

Title: Uncovering Insights: Survey Analysis and Its Impact on Cybersecurity

Subtitle: A Data-Driven Exploration

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Date : 19-09-24

Outline

- Introduction
- Methodology
- Data Overview
- Programming language trends -findings & implications
- Key findings
- Conclusions

Introduction:

In today's presentation, we delve into the insights gleaned from our recent survey analysis, focusing on developer roles, their compensation, and how these trends influence the cybersecurity landscape. Our goal is to translate data findings into actionable insights that can inform cybersecurity strategies and practices.

Methodology.

- ▶ We utilized a comprehensive dataset obtained from an SQLite database, which included various tables such as **DevTypes** for developer roles and **JobFactors** for compensation. By running targeted SQL queries, we extracted relevant data and performed visual analysis to uncover key trends and correlations.
- Collect survey data & explore its content
 - Web Scraping
 - APIs.
 - Request library.
- ▶ Data Wrangling
- ▶ Exploratory data analysis •
 - ❖ Analyzing data distribution.
 - ❖ Handling outliers.
 - ❖ Correlations. •
- ▶ Data Visualization •
 - ✓ Highlight distribution of data, relationships, the composition and comparison of data.
- ▶ Dashboards

Data Overview

- The survey data encompasses a wide range of information about developer roles, compensation levels, and job-related factors. Key tables include:
 - **DevType:** Insights into different developer roles.
 - **JobFactors:** Data on compensation and job satisfaction.
- ▶ We summarized the data structure with a chart showing the distribution of developer roles and key metrics related to compensation.

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONs

► Findings

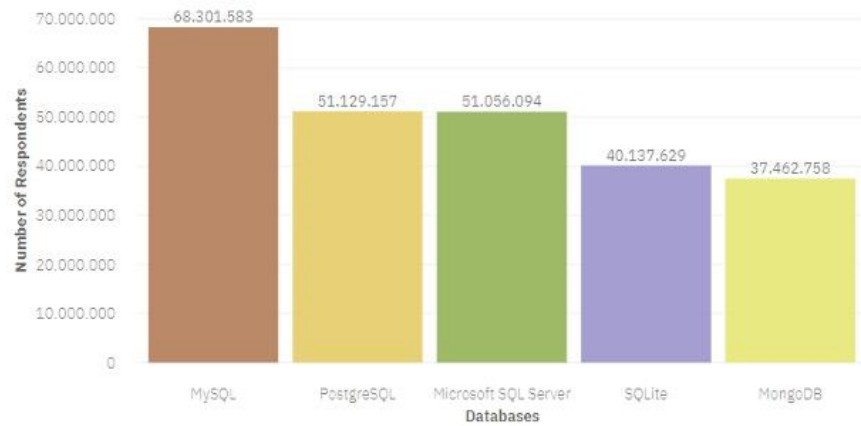
- ✓ JavaScript seems to keep as leading language.
- ✓ Python fastest-growing.
- ✓ Great interest in TypeScript Implications

► Implications

- ✓ Possible developers migration from JavaScript to TypeScript.

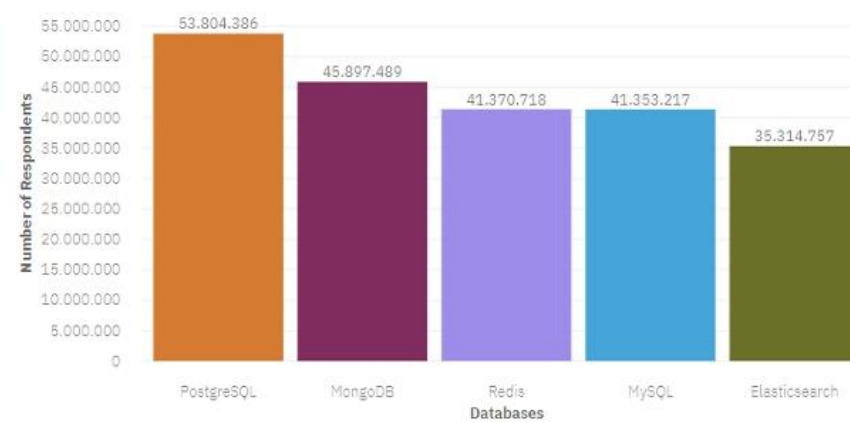
Current Year

Top 5 Databases Worked with



Next Year

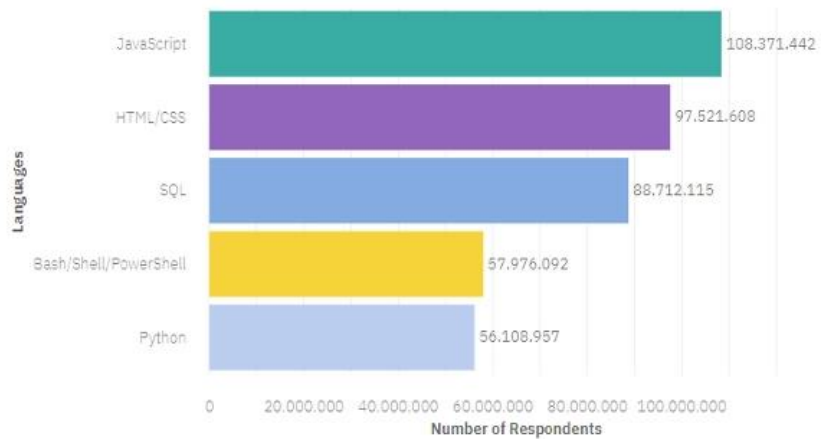
Top 5 Desired Database to Learn



Programming Language Trends

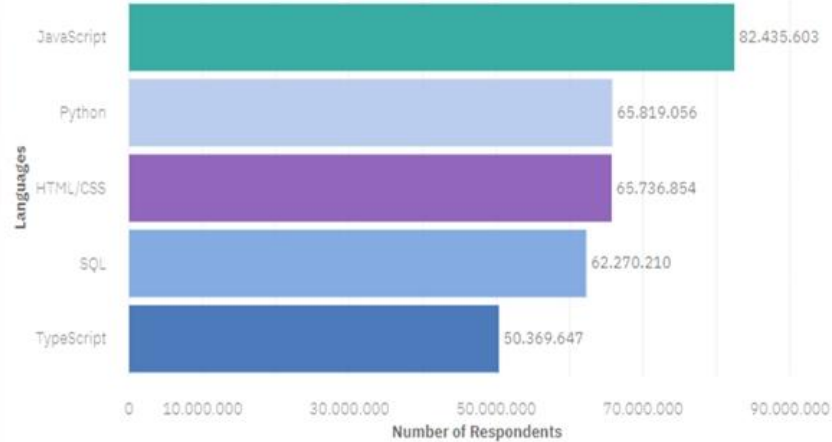
Current Year

Top 5 Programming Language Experience



Next Year

Top 5 Desired Language to Learn



Current Technology Usage



Key Findings.

- **Developer Roles:** Our analysis indicates that the majority of respondents identify as [Developer Type]. This suggests a significant trend towards this role in the current job market.

Compensation Trends: We observed notable patterns in median compensation based on developer roles and age groups. The data reveals how compensation varies among different roles and experience levels.

Key visualizations include a pie chart illustrating the proportion of various developer roles and a bar graph detailing median compensation across roles.

Conclusion.

- ❑ To sum up, our analysis has provided valuable insights into developer roles and compensation trends, shedding light on their implications for cybersecurity. By understanding these trends, we can better align our cybersecurity strategies with the current job market and anticipate future changes.
- ❑ 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 in development