



# The Stack Overflow Data 2025

Angelo Pantuliano Jr.  
July 16, 2025

<https://www.linkedin.com/in/angelo-pantuliano-jr-a38937303/>

# OUTLINE

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

# EXECUTIVE SUMMARY



- ❑ Evaluate & Interpret Data Objective
- ❑ Techniques of Data Collection
  - ❑ Data cleaning
  - ❑ Data analysis
  - ❑ Data Visualization
  - ❑ Data Wrangling
- ❑ Outcome presentation backed by Current and Future graphs and trends.
- ❑ Consideration of the findings and conclusions of the data results.
- ❑ Final Conclusion

# INTRODUCTION



- ❑ Stack Survey data represents an extensive database on people around the world by age, education level, coding languages, and more.
- ❑ Data results fluctuate between developers.
- ❑ Languages widely use between developers.
- ❑ Envision the direction developers are going.
- ❑ Different developers and cultures embracing coding and technology.

# METHODOLOGY

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## ☐ Gather data & analyze the information

- ☐ Web scraping
- ☐ Python Libraries (Panda, NumPy, Matplotlib, etc.)
- ☐ ChatGPT

## ☐ Data Wrangling

## ☐ Data Analysis Inquiry

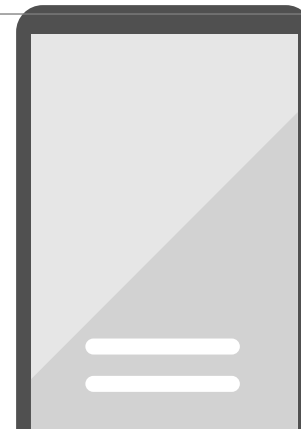
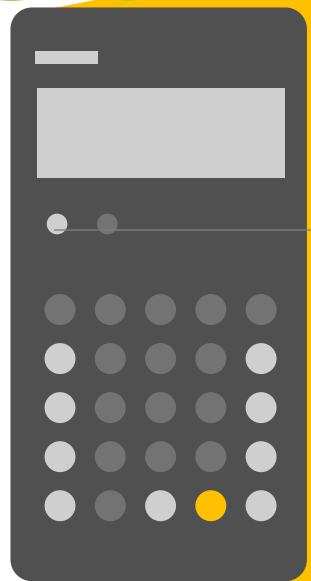
- ☐ Data cleaning
- ☐ Data quality
- ☐ Data patterns
- ☐ Data variables

## ☐ Data Visualization

- ☐ Storying telling with data using graphs, plotting trends, and making the data assessable.

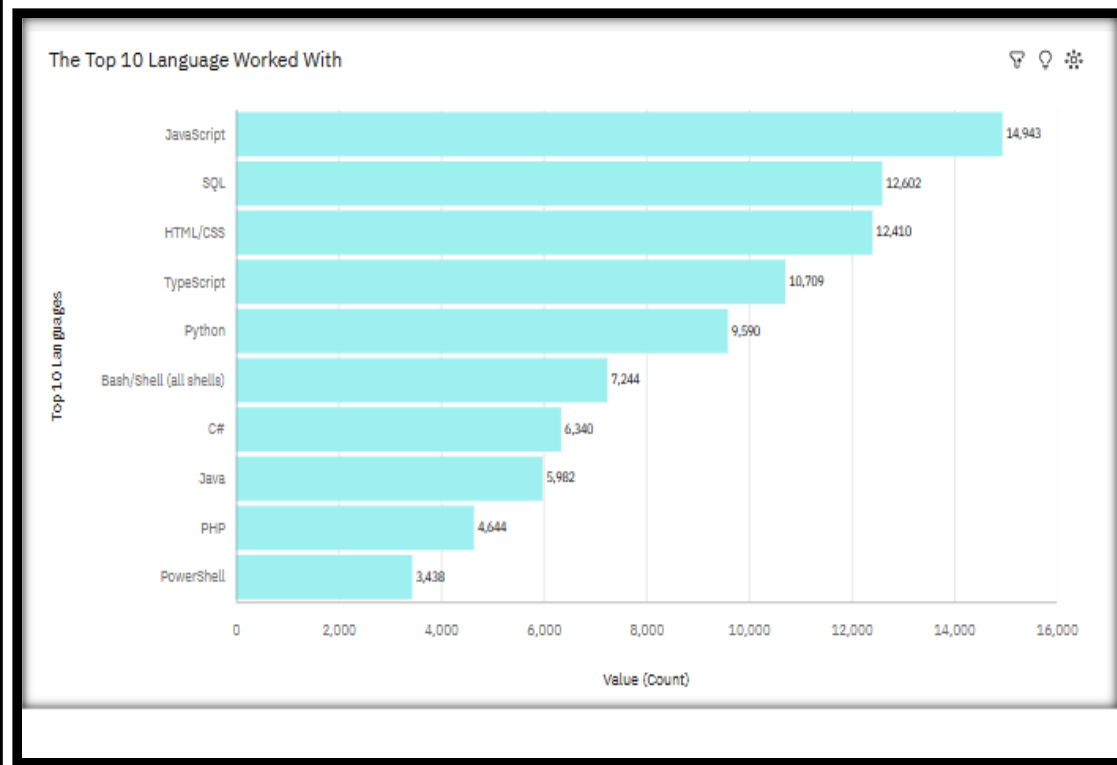
## ☐ Dashboards

# Result for Survey Data

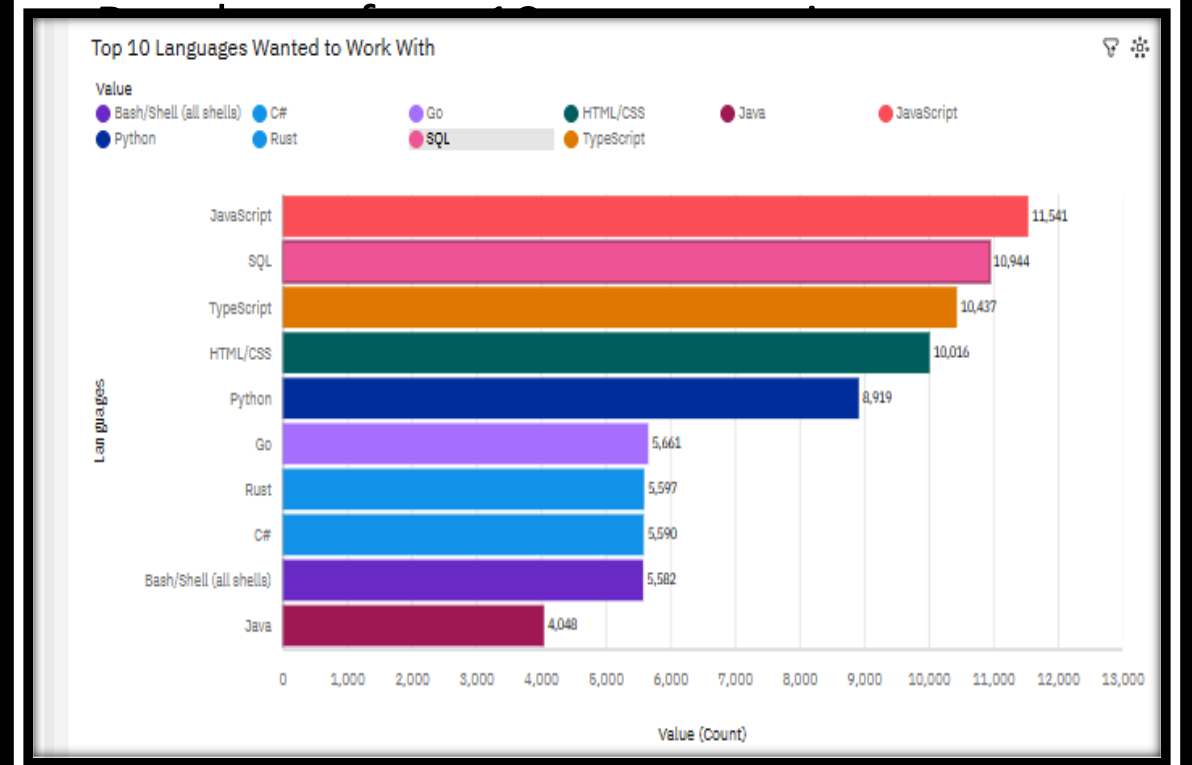


# PROGRAMMING LANGUAGE TRENDS

## Current Year



## Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- ❑ JavaScript is the leading language used and learned
- ❑ SQL use is growing
- ❑ HTML/CSS, TypeScript, & Python is steadily advancing

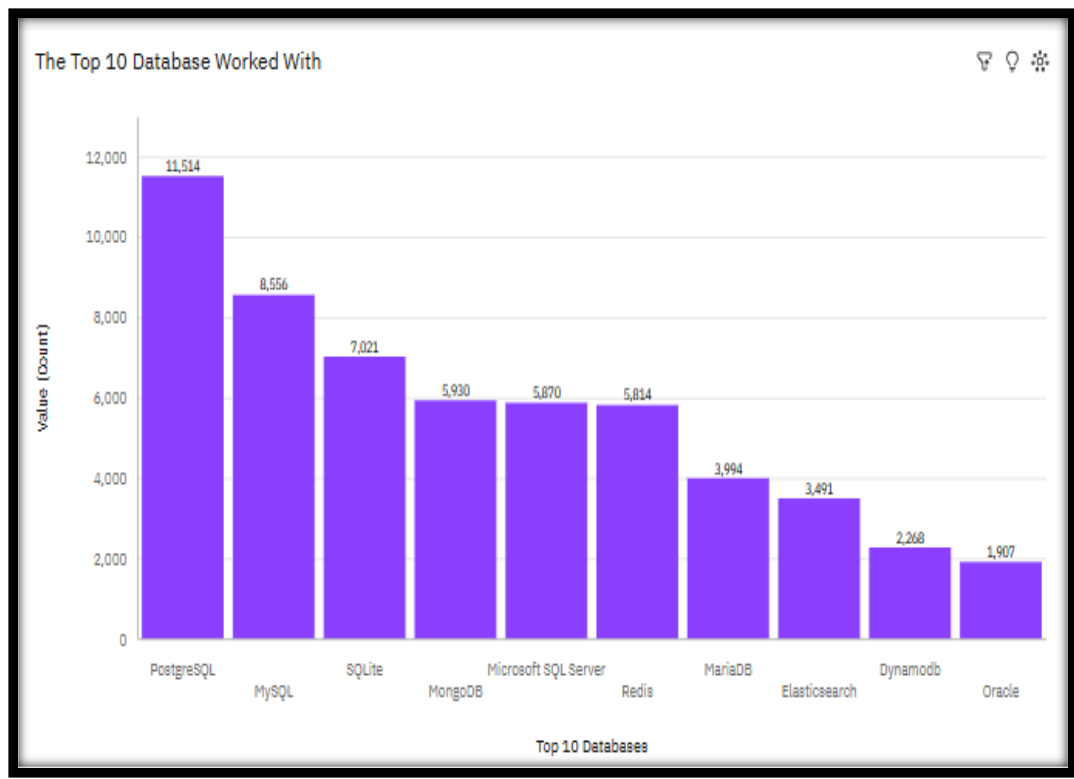
## Implications

- ❑ JavaScript, SQL, and TypeScript will be the most languages used and wanted to experience at this time.

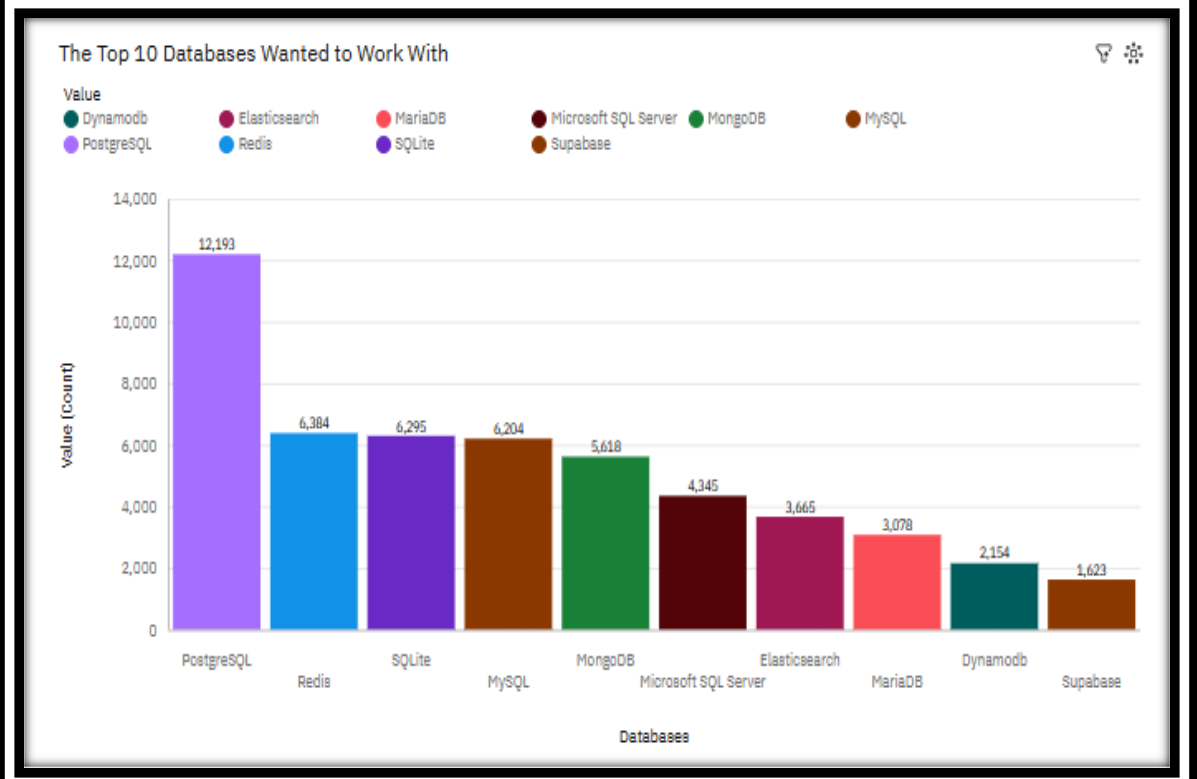


# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- ❑ PostgreSQL Database is the most worked with and experienced.
- ❑ MySQL losing traction in the market.
- ❑ SQLite and Redis are moving up in the market.
- ❑ Although Oracle is currently used it is not in the future.

## Implications

- ❑ PostgreSQL Database is dominating both current and future trends.
- ❑ Oracle is complete off the market for now.
- ❑ SQLite and Redis Databases are steadily establishing themselves.

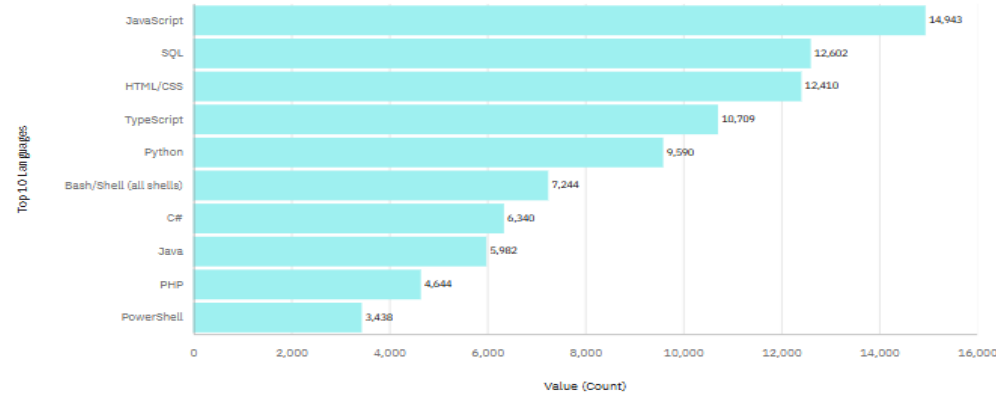
# DASHBOARD

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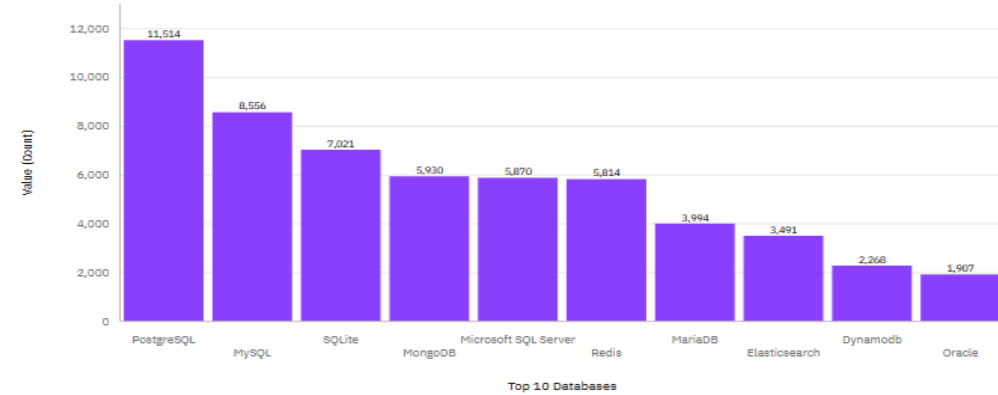


# Current Technology Usage

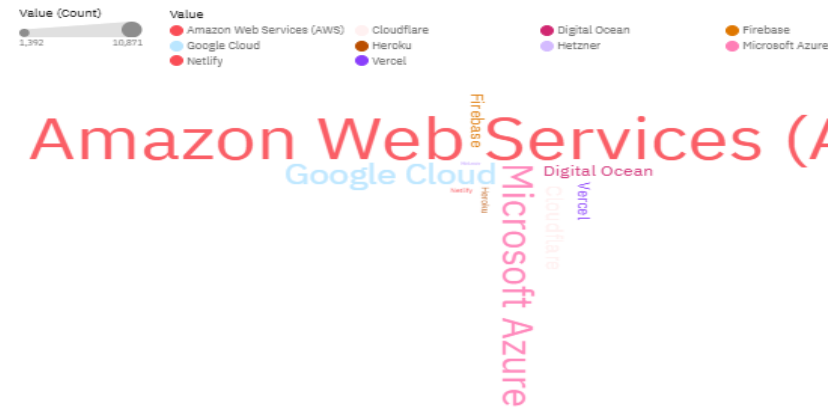
The Top 10 Language Worked With



The Top 10 Database Worked With



The Top 10 Platform Worked With

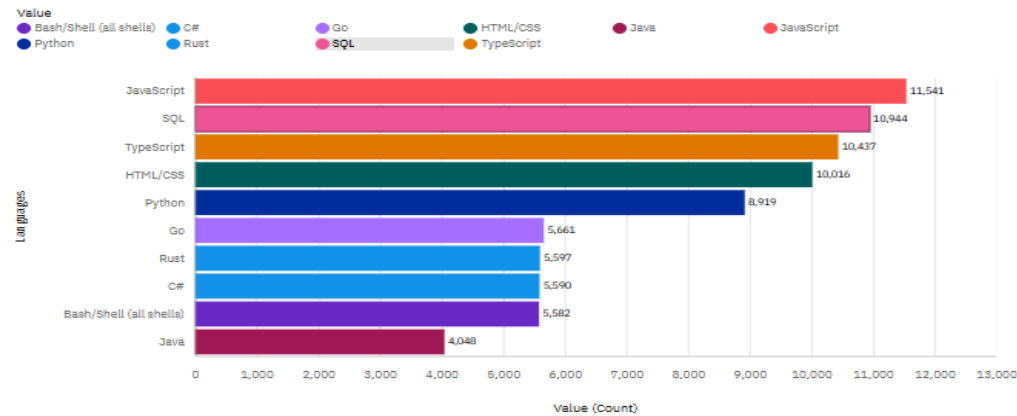


The Top 10 Web frameworks Worked With

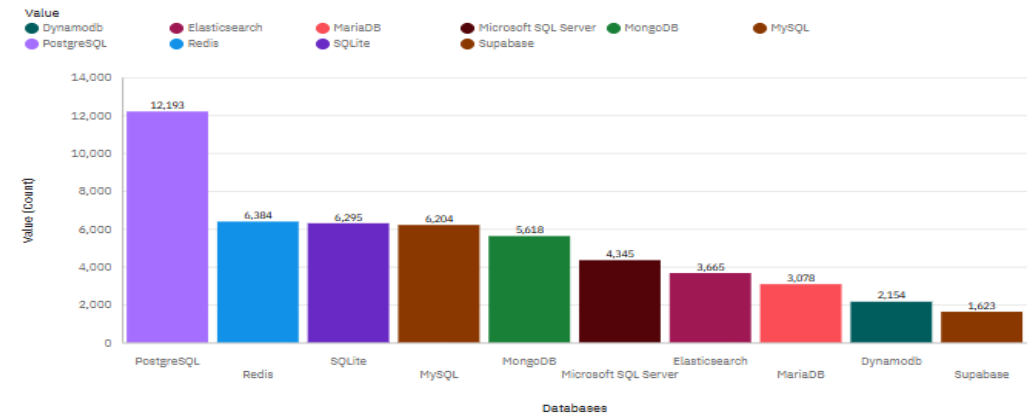


# Future Technology Trends

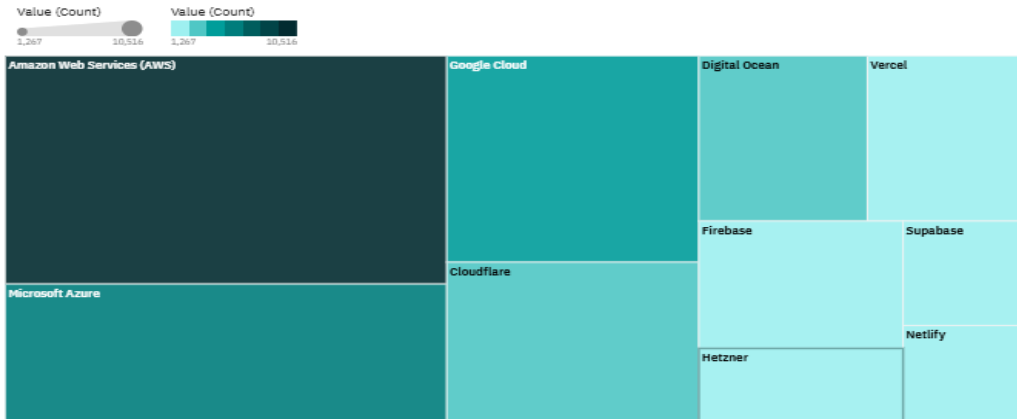
Top 10 Languages Wanted to Work With



The Top 10 Databases Wanted to Work With



Top 10 Platforms Wanted to Work With

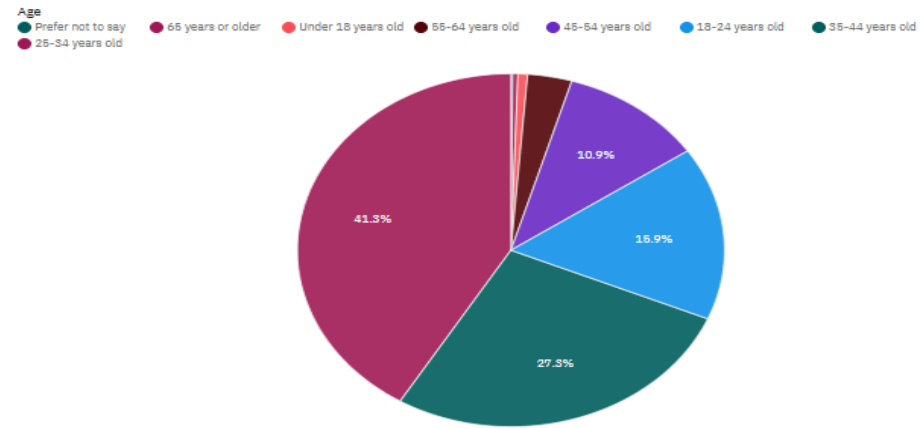


Top 10 Web Frameworks Wanted to Work With

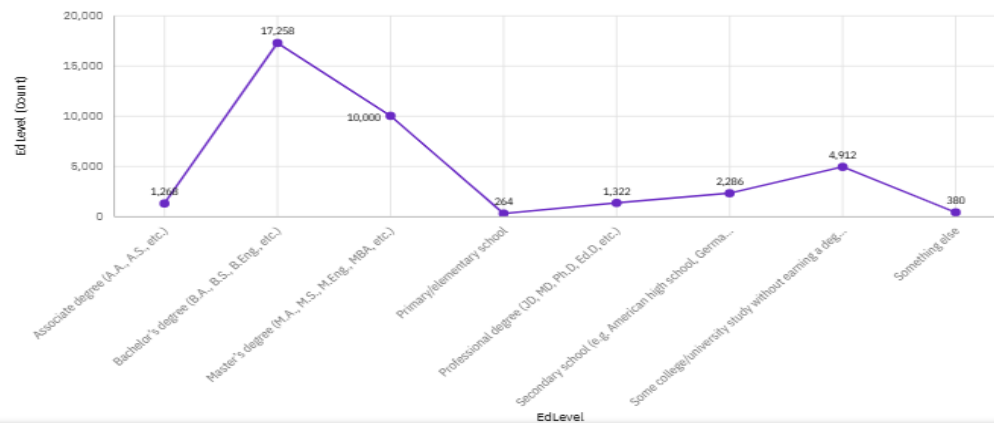


# Demographics

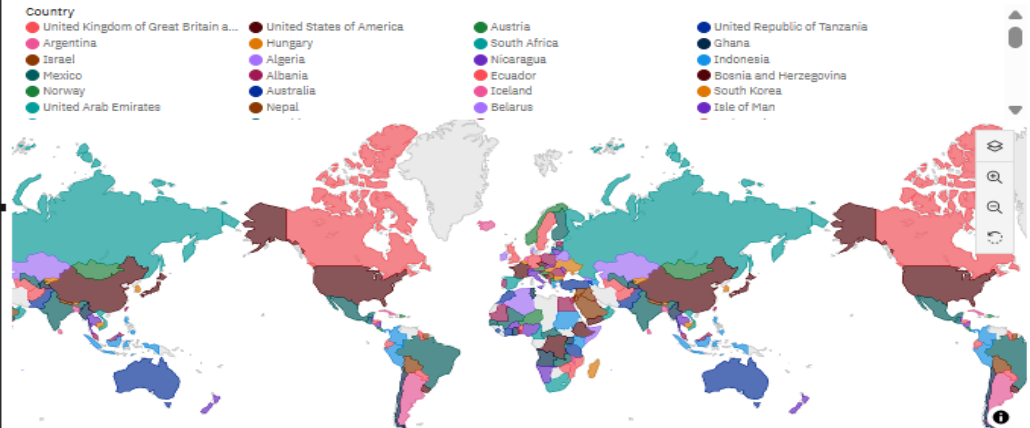
Respondent Distribution by Age



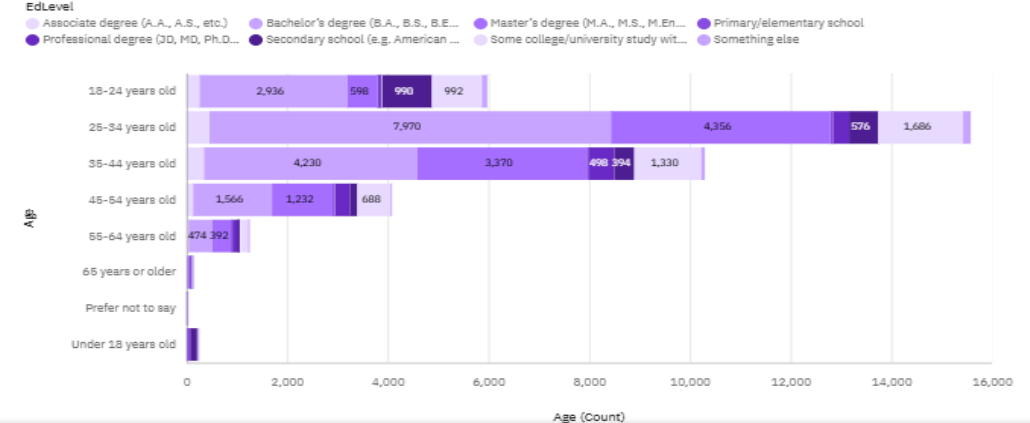
Respondent Distribution by Education Level



Country for Country regions



Respondent Count by Age and Education Level



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- ❑ JavaScript Language is leading and SQL getting popular.
- ❑ PostgreSQL Database is popular for current usage and future trends.
- ❑ Developers mostly between ages of 25 – 34 years.
- ❑ Developers education 42.3 % Bachelor degrees.
- ❑ Developers mostly from highly developed countries.

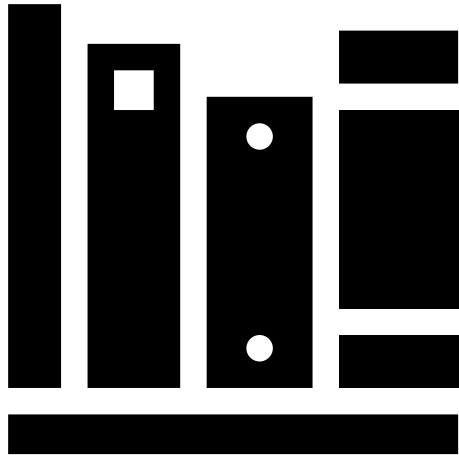
## Implications

- ❑ JavaScript and SQL will continue rising between developers
- ❑ PostgreSQL Database will rise as well.
- ❑ Global education, age, and cultures will be a deciding factor in the understand of coding and new technologies.



# CONCLUSION

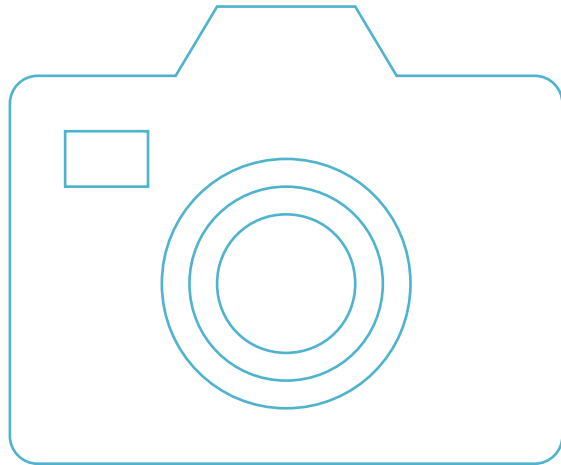
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- ❑ Developers are unique in establishing what languages are wanted and which ones they really want to learn or experience.
- ❑ Languages, Databases and Platforms can be used and learned through popularity and education.
- ❑ More effort needs to be put toward this market for newly developed countries.

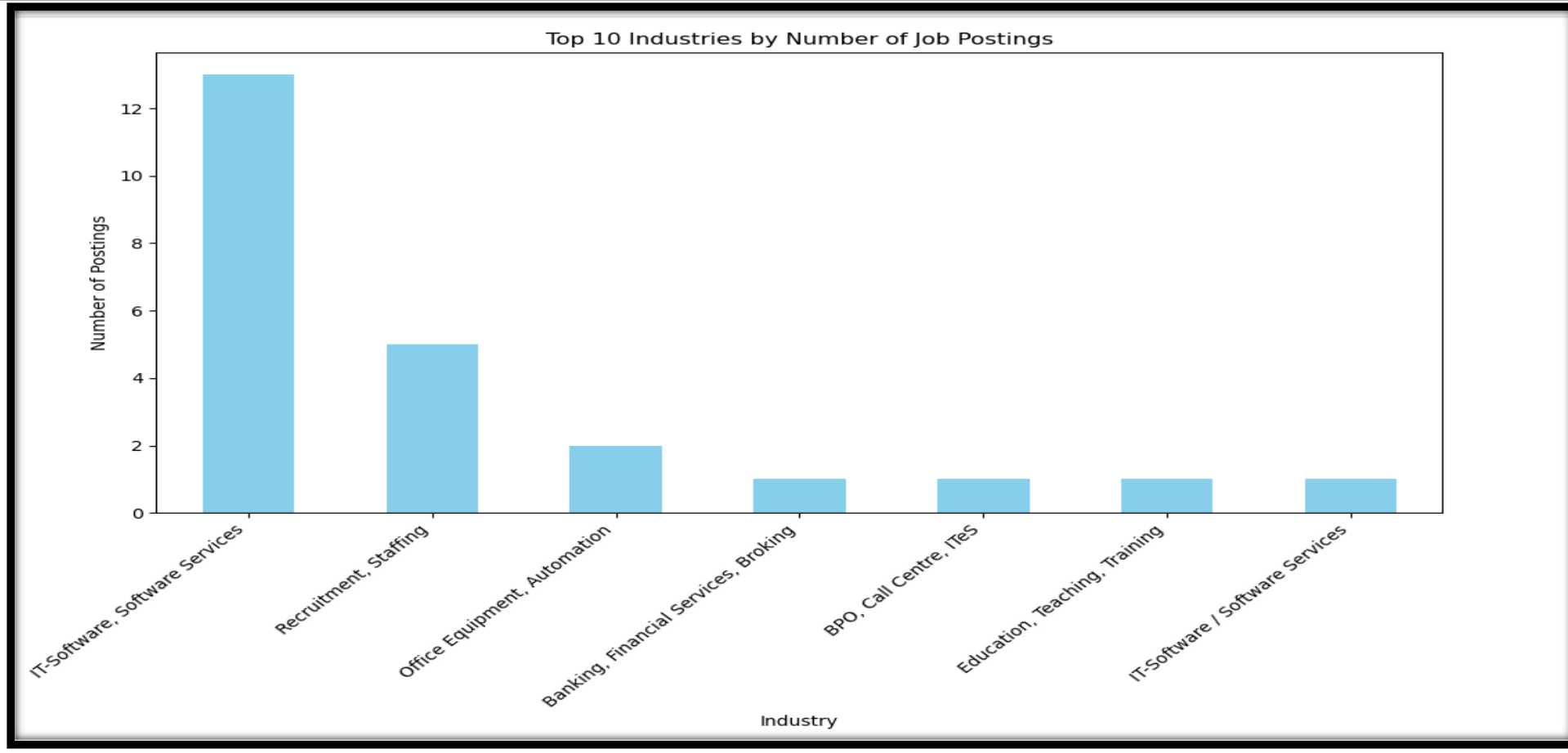
# APPENDIX

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- ❑ Included relevant additional charts, and tables created during the analysis phase.

# JOB POSTINGS IN INDUSTRY



# POPULAR LANGUAGES

