Expert Panel Report

Team S.M.E.A



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Executive Summary

My project team conducted an expert panel report to help us see our project from an expert's point of view. This will allow us to consider possible solutions from an expert's input. To begin the report, each member interviewed a panelist who focused on a specific area in which they were knowledgeable. In the first section below, we listed the panelists' names, their specified areas of expertise, and the members who interviewed them. As you can see, we made sure our experts ranged in their area of expertise so we have more advice concerning our project to make it better overall. Moving forward to the next section, we recorded our findings when interviewing our expert panelists. In this section, my team and I wrote down any prevailing themes or blind spots we have overlooked. To summarize this section, my team and I overlooked many small things that are hard to spot but can have a serious impact on the overall product in the future. The section goes more in-depth with each member's output on the matter. The following section covers the proposed high-level move designs we brainstormed as a group after going over our experiences with our expert panelists. In the table, we first listed the name of our proposed high-level move. We followed

the name up with a detailed description of what this high-level move will achieve for us. We then finished with a justification for why this move would be our solution to the problem pointed out by our experts. Finally, the last section covers our interview data. This section goes in depth over questions asked to each interviewer as well as important insights we deemed worthy to document. This is important to support our findings and the proposed design move motivations. This document has helped my team think of solutions that we wouldn't have without the help of our expert panelists. For this reason, we found this report to be useful.

Expert Panelists

Panelist Name (May be Changed for Privacy)	Specific Area of Expertise	Responsible Team Member
Joshua Perry	Manager miscellaneous pages optimization	Jose Ortiz
Martin Rob	Payment security and compliance	Nathan Tran
Samantha Hayes	Data Privacy	Kyle Palermo
Chris Robinson	User experience designer	Sandeep Mishra
Isabel Booker	Accessibility Expert	Alex Beamer
Leonardo Holt	Frontend Web Designer	Marvin Fung

Expert Panel Findings

I was surprised to find that our manager page lacked small adjustments that were not yet accounted for. To begin, our pages still have overlapping components that prevent us from having an efficient layout. For example, if we resize the web page to a smaller size, the navigation bar becomes unusable. More importantly, however, some of the backend functionality we thought was working is failing in some cases.

One common theme was our use of space, which can immediately make our interfaces look better. I was surprised we didn't already account for that, but it is understandable that we mostly focused on functionality and not how the UI looks. There are many other suggestions we could use from the perspective of a UX designer, but the easiest would be to accommodate spaces in our interfaces.



The color scheme is a bit unusual to the expert with the pink and bright orange colors. It could be thought out more to look much better. Similarly, the structure of the website to be more consistent between the pages, which can make navigation also easier.

One important point that was brought up in the discussion of security and compliance for the POS system was that the website still lacked many security features that would be very important to implement to protect user security. This includes more secure, reliable authentication, restricting access to some pages based on the user's role in the Rev's system, and adding features for payment and order security through a trusted API.

Proposed Design Moves

High-level Design Move	Detailed Description	Justification
Verification and Validation tester	As a manager, I need to make sure that the functions that are being used update the data in our database correctly. To address this we need to install a verification and validation tester Acceptance Criteria: - Use a standard testing framework for the language used -Automated tests for front-end and back-end code at several levels -Make sure to get at least 80% coverage	With this new high-level design move, we will have an AI that will test our code and reenact it as if it were a user. This will go through our code and make sure that each functionality is updating accordingly with each interface and that it is also updating in the database.
Payment security and compliance	As an administrator, I need to make sure that the data of our customers and the data of the restaurant are handled in an efficient and secure way Acceptance Criteria: - Implement a way to	With this high-level design move, we will have features for payment security and security in the clearance level of different users on the system which will greatly improve the level of security and compliance across our system

	account for security when payment is passed for an order - Implement a way to restrict access to certain web pages based on the type of user	
User Design Planning	As a user, I want to be able to easily navigate and enjoy the look of the website so that I can use the website with minimal issues accomplishing various tasks like ordering. Acceptance Criteria: Decide on changes to the color scheme Decide on changes to the overall navigation Decide on methods to reduce the space around different pages Ask others regarding the choices if they appear alright to them	From the expert panel, there were several issues with the design of the look of our website. As suggested, with this high-level design move, we will decide on future front-end designs that will be appealing and easy to interact with. This will make it easier for the user to navigate and read things on the page.
Accessibility Testing/Verification	As a user with complex interaction requirements, I want to be able to use the full functionality of the website. Acceptance Criteria: - Allow tab navigation to skip navigation and non-content menus - Allow translation to other languages - Allow zoom - Verify conformance to web accessibility standards using standard tools	There are numerous issues with the current accessibility of our POS system. This could prevent a significant portion of users from getting the full functionality of the website and thus could hinder their ability to patronize Rev's American Grill. Therefore the system must support all users' needs to avoid loss of profits.
Enhanced	As a user who is conscious of my	Implementing Google OAuth will

Authentication and Authorization

privacy, I need the website to have a reliable and secure authentication system so that I can ensure that my personal data is protected.

Acceptance Criteria:

- Integrate Google OAuth for authentication logins.
- Allow users to log in using Google accounts with appropriate redirection.
- Control users' access to pages based on the user's role.

significantly enhance the security of user authentication by using a widely trusted platform. This also simplifies the login process for users, who can use their familiar Google account rather than creating a new one, improving trust in the system. Robust access control is essential for ensuring the privacy of restaurant and user data, and it ensures that unauthorized changes to the data or other unauthorized actions do not occur.



Appendix 1: Expert Panel Interview Data

Panelist Name	Interview Data (Questions and Responses, Observations)	Important Insights and Previously Unconsidered Perspectives
Joshua Perry	 What is something that can be changed to improve the user experience in our manager pages? Do you find the functions implemented easy to use? Did we miss any function that could improve the manager experience? Is the blank space used appropriately for each page? 	The pages could use the blank space better as some pages have too much blankness around the main feature (for example inventory page) Make sure that the components of our layout are responsive to the sizing of the page Make sure that functions that are being used successfully update the backend function
Chris Robinson	 How do you assess the menu Board design visually and in terms of presentation of information? Looking at the manager interface designed for managing inventory and generating reports, what improvements would you suggest to enhance usability What can you say about the current customer interface of our POS system? What are your thoughts on its accessibility and ease of order creation? 	The menu boards look fine so far, just add the actual information and take into account real-time updates, Additionally, there is a lot of white space, so you should accommodate for it by enlarging the contents The overall presentation of data in the manager interface is good, and there is good use of space for almost everything except for the manager inventory page, which could potentially be part of another page. Make sure to test data that doesn't work and output invalid data. The customer page looks the best in the POS system with its usage of color, text size, and navigation ease. A good suggestion was to see how it interacts with the kitchen and orders in real-time as that is the most important part of its functionality.
Martin Rob	 What features do you have implemented to account for differing levels of access? Do certain users have 	Overall, the website is lacking in many areas in terms of security and access features as it seems that a lot of them are not yet implemented

	different levels of access to specific parts of the POS website? - Do you have ways to protect customer data in things such as payment security?	You should make sure to have a way to have payment security and confirmation methods possibly through methods like fulfilling orders or some API Would probably be a good idea to have restricted access based on login
Leonardo	Initial impressions of the website weren't too great with dislike of the color scheme with the pink and bright orange colors. He also noticed instantly the website wasn't in any way responsive. After navigating through the pages, he stated that the design wasn't consistent throughout the pages. Interview Questions: Is there anything you think if changed would be a massive improvement on the website? - I don't think there's a single change but changes with the color scheme and some planning regarding a global structure can bring this to a much better product - The use of the space is really good for having a clean product What are some of the main issues of this website that could prevent it from working well in the real world? - The navigation is not intuitive and inconsistent between the pages. Also, there's no authentication and no method of actually paying. - The color scheme of the website feels like a prototype instead of being thought out and close to ready for production	Planning the general structure of our website could help with greater consistency between the pages. The color scheme is a bit odd with the pink and bright orange. Reduce the amount of excessive space on the website, which is easier to view and use. The customer page works fairly well though can be improved upon.

	What do you like about the product that we should be sure to keep? The redirecting of the user to the menu page works well The ability to view the order while adding items to the cart is nice The manager page has nice functionality with the tables and inventory	
Isabel Booker	What could slow down a user trying to interact with the website? - Tab goes over the navigation bar, requiring excess clicks before they can use the interface - Button focus is hard to see, on some buttons outlines only appear on two sides What potential issues are there with the design or layout? - Some content cannot be seen but will be read by screen readers	We should add a "skip navigation" button that is common on larger websites. We should make it more obvious which button is highlighted. We should make sure that content navigation is the same for screen readers and other tools as it is for humans.
Samantha Hayes	 What are your initial thoughts on our approach to data privacy? How well do you think our current system adheres to best practices for data protection, especially considering our plan to possibly integrate Google OAuth? Can you suggest any improvements or alternatives to how we currently encrypt and verify user credentials? What risks or potential vulnerabilities do you see in our current setup from a data privacy perspective? 	Moving toward more advanced encryption methods and integrating more secure authentication such as OAuth will significantly improve data protection. Storing sensitive information such as role, salary, and hours should be handled with more caution, potentially using different encryption or access controls. A more robust hashing algorithm such as bcrypt or Argon2 is recommended for password storage. Two-factor authentication could provide additional security. Activity logs could provide additional security while being useful to management as well.

