

# FINAL PRESENTATION

- LAURA H.
- 05/24/2024



# OUTLINE



- EXECUTIVE SUMMARY
- INTRODUCTION
- METHODOLOGY
- RESULTS
  - VISUALIZATION – CHARTS
  - DASHBOARD
- DISCUSSION
  - FINDINGS & IMPLICATIONS
- CONCLUSION
- APPENDIX

# EXECUTIVE SUMMARY



- JAVASCRIPT IS THE MOST USED AND DESIRED PROGRAMMING LANGUAGE
- POSTGRESQL AND MONGODB ARE FORECASTED TO BE THE MOST POPULAR DATABASES
- THE PROGRAMMING FIELD IS DOMINATED BY YOUNG, EDUCATED, MALE WORKERS
- THE TOP POPULAR PLATFORMS ARE CONSISTENTLY LINUX, WINDOWS, AWS, AND DOCKER
- REACT.JS OVERTOOK IQUERY AND OTHER WEBFRAMES AS MOST DESIRED



# INTRODUCTION



- This report summarizes findings from the StackOverflow Developer Survey results for 2019
- This report is for people interested in learning about the popularity of specific languages, platforms, WebFrames, and databases
- This report juxtaposes current and forecasted datasets to provide trends and forecasts
- This report could be used for careers
  - Employers learn what databases and tools to provide
  - Employees learn which languages are desirable to learn



# METHODOLOGY



- DATA WAS TAKEN FROM STACKOVERFLOW DEVELOPER 2019 SURVEY AND COMPILED INTO A DATABASE
- NULL VALUES WERE REMOVED FROM SURVEY RESULTS
- THE TOP RESULTS FROM THE SURVEY DATA WAS HIGHLIGHTED
- DATA WAS DISPLAYED IN GRAPHS OF DIFFERENT FORMATS
  - GRAPHS WERE TAILORED TO EACH DATA TYPE FOR MAXIMUM READABILITY
  - A LINK TO A LARGER PDF OF THE GRAPHS IS PROVIDED AS A GITHUB LINK

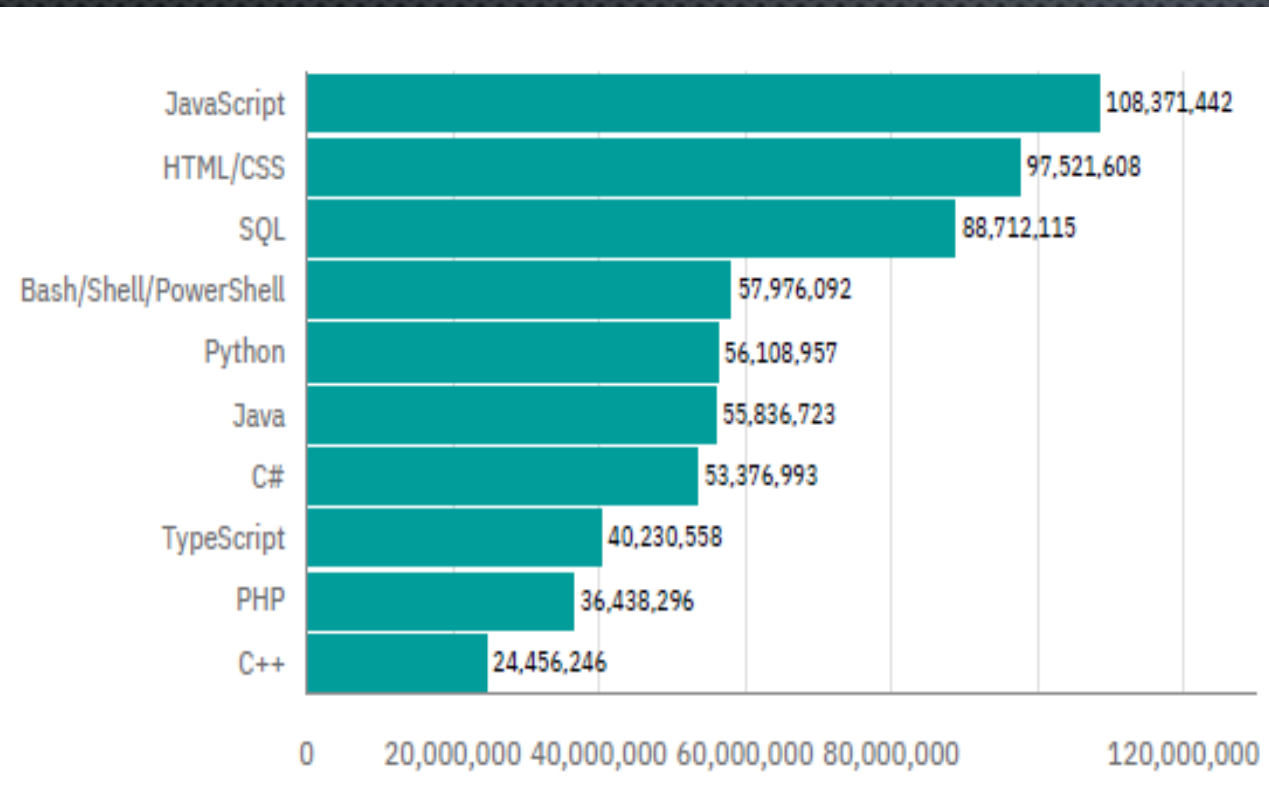


# RESULTS

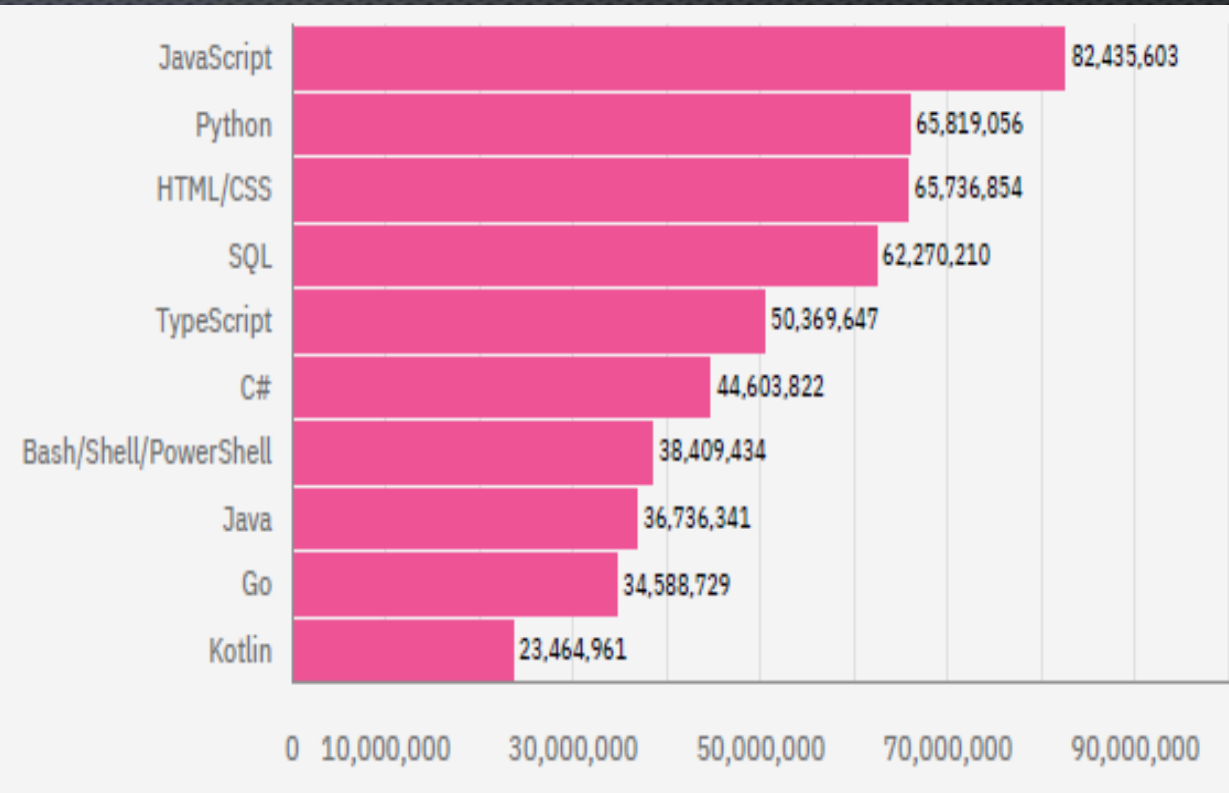


# PROGRAMMING LANGUAGE TRENDS

CURRENT YEAR



NEXT YEAR





# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

## FINDINGS

- JAVAScript: #1 LANGUAGE FOR CURRENT AND FUTURE USE
- HTML/CSS, SQL, JAVAScript, AND PYTHON: IN THE TOP 5 FOR CURRENT AND FORECASTED USE
- BASH/SHELL/POWERSHELL: IN THE TOP 5 FOR CURRENTLY USE, BUT MOVED TO 7TH PLACE IN FORECASTED USE

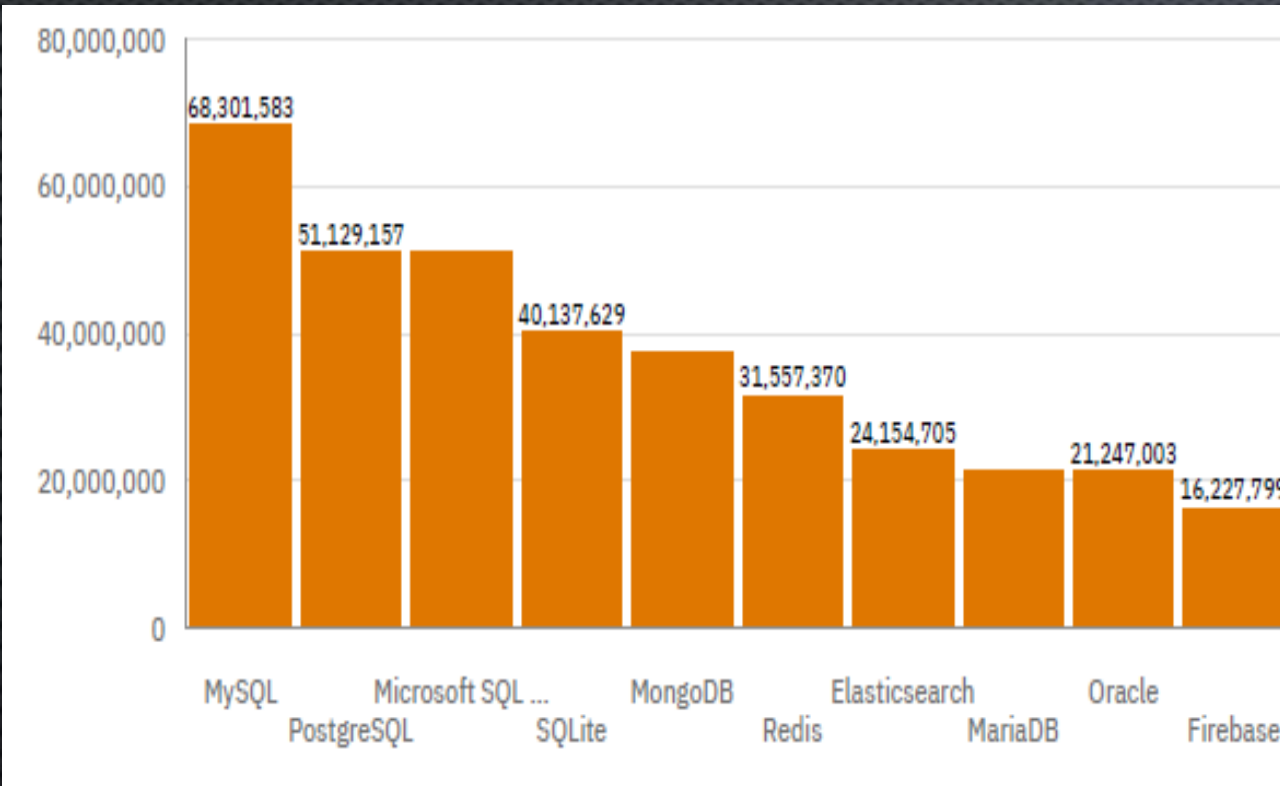
## IMPLICATIONS

- JAVAScript IS THE MOST POPULAR LANGUAGE AND WILL REMAIN SO NEXT YEAR.
- HTML/CSS, SQL, AND PYTHON ARE IMPORTANT LANGUAGES FOR CURRENT AND FUTURE USE
- BASH/SHELL/POWERSHELL WILL BE LESS USEFUL IN THE FUTURE

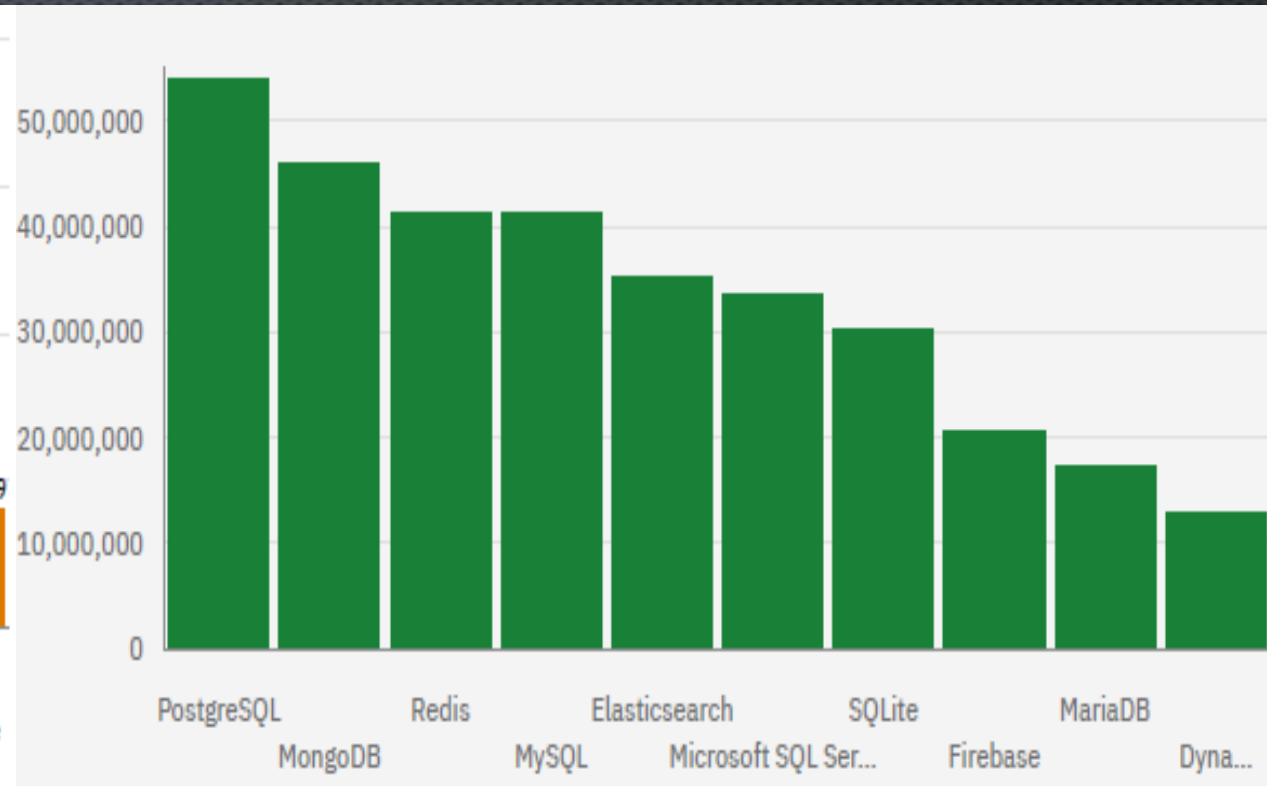


# DATABASE TRENDS

## CURRENT YEAR



## NEXT YEAR





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

## FINDINGS

- POSTGRESQL: #2 IN CURRENT DATABASES, #1 IN FORECASTED
- MYSQL, MICROSOFT SQL, AND SQLITE: ALL IN TOP 5 DATABASES FOR CURRENT USE, BUT DECREASED THEIR RANK IN FORECASTED USE
- MONGODB: #5 IN CURRENT USE BUT FORECASTED TO BE #2

## IMPLICATIONS

- POSTGRESQL IS A POPULAR DATABASE THAT WILL INCREASE TO BE THE MOST USED DATABASE
- MONGODB IS QUICKLY BECOMING A WIDELY USED LANGUAGE
- OTHER SQL SERVERS ARE LOSING POPULARITY



# DASHBOARD



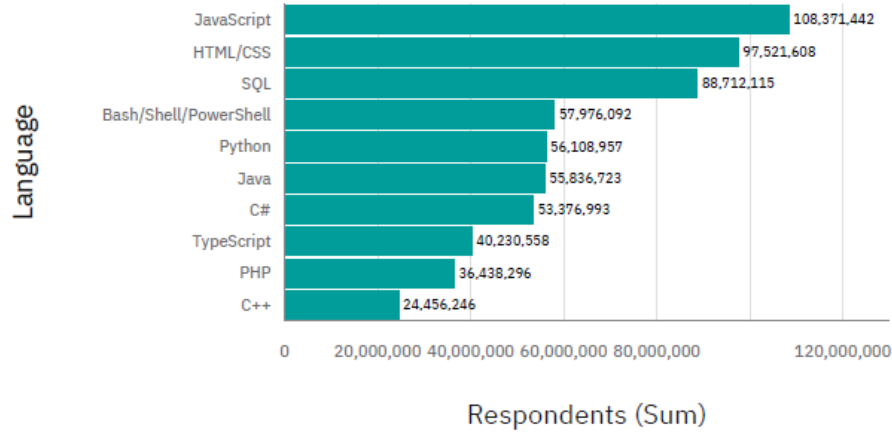
GITHUB LINK:

[HTTPS://GITHUB.COM/KANDLEMAS/IBM-PEER-GRADED-ASSIGNMENT](https://github.com/KANDLEMAS/IBM-PEER-GRADED-ASSIGNMENT)

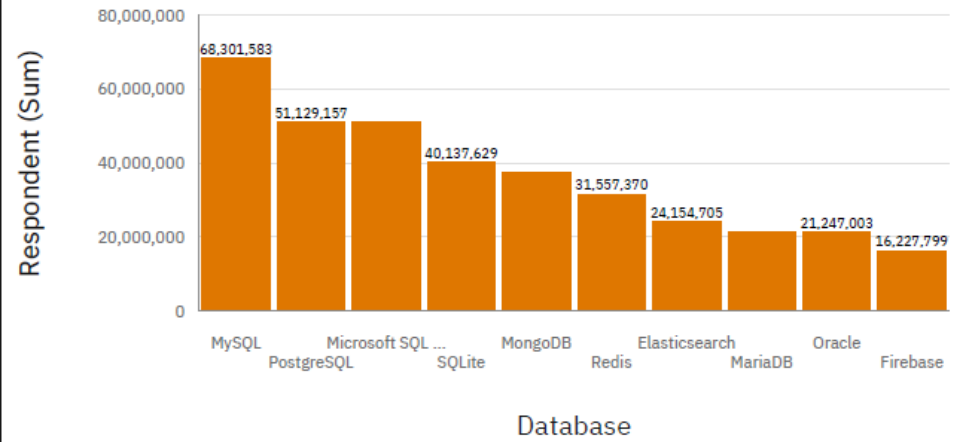


# DASHBOARD TAB 1

## Top 10 Languages



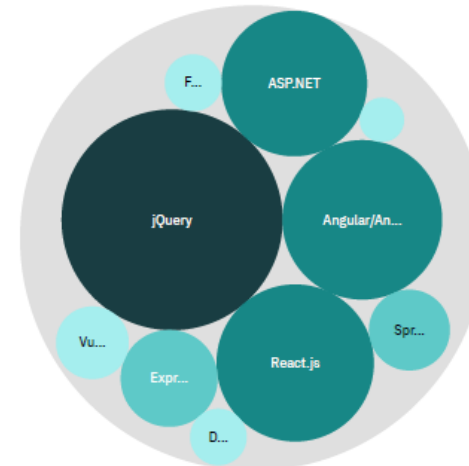
## Top 10 Databases



## Most Popular Platforms



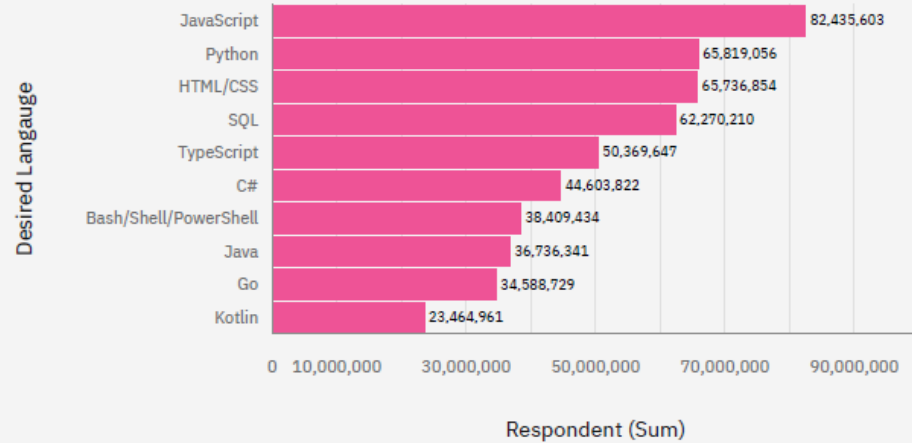
## Top 10 WebFrames



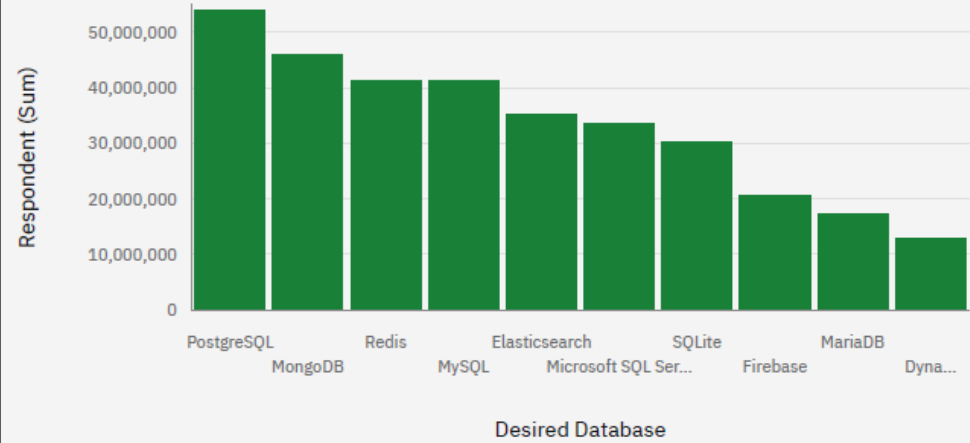


# DASHBOARD TAB 2

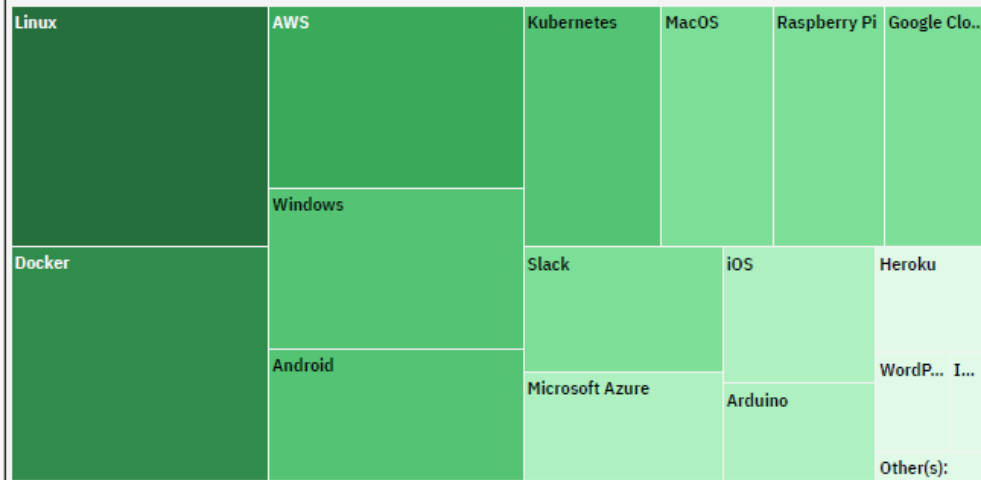
## Top 10 Languages Desired for Next Year



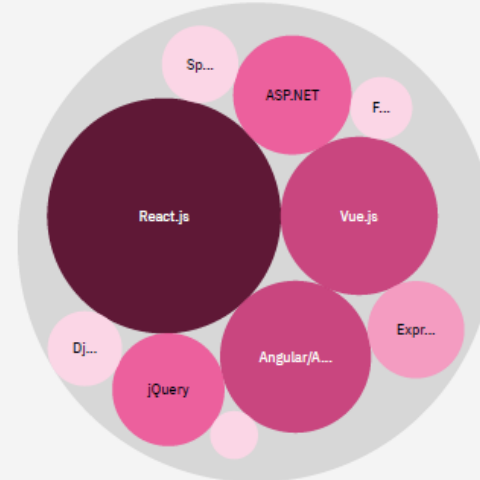
## Top 10 Databases Desired for Next Year



## Platforms Desired for Next Year

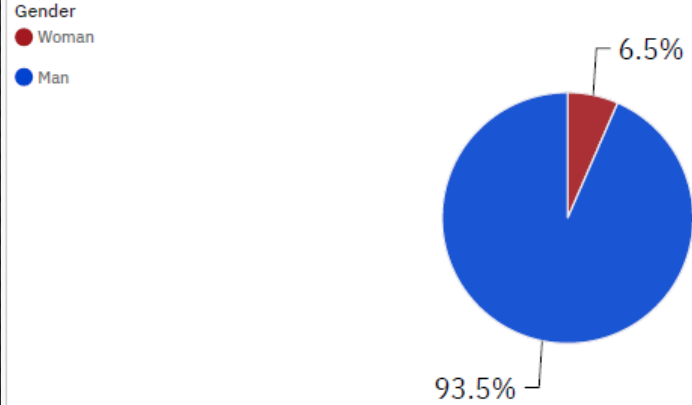


## WebFrames Desired for Next Year

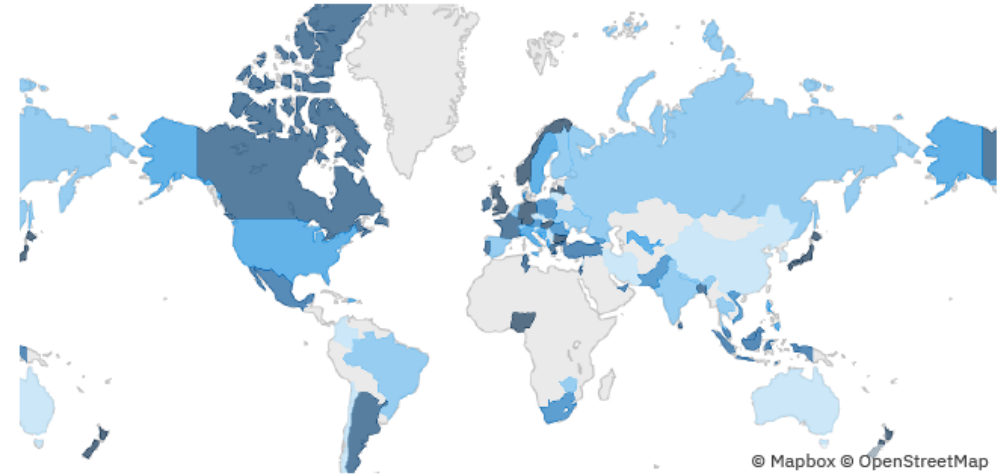


# DASHBOARD TAB 3

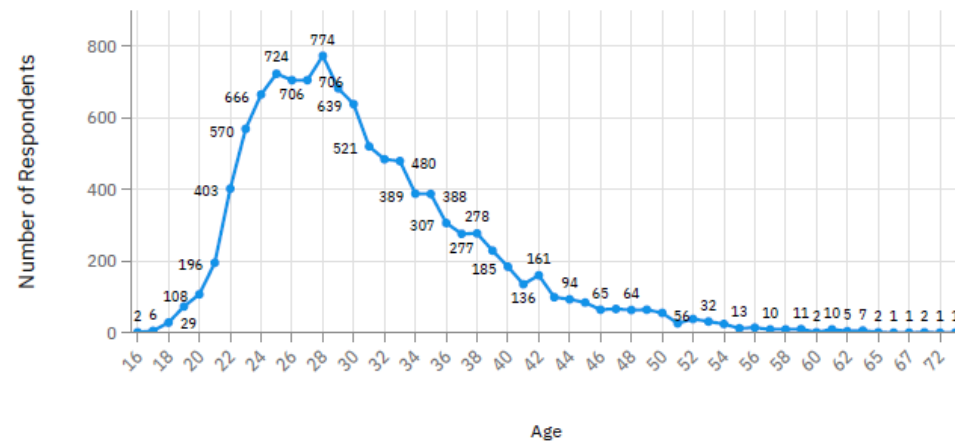
## Gender of Respondents



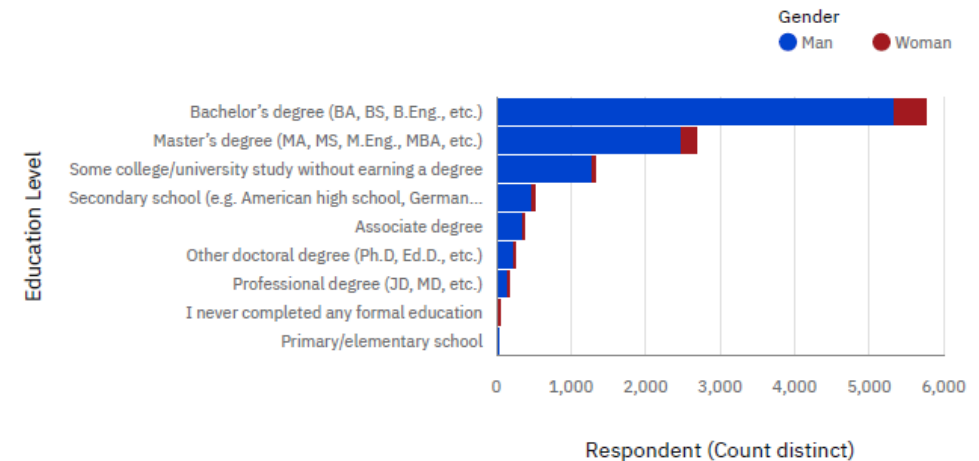
## Respondents' Countries



## Age of Respondents



## Formal Education of Respondents







# DISCUSSION



# OVERALL FINDINGS & IMPLICATIONS

## FINDINGS

- THE MAJORITY OF RESPONDENTS ARE MALE, IN THEIR 20S AND 30S, AND HAVE A BACHELORS OR MASTER'S DEGREE
- LINUX, WINDOWS, AWS, AND DOCKER ARE TOP 4 MOST POPULAR AND DESIRED PLATFORMS
- IQUERY WAS #1 USED WEBFRAME, BUT REACT.JS IS #1 FORECASTED WEBFRAME

## IMPLICATIONS

- THIS FIELD IS DOMINATED BY YOUNG, EDUCATED, MALE WORKERS
- LINUX, WINDOWS, AWS, AND DOCKER ARE ABLE TO ADEQUATELY PROVIDE USERS WITH TOOLS AND FUNCTIONS THEY NEED
- REACT.JS HAS FEATURES WHICH MAKES IT MORE DESIRABLE THAN IQUERY



# CONCLUSION



- JAVASCRIPT IS THE #1 CURRENTLY USED AND DESIRED LANGUAGE
- POSTGRESQL WILL BE THE MOST POPULAR DATABASE, HOWEVER MONGODB WILL ALSO BECOME VERY IMPORTANT
- THIS FIELD IS DOMINATED BY YOUNG, EDUCATED, MALE WORKERS
- LINUX, WINDOWS, AWS, AND DOCKER ARE ABLE TO ADEQUATELY PROVIDE USERS WITH TOOLS AND FUNCTIONS THEY NEED
- REACT.JS OVERTOOK IQUERY AND OTHER WEBFRAMES
  - POTENTIALLY HAS FEATURES THE OTHERS DO NOT

# APPENDIX



# JOB POSTINGS

IN MODULE 1 YOU HAVE COLLECTED THE JOB POSTING DATA USING JOB API IN A FILE NAMED "JOB-POSTINGS.XLSX". PRESENT THAT DATA USING A BAR CHART HERE. ORDER THE BAR CHART IN THE DESCENDING ORDER OF THE NUMBER OF JOB POSTINGS.

# POPULAR LANGUAGES

IN MODULE 1 YOU HAVE COLLECTED THE JOB POSTINGS DATA USING WEB SCRAPING IN A FILE NAMED "POPULAR-LANGUAGES.CSV". PRESENT THAT DATA USING A BAR CHART HERE. ORDER THE BAR CHART IN THE DESCENDING ORDER OF SALARY.