Stack Overflow Developers Survey

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OUTLINE

- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

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EXECUTIVE SUMMARY

- Objective of data contextualization and analysis
- An explanation of the methodology
  - Data collection
  - Data interpretation
  - Data-driven graphics
- Results are presented with graphs and trends for context.
- A summary of the main conclusions and their consequences
- Final conclusions of the research that was done

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INTRODUCTION

- The most extensive and biggest survey of coders worldwide is Stack Overflow's Developer Survey.

- Not every member of the development community is equally represented in the results.

- Almost 90,000 developers

- Trends that forecast the future direction of the development

- Descriptions of developers worldwide
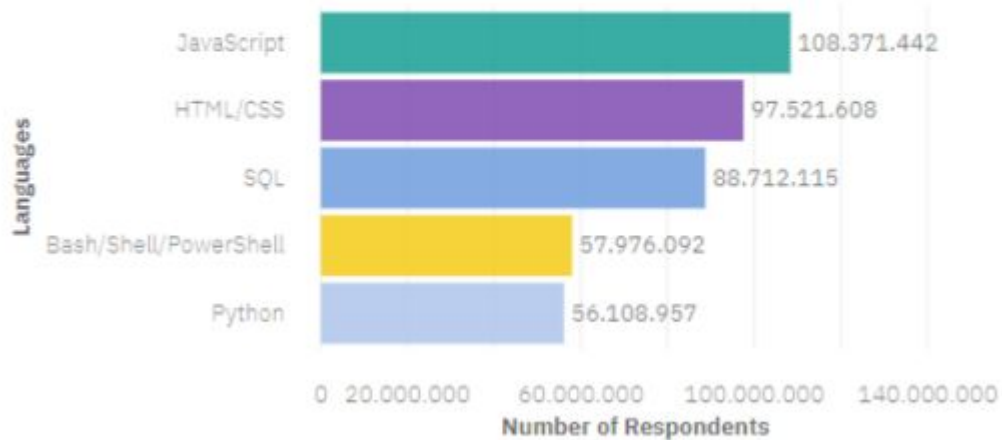
METHODOLOGY

- Collect survey data & explore its content
  - Web Scraping
  - APIs
  - Request library
- Data Wrangling
- Exploratory data analysis
  - Analyzing data distribution
  - Handling Outliers
  - Correlations
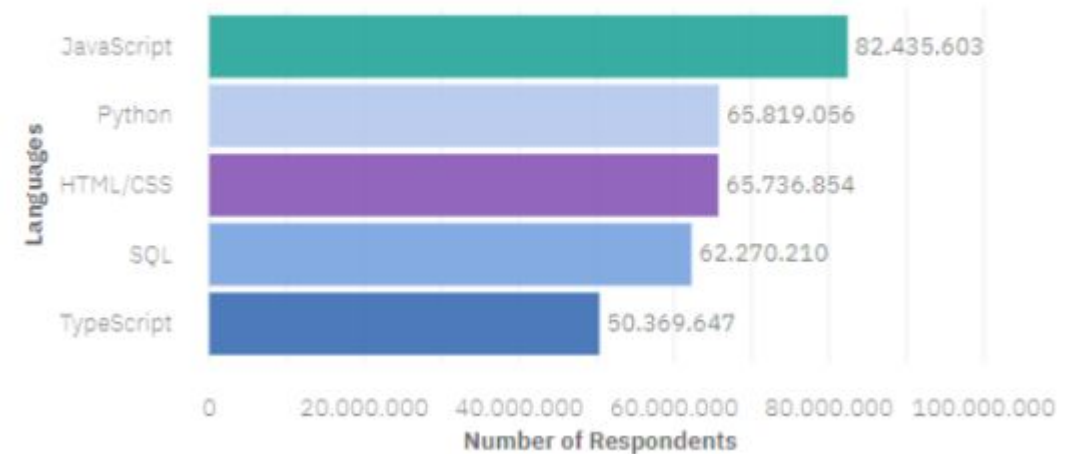- Data Visualizations
- Dashboards

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript continues to be the most popular
- Fastest-growing language is Python.
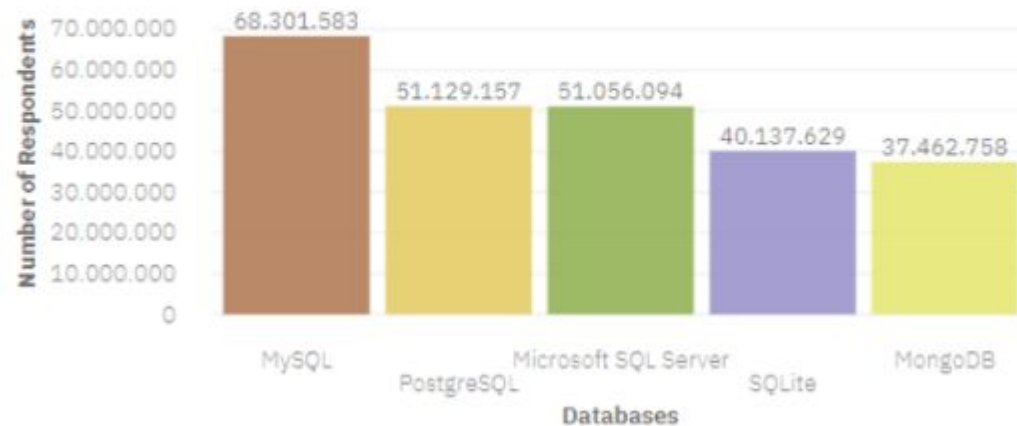- a strong desire to use TypeScript

Implications

- Potential switch by developers from JavaScript to TypeScript

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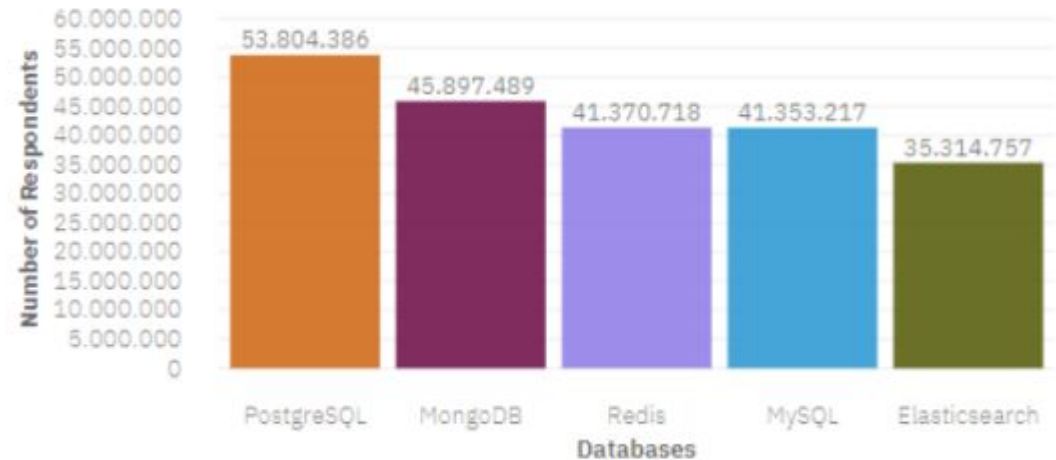
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DATABASE TRENDS

Current Year

Next Year

Top 5 Databases Worked with

Top 5 Desired Database to Learn

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- The most popular database is MySQL.
- Disinterest in SQLite and Microsoft SQL Server.
- Growing interest in MongoDB and PostgreSQL.

Implications

- Microsoft SQL Server and SQLite losing ground in the market.
- The introduction of MongoDB and PostgreSQL to the market.
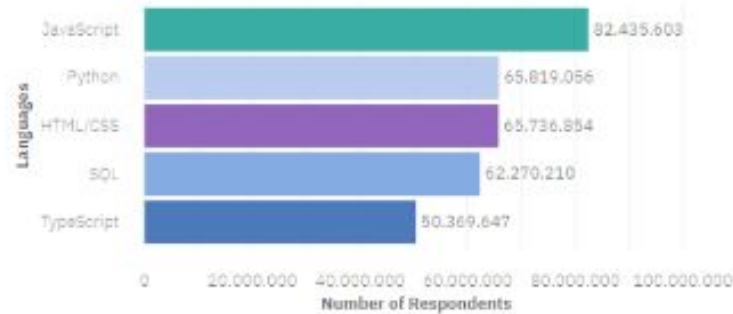
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DASHBOARD

https://github.com/darwisy01/IBM-Data-Analyst-Capstone-Project/blob/main/dashboards_embedded.pdf
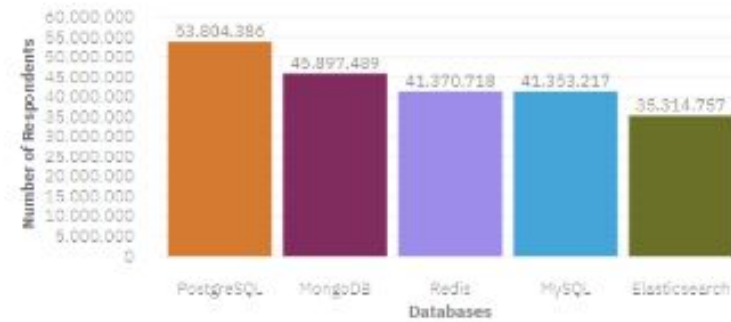
CURRENT TECHNOLOGY USAGE

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FUTURE TECHNOLOGY TREND

Top 5 Desired Language to Learn

Languages	Number of Respondents
JavaScript	82.435.603
Python	65.819.056
HTML/CSS	65.736.854
SQL	62.270.210
TypeScript	50.369.647

Top 5 Desired Database to Learn

Databases	Number of Respondents
PostgreSQL	53.804.396
MongoDB	45.897.489
Redis	41.370.718
MySQL	41.353.217
Elasticsearch	35.314.757

Platform Next Year

Linux, AWS, Kubernetes, Slack, Micro..., MacOS, Windows, iOS, Ardu..., Docker, Raspberry Pi, Android, Google Cloud Pla..., Heroku, Word...

Top 10 WebFrame Next Year

No. Respondents
58.321.909
1.970.796

WebFrame
- Angular/Angul...
- ASP.NET
- Django
- Drupal

ReactJs, Vue.js, Angular/A..., ASP.NET, Spr..., Fl..., Expr..., Django, jQuery, R...
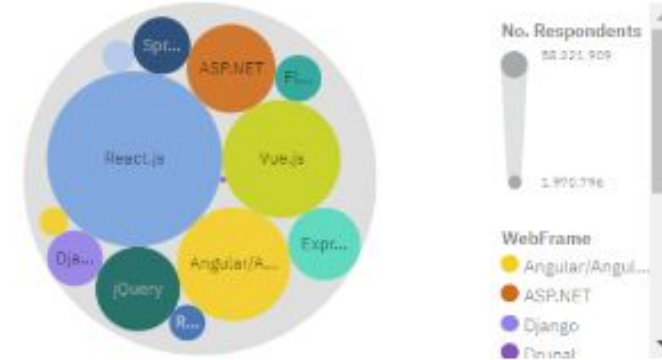
DEMOGRAPHICS
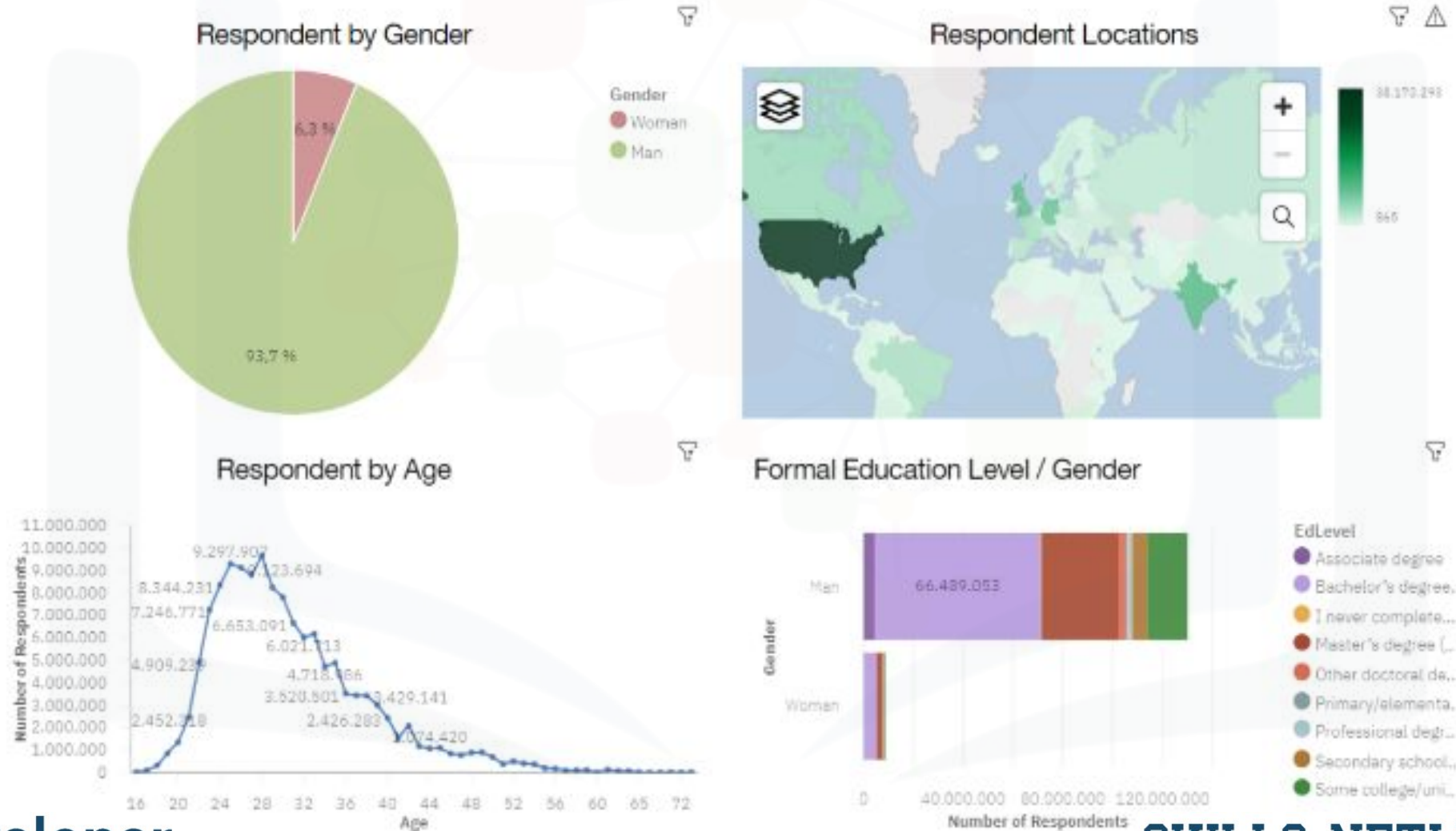
OVERALL FINDINGS & IMPLICATIONS

Findings

- TypeScript is becoming more popular and JavaScript is extensively utilised.

- More than 90% of young men working as developers.

- Most developers are found in industrialised nations.

Implications

- Web frames with JavaScript and TypeScript are becoming more popular.

- Geographic and gender-based polarisation of developers worldwide.

- The majority of young developers lack postgraduate education.

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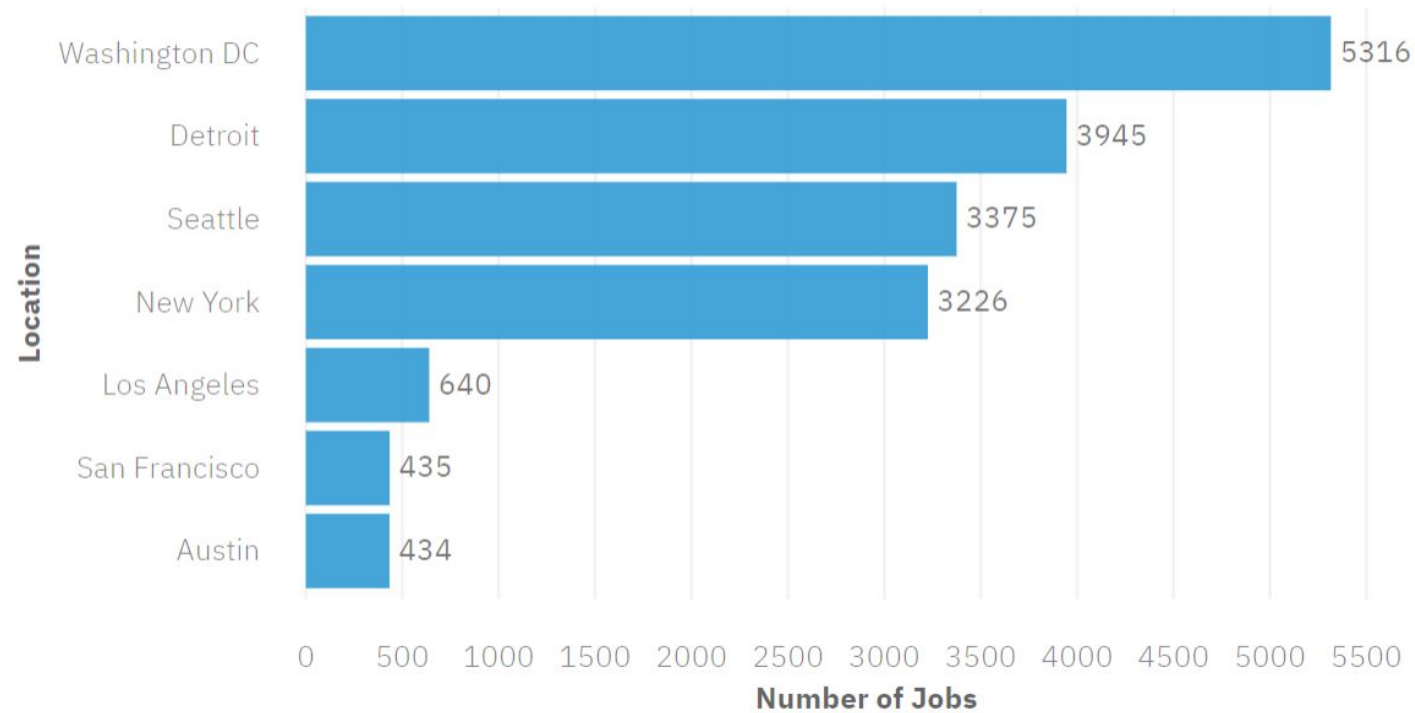
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CONCLUSION

- Developers are individuals with distinct traits.

- One can acquire a decent understanding of the popularity trends of various tools, platforms, and languages.

- It is necessary to expand this labour market's accessibility to developing nations.

APPENDIX

- Included relevant additional charts that have created during the analysis phase.

JOB POSTINGS

POPULAR LANGUAGES