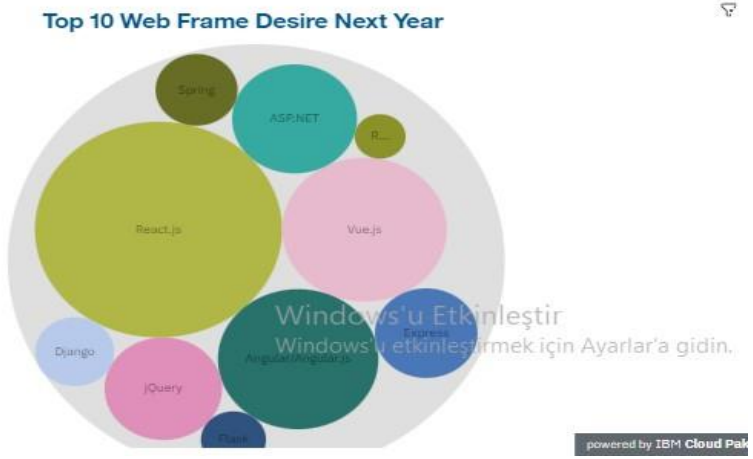


FUTURE TECHNOLOGY TREND









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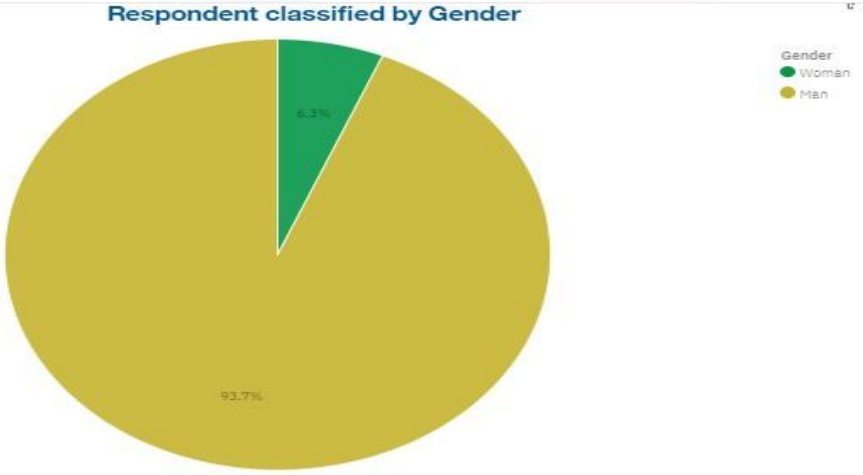
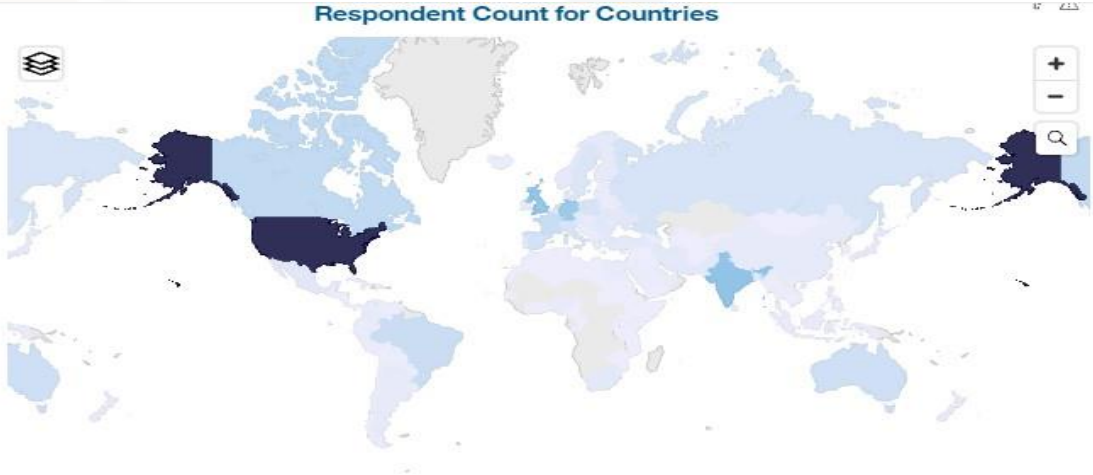
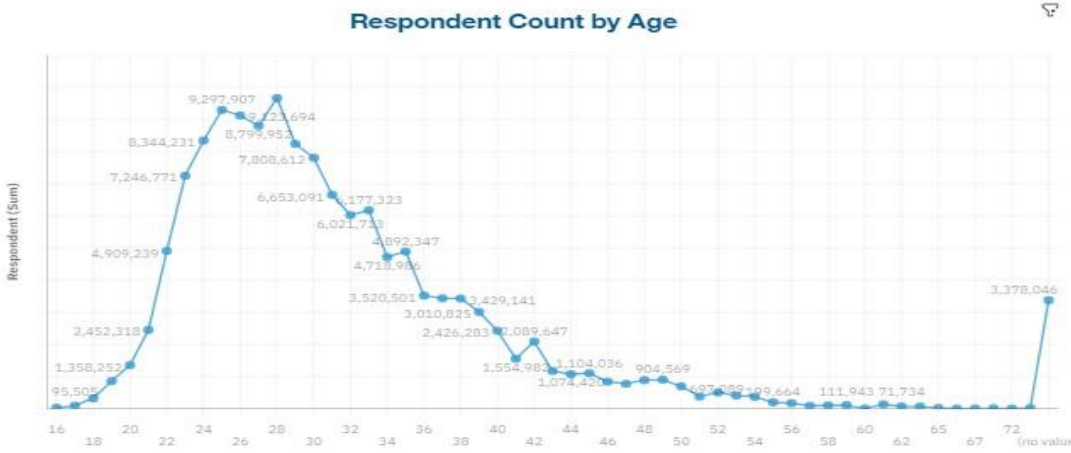
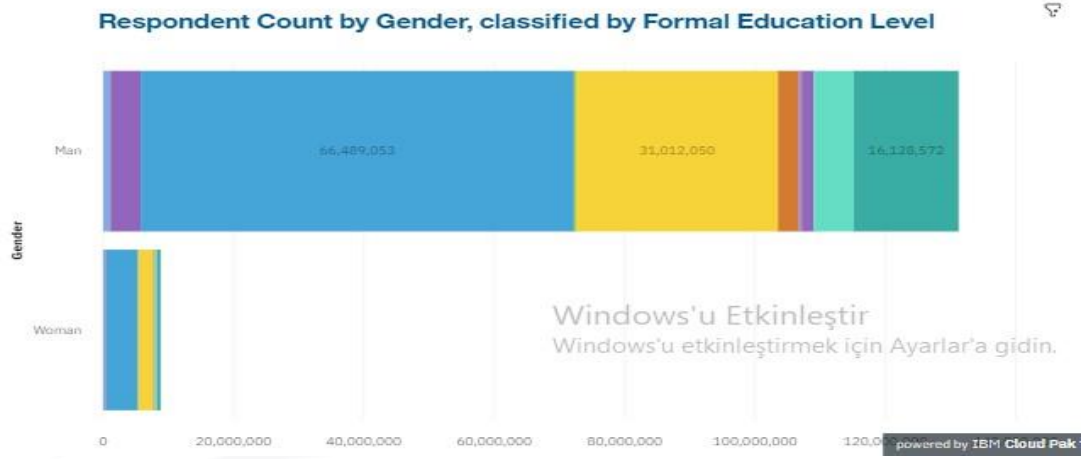
SKILLS NETWORK

DEMOGRAPHIC SURVEY









DISCUSSION

- According to these analyzes, will the technologies that are in demand in the future consist of only these?

  or

- Will these technologies be insufficient?

OVERALL FINDINGS & IMPLICATIONS

Findings

- USA is the top technology country.
- The number of women software developers is very low compared to men.
- Linux , AWS and Docker are the most demanded platforms.
- Technology tools are constantly changing.

Implications

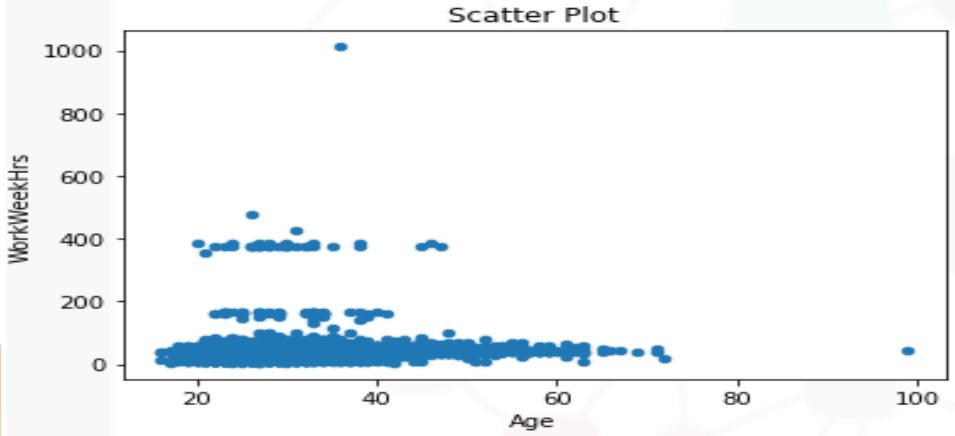
- In more different countries, they should join the technology network and develop themselves.
- The inequality between female and male software developers should be resolved. More female software developers should enter the sector.
- Software developers have to constantly follow the changing technology.

CONCLUSION

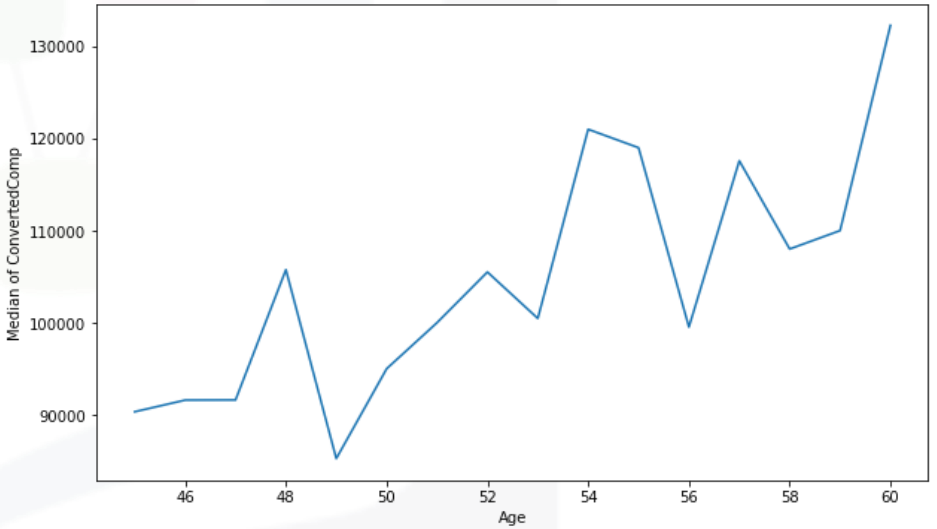
- Programming Languages, Databases , Platforms and Web Frame Trends are changing and developing day by day.
- Other countries, except the USA, continue to lag behind in technology.
- Women are very lacking in participation in technology.
- There is no relationship between the salary demanded by the software language and the software language desired to be learned.
- In line with big data, NoSQL databases and data processing languages such as Python are in high demand.

APPENDIX

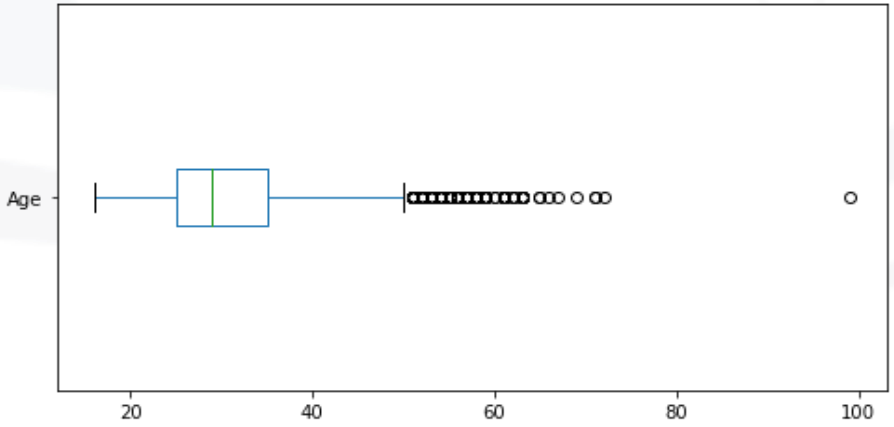
Searching for Correlations Between Age and WorkWeekHrs



Line Chart of Salary for 45 To 60 Year Olds



A Boxplot To Find The Outliers



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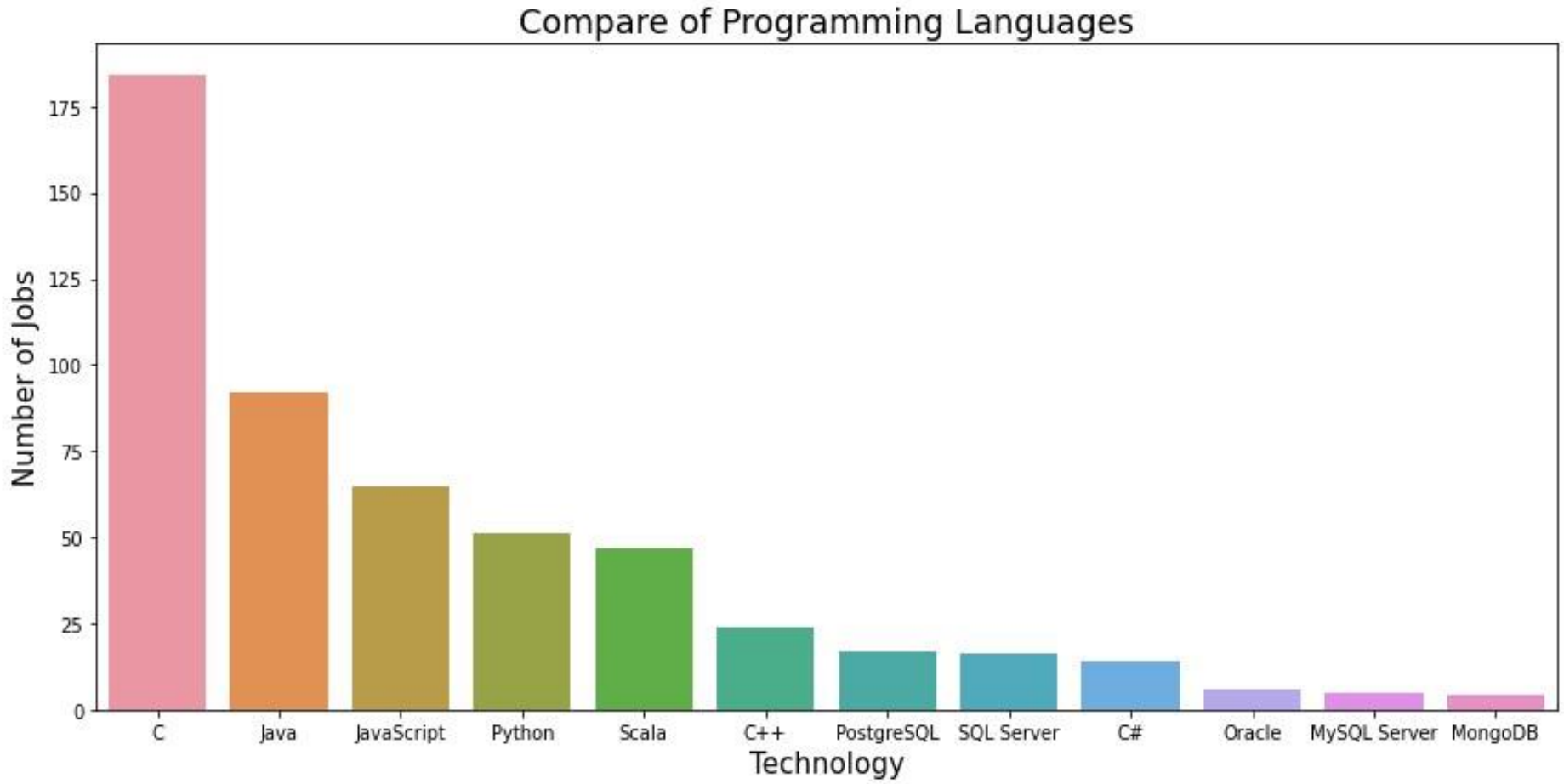
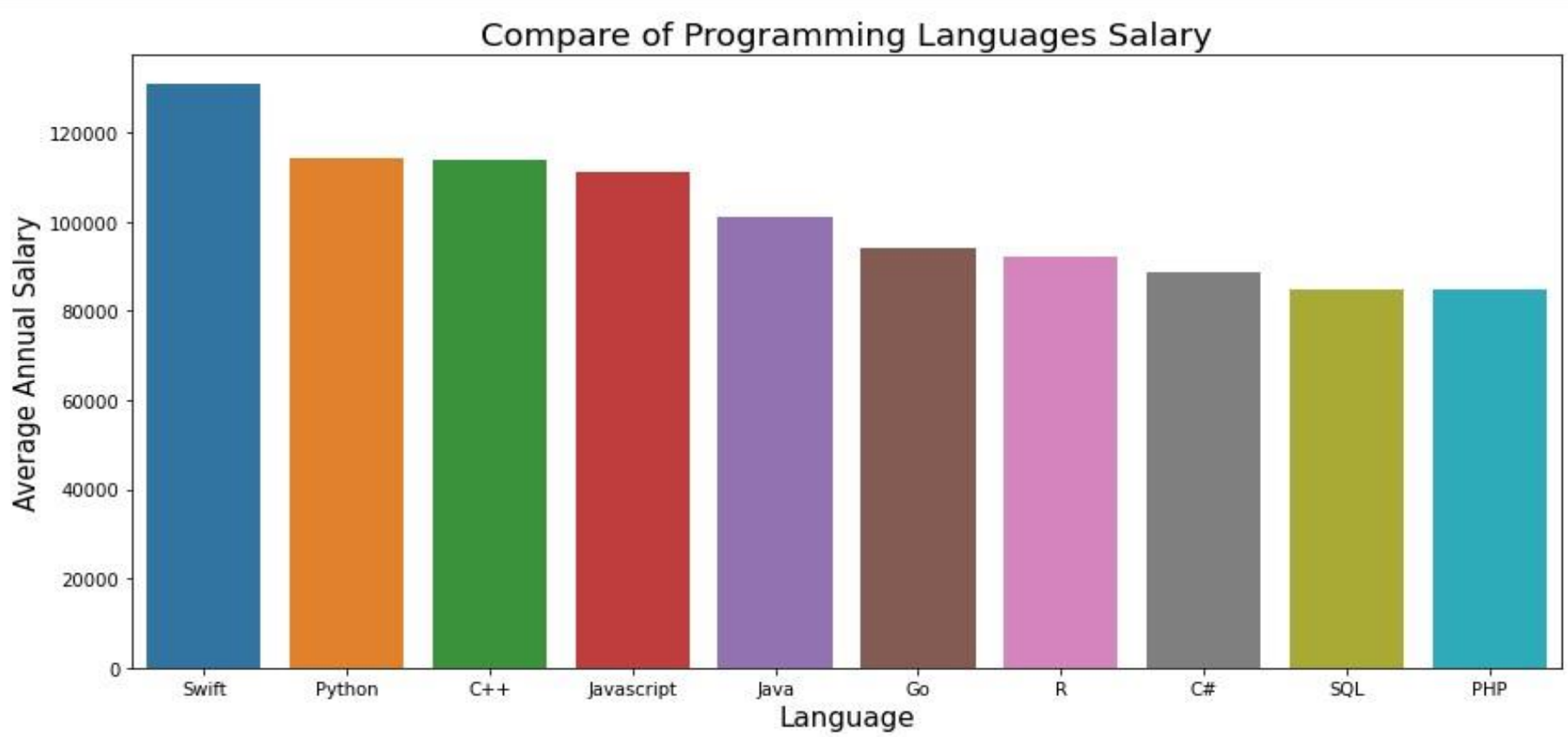
SKILLS NETWORK

GITHUB JOB POSTINGS



POPULAR LANGUAGES