

FINAL ASSIGNMENT

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Executive Summary



After collecting Data, they have to be cleaned and then organized. The last task is to present findings through Visualization.



We have analyzed data in the previous Module, Dashboard has been created. Storytelling is created to clarify analysis.



Dashboarding with IBM Cognos Analytics and Google Looker Studio have been used to create Visualization



A sharable link to show Dashboards and Charts from Current and future Trend

Table of Content

Dashboard components

Current Technology Usage Tab

1. Top 10 Language: visualize the top 10 languages respondents have worked with and the top 10 languages respondent desire next Year
2. Top 10 Databases: visualize the top 10 databases respondents have worked with and the top 10 databases respondents need to learn next Year

Introduction

This presentation covers storytelling about Current Trends and upcoming Trends.

Dashboards need to be explained by storytelling to be clearly understood by the audience.

The presentation is addressed to the audience who wants to compare current trends and upcoming trends to make decision.

Dashboarding is to create a compelling story of analysis.

Present findings using visualization.

Sometimes, the dashboard misses clear storytelling. As a consequence, the audience feels confused about understanding the findings report.

Methodology

1. Collecting Data and Explore its Contents

- . APIs
- . Web Scraping
- . Consulting Library

Data has been collected from https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DA0321EN-SkillsNetwork/LargeData/m5_survey_data_demographics.csv and https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DA0321EN-SkillsNetwork/LargeData/m5_survey_data_technologies_normalised.csv

2. Data Wrangling

3. Exploratory Data Analysis

- . Analyzing Data Distribution
- . Handling Outliers
- . Correlations

4. Data Visualization

5. Charts and Dashboarding

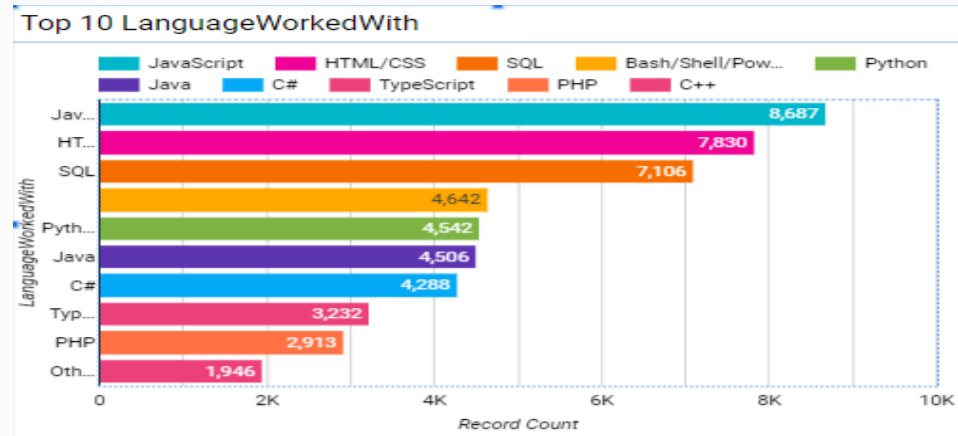
They have been cleaned and then organized to be used in finding reports. Charts and Dashboarding are chosen in presenting the findi



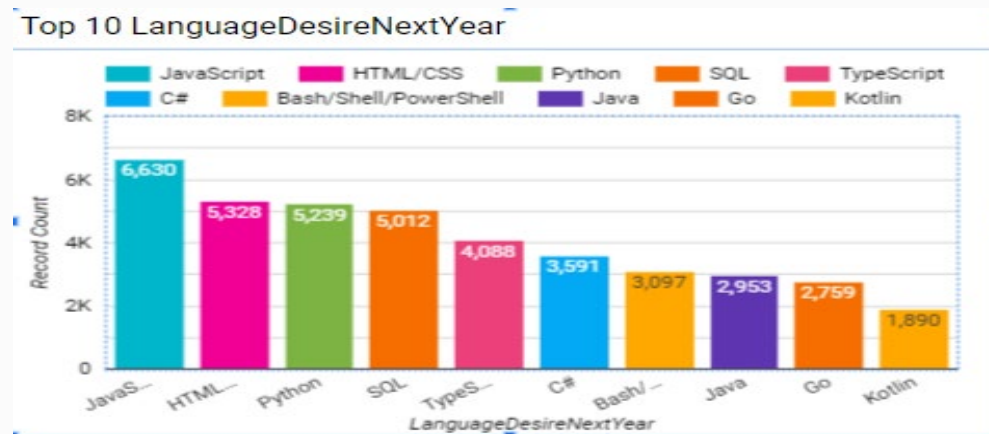
RESULTS

Programming Language Trends

CURRENT YEAR



FUTURE YEAR



Programming Language Trends Findings & Implications

Findings

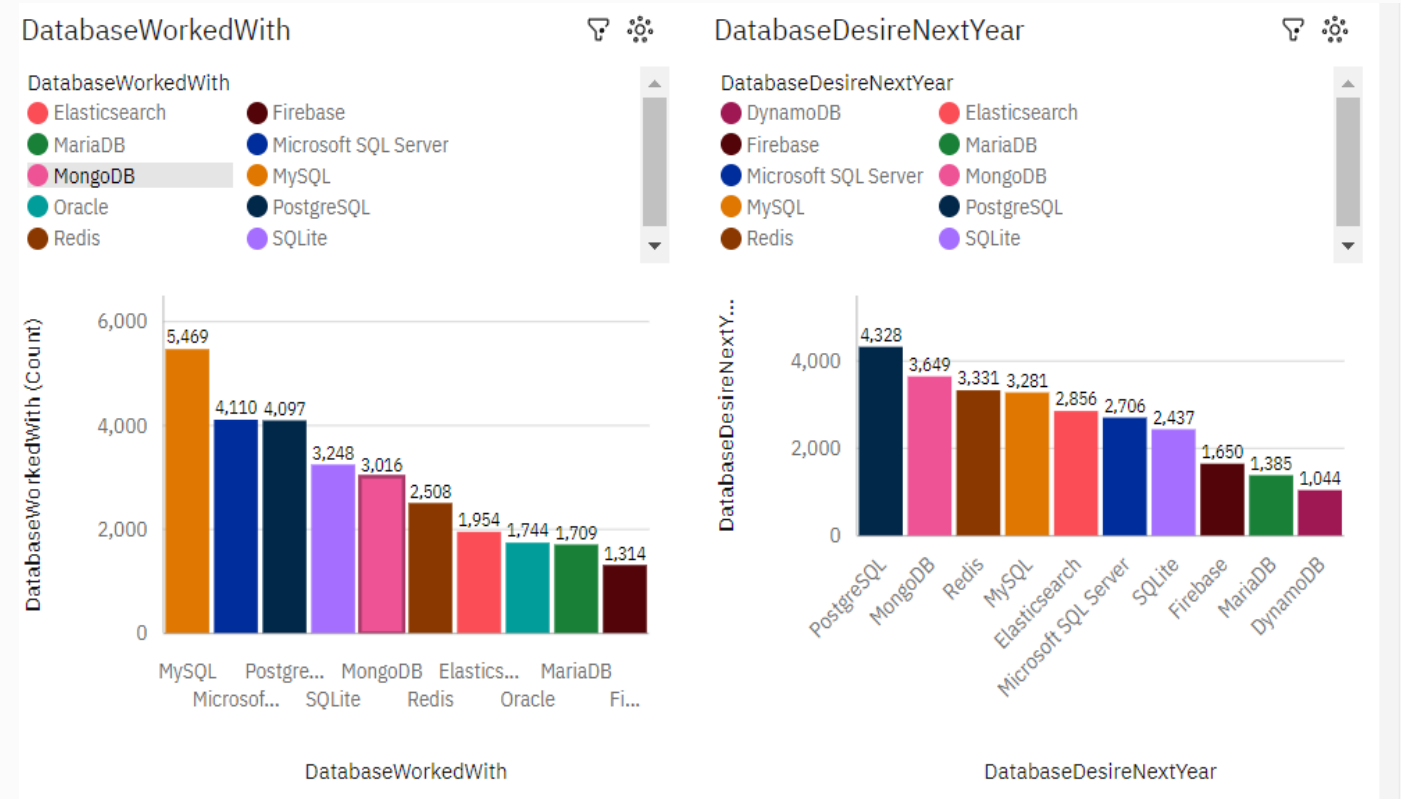
1. The Order of the top 10 programming language trends has been changed.
2. New programming languages appeared as programming languages desired to be learned next year.
3. JavaScript and HTML/CSS take the lead whether in Current year Trends or Future year Trends
4. Python takes third place in Future Trends while SQL was in third place in the current Year

Implications

1. Some programming languages have changed their rank because they need to be learned for the next year.
2. New programming Languages must be learned because previously they were not worked within the top 10.
3. JavaScript and HTML/CSS are the best programming languages.
4. SQL lost his place. This means Python is most preferred by developers in the Future year

Database Trends

Current year Trends and Future Year Trends



Database Trends Findings & Implication S

Findings

1. There is a difference in ranking between the top 10 Databases worked with and the top 10 Databases desired Next Year.
2. Databases at the head of the list in the top 10 databases worked with are in the middle of the top 10 databases desired next Year
3. In the current year, SQL lost his first place and then took fourth place in the Future year
4. PostgreSQL takes first place in The future year

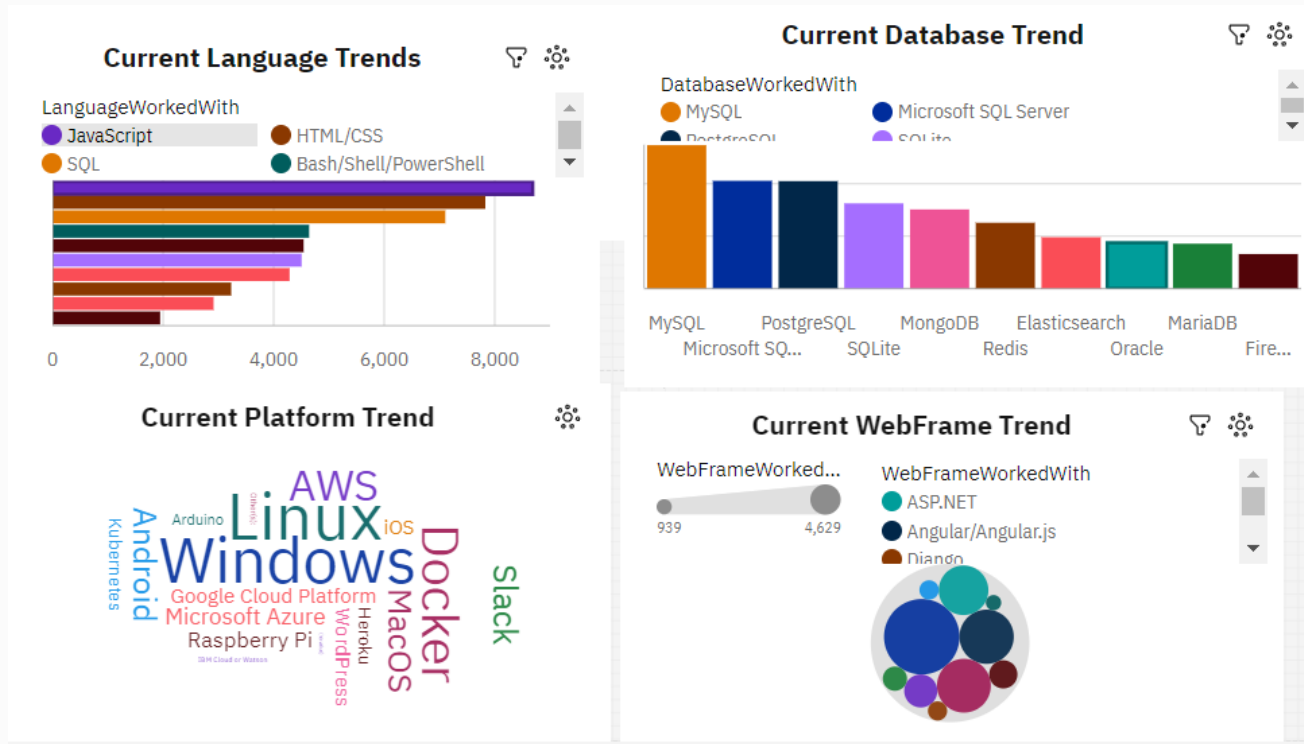
Implications

1. The databases desired in the next year are almost different from the Databases worked with.
2. Databases worked with are not in the first ranks of the top 10 Databases desired Next year
3. PostgreSQL is the most valuable Database in the Future Year than SQL.
4. In the current, SQL Database is most valuable than PostgreSQL

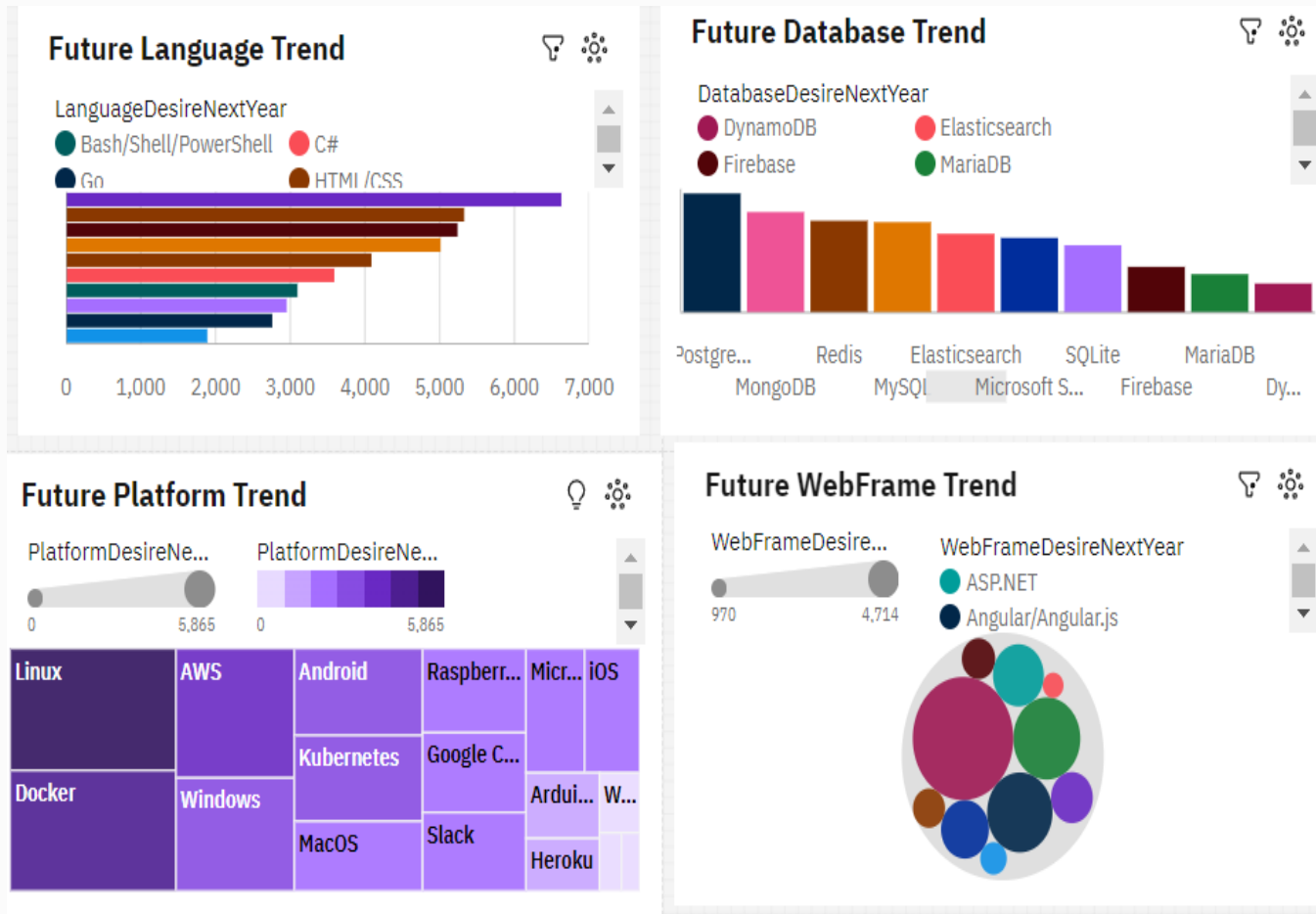
Dashboards

https://github.com/GATERETSE/testrepo/blob/main/Assignment_6_final.pdf





DASHBOARD TAB 1



DASHBOARD TAB 2

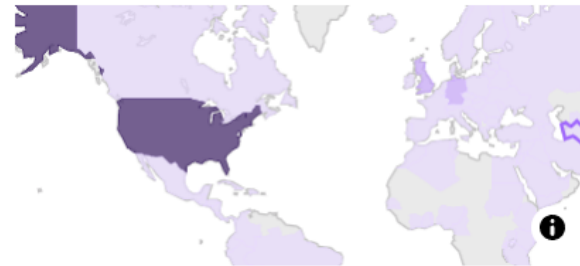
DASHBOARD TAB3

Respondent by Gender

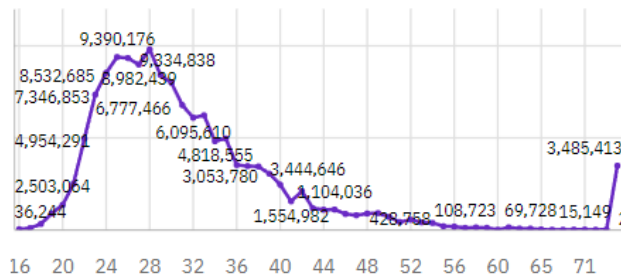
Gender
● Woman ● Man



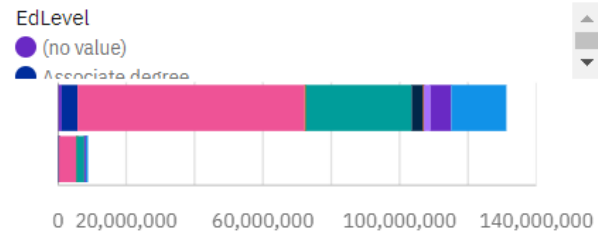
Respondent Count for Countries

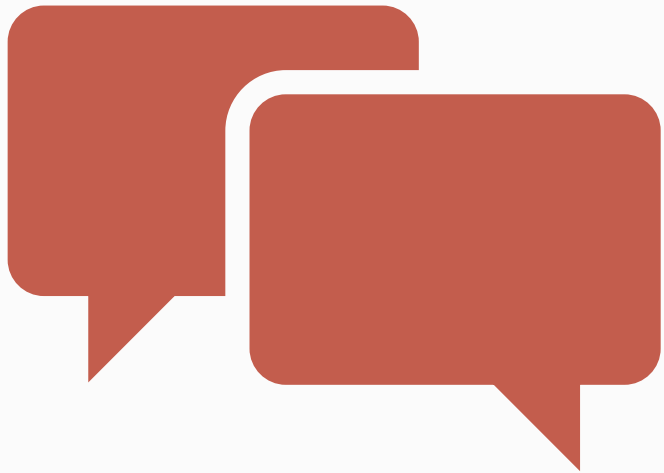


Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level





DISCUSSION

OVERALL FINDINGS \$ IMPLICATIONS

Findings

1. The Order of the top 10 programming language trends has been changed.
2. JavaScript and HTML/CSS take the lead whether in Current year Trends or Future year Trends
3. Python takes third place in Future Trends while SQL was in third place in the Current Year
4. In the current year, SQL lost his first place and then took fourth place in the Future year
5. PostgreSQL takes first place in The future year

Implications

1. Some programming languages have changed their rank because they need to be learned for the next year.
2. New programming Languages must be learned because previously they were not worked within the top 10.
3. JavaScript and HTML/CSS are the best programming languages.
4. SQL lost his place. This means Python is most preferred by developers in the Future year
5. PostgreSQL is the most valuable Database in the Future Year than SQL.
6. In the current, SQL Database is most valuable than PostgreSQL



CONCLUSION

1. Developers changed some Programming Languages from Current Year to Future language.
2. PostgreSQL moves to first place in the Future Year.
3. Some Programming Languages become interesting to be learned for the next Year.
4. Databases changed in the future Year, some Database lost their places in the future Year



Appendix and Reference

https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DA0321EN-SkillsNetwork/LargeData/m5_survey_data_demographics.csv

https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DA0321EN-SkillsNetwork/LargeData/m5_survey_data_technologies_normalised.csv