Analysis on Stack Overflow Survey Data

Done By Ezuruike Chimere Enyinnaya On **This** Day 27th Jan, 2025.

Outline

- Executive Summary
- Introduction
- Methodology
- Programming Languages Trends
- Database Trends
- Dashboards
- Insights from Dashboards
- Findings/Implications
- Conclusion
- Appendix
- Job posting Chart

- Executive Summary
 This report presents the findings of an analysis of the Stack Overflow survey dataset, which aimed to provide insights into Programming language and Database trends as well the demographics, etc.
- .Key Findings:
- 1. Programming language: it was observed that CSS java Script ,C#SQL and Python tops the list of Languages that developers are have used and are willing to learn subsequently.
- Also postgradeSql,mysql and MongoDb are among the top 10 databases used by developers and intends to use going forward.
- Majority of developers have worked more with webframe such as AWS and Microsoft Azure etc.

The majority of developers are male (92.6%), between 25-34 years old (64.4%), and hold a Bachelor's degree or higher (73.2%).2.

• The findings of this report have implications for employers, educators, and policymakers seeking to understand the needs and aspirations of the developer community. By recognizing the trends and patterns in developer demographics, skills, and aspirations, stakeholders can develop targeted strategies to support the growth and development of the developer community. This report provides a comprehensive overview of the developer landscape, highlighting key trends and insights that can inform decision-making and strategy development in the tech industry.

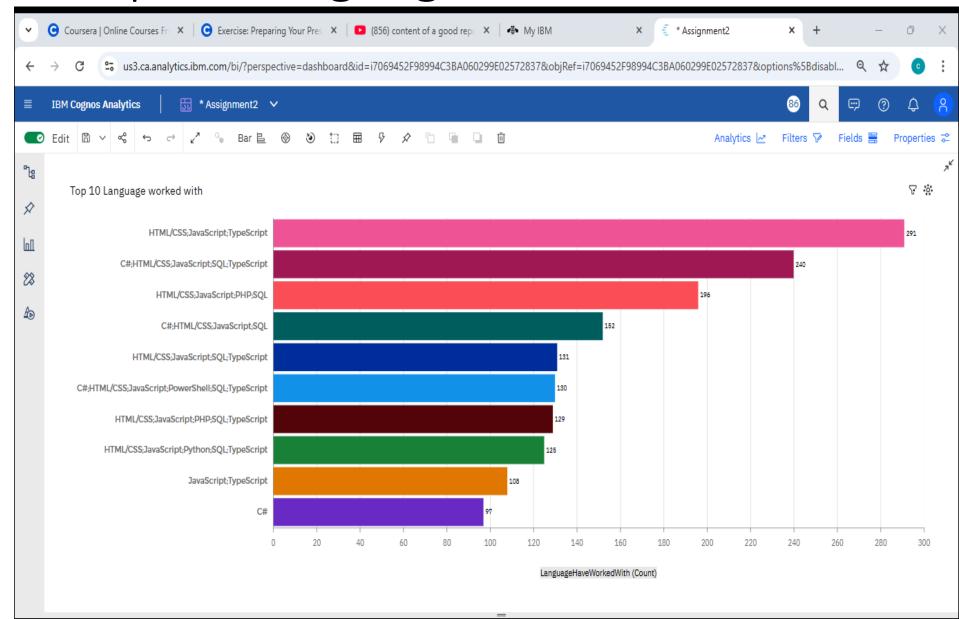
Introduction

- "Welcome to this report on the Stack Overflow survey dataset, which provides a comprehensive snapshot of the developer community worldwide.
- This report aimed at understanding the trends of programming languages that developers have worked with and are willing to go for in the coming year
- It also looked at the preferred database by developers.
- Finally, it captures the age bracket with the highest interest in programming Language usage.
- Etc.

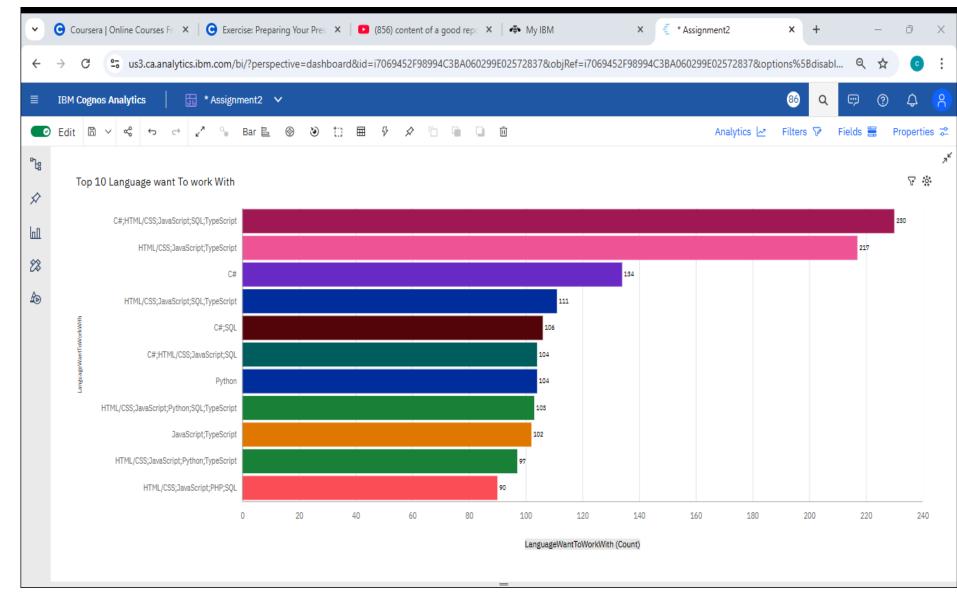
Methodology

- Data Sources:- Stack Overflow survey dataset
- Data Collection Methods:- Online survey conducted by Stack Overflow- Survey questions covered demographics, programming languages, technologies, and career aspiration
- Data Wrangling Steps:
- 1. Data Cleaning: Removed and replaced missing values, handled inconsistent data formatting, and removed duplicates.
- Tool used here for the cleaning process was python pandas, while Cognos Analytics was used for visual presentation.

Top 10 Language worked with



Top 10 Language want to work with



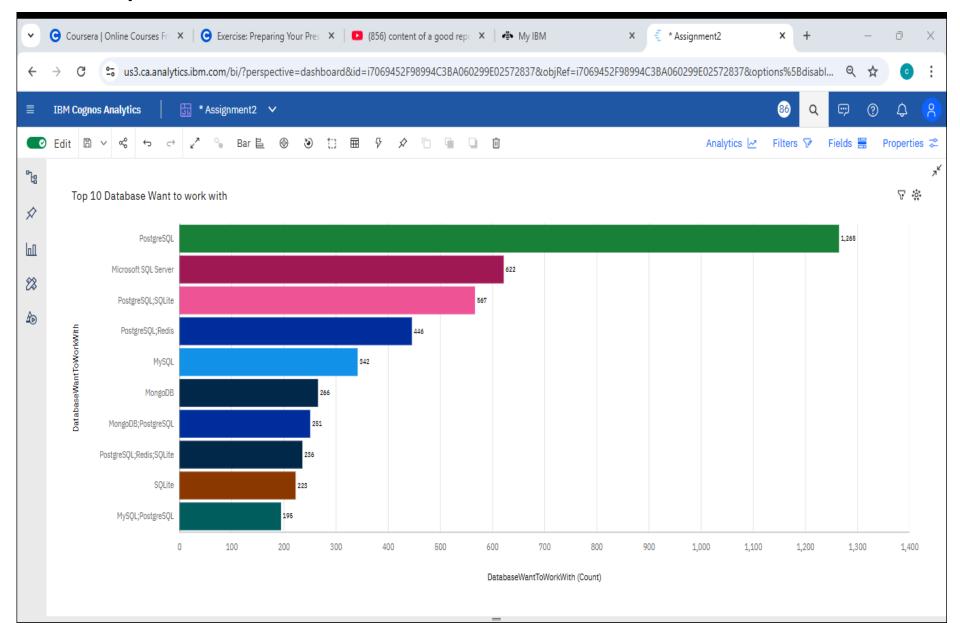
Findings

 Java script and C languages as well as Python developers are on the rise and will continue in the coming years all thing being equal.

Top 10 Database worked with



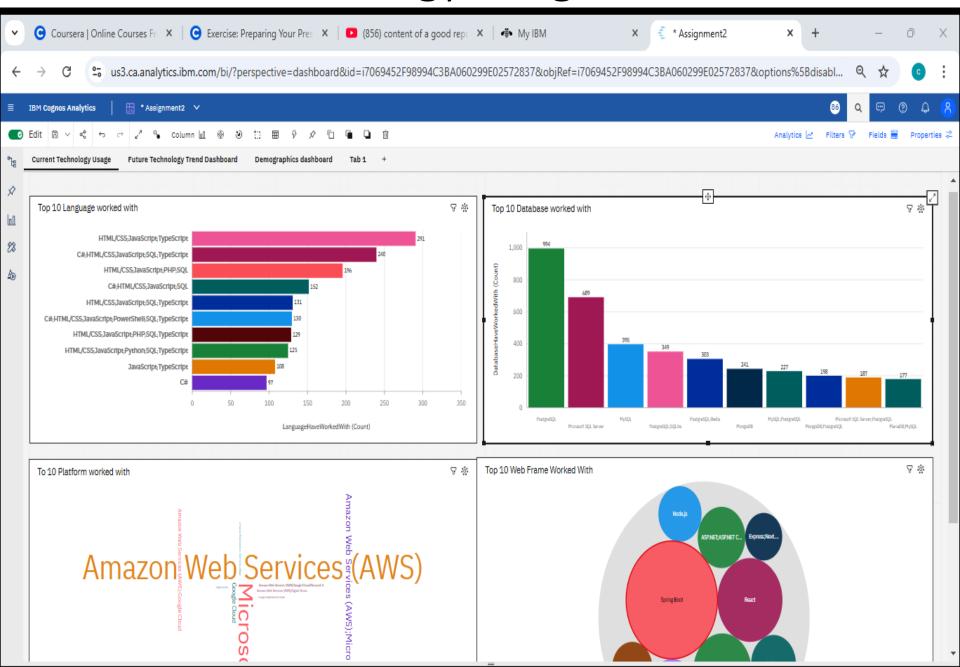
Top To Database want to work with



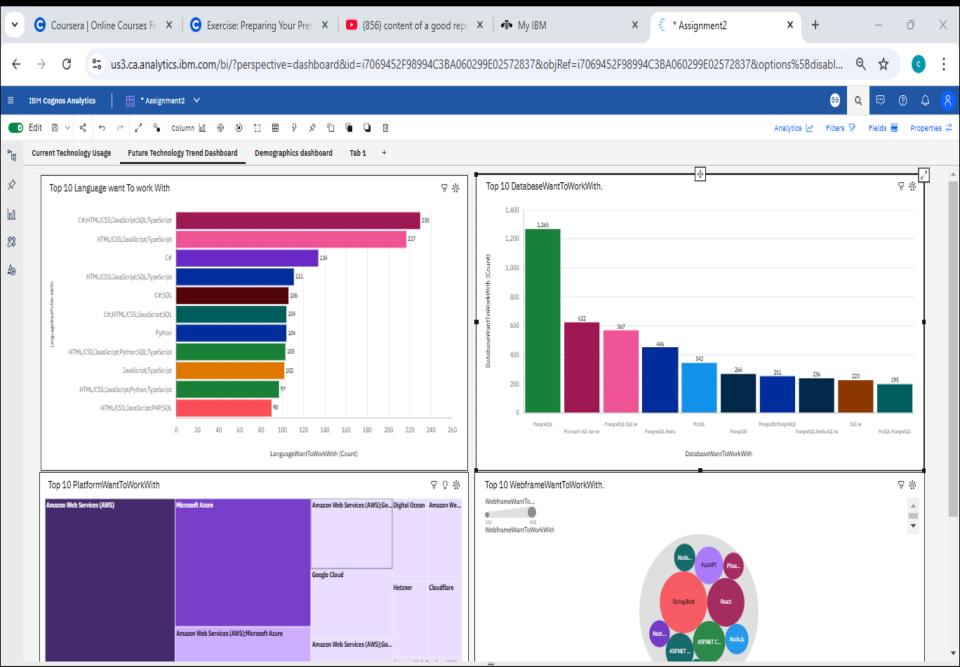
Findings

 PostgradeSQL ,Microsoft server and MySQL Tops the list of databases developers have worked with and even in the coming years.

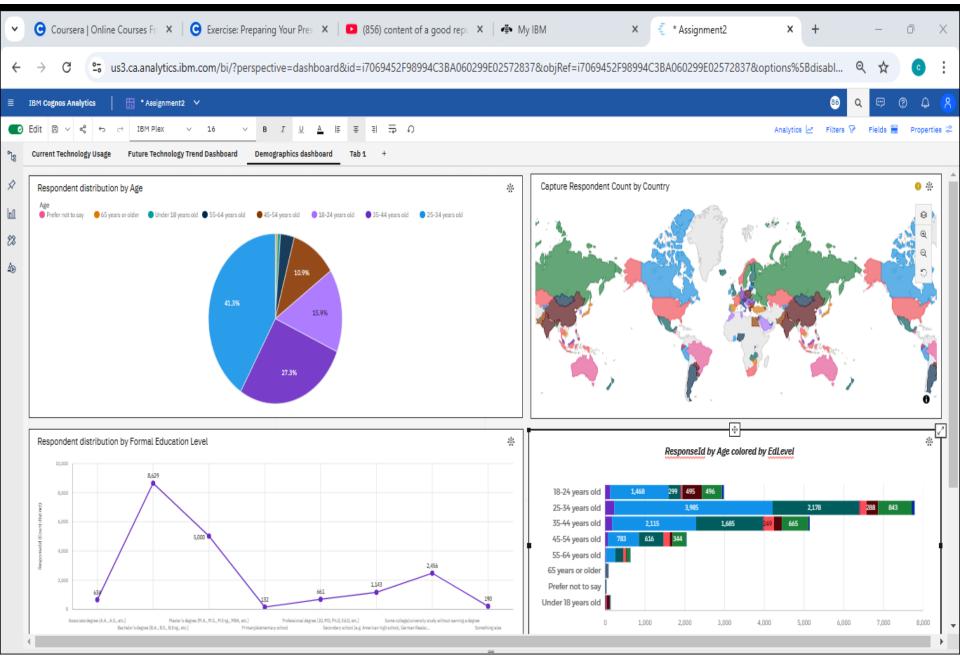
Current Tecnology usage Dashbord



Future Tech usage Dashboard



Demographic Dashboard



Findings From Dashboard

- From the Dashboard, JavaScript Tops the list of Programming language developers are working with currently and still the one more would be developers are anticipating going for. This then followed C# language and Python.
- In Terms of Databases people have used anne still expecting to use going Forword is PostgradeSQL, MS Sql server and Mysql.
- AWS and MS Azure tops the list of platform developers have worked with.
- Age group between 25-34 years are the highest age involvement in this trend.
- Bachelors' degree is the highest Education attained by the largest respondents.

Overall Findings

- The result shows that JavaScript is the leading programming language today in the industry and more people are willing to go for it.
- It also shows that PostgadeSql is leading Database as at now.
- Also one can deduce from the age group ,that you people are currently leading in this sector.
- And it is not about how educated you are but about passion.

Implications

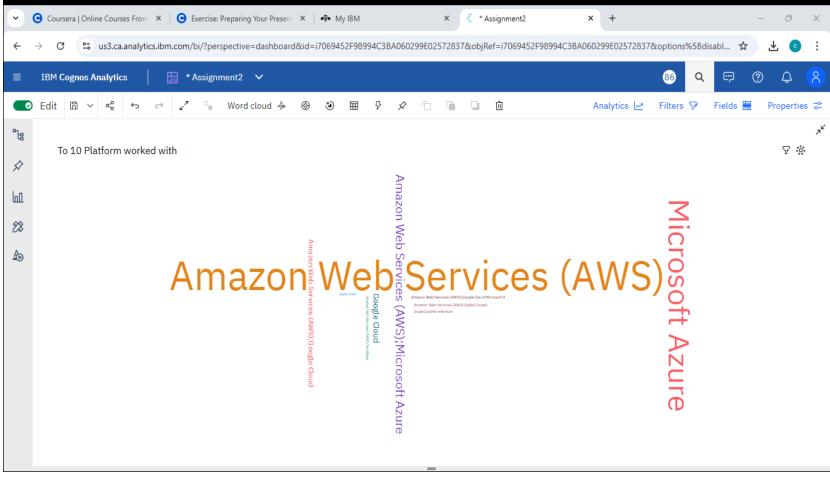
- Employers and educators should prioritize JavaScript,
 Python, and Java in their training programs and hiring processes.
- Also aspiring developers should go for this trending languages.
- Employers and educators should prepare for the growing demand for Python skills and adapt their training programs and hiring processes accordingly
- Employers and educators should continue to prioritize relational database skills in their training programs and hiring processes.

Concussion

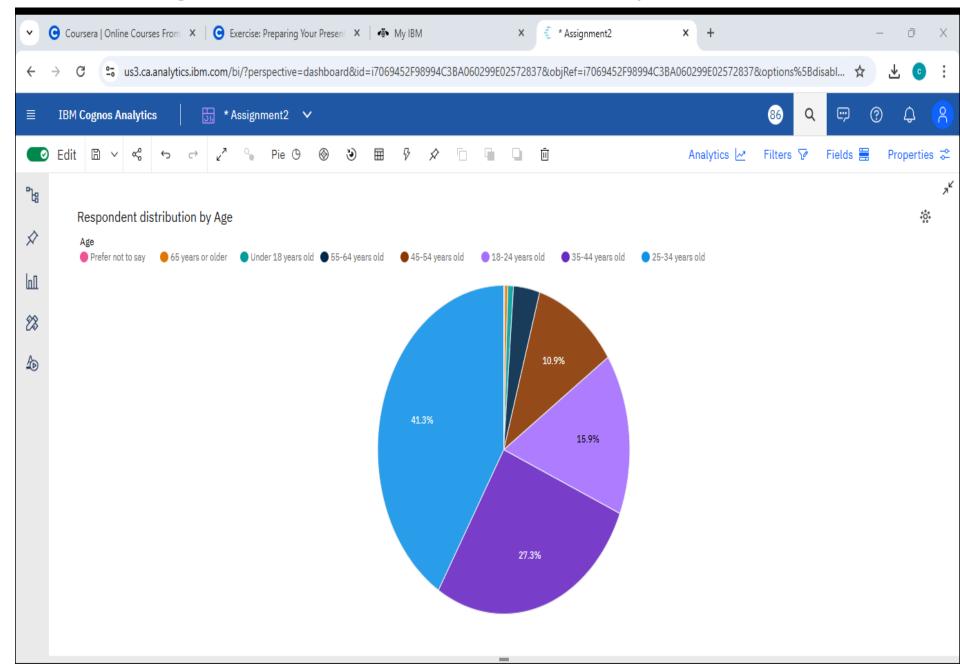
This analysis provides actionable insights for employers, educators, and policymakers seeking to understand the needs and aspirations of the developer community. By leveraging these findings, stakeholders can develop targeted strategies to support the growth and development of the tech industry.

Appendix

Top 10 Platform Worked with



Age Distribution Of Respondents



Job Posting Data Language vs Salary

