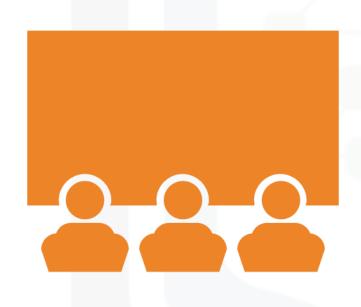


# Trends in Development Technology

Ahmed Azlan Rameez 1<sup>st</sup> May 2024

# OUTLINE



- Executive Summary
- Introduction
- Metholology
- Results
  - Visualization Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion

# **EXECUTIVE SUMMARY**



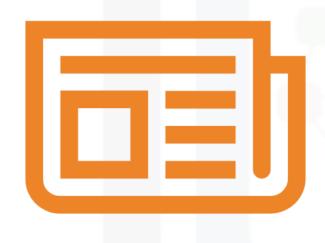
- Trends in programming languages, databases and platforms
- What technologies to look for in the future
- Gender Gap in Development Jobs

# INTRODUCTION



- About:
  - Analyzing the trends in software development
- Purpose
  - Identify skill requirements for future
  - What are the top programming languages in demand?
  - What are the top databases in demand?
  - Popular platforms among Developers
  - What web frameworks are going to be in demand?
  - What is the gender-gap within the industry

# **METHODOLOGY**



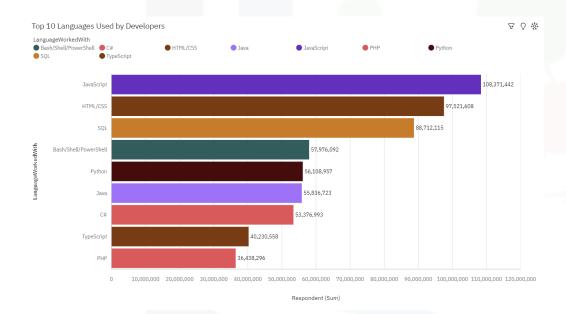
- **Data Collection Sources** 
  - Stack Overflow Developer 2019 Survey
    - Downloaded
  - GitHub Job Postings
    - API
  - Programming Languages Average Annual Salaries
    - Web scraping
- **Data Cleaning**
- **Data Exploration**
- Data Visualization

# **RESULTS**

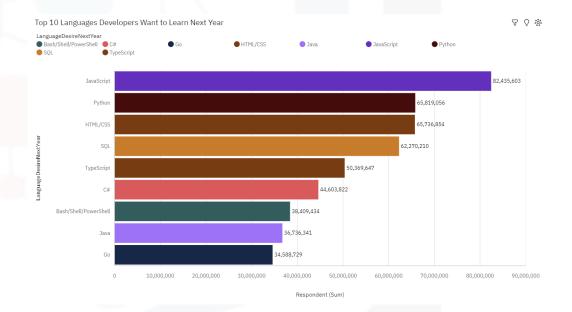


### PROGRAMMING LANGUAGE TRENDS

#### **Current Year**



#### **Next Year**



### PROGRAMMING LANGUAGE TRENDS - FINDINGS & **IMPLICATIONS**

### **Findings**

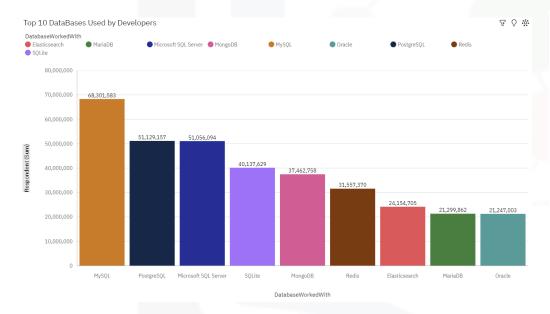
- JavaSCript, HTML/CSS and SQL are currently the top 3
- Python and TypeScript to become more popular
- PHP Edged Out

#### **Implications**

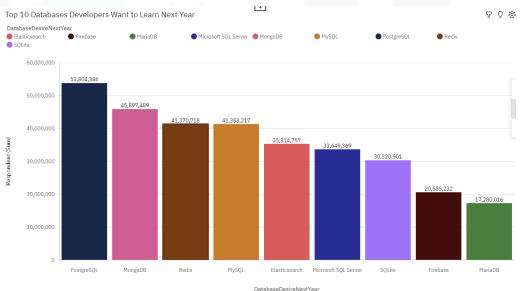
- Web development still in high demand
- With rising Al, python gaining more popularity
- SQL still on top in database and query languages

# DATABASE TRENDS

#### **Current Year**



#### **Next Year**



# DATABASE TRENDS - FINDINGS & **IMPLICATIONS**

### **Findings**

- MYSQL is the most popular
- MongoDB and Redis to gain popularity
- Postgres to gain popularity over MySQL

### **Implications**

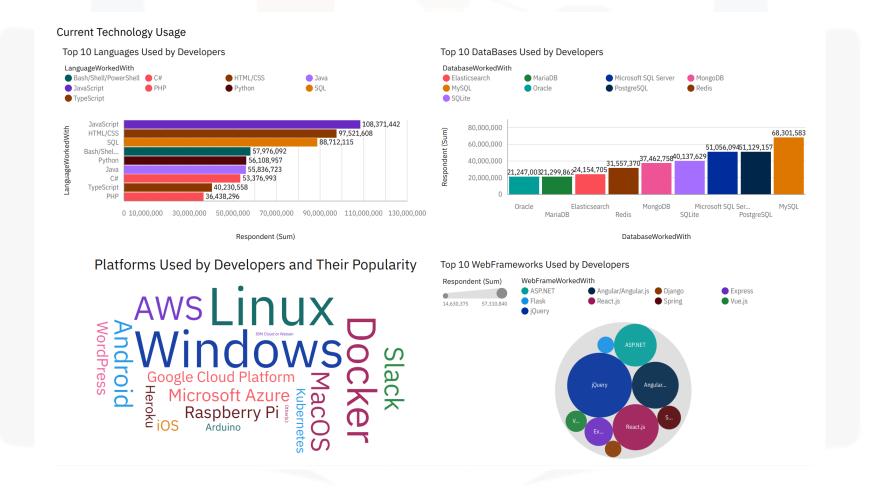
- Open source databases still in demand
- NoSQL databases to make an impact for storing non relational data
- Oracle SQL losing relevance

# **DASHBOARD**

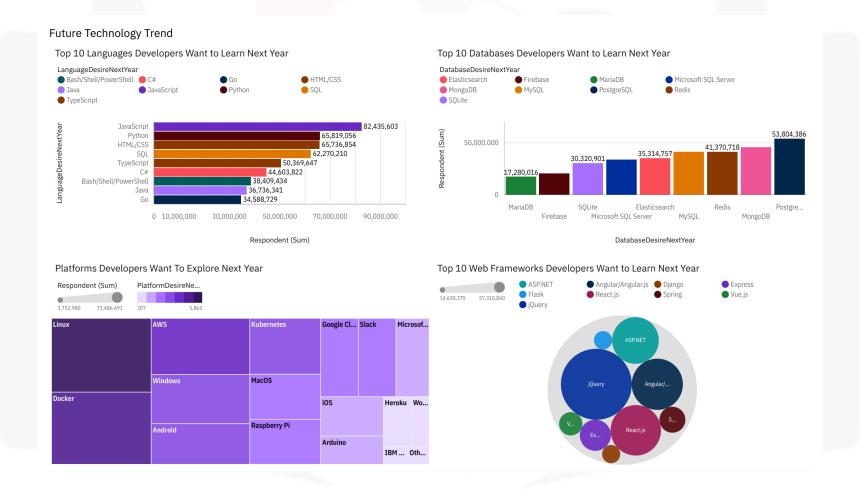


https://github.com/Axlan19/Capstone/blob/main/Capstone.pdf

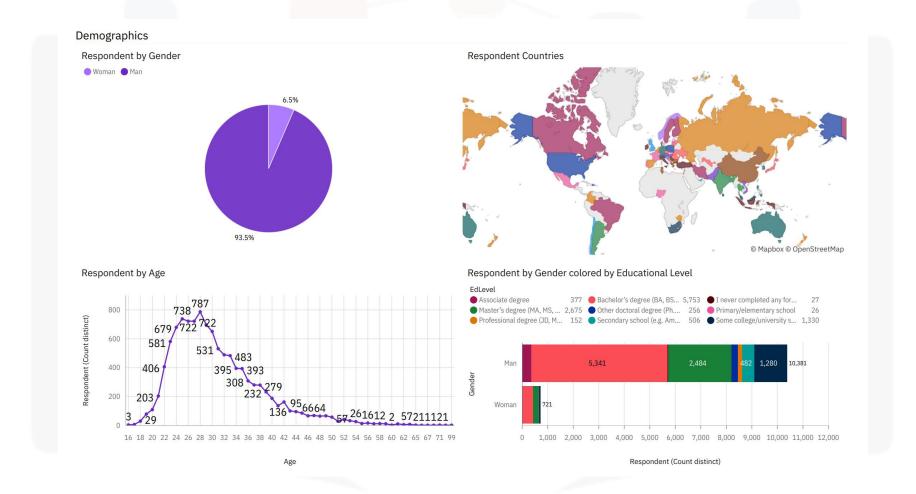
# DASHBOARD TAB 1



# DASHBOARD TAB 2



# DASHBOARD TAB 3



### **DISCUSSION**



- Now and future of technological trends in software development
- Training of staff
- Gender Gap in the industry
- Increasing demand for mobile development

### OVERALL FINDINGS & IMPLICATIONS

### **Findings**

- Most People in the field have a Bachelors' Degree
- The industry is mostly compromised of young individuals
- Web Development in demand

### **Implications**

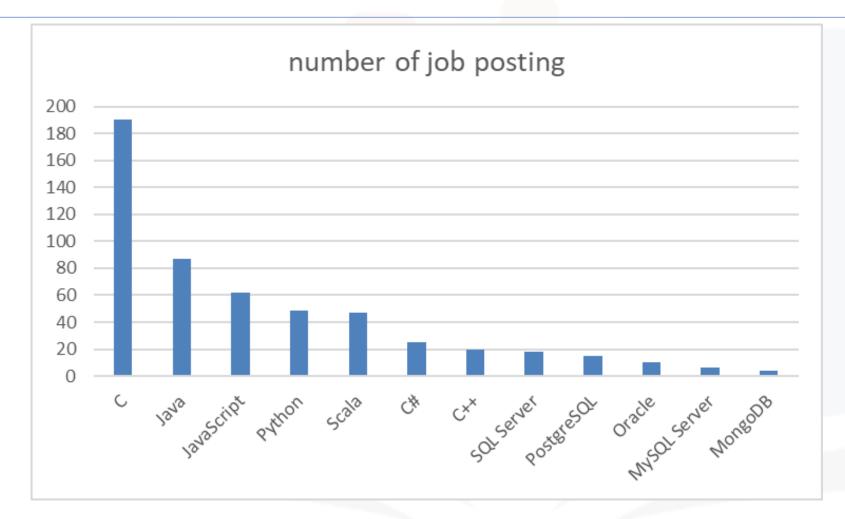
- Web Development is still a very good skill
- Importance to develop skill in NoSQL databases
- Less Developed Countries need more access to tech trainings

# **CONCLUSION**



- Trends change overtime
- Actions to be taken
- Demographic overview

### JOB POSTINGS



### POPULAR LANGUAGES

