



# Stack Overflow Website Developer Survey Analysis

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Date: 15<sup>th</sup> November 2024

# OUTLINE

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

# EXECUTIVE SUMMARY

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- Data scrutiny, analysis and view towards goal.
- Methodology description.
  - Data gathering.
  - Data analysis.
  - Data visualizations.
- Results presentation supported with graphs and trends.
- Discussion of overall findings and implications regarding the results previously analyzed.
- Final conclusions of the carried out scrutiny and analysis.

# INTRODUCTION

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- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- Results don't represent everyone in the developer community evenly.
- More than 85,000 developers.
- Trends to predict where the developers are going.
- Characterization of developers around the globe.

# METHODOLOGY

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- 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

# RESULTS

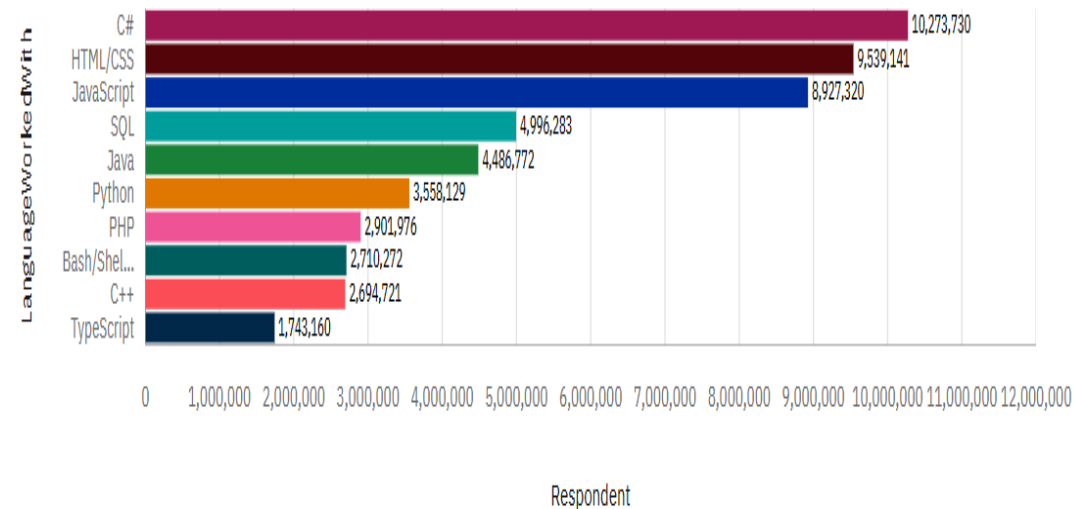
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# PROGRAMMING LANGUAGE TRENDS

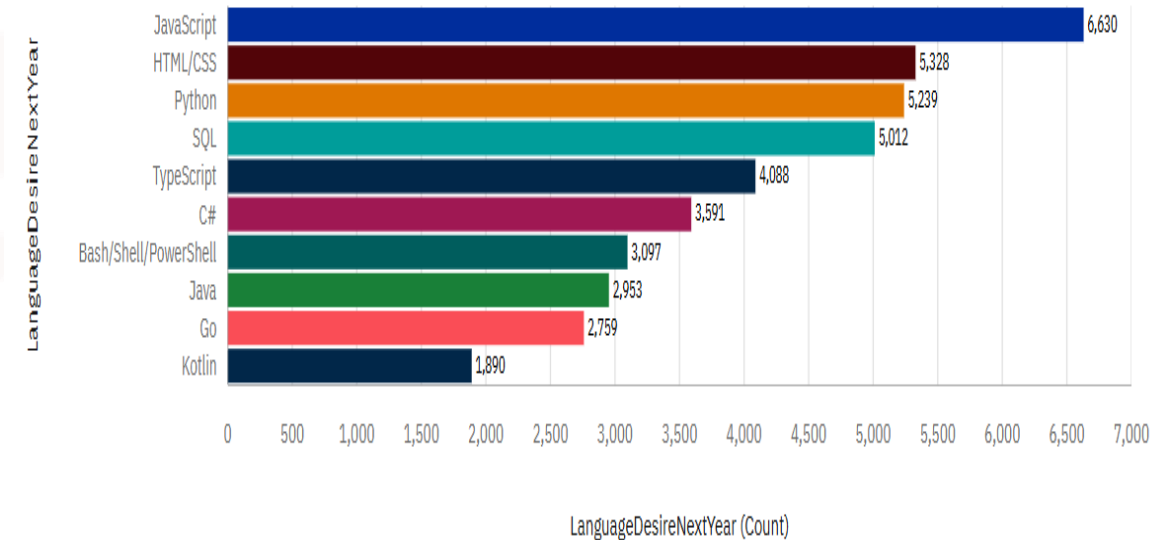
## Current Year

Respondent - Top 10 Language Worked With



## Next Year

Top 10 Language Desired Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- JavaScript seems to keep as leading language.
- C# Highly Used in Current Year
- Great interest in HTML/CSS

## Implications

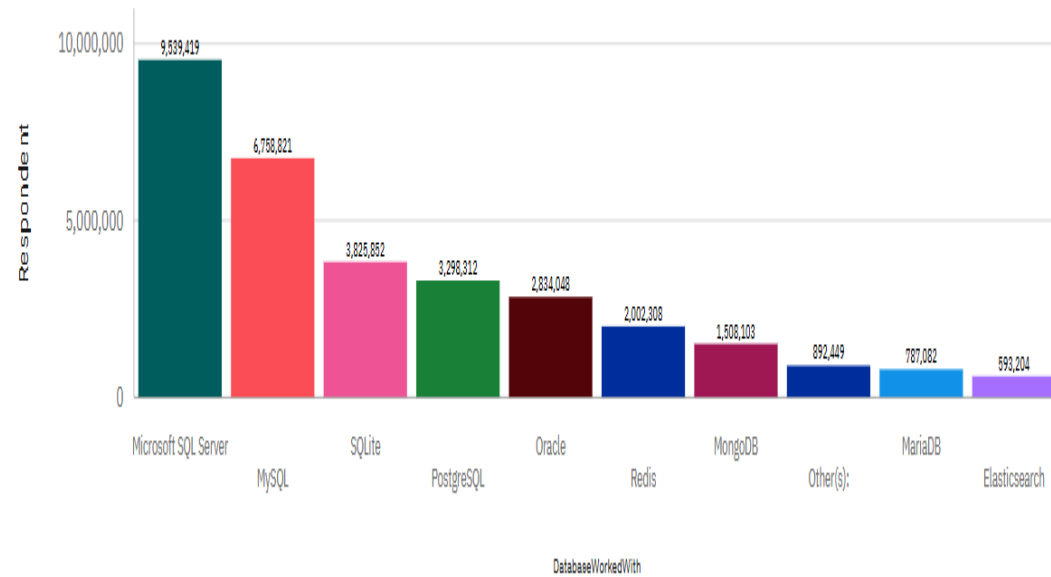
- Possible developers migration from TypeScript to JavaScript
- Kotlin is not much desired language.



# DATABASE TRENDS

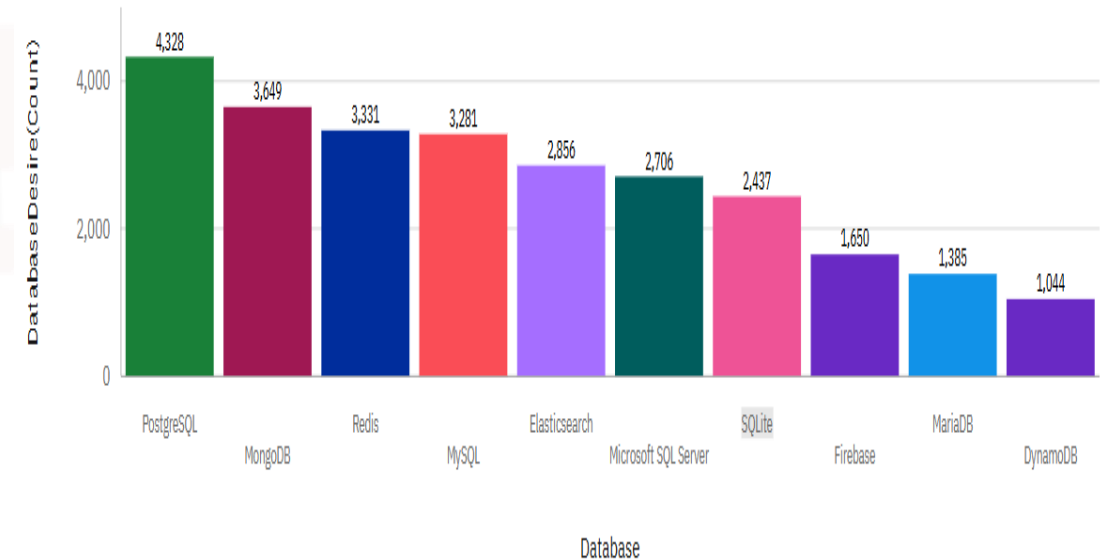
## Current Year

Respondent - Top 10 Database Worked With



## Next Year

Top 10 DatabaseDesireNextYear



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Microsoft SQL Server as most used database.
- Lack of interest in Oracle and Redis.
- Increasing interest in PostgreSQL and MongoDB.

## Implications

- Oracle and Redis losing ground in the market.
- PostgreSQL and MongoDB establishment in the market.

# DASHBOARD

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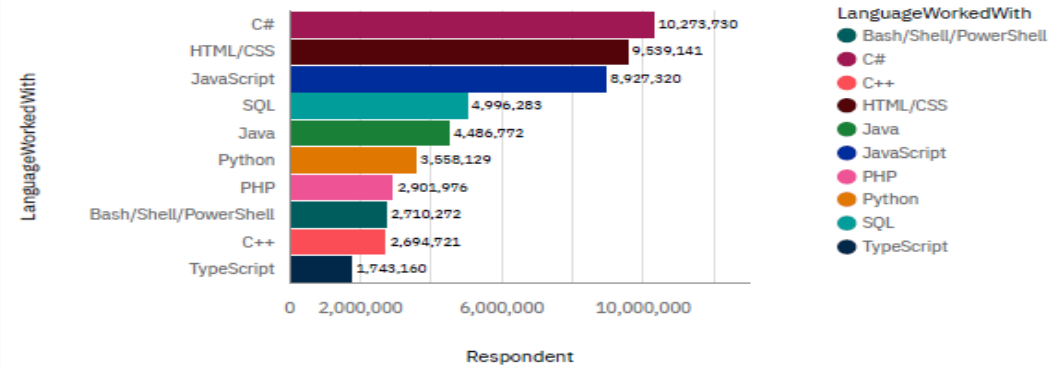


<https://github.com/mpanikedath/MyDjangoWeb/blob/master/Cognos%20Analytics.pdf>

# DASHBOARD TAB 1

## Current Technology Usage

Respondent - Top 10 Language Worked With

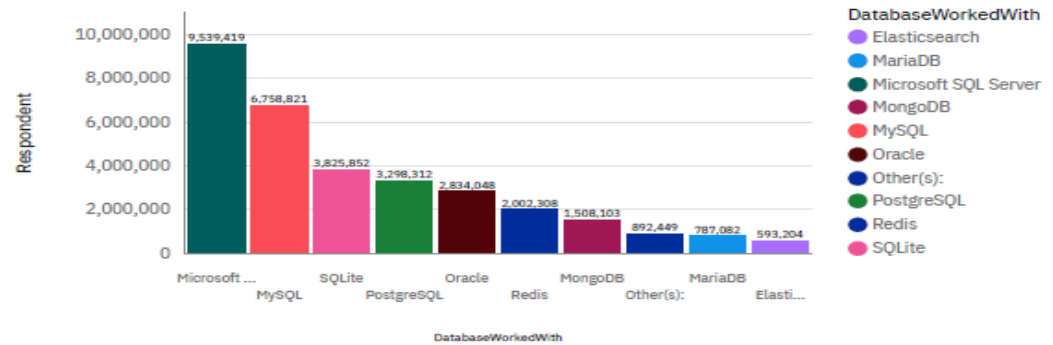


Platform Worked With Word Cloud



1

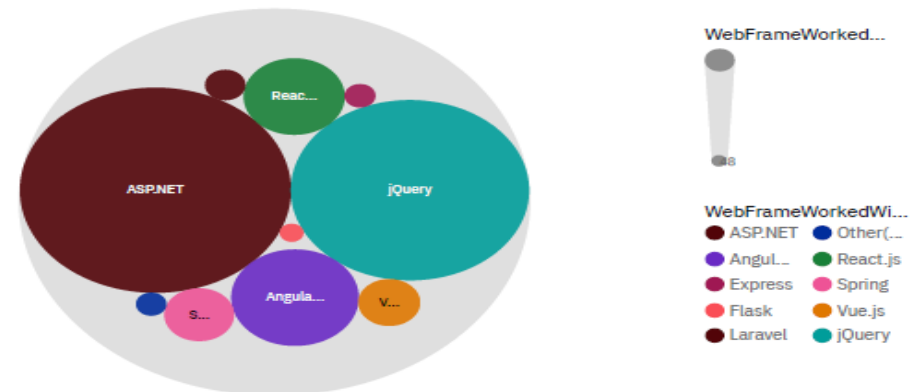
Respondent - Top 10 Database Worked With



2

3

Top 10 Web Frame Worked With

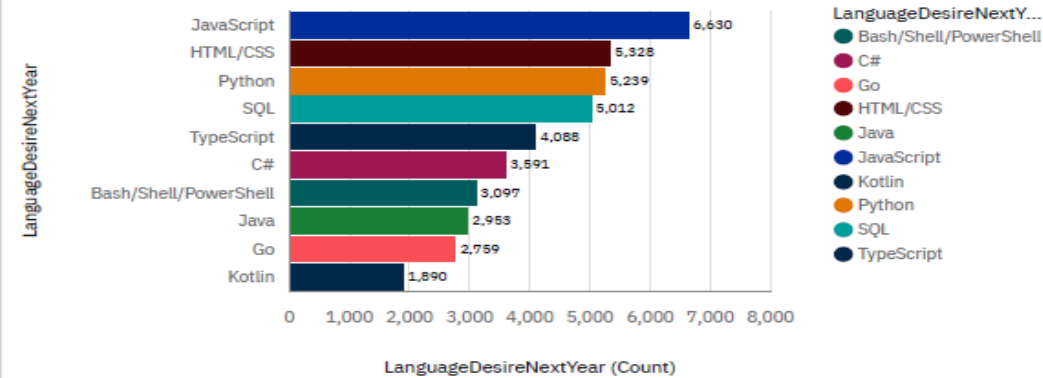


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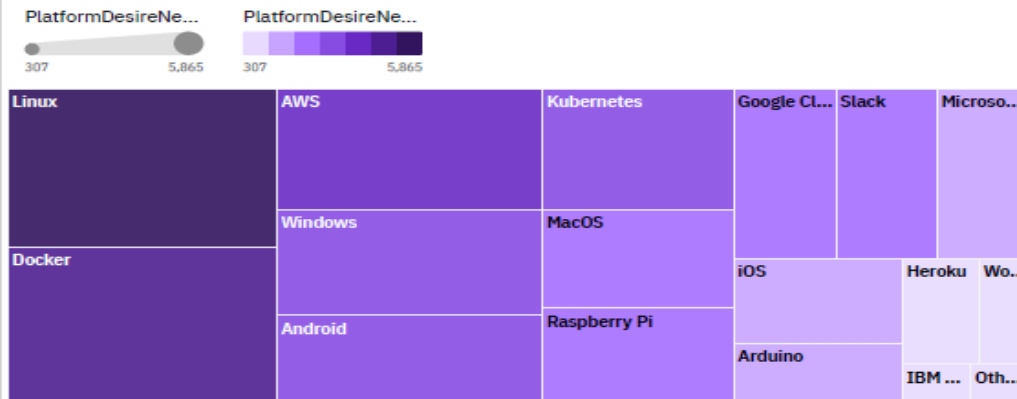
# DASHBOARD TAB 2

## Future Technology Trend

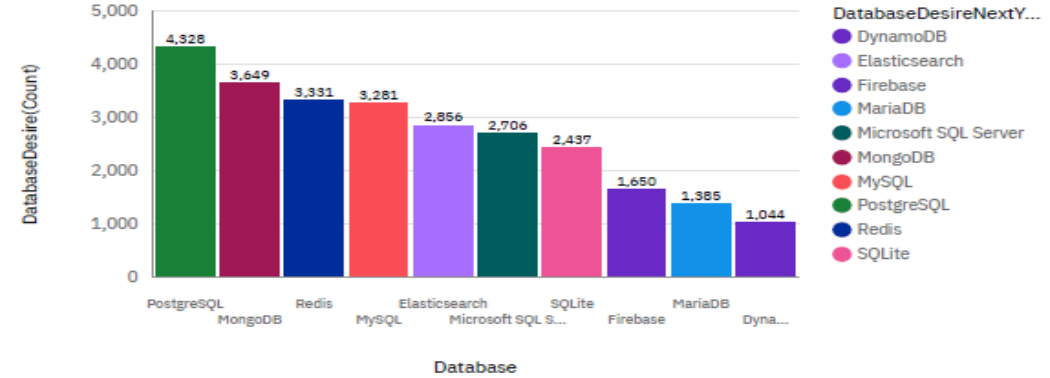
Top 10 LanguageDesireNextYear



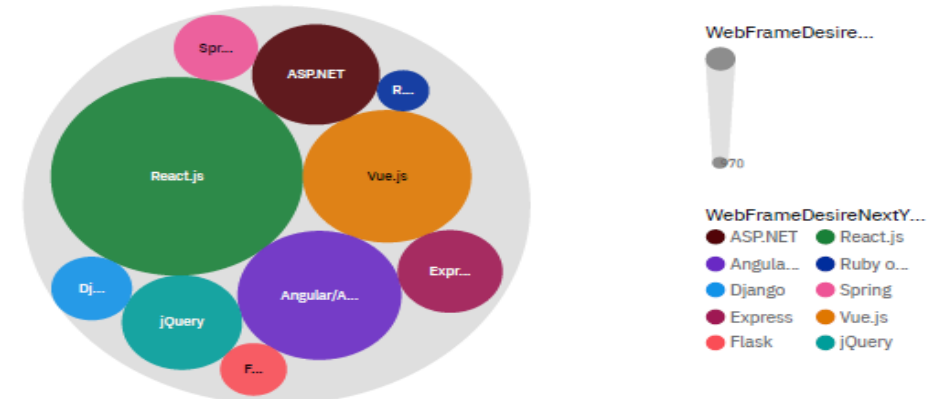
Platform Desire Next Year



5 Top 10 DatabaseDesireNextYear



7 Top 10 Web Frame Desire Next Year

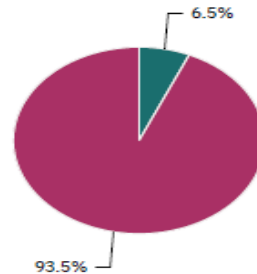


# DASHBOARD TAB 3

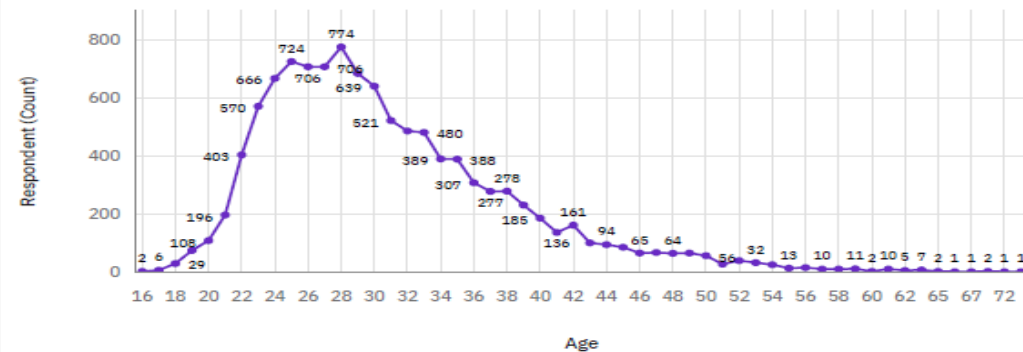
## Demographics

### Respondent classified by Gender

Gender  
● Woman ● Man

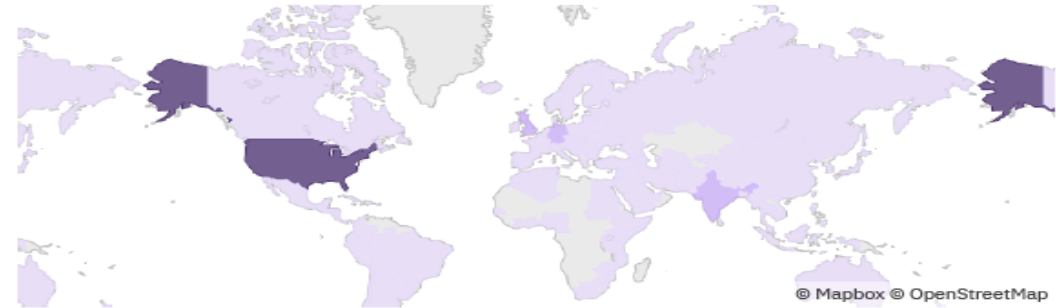


### Respondent Count by Age

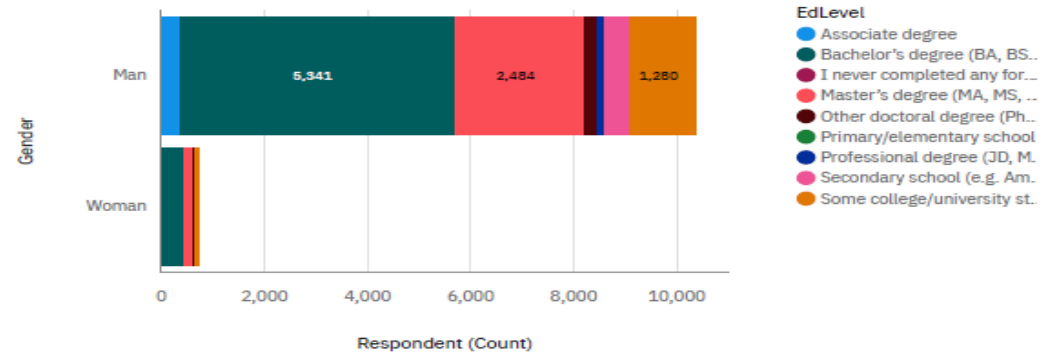


### 9 Respondent Count for Countries

Respondent (Count)  
1 3,058



### 11 Respondent Count by Gender, classified by Formal Education Level



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- JavaScript widely used and PostgreSQL getting popular.
- Over 90% young male developers.
- Developers mostly located in developed countries.

## Implications

- JavaScript and Python web frames gaining followers.
- Global polarization of developer's location and gender.
- Young developers without postgraduate studies on its majority.



# CONCLUSION

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- Developers are people with very marked feature, quality and habits.
- A good idea of popularity trends among different tools, platforms and languages are obtained.
- There is a job to be done to spread accessibility of this labor market to countries in developing stage.

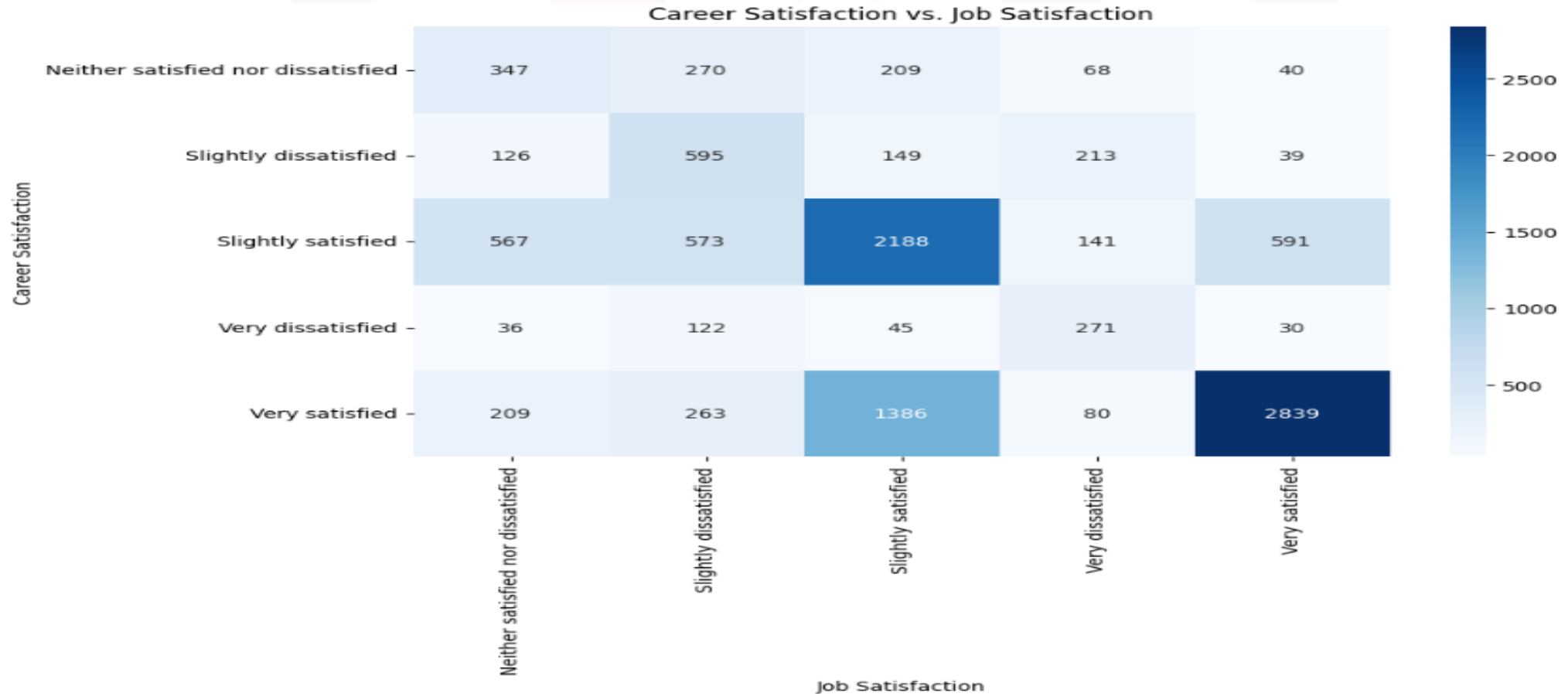
# APPENDIX

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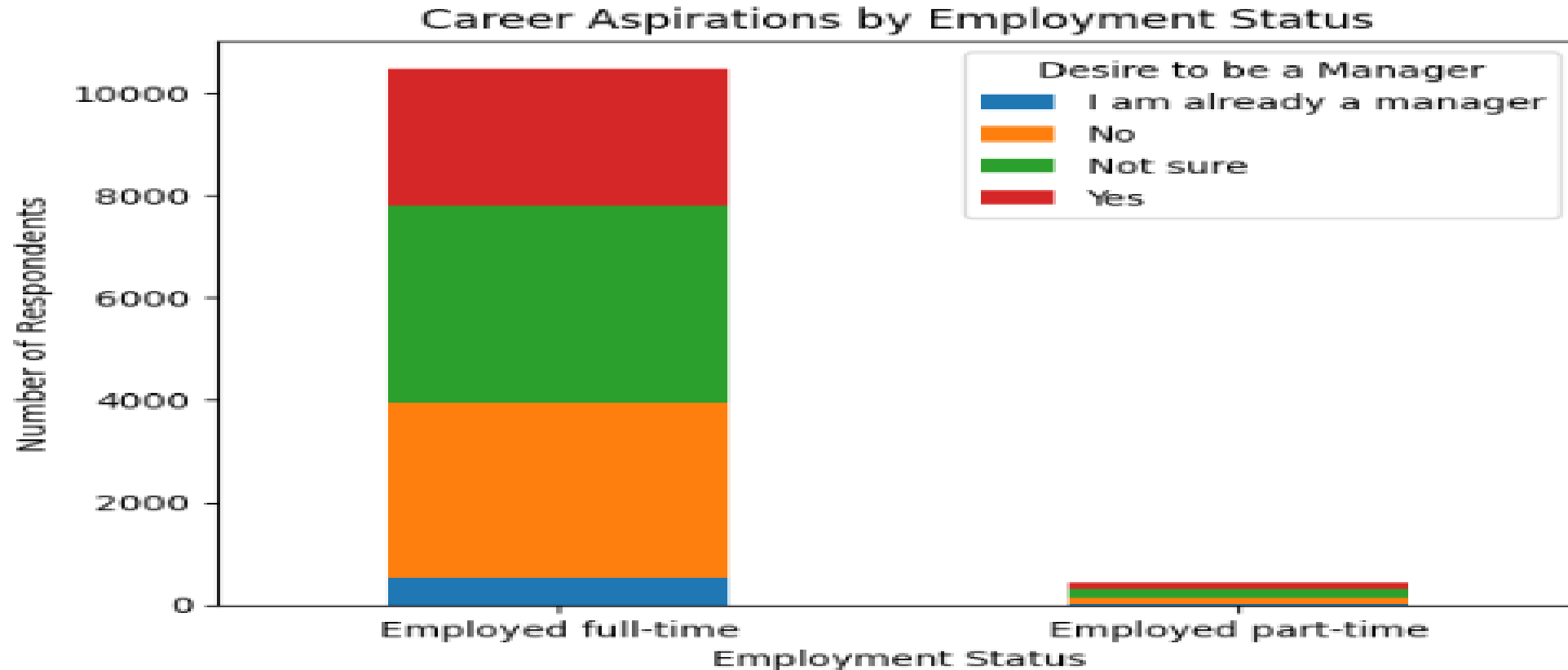


- Include any relevant additional charts, or tables that you may have created during the analysis phase.

# Distribution of Respondents by Career Satisfaction and Job Satisfaction

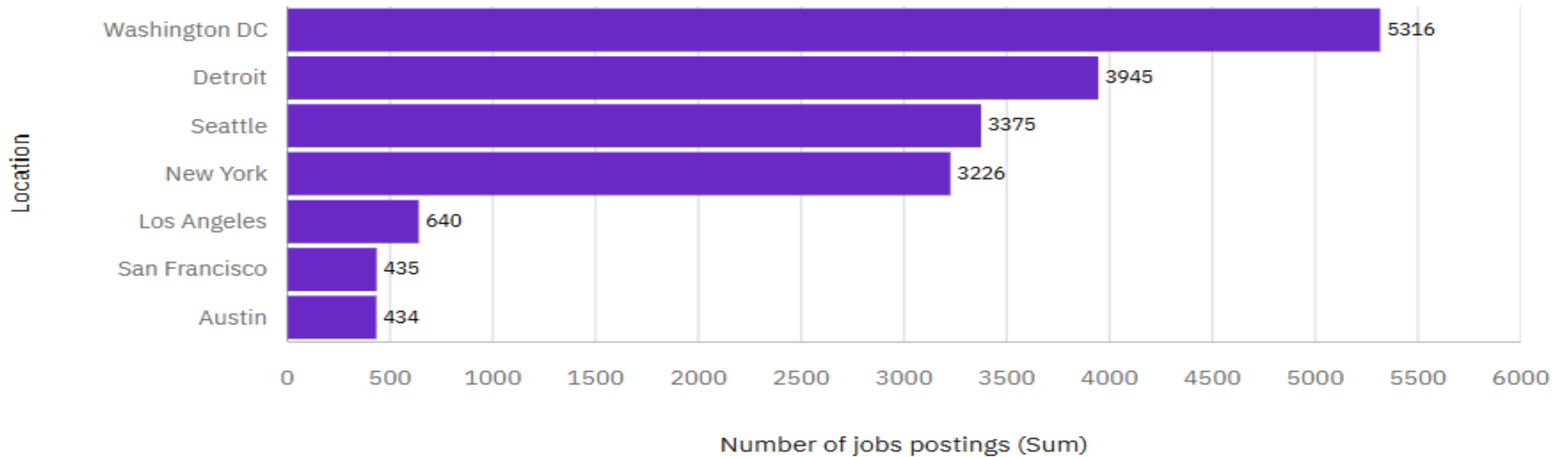


# Job Satisfaction and Career Aspirations by Employment Status



# JOB POSTINGS

Number of jobs postings by Location



# POPULAR LANGUAGES

Average Annual Salary by Language

