



# DEVELOPER SURVEY 2019

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# OUTLINE



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



# EXECUTIVE SUMMARY



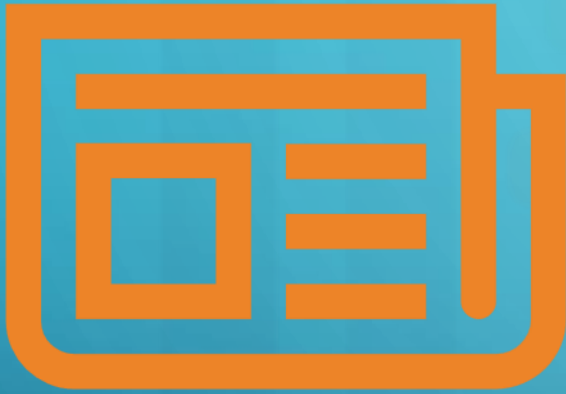
- This survey explains skills and technologies need for people and business.
- It's necessary and essential for tech industry to know about:
  - The current market.
  - The most useful skills.
  - The future Software Development.
- This presentation contains current/future usage and trends of Programing languages, Databases, Platforms and Webframes.
- The aim of this presentation is to identify future skill requirements for businesses and developers

# INTRODUCTION



- The Purpose of this Presentation is to help Tech industry with the current and future skill requirements of individuals needed.
- The presentation will help the IT industry to keep pace with the changing technologies and necessary actions to remain competitive.
- Recommendations are based on the data.

# METHODOLOGY



1. A subset of Stack-Overflow developer survey 2019 is being used in this analysis.
2. The data is properly wrangled and cleaned from missing any missing values or outliers.
3. Exploratory Data Analysis (EDA).
4. Data is visualized through:
  1. Matplotlib.
  2. Seaborn.
  3. IBM Cognos Analytics.

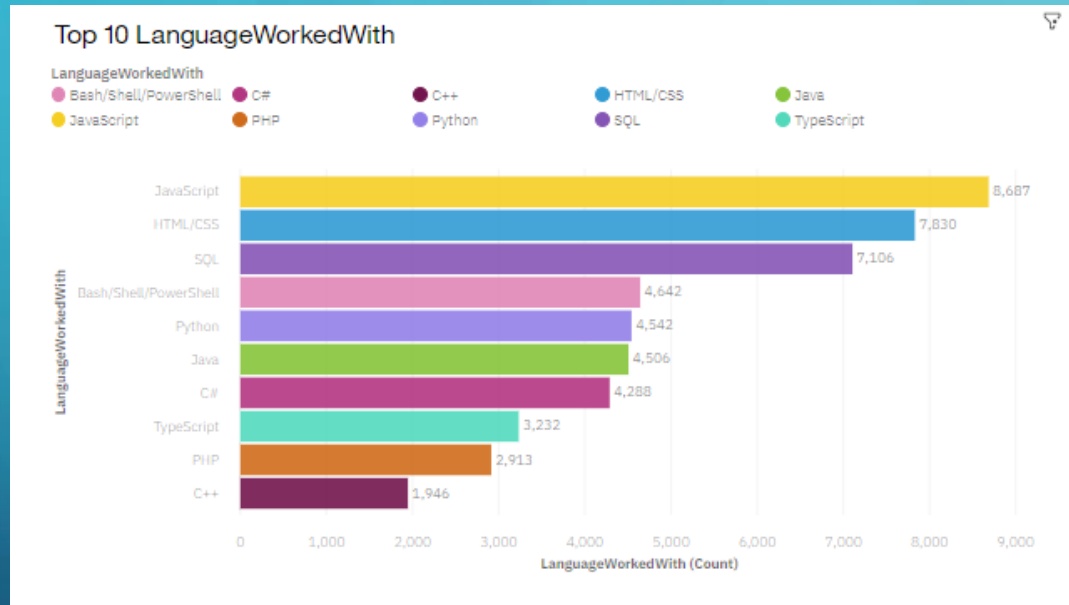


# RESULTS

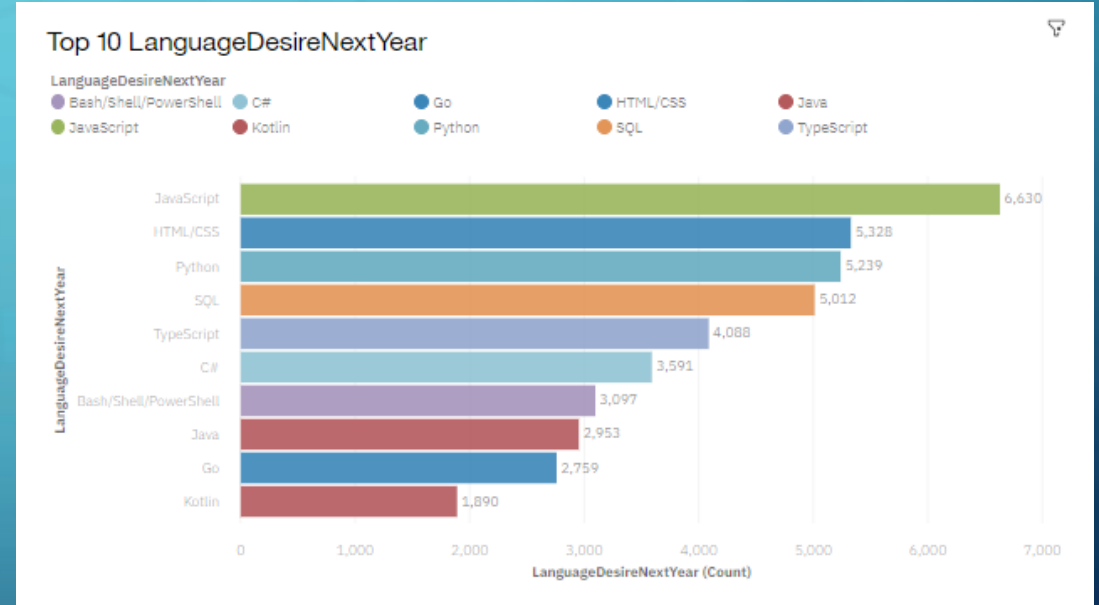
The survey results shows that 93.7% Respondents are Male, Age around 25 to 32 Years with bachelors degree. Starting with the languages “JavaScript” seems to be the most used language of the year and still be at the top next year. MySQL database is at the top this year but it might in the top 3 next year with the PostgreSQL at the top. Windows is so far the most used platform this year crossing Linux & others but next might be totally different with Linux at the top and Docker will see a large up rise behind Linux and after AWS. Lastly as for the Web-frames JQuery might lose its place from top by React Js.

# PROGRAMMING LANGUAGE TRENDS

## Current Year



## Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- JavaScript, Html and CSS are the on top and will be at the same place.
- SQL is top 3 and will not see any declines.
- Python moderately used language but it will see a large up rise in the future.

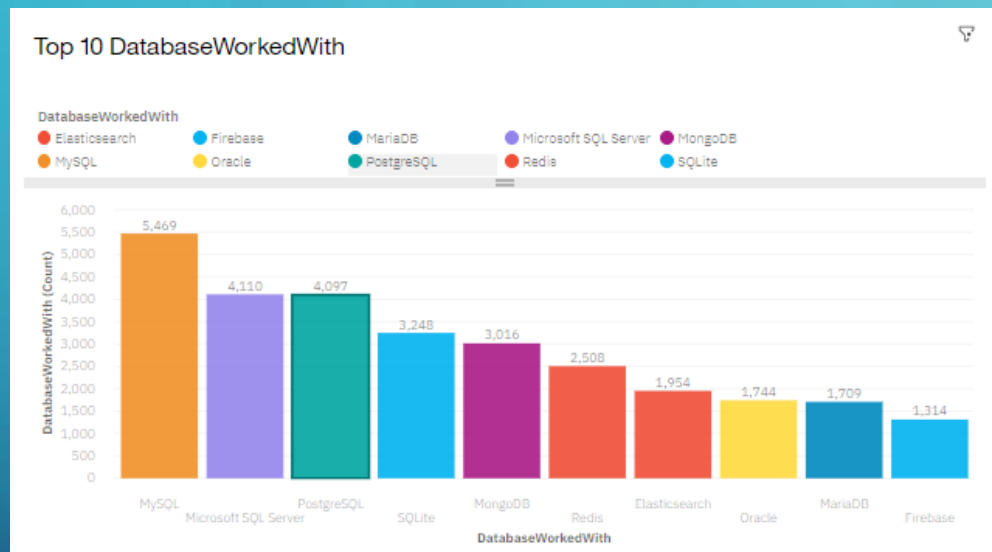
## Implications

- Web-designers will still be in high demand.
- SQL Individuals should continue learning SQL, It's still a valuable skill.
- Businesses and individuals should start working with python and more and more python developers will be in high demand in the future.

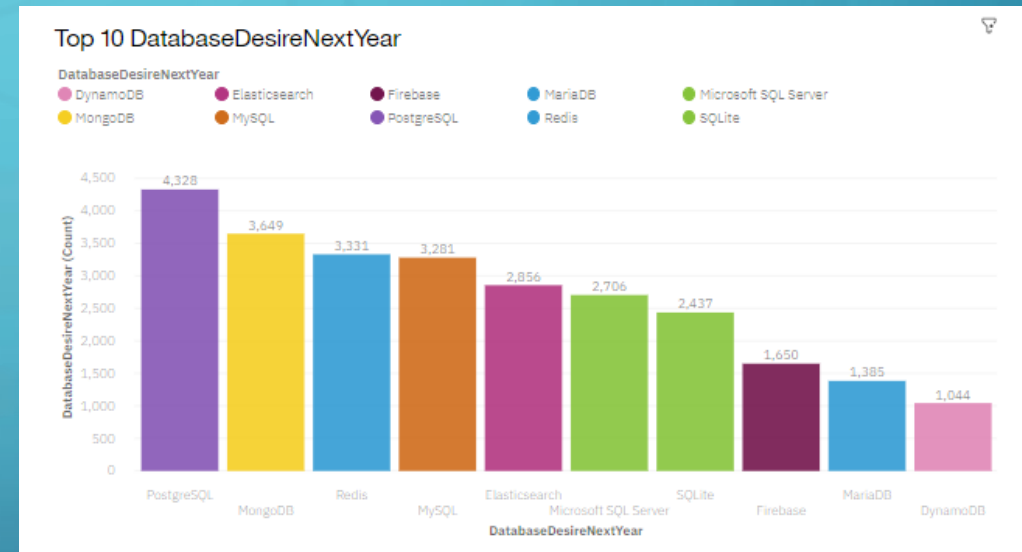


# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- MySQL is at the top because It's Open-source DBMS.
- Microsoft SQL Server will see a decline in future.
- PostgreSQL might be at the top used DBMS next year.
- MongoDB and Redia will see a large up rise in their place.

## Implications

- MySQL might not be at the top in the future but still be moderately used DBMS.
- Businesses and software firms are advised to take action for the future change.
- NoSQL databases like MongoDB will make a large impact on datebases lineup.

# DASHBOARD



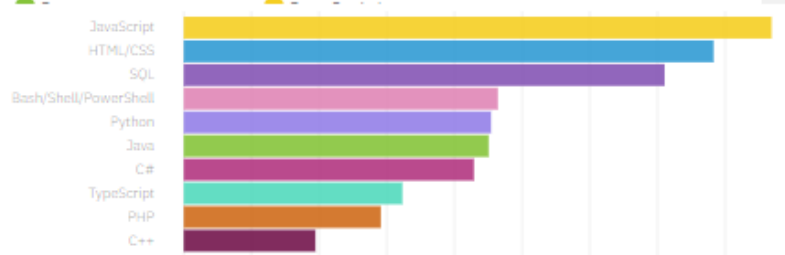
[Click here for Dashboard Link](#)

# DASHBOARD TAB 1

## Top 10 LanguageWorkedWith

LanguageWorkedWith

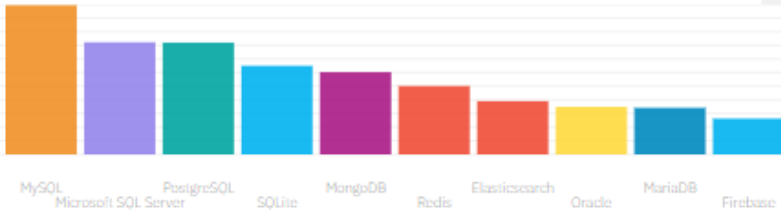
● Bash/Shell/PowerShell ● C#  
● C++ ● HTML/CSS



## Top 10 DatabaseWorkedWith

DatabaseWorkedWith

● Elasticsearch ● Firebase ● MariaDB  
● Microsoft SQL Server ● MongoDB ● MySQL



## PlatformWorkedWith

PlatformWorked...  
1,490 5,811

PlatformWorkedWith  
● AWS ● Android  
● Docker ● Linux



## Top 10 WebFrameWorkedWith

WebFrameWorke...  
939 4,629

WebFrameWorkedWith  
● ASP.NET ● Angular/Angular.js  
● Django ● Express

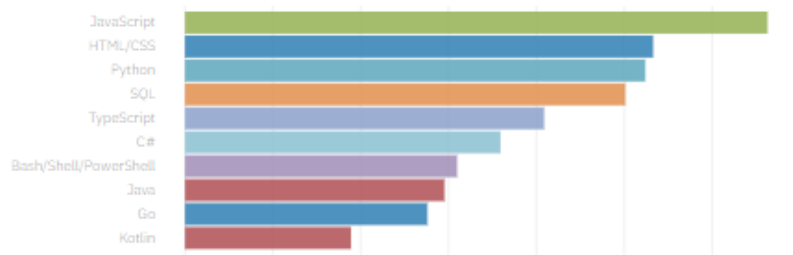


# DASHBOARD TAB 2

## Top 10 LanguageDesireNextYear

LanguageDesireNextYear

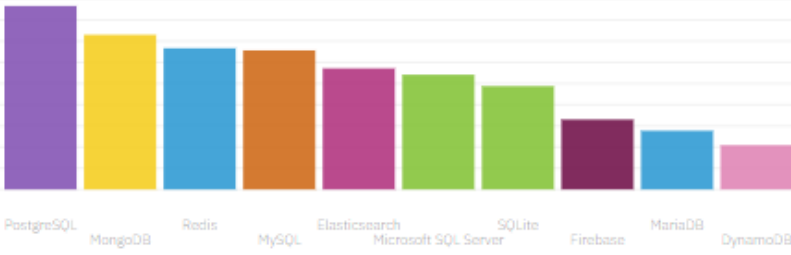
Legend: Bash/Shell/PowerShell, C#, Go, HTML/CSS, JavaScript, Python, SQL, TypeScript, Java, Kotlin



## Top 10 DatabaseDesireNextYear

DatabaseDesireNextYear

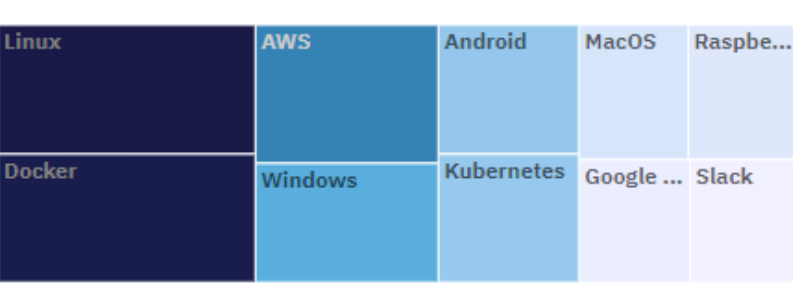
Legend: PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch, Microsoft SQL Server, SQLite, Firebase, MariaDB, DynamoDB



## Platform Desire Next Year

PlatformDesireN...

Legend: Linux, AWS, Android, MacOS, Raspbe...



## Top 10 WebFrameDesireNextYear

WebFrameDesire...

WebFrameDesireNextYear

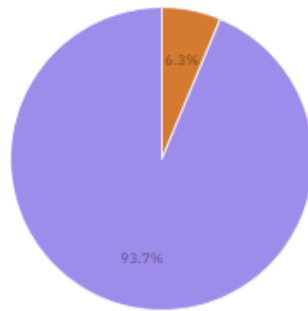
Legend: ASP.NET, Angular/Angular.js, Django, Express



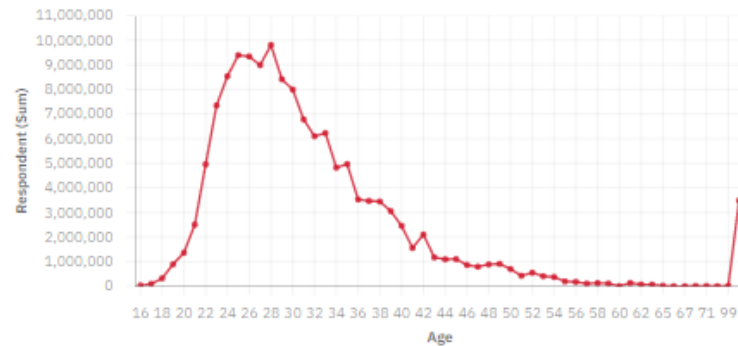
# DASHBOARD TAB 3

Respondent classified by Gender

Gender  
● Woman ● Man

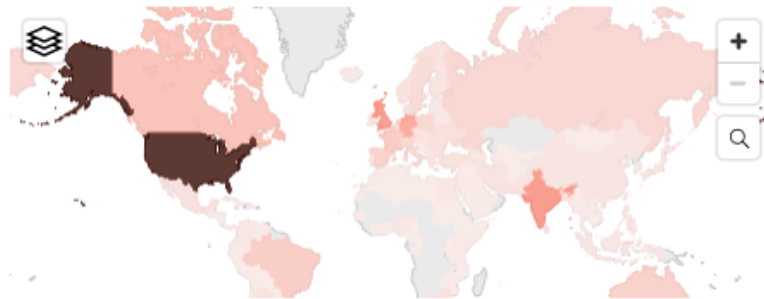


Respondent Count by Age



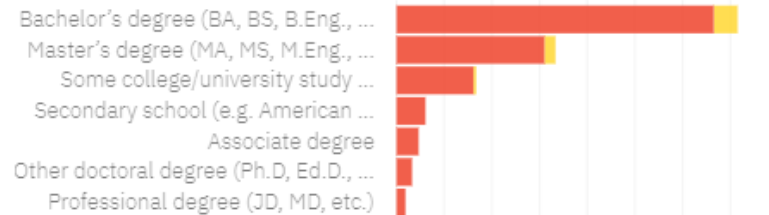
Respondent Count for Countries

Country (Count)  
1 3,127



Respondent Count by Gender, classified by Formal Education Level

Gender - Measures group (2)  
● Man | Gender (Count) ● Man | Respondent (Sum) ● Woman | Gender (Count)  
● Woman | Respondent (Sum)





# DISCUSSION



# OVERALL FINDINGS & IMPLICATIONS

## Findings

- Programming Languages: JavaScript, HTML/CSS, Python & TypeScript will see a large Up-Rise.
- DataBases: PostgreSQL, Redis and MongoDB are growing fast as ever.
- Platforms: Linux, Docker and AWS are increasing passing through Windows.
- Web-Frames: JQuery is not the favorite anymore, It will see a large decline. React.Js growing moderately with Vue.Js fast as ever.

## Implications

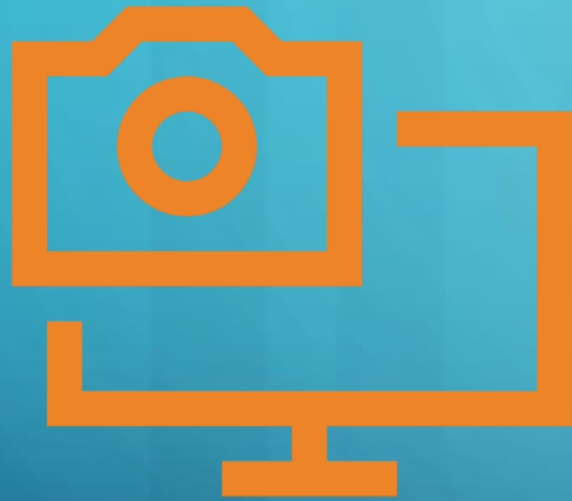
- Developers need to learn more skills like python and TypeScript to stay competitive.
- NoSQL Databases are on Rising Boom.
- Linux seems to be the future of platforms and Ignore docker, AWS, Kubernetes and slack will be a big mistake.
- Developing skills for React.Js and Vue.js is a must but ASP.net and Angular will be still moderately used.

# CONCLUSION



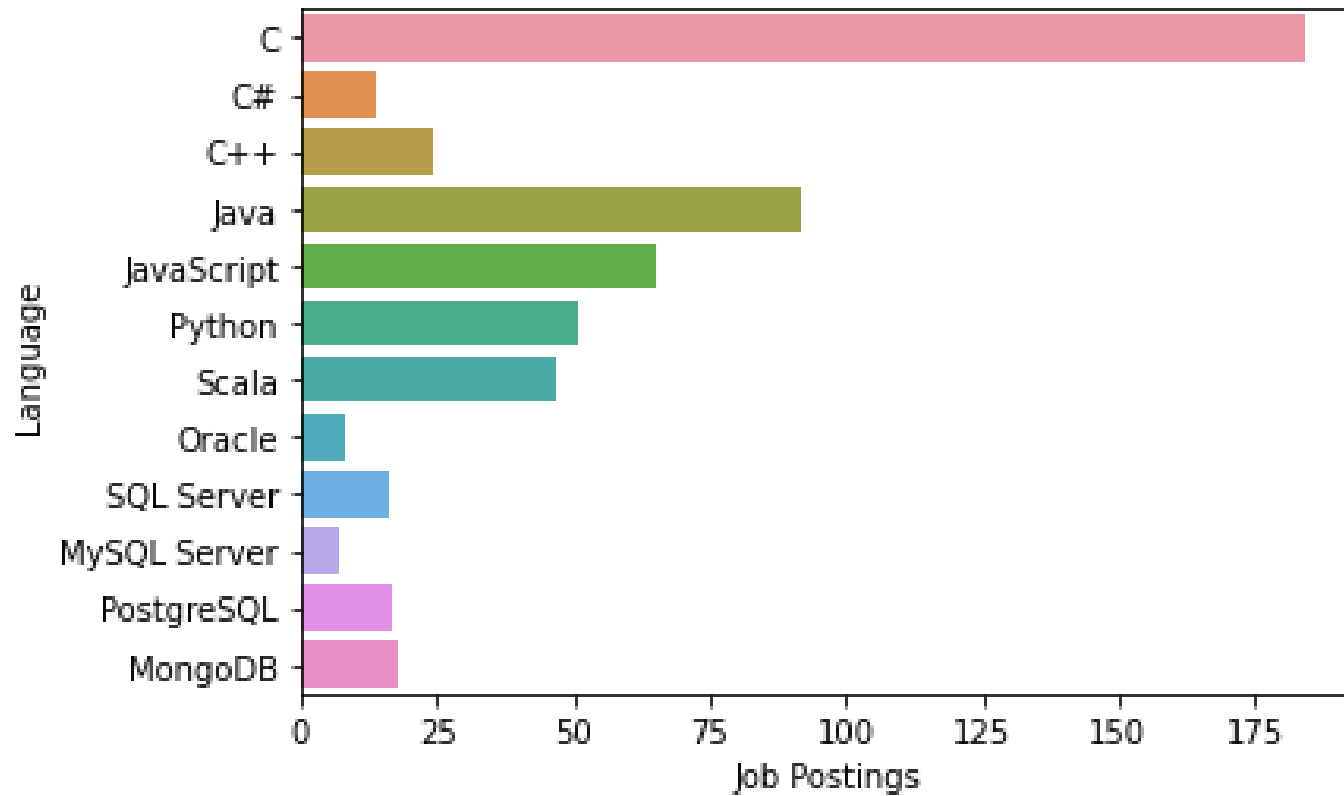
- Tech Industry is growing as fast as ever, Learning technologies is a must for future developers to stay competitive.
- Those having the old skills must learn new skills and technologies or they will be replaced.
- Businesses have to change with technologies.

# APPENDIX



- To get the annual salary for the programming languages, Data is scrapped from Github Jobs API.

# JOB POSTINGS



# POPULAR LANGUAGES

