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CUSTOMER FEEDBACK VIEWER IN GRAPHICAL FORMAT IN WEB APPLICATION

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Abstract:

In the dynamic world of the food industry, understanding customer preferences and feedback is paramount. Traditional feedback analysis methods, often reliant on manual interpretation of lengthy written reviews, are inefficient and time-consuming. This paper introduces a novel web application designed to address these challenges. Utilizing graphical representation in the form of a word cloud, the application efficiently highlights key themes in customer feedback, providing businesses with a rapid and clear understanding of consumer sentiments.

Introduction:

The evolution of consumer behavior, particularly in the food industry, has highlighted the importance of effective feedback analysis. As customers increasingly rely on online reviews to make dining decisions, businesses need to adapt by employing innovative methods to analyze and respond to customer feedback. This paper proposes a web application that leverages graphical data representation to transform the way businesses interpret customer reviews.

Problem Statement:

The inception of this project was fueled by the personal experience of sifting through extensive online food reviews without reaching a conclusive understanding of the general sentiment. This highlighted a gap in the market for an efficient tool that could simplify and expedite the process of feedback analysis.

Idea Development:

The initial concept revolved around a feedback viewer using a word cloud to pinpoint the most mentioned keywords in customer reviews. This approach aimed to identify the most prominent themes quickly. Following discussions and further ideation, the project expanded to include a more comprehensive feedback system, incorporating a wider array of review sources and visual representations.

Literature Review:

A review of existing feedback analysis methods in the food industry reveals a heavy reliance on traditional text-based reviews. Studies have shown that while these reviews provide valuable insights, their analysis often requires significant resources and time. The literature suggests a growing need for more efficient, technology-driven solutions.

Design and Implementation:

The initial design phase utilized basic web technologies. As the project evolved, advanced tools such as React for front-end development and Firebase for backend services were integrated. Tailwind CSS was employed to enhance the application's visual appeal and user interface.

System Architecture:

The application's architecture consists of a front-end user interface, a back-end database, and an API for data retrieval. The front-end is designed for ease of navigation, allowing users to search for specific restaurants or food establishments and view aggregated feedback in a graphical format.

Implementation Details:

React was chosen for its efficiency in creating dynamic user interfaces. Tailwind CSS provided the necessary styling tools to create an intuitive and visually appealing design. Firebase offered a scalable solution for database management and API interactions, enabling real-time data processing and storage.

Testing and Evaluation:

The application underwent rigorous testing to ensure functionality and user-friendliness. User feedback was collected to refine the interface and improve the overall experience. The effectiveness of the word cloud in conveying key feedback themes was particularly evaluated.

Conclusion:

The developed web application offers a significant advancement in the analysis of customer feedback within the food industry. By converting extensive text-based reviews into a concise, visual format, the application provides businesses with a rapid and clear understanding of customer sentiments. This tool not only saves time but also offers a more intuitive way for businesses to connect with their customers' needs and preferences.

Future Work:

Future enhancements could include the integration of machine learning algorithms for more nuanced analysis and the expansion of the application to other industries. The potential for global scalability and multilingual support also presents avenues for further development.