



Emerging Trending Skills In IT industry

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OUTLINE



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EXECUTIVE SUMMARY



- IT industry is a competitive and ever changing industry which require constant refine new programing skill and DataBases. This project is used to analyze the trends
- This project is used to analyze the trend:
 - Current Technology Usage
 - Future Technology Trend
 - Demographics in IT industry
- The project is to identify the top programming languages
- Identifying top database skills in demand
- Popular IDEs

INTRODUCTION



- What is the emerging trend and future skill requirements in the Industry?
 - What are the top programming language in demand?
 - What are the top database skills in demand?
 - What are the popular IDEs?
- collecting data from various sources and identifying trends for this year's report on emerging skills:
 - Job Postings
 - Training Portals
 - Surveys
- A Data Analyst in a global IT and business consulting services firm that is known for their expertise in IT solutions and their team of highly experienced IT consultants. In order to keep pace with changing technologies and remain competitive, your organization regularly analyzes data to help identify future skill requirements.

METHODOLOGY



1. **DataSource:** Stack Overflow, Two data is used Demographics and Survey data technologies
2. SurveyData technologies was used to analyze the current technology trend and future technology trend:
 - Respondents
 - LanguageWorkedWith, DataBaseWorkedWith, PlatformWorkedWith, WebframeWorkedWith
 - LanguageDesireNextYear, DataBaseDesireNextYear, PlatformDesireNextYear, WebframeDesireNextYear,
3. Demographic data was used for demographic data:
 - Man and woman
 - Age
 - Formal education level and Countries
4. Data is **filtered** with:
 - NoValue or null is cleaned
 - Demographic: man and woman only

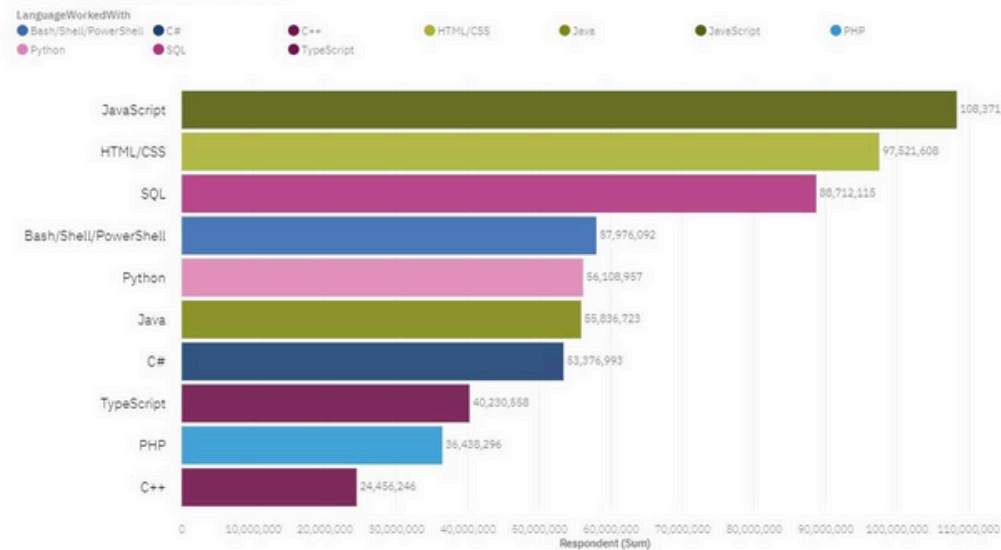
RESULTS



PROGRAMMING LANGUAGE TRENDS

Current Year

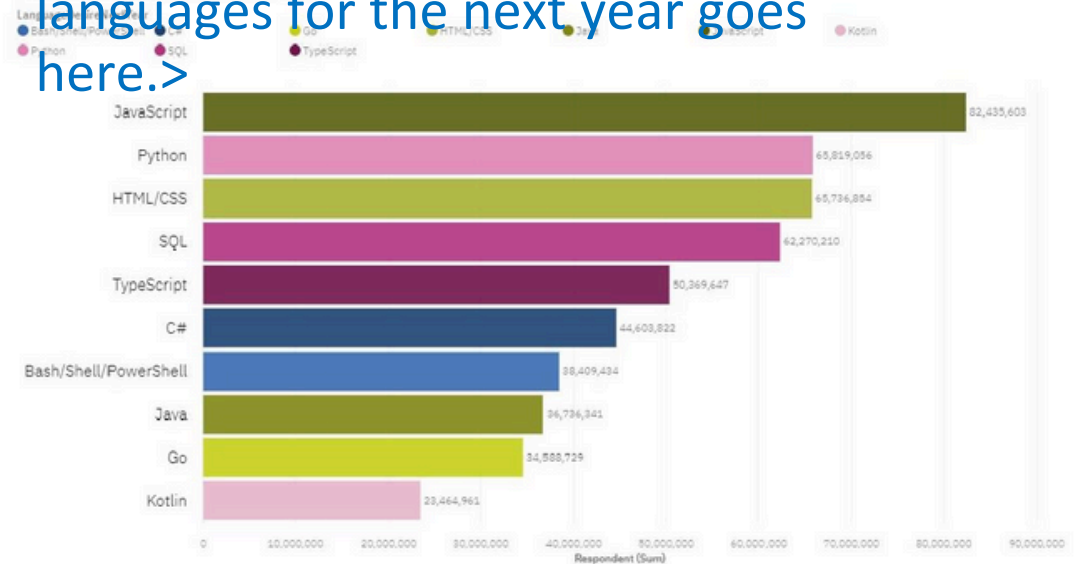
Top 10 LanguageWorkedWith



Next Year

< Bar chart of top 5 programming languages for the next year goes here.>

Top 10 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS -FINDINGS & IMPLICATIONS

Findings:

- JavaScript is the top most demanded for current and future programming language.
- Significantly Increasing desire for Python
- The trends of programming language has shifted

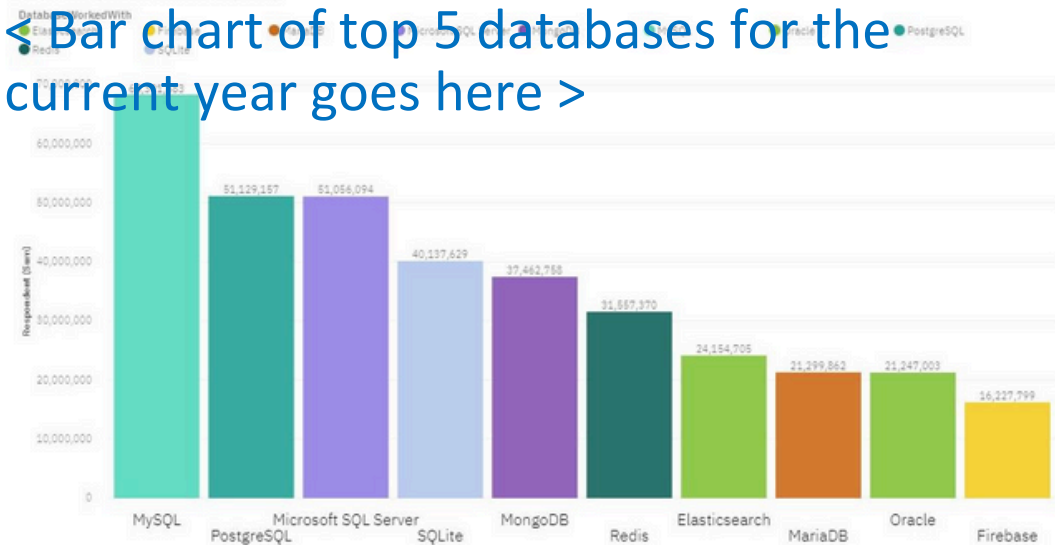
Implications:

- JavaScript is still most popular and widely used in programming language in IT industry.
- Python has become a new desired and required skills in IT industry.
- JavaScript, Python, HTML/CSS, SQL, TypeScript are the top 5 most desired skills.

DATABASE TRENDS

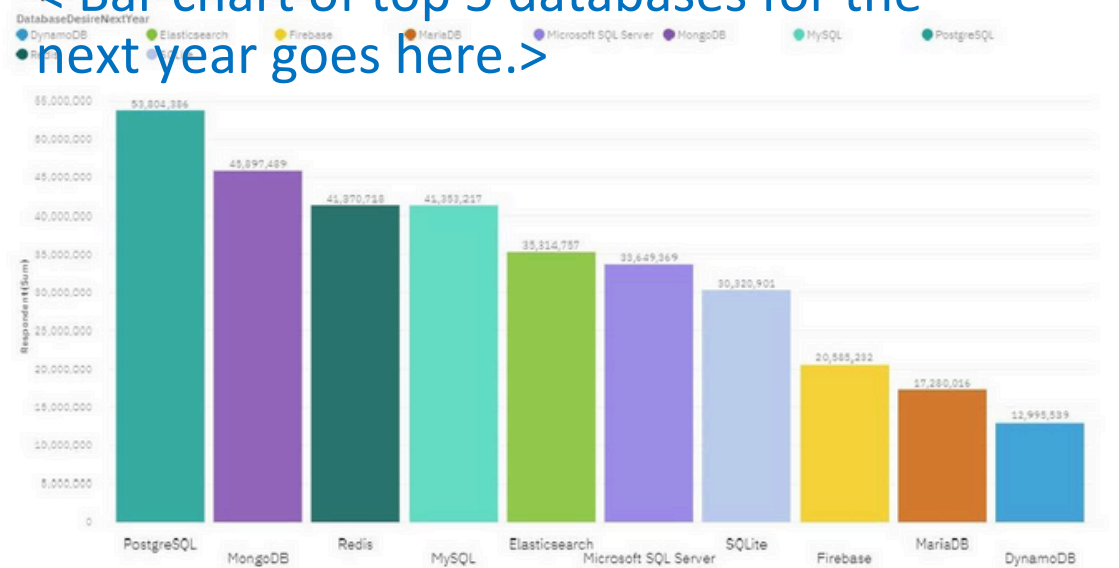
Current Year

Top 10 DatabaseWorkedWith



Next Year

Top 10 DatabaseDesireNextYear



DATABASE TRENDS -FINDINGS & IMPLICATIONS

Findings:

- PostgreSQL, MongoDB, Redis have become the most desired Database.
- MongoDB, Redis, Elasticsearch are becoming increasingly popular for desired Database roughly 10,000 increased in respondents.
- Oracle Database has become less popular and less desired

Implications:

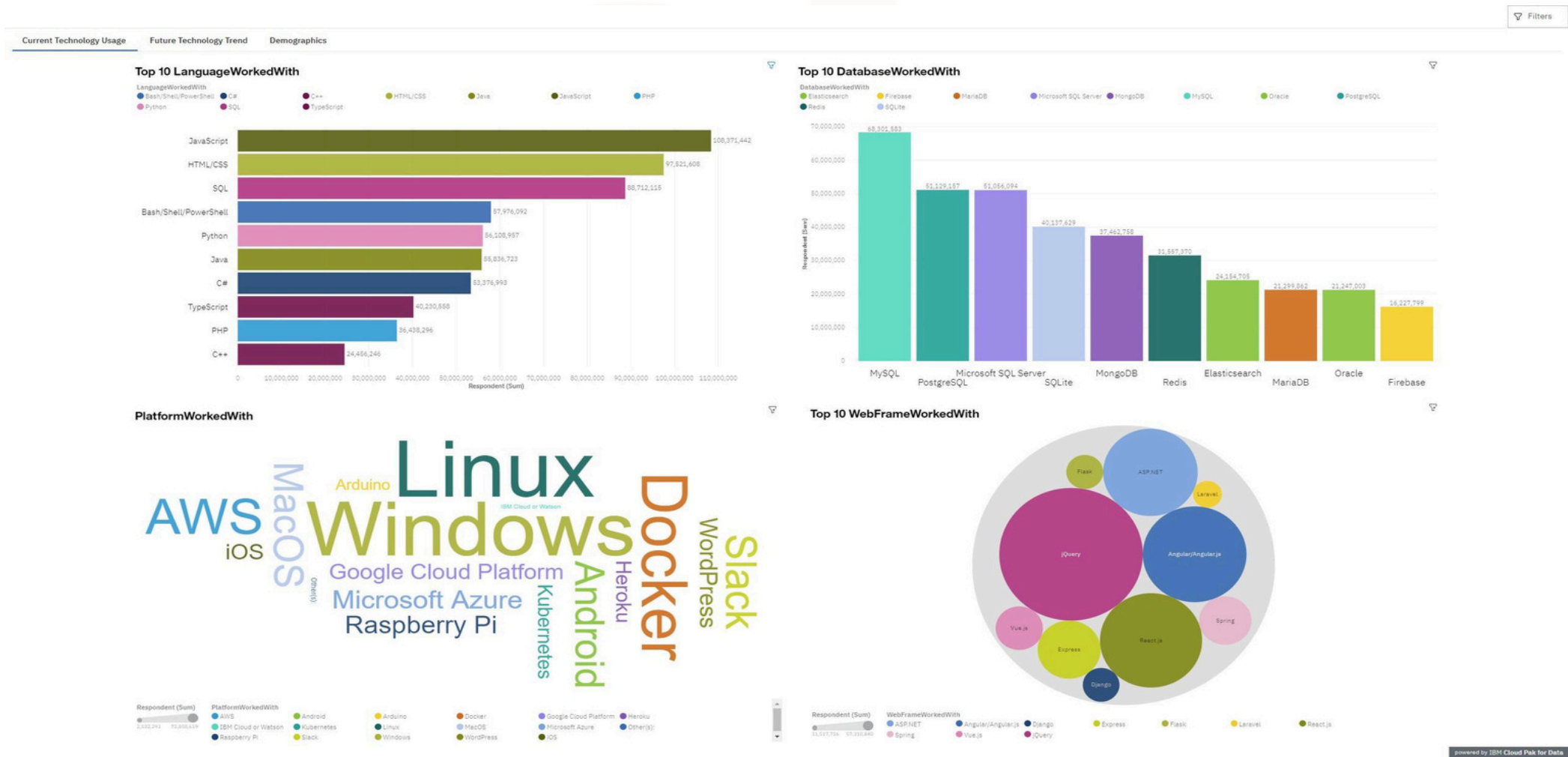
- PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch share the desired and most used Database.
- MongoDB, Redis, Elasticsearch have new and better functionalities or services.
- Oracle Database is to avoid

DASHBOARD

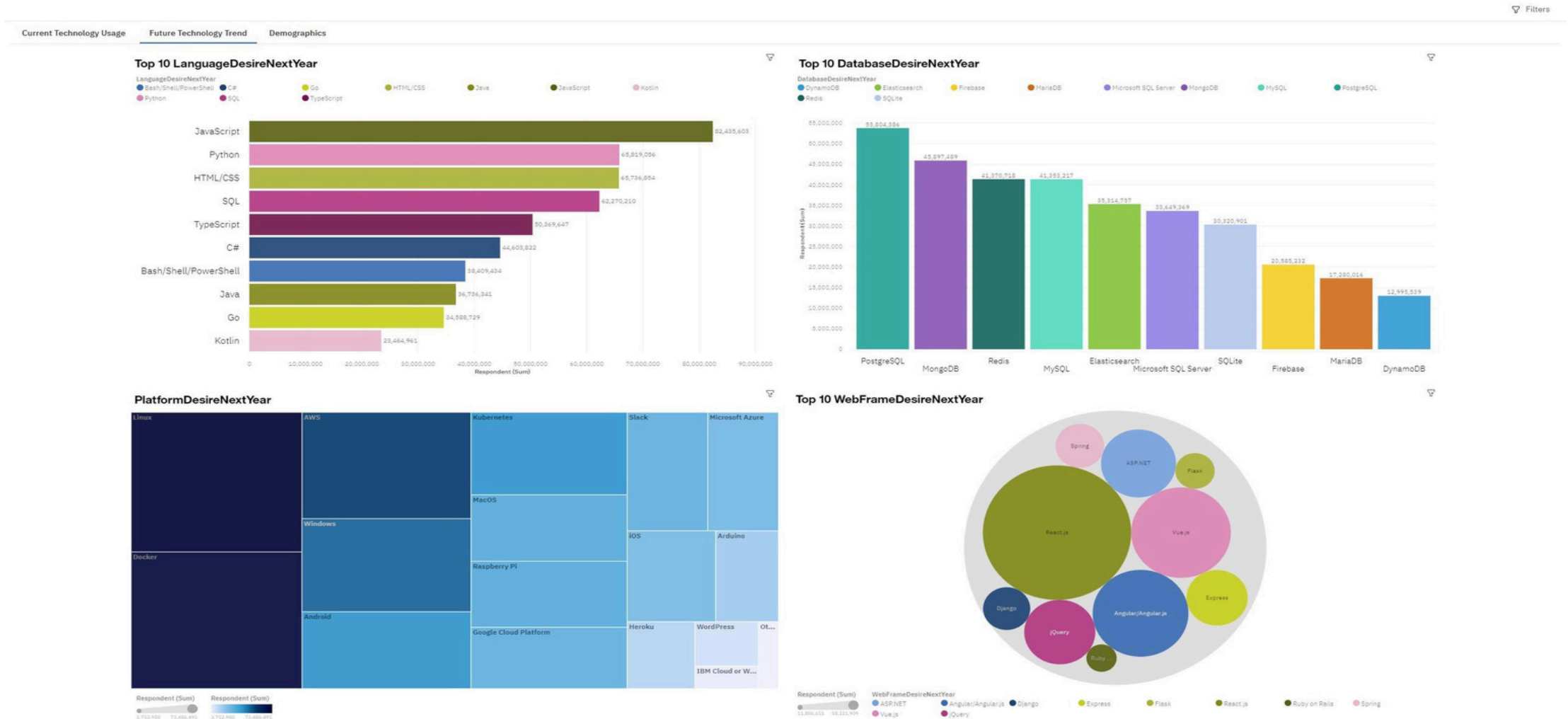


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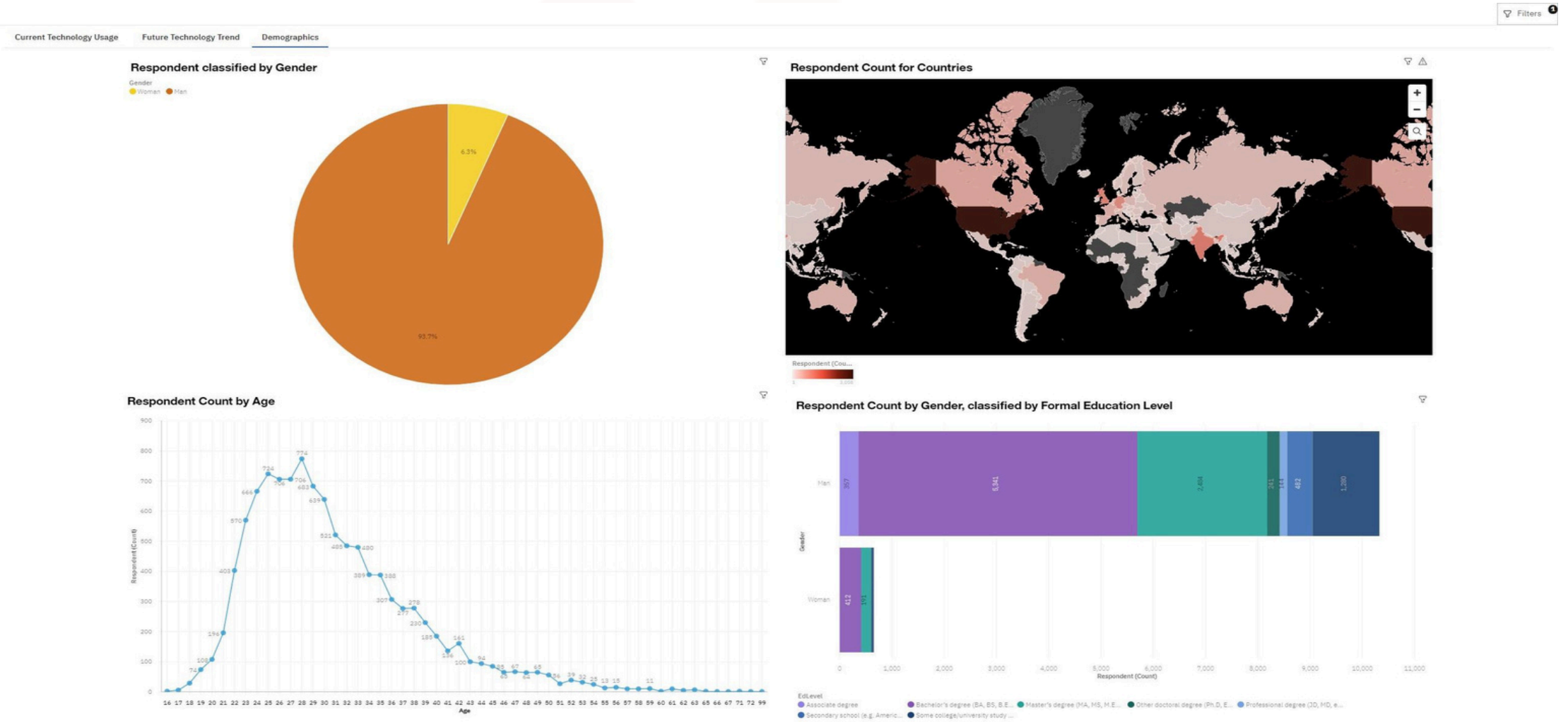
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- For future skills requirements and recommendations:

1. Top programming languages Future Desire are:
 - JavaScripts, Python, HTML/CSS, SQL, TypeScript have become the new desire programming language that are gaining popularity in the IT industry
2. Top Database Skills:
 - PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch are becoming more sought after as compared to current most popular databases that people worked with.
3. Popular IDEs:
 - React.js, Angular/Angular.js, Vue.js, jQuery and ASP.net are the popular IDEs.

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScripts, Python, HTML/CSS, SQL, TypeScript are the new desired programming language
- PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch are the new desired Database
- React.js, Angular/Angular.js, Vue.js, jquery and ASP.net are the popular IDEs

Implications

- Future Skills Requirements implements:
 1. Programming Language:
JavaScripts, Python, HTML/CSS, SQL, TypeScript
 2. Database:
PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch
 3. IDEs:
React.js, Angular/Angular.js, Vue.js, jquery and ASP.net

CONCLUSION



- The Open source data collected from StackFlow can be recreated and analyzed to avoid any data bias.
- The technologies that worked with in current year has shown a shift in trend, in order to remain competitive changes in skills requirements are needed.
- The significant changes and desires are shown in programming languages and the databases. Hence the new requirements:

Programming Language:

JavaScripts, Python, HTML/CSS, SQL, TypeScript

Database:

PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch

IDEs:

React.js, Angular/Angular.js, Vue.js, jQuery and ASP.net

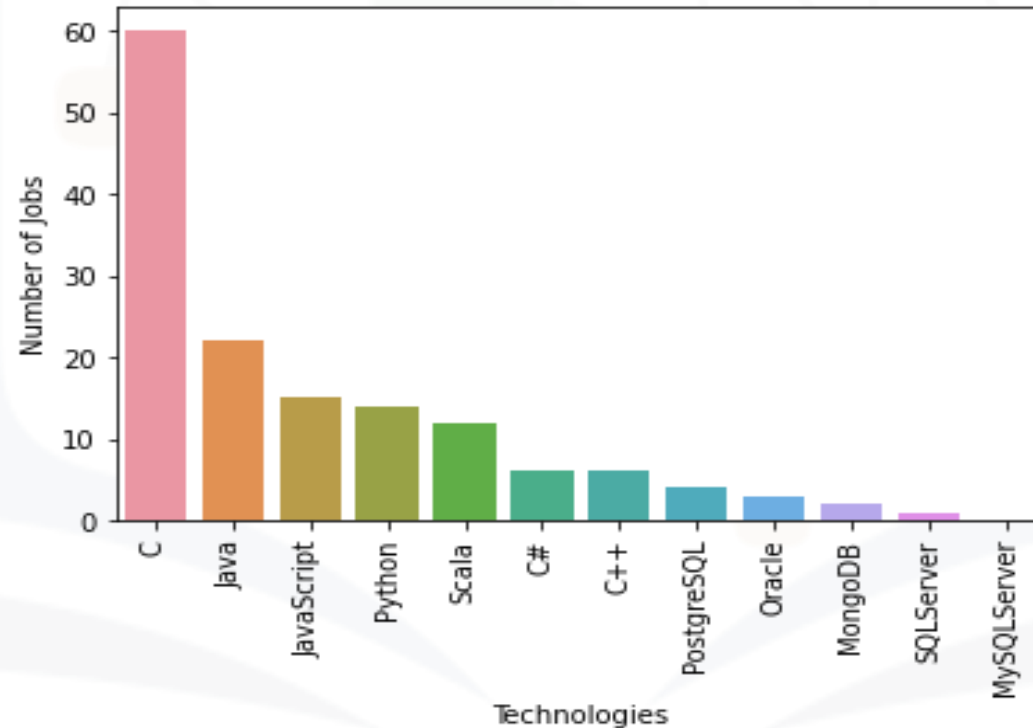
APPENDIX



- Include any relevant additional charts, or tables that you may have created during the analysis phase.

GITHUB JOB POSTINGS

In Module 1 you have collected the job postings data using GitHub API in a file named “github-job-postings.xlsx”. Present that data using a bar chart here. Order the bar chart in the descending order of number of job postings.



POPULAR LANGUAGES

In Module 1 you have collected the job postings data using web scraping in a file named “popular-languages.csv”. Present that data using a bar chart here. Order the bar chart in the descending order of salary.

