



# Technology Trends and Forecast

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# OUTLINE

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

# EXECUTIVE SUMMARY

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- Current Trends
- Future Skills in-Demand
  - Languages
  - Databases
  - Platforms
  - WebFrames
- Findings and Implications
- Learning and Career Development

# INTRODUCTION

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- Annual Developer Survey
- For current and future developers
- Work prospective
- Decision making
  - Languages
  - Databases
  - Platforms
  - WebFrames

# METHODOLOGY

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- Data source : <https://insights.stackoverflow.com/survey>
- All respondents of the survey
- Comparison Current vs Next Year
- Identify any biased response in the analysis
- For demographics, filter applied by Gender (Men or Women)
  - Countries
  - Age
  - Education level

# RESULTS

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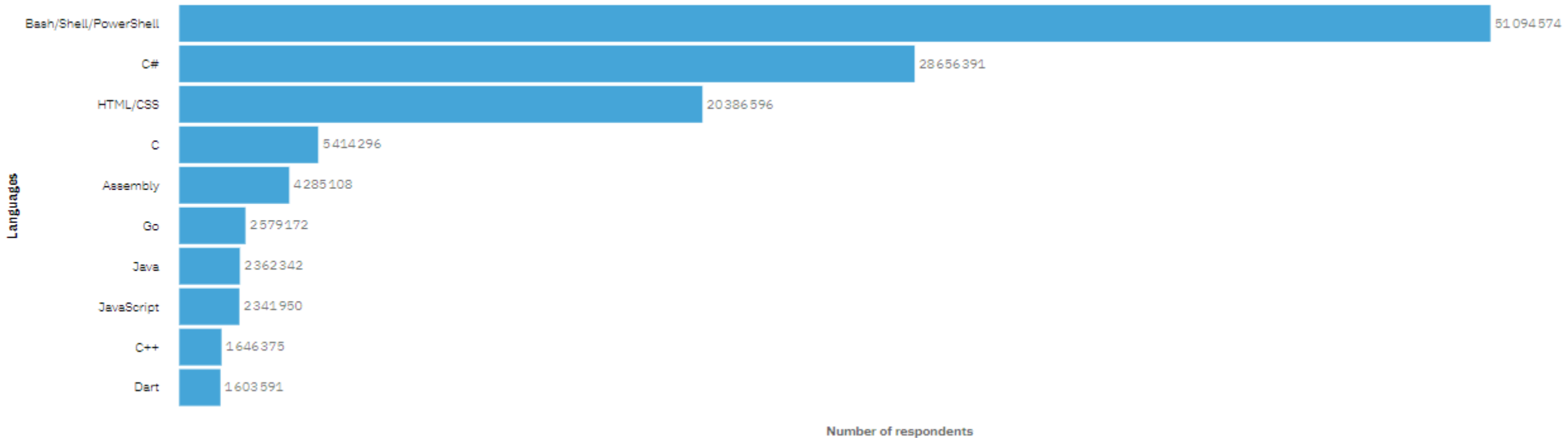
## Top 3 in-demand

- Languages : JavaScript, HTML/CSS, TypeScript
- Databases : PostgreSQL, MongoDB, Elasticsearch
- Platforms : AWS, Android, Docker
- WebFrames : Github, Confluence, Jira

Analysis to be completed with a survey on stakeholders demand since 83% of respondents are hobbyist.

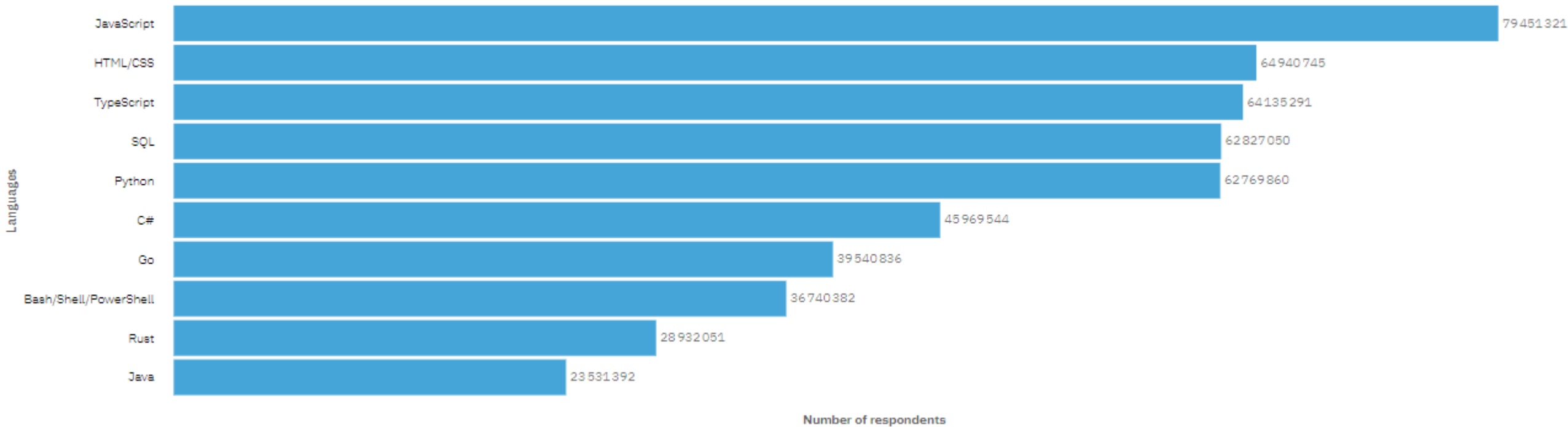
# PROGRAMMING LANGUAGE TRENDS

Current Year



# PROGRAMMING LANGUAGE TRENDS

Next Year





# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

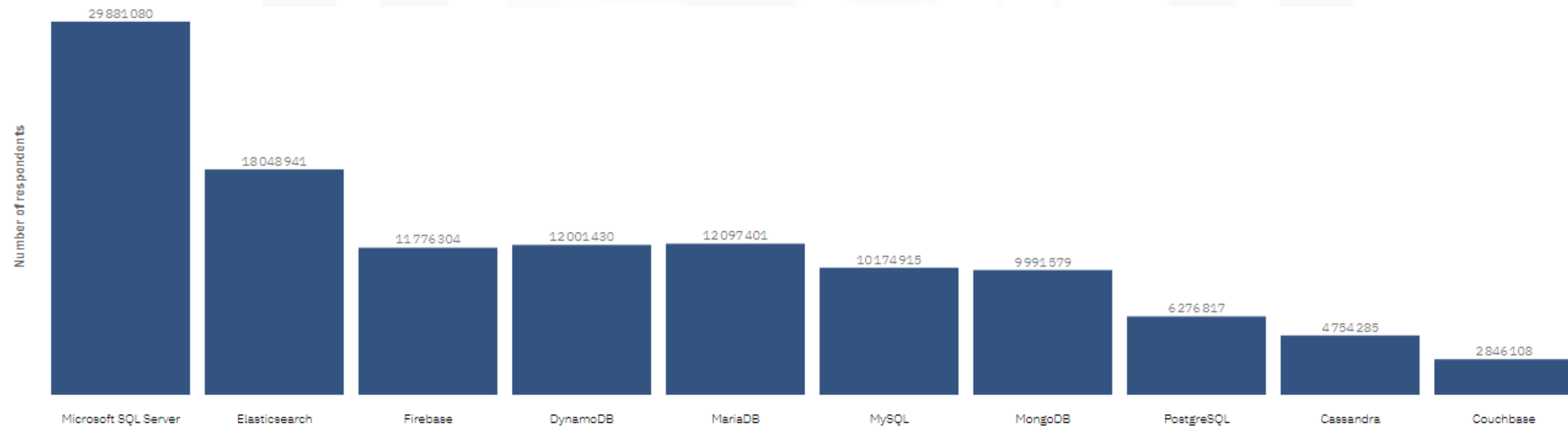
- Dynamic interactions in-demand
- Frontend in-demand
- TypeScript in-demand

## Implications

- Debugging : HTML, C#
- Data storage and cybersecurity
- Learn JavaScript, handle red wavy lines and compilation errors

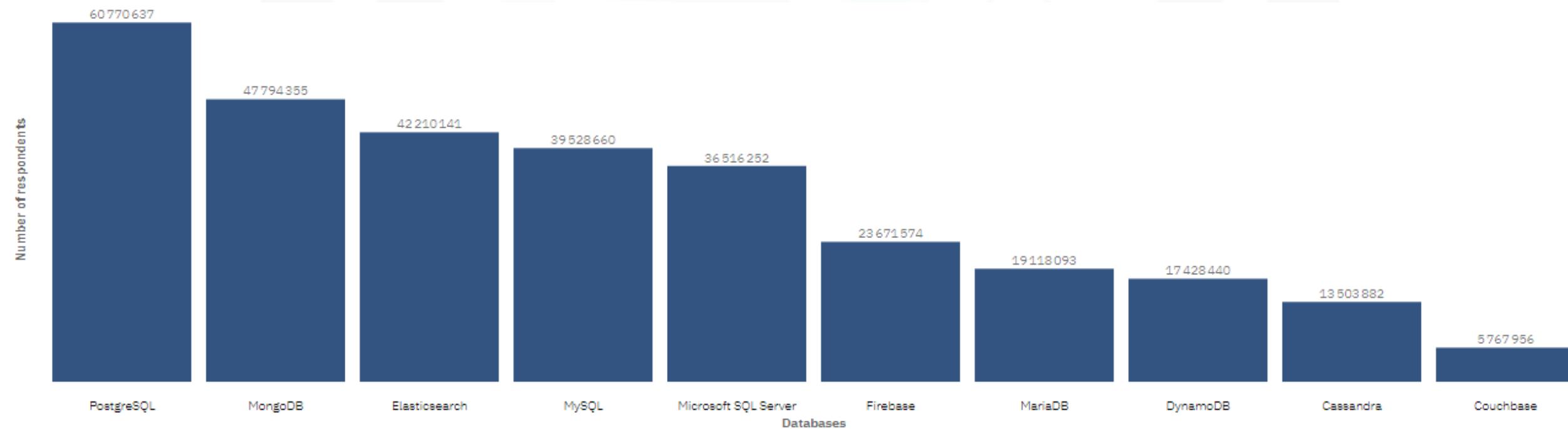
# DATABASE TRENDS

Current Year



# DATABASE TRENDS

Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Open source in-demand
- Document oriented
- Indexation and Search

## Implications


- Cybersecurity
- Indexation and data storage
- Learn Java

# Stack Overflow Annual Developer Survey

## Partager Stack Overflow Annual Developer Survey

Partagez une vue en lecture seule de ce tableau de bord.

 Partager avec tous les utilisateurs qui disposent du lien.

 Le lien pointe toujours vers la version la plus récente du tableau de bord.

Lien permanent pour afficher le tableau de bord

<https://eu-de.dataplatform.cloud.ibm.com/dashboards/e3c3798d-a613-4a98-a62a-6a17de9ae9b4/view>



<https://eu-de.dataplatform.cloud.ibm.com/dashboards/e3c3798d-a613-4a98-a62a-6a17de9ae9b4/view/4f11e11831ec2cc95fead0e4079e24037e3e705bb6bbd200d6d37b495d677997f0691bc4c829480c8c115364f4b91b0a98>

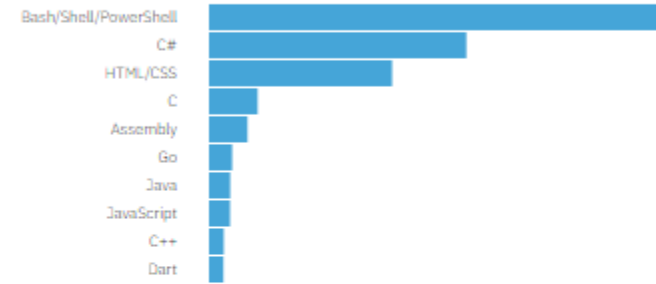
# Current Technology Usage

Current Technology Usage

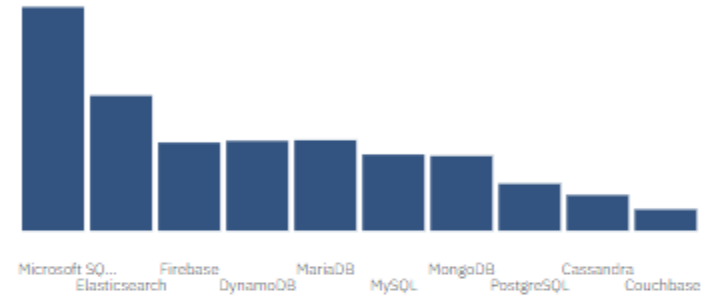
Future Technology Trend

Demographics

Top 10 Languages



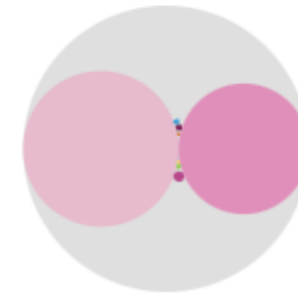
Top 10 Databases



Platforms



Top 10 WebFrames



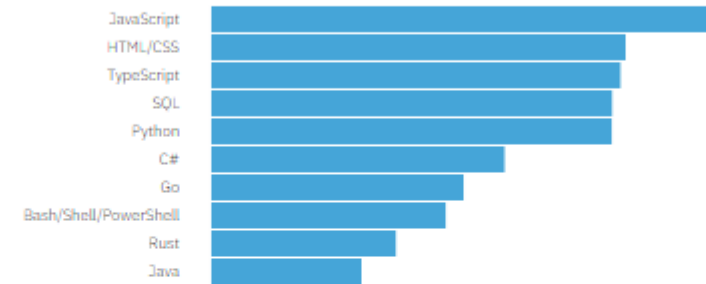
# Future Technology Trend

Current Technology Usage

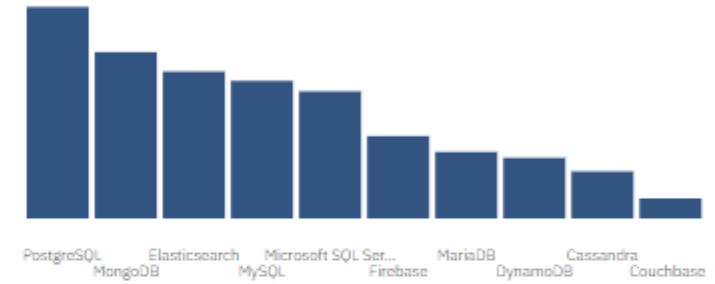
**Future Technology Trend**

Demographics

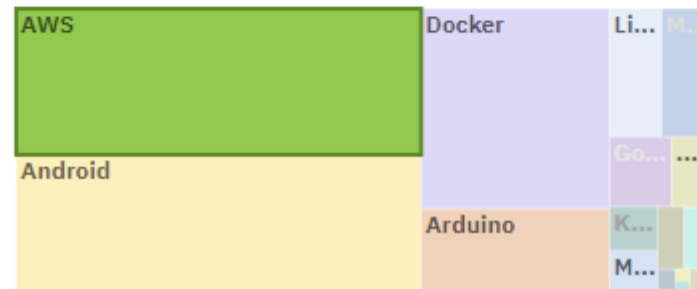
Top 10 Languages desired for the next year



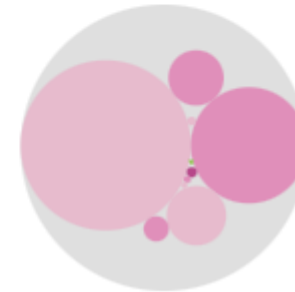
Top 10 Databases desired for the next year



Desired Platforms for the next year



Top 10 WebFrames desired for the next year



# Demographics

Current Technology Usage

Future Technology Trend

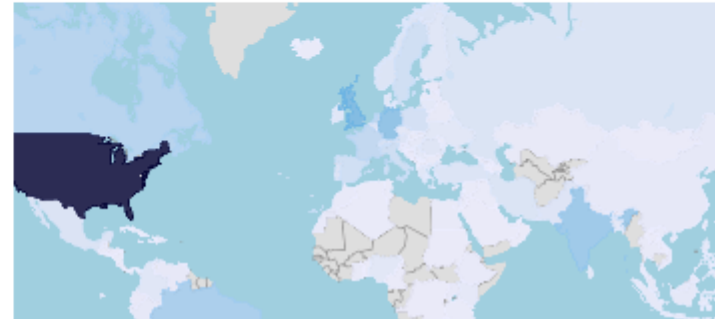
Demographics

Respondent classified by Gender

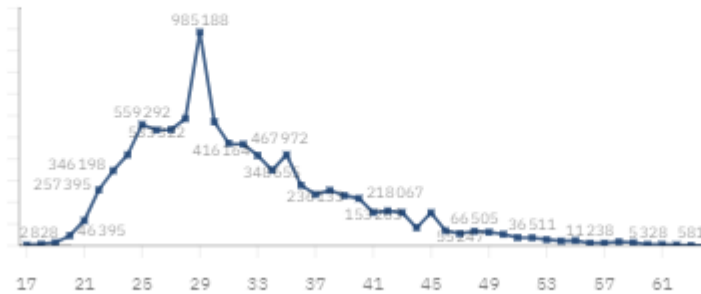
Gender  
● Woman ● Man



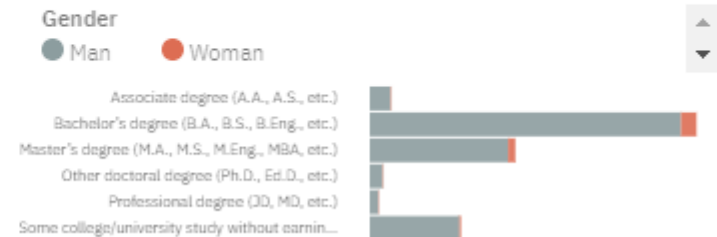
Respondent count for countries



Respondent count by Age



Respondent count by Gender, classified by Formal Education level





# DISCUSSION – ENHANCE SECURITY MEASURES

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- cyber security
- off-site Data storage
- compliance with laws and regulations
- Ethics using AI

# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- Moving towards **Object-Oriented Programming**
- **Web development** in progress
- **Disparity** in Gender and Education level of respondents
- **Biaised survey** due to 83% being hobbyist

## Implications

- **Data storage**, Learning
- **Cybersecurity** measures
- Demographics and **economy**
- Need to do an additional **survey on stakeholders demand**

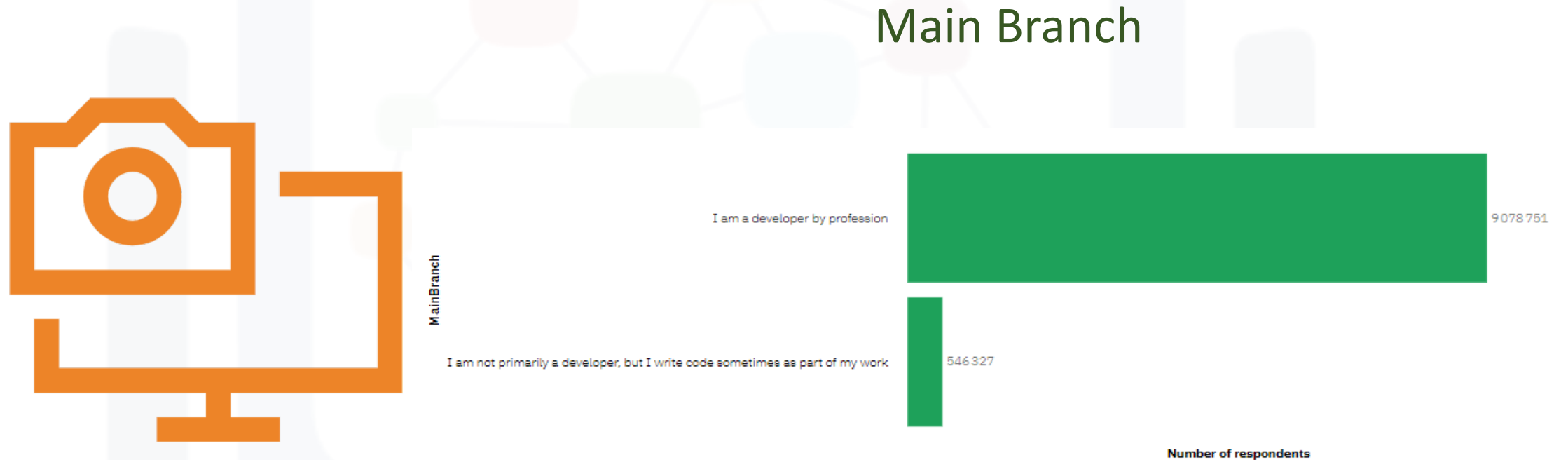
# CONCLUSION

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- Object-oriented programming in-demand
- Front-end in-demand
- Handling document indexation
- Disparity in Gender and Education level
- Data storage and cybersecurity issues
- Need to do an additional survey on stakeholders demand

# APPENDIX



# APPENDIX

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Any hobbyist?

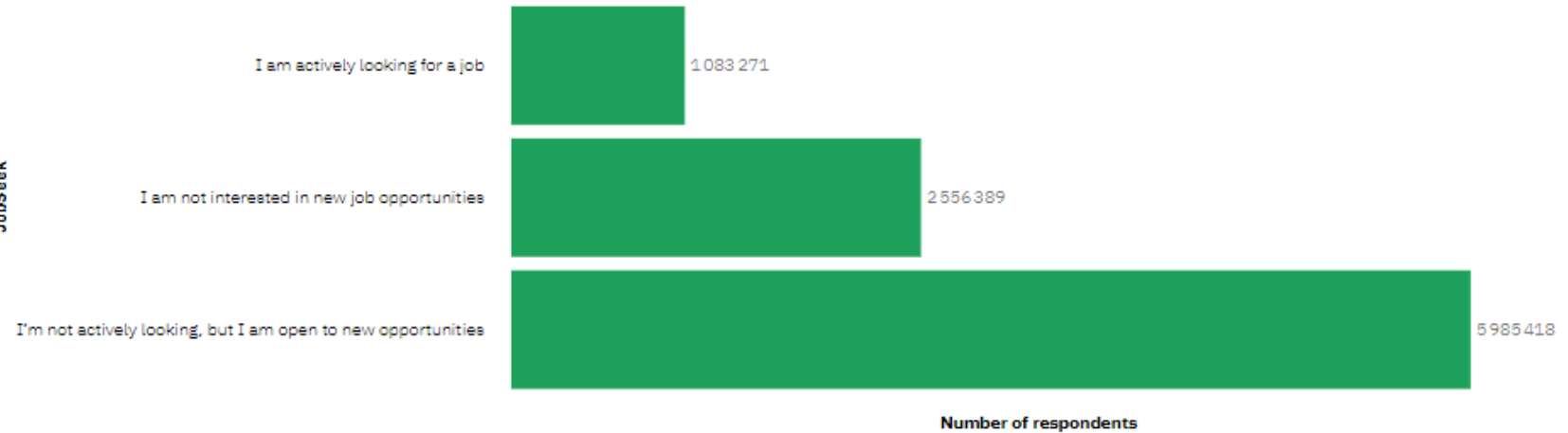


# APPENDIX



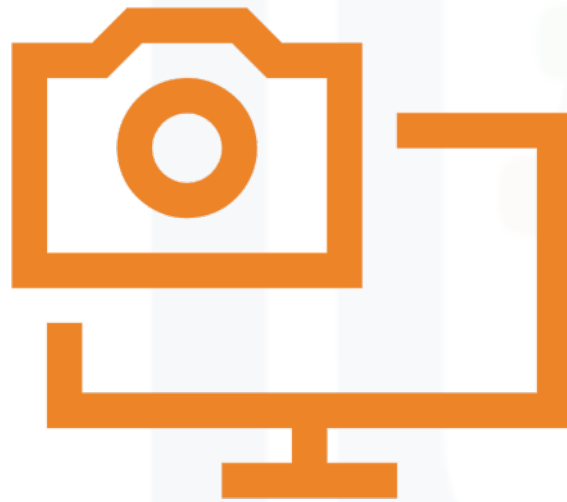
JobSeek

## Job Seeker



# APPENDIX

## Job Satisfaction



JobSat

Neither satisfied nor dissatisfied

915107

Slightly dissatisfied

1453519

Slightly satisfied

3056117

Very dissatisfied

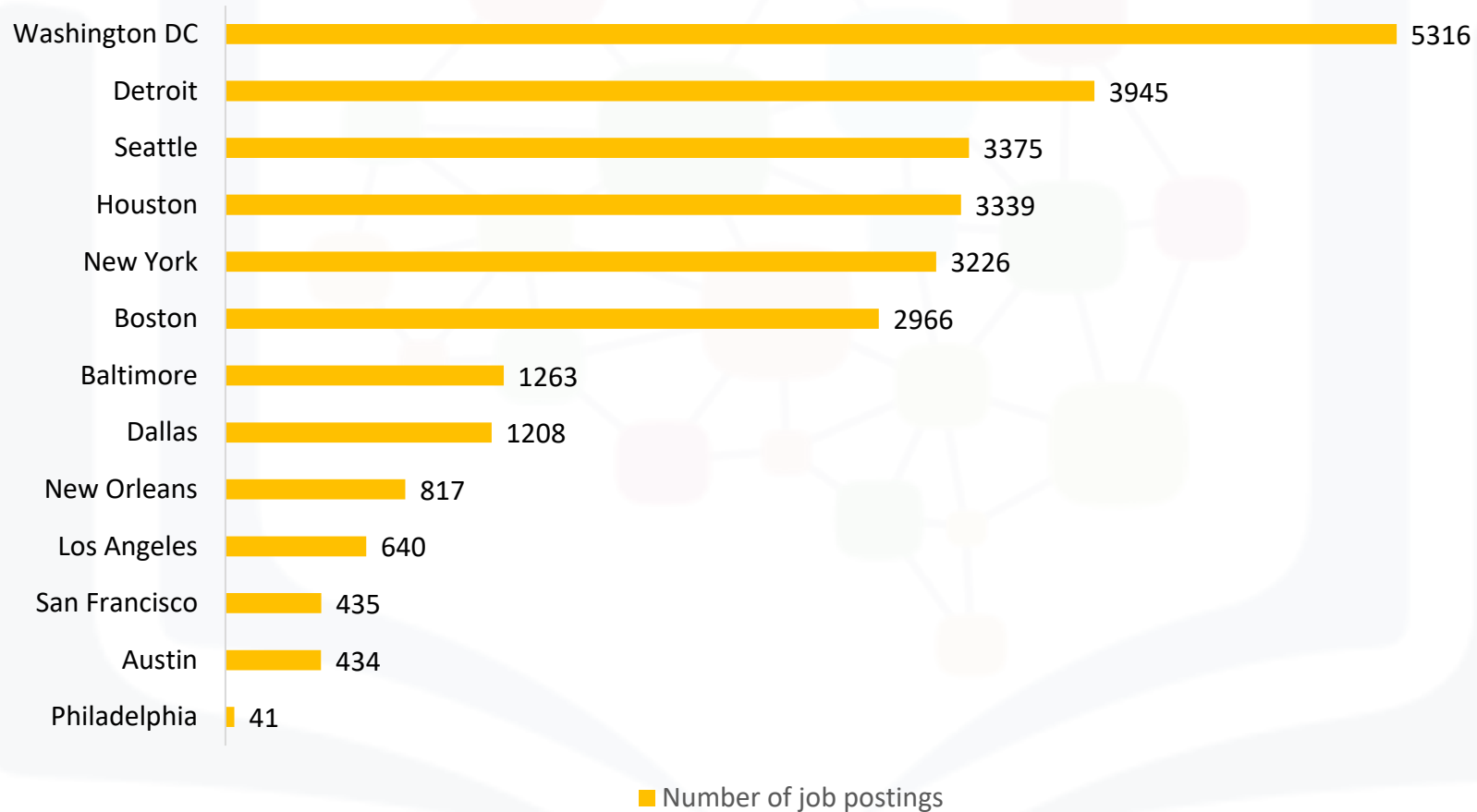
665531

Very satisfied

3534804

Number of respondents

# JOB POSTINGS





# POPULAR LANGUAGES

