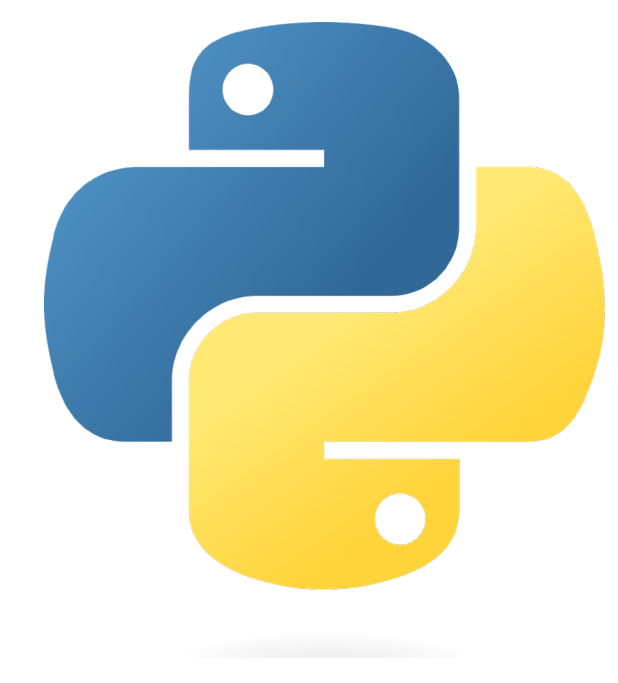
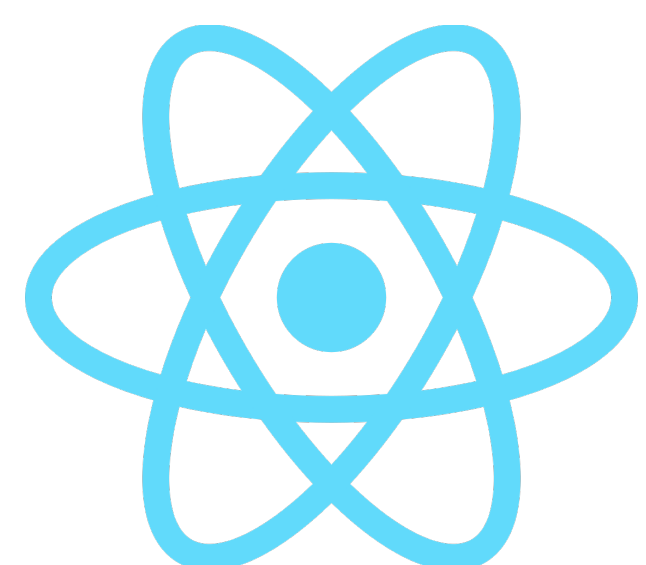
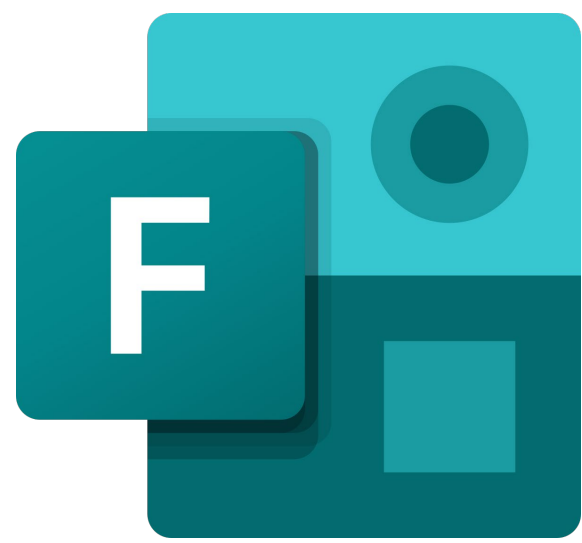




Knight Foundation School of Computing and Information Sciences

Fall 2023 Senior Design Project

FIU Simulated Phishing Campaign

Students: Darian Perez, Carlos Carillo, Vamsi Kanneganti

Mentor: Masoud Sadjadi

Instructor/Faculty: Masoud Sadjadi, Florida International University

PROBLEM

Despite ongoing efforts to combat cyber threats, cybersecurity risks continue to pose significant challenges. The main factor contributing to this persistent issue is the lack of adequate awareness among people in and out of the workforce. This void in understanding and preparedness leaves organizations vulnerable to attacks, emphasizing the need for more effective cyber education before and during an employee's lifecycle.

CURRENT SYSTEM

Conventional cybersecurity training often fails to leave a lasting impression, primarily due to its generic, outdated, and non-interactive nature. These methods, typically comprising videos and lectures, do not actively engage the audience. As a result, employees often lack the practical skills and heightened awareness necessary to identify and respond to real-world cyber threats effectively.

REQUIREMENTS

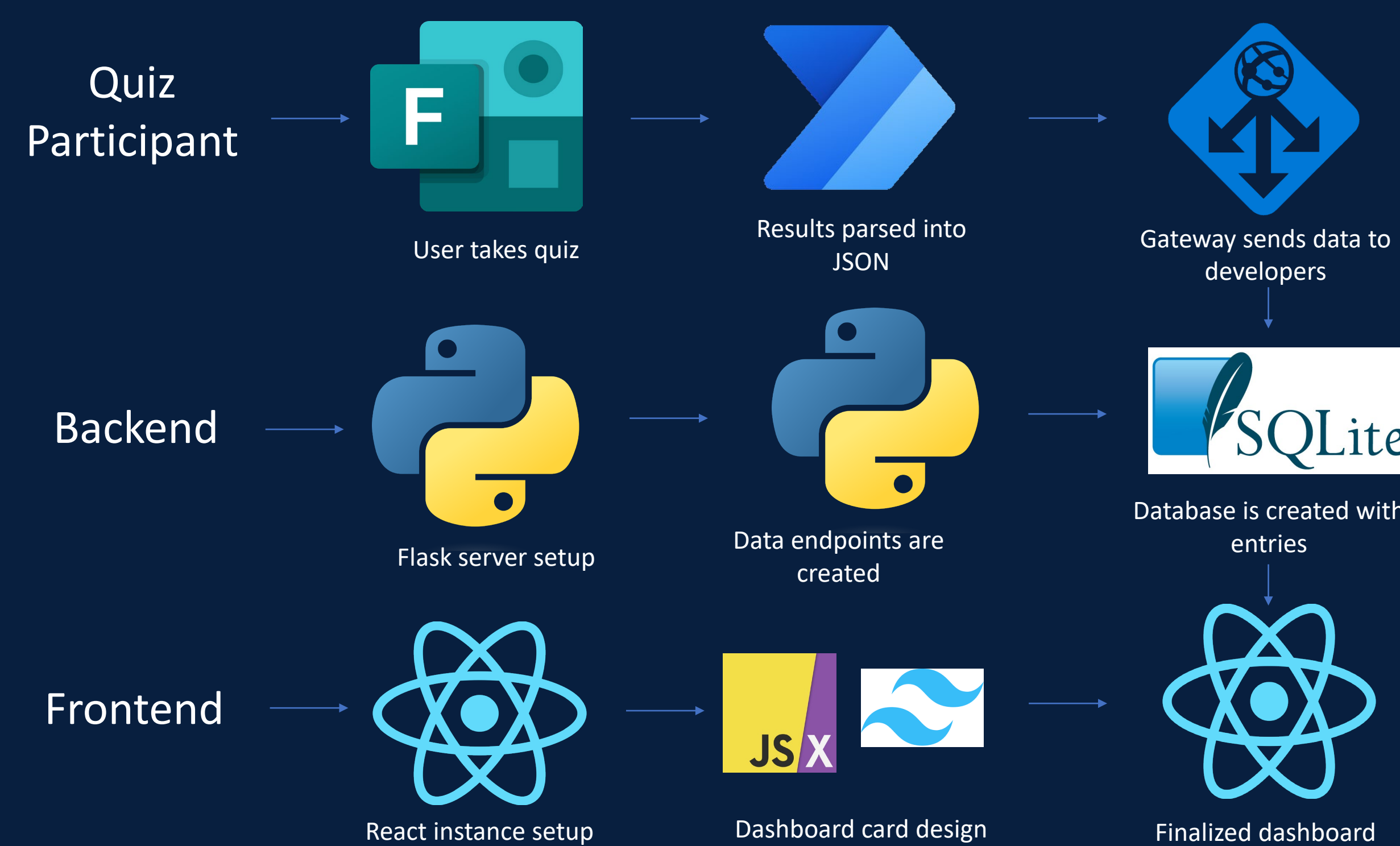
Quiz Requirements

- Include key cybersecurity principles.
- Include real-life scenarios for practical understanding.
- Offer immediate feedback

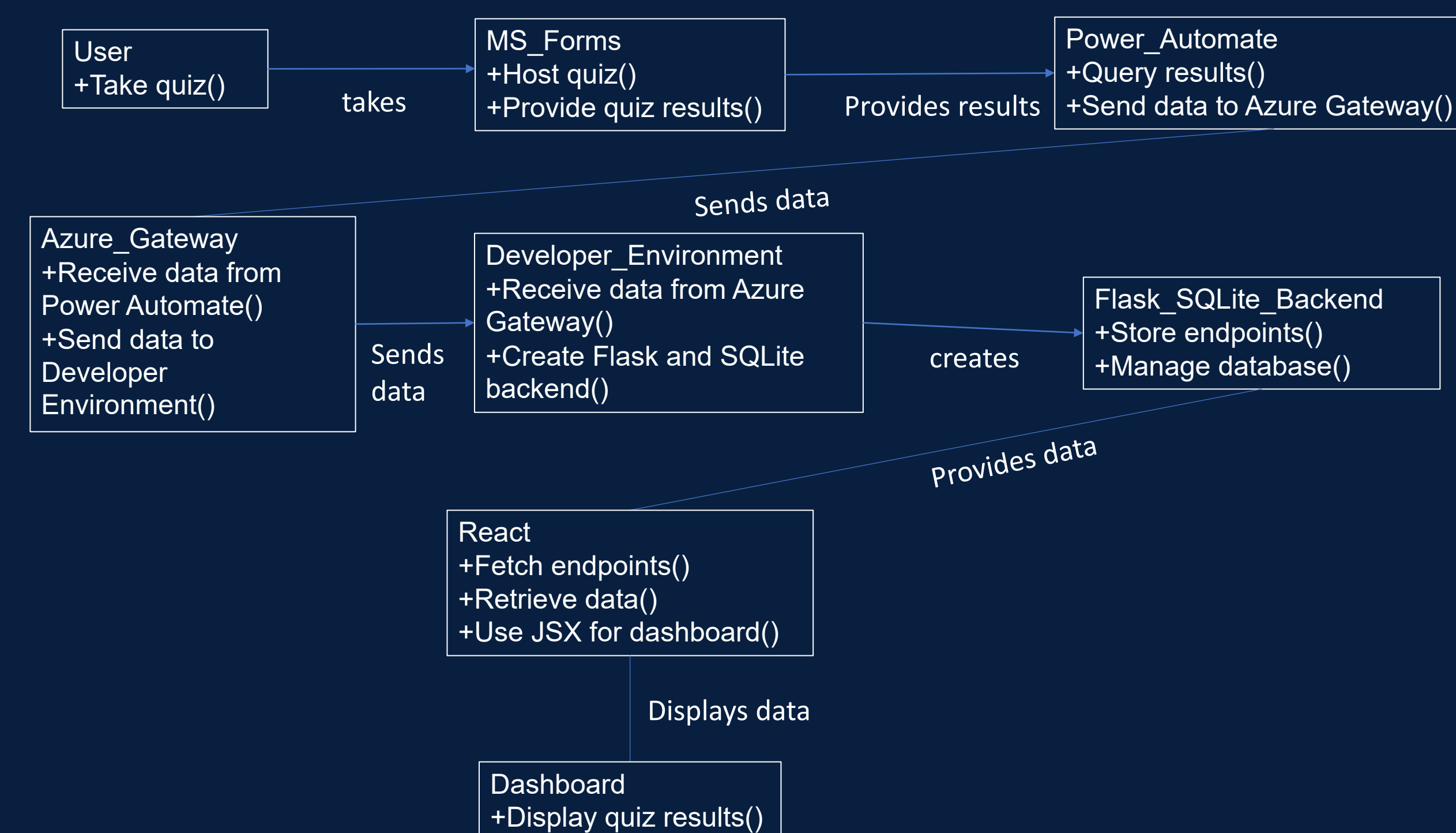
Dashboard Requirements

- Store and analyze results in database
- Visualize data interactively with filtering options.
- Ensure data accuracy.

SYSTEM DESIGN



OBJECT DESIGN



IMPLEMENTATION

- Microsoft Forms:** Employed for designing the interactive cyber awareness quiz.
- SQLite:** Utilized as a database to securely store and manage quiz responses.
- Python:** Used for writing backend logic to process data and generate insights.
- React:** Chosen for developing the user dashboard.
- Flask:** Implemented as a micro web framework to create API endpoints for data transactions between the SQLite database and the React frontend.
- Power Automate:** Automate the workflow from MS Forms submission to the SQLite database entry.

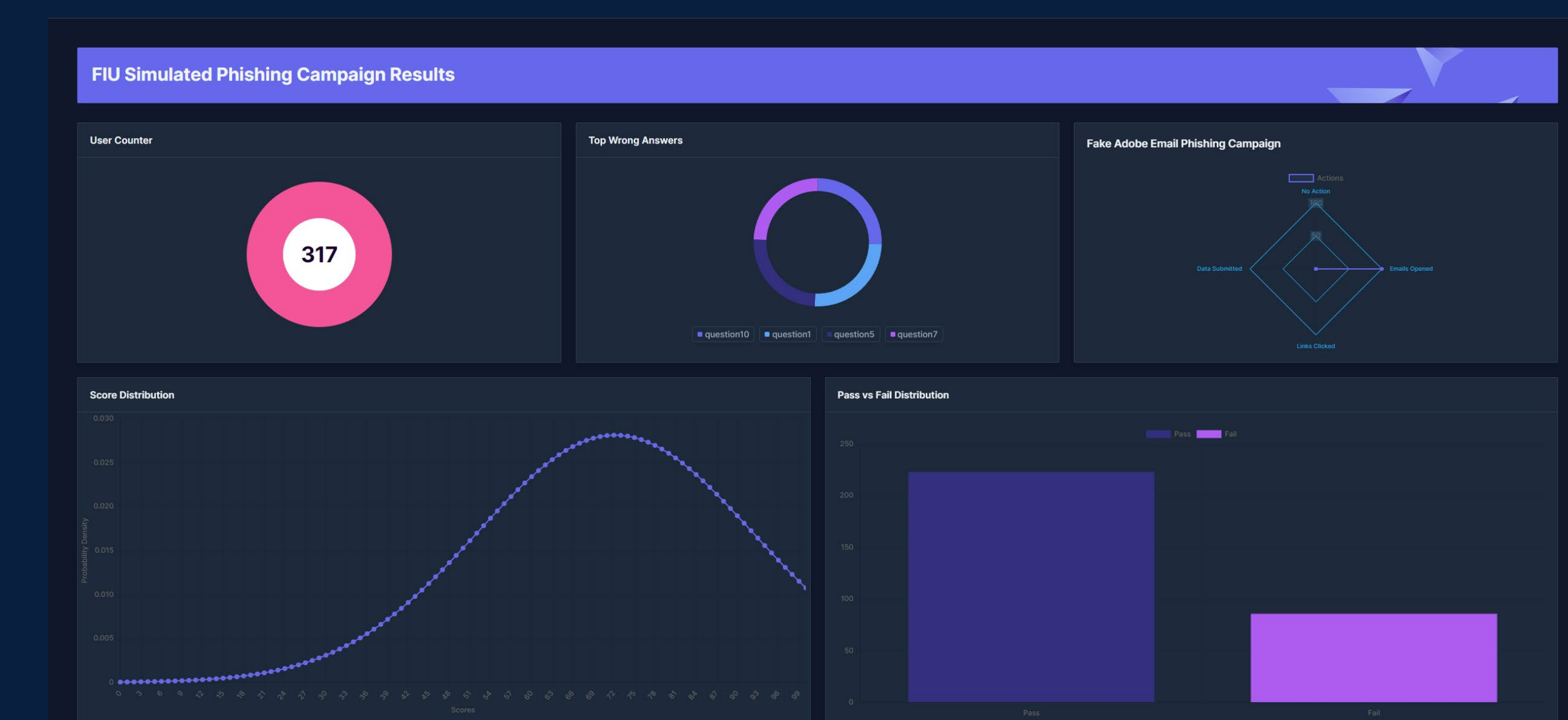
VERIFICATION

Power Automate Testing: Confirmed the accurate transfer of user submissions
CSV and JSON Validation: Reviewed and validated the structure and accuracy of JSON arrays
Flask API Testing: Ensured API endpoints created with Flask correctly fetched and processed data for the frontend.
Integration Checks: Tested SQLite for data management and Flask integration for API responsiveness.

SUMMARY

The implementation of our cyber awareness quiz revealed that approximately 70% of participating students passed, demonstrating a satisfactory level of understanding of cybersecurity principles. However, the remaining 30% did not achieve passing scores, underscoring the ongoing need for enhanced cyber awareness training.

Screenshots



ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Kaseya. We thank Kaseya for their assistance and mentorship that we received throughout the senior design project.