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FOOD HUNTER: HYPERLOCAL FOODIES' EXPERIENCE

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ABSTRACT

Food Hunter: Hyperlocal Foodies' Experience addresses the problem of decision fatigue and untrustworthy restaurant reviews by offering personalised, community-based dining recommendations. The platform targets users within hyperlocal communities, providing suggestions tailored to individual preferences and supported by trusted feedback from friends and locals. The system was developed using a structured methodology, including planning, user research, agile development, and iterative testing. Data was collected through on-site observations and interviews in a community housing area to ensure the platform aligns with user needs. Findings reveal that personalised recommendations and community-driven reviews enhance user trust and satisfaction, while also promoting the discovery of local food culture. The platform fosters stronger community engagement and supports local food businesses by celebrating nearby culinary experiences.

Keywords: Personalised restaurant recommendations, Hyperlocal, Community, Dining experiences, Food cultures.

INTRODUCTION

Food is more than fuel — it shapes our health, mindset, and social lives. As Matran (2018) highlights, eating is a complex experience that impacts us physically, mentally, and socially. Vidgen and Gallegos (2014) define *food literacy* as the practical skills and knowledge needed for healthy eating, covering everything from planning meals to making informed food choices.

Choosing where to dine can be a daunting task, especially when aiming for a delightful and memorable experience. This challenge becomes even more pressing when visiting a new restaurant, where the quality of food is often uncertain. To navigate this uncertainty, many diners turn to online platforms such as Google, Instagram, and TikTok. These digital tools allow users to explore menus, read reviews, and gauge a restaurant’s popularity. By accessing real-time feedback, users can assess food quality, ambience, and service through the shared experiences of fellow diners. In this way, restaurant review apps offer a convenient and effective solution, helping users make informed dining decisions (Cheong, 2023).

In today’s evolving dining landscape, the concept of *hyperlocal* adds a valuable dimension to culinary discovery. Defined as a focus on a tiny geographical area—such as a street, neighbourhood, or city—hyperlocal dining emphasises the unique flavours, dishes, and traditions rooted in specific micro-communities (Talking HealthTech, 2022). It is not just about finding nearby restaurants; it is about immersing oneself in the authentic food culture of a local area. Food Hunter, a web-based platform presented in this paper, embraces this concept by helping users uncover hidden culinary gems within their immediate surroundings. By doing so, it supports local businesses, promotes cultural appreciation, and enhances the dining experience through deeper, more personal food journeys.

LITERATURE REVIEW

The landscape of food discovery and recommendation systems has evolved significantly with the advent of technology, yet challenges persist in providing users with reliable, personalised, and hyperlocal dining experiences. Table 1 highlights the literature review on existing platforms and their limitations, highlighting the need for a more tailored approach to food recommendations.

Table 1

Literature Review on Existing Food Recommendation Platforms

Existing Platforms	Key Features	Issues
Eatigo	We offer discounts and facilitate restaurant reservations across Asia. With over 10 million users, Eatigo demonstrates the effectiveness of combining dining reservations with discounts (Eatigo International, n.d.).	It primarily focuses on broad locations rather than hyperlocal communities, limiting its capacity to provide personalised recommendations at a micro-community level.
LocalEats	Curates a list of locally owned, non-chain restaurants in the United States, emphasising culinary excellence and providing	While it promotes local dining, it lacks a personalised recommendation system that accounts for individual user preferences and hyperlocal nuances.

	expert reviews and recommendations (LocalEats, n.d.).	
TheFork	With a network of over 60,000 restaurants, TheFork offers extensive coverage and real-time reservations across Europe and Australia (TheFork, n.d.).	Despite its wide reach, TheFork's broad focus does not address the need for hyperlocal specificity, resulting in a generic user experience.
Eatwith	This service connects travellers with hosts for unique dining experiences, fostering social connections through shared meals (Eatwith, n.d.).	This platform excels in creating memorable dining experiences but is primarily geared towards travellers rather than residents seeking everyday dining options in their local community.
Traveling Spoon	Travellers connect with local hosts for home-cooked meals and cooking classes, promoting cultural immersion through food (Travelling Spoon, n.d.).	While it provides an authentic culinary experience, it is designed for tourists rather than catering to the everyday dining needs of residents.

These platforms collectively highlight the demand for localised dining experiences and authentic user-generated content. However, they fall short in addressing hyperlocal personalisation and credible review systems. Studies have shown that decision paralysis often arises from an overload of information and choices (Cr8_Admin, 2024). Additionally, the credibility of user reviews is compromised by biased and potentially fake content, making it difficult for users to make informed decisions (Simonson, 2016).

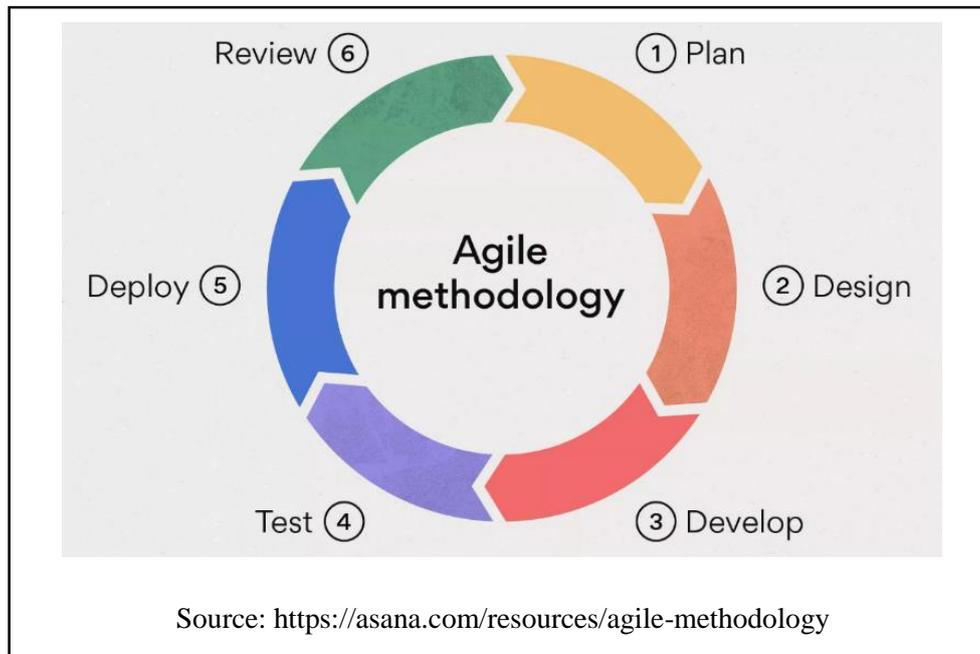
Food Hunter aims to bridge these gaps by offering hyperlocal, personalised restaurant recommendations, leveraging user preferences and behaviours to deliver relevant suggestions. Emphasising genuine reviews from friends and community members ensures credibility and trust, addressing the limitations of existing solutions. By fostering deeper connections within local communities, Food Hunter enhances the culinary exploration experience, supporting local businesses and enriching the hyperlocal food culture.

METHODOLOGY

The "Food Hunter" project will follow a structured approach, progressing through distinct steps to ensure a systematic and practical development process. The Agile Methodology chosen facilitates a comprehensive examination of the subject matter, offering invaluable insights into the multifaceted challenges and opportunities inherent in developing and maintaining such a repository (Swaraj, 2019).

Figure 1

Agile Methodology



Step 1: Project Planning

The project will commence with a comprehensive planning phase that includes defining the project scope, setting clear objectives, and developing a detailed project plan. To ensure the system development process remained user-centred, data collection was carried out within a selected community housing area. A mixed-methods approach was employed, combining on-site observations with semi-structured interviews. The observations focused on how residents made dining choices, their reliance on existing review platforms, and the challenges they encountered in assessing the credibility of online reviews. Semi-structured interviews were conducted with both residents and local food business operators to gather insights into user expectations, trust issues, and preferred system features. The data collected provided qualitative requirements, including desired system functionalities (e.g., hyperlocal filtering, credibility of reviews, personalisation) and user experience preferences (e.g., intuitive navigation, visual appeal). These findings were translated into functional and non-functional requirements, forming the basis of the Food Hunter platform's design and development.

Step 2: Design

Following the planning and data collection phase, a proposed type of analysis and design diagram will be created using UML diagrams. Prototypes, including both low-fidelity and high-fidelity versions, may be developed at this stage to illustrate the website's setup and design based on the gathered requirements. These prototypes serve to demonstrate the content, navigation flow, and overall appearance of the platform. Subsequently, the project will transition into the design stage, which involves the creation of wireframes and User Interface (UI) designs for the web-based platform. Key decisions regarding the platform's aesthetics, look and feel, and user interactions will be made during this phase.

Step 3: Development

With the design in place, the development phase will commence. The project will work on building the front-end and back-end components of the web platform. Agile development practices will be employed to allow for iterative progress, continuous collaboration, and flexibility in responding to changing requirements.

Step 4: Testing

Following the development stage, a dedicated testing phase will ensue, characterised by rigorous examination to identify and rectify any bugs, issues, or inconsistencies in the system. This phase will actively collect feedback from real users, combining User Acceptance Testing (UAT) with fieldwork to ensure a comprehensive gathering of valuable insights.

Step 5: Deployment

After successful testing and validation, the project will proceed to the deployment stage. The web platform will be launched, and initial user onboarding strategies will be implemented. The deployment process will be closely monitored to address any unforeseen issues promptly.

Step 6: Review

Following deployment, the project will enter a review phase. User engagement metrics, feedback, and performance data will be analysed. This information will be used to conduct a comprehensive review of the platform's effectiveness and identify areas for improvement. Based on the findings, adjustments and enhancements will be planned for future updates.

DESIGN AND DEVELOPMENT OF FOOD HUNTER

The functional and non-functional requirements outlined in Tables 2 and 3 serve as the foundation for the Food Hunter's design and development. The functional requirements in Table 2 specify the core features and behaviours the platform must support, such as user authentication, location-based restaurant discovery, and review submission. These directly reflect the primary objectives of the system in addressing user needs and expectations. Key functional requirements are summarised as follows:

Search Restaurants: Users can discover hyperlocal restaurants by searching based on location and filtering by cuisine, ratings, and more. The system will also display neighbourhood-based comments to enhance local insights.

Rate and Review: Users can rate and review restaurants, edit or delete their feedback, and engage with other users' reviews through comments and likes, contributing to a community-driven experience.

Recommend Best Meals: The system highlights top-rated meals and cafes, ranking them from most to least preferred based on user ratings.

Admin Review Management: Admins can manage user reviews by viewing, editing, or deleting them to ensure content quality and platform integrity.

Table 2

Functional Requirement List

No.	Requirement ID	Requirement Description	Priority
	FH_01	Manage Profile	
1.	FH_01_01	Users can sign up for an account.	M
2.	FH_01_02	Users can log in to their accounts.	M
3.	FH_01_03	Users can update their profile information.	D
	FH_02	Search Restaurant	
4.	FH_02_01	Users can search for restaurants based on location.	M
5.	FH_02_02	Users can filter restaurants by cuisine, ratings, etc.	M
6.	FH_02_03	The system shall display a list of hyperlocal restaurants.	M
7.	FH_02_04	The system will show the neighbourhood comment.	M
	FH_03	Rate and review	
7.	FH_03_01	Users can leave reviews for restaurants.	M
8.	FH_03_02	Users can rate restaurants based on their experience.	M
9.	FH_03_02	Users can edit or delete their reviews.	O
10.	FH_03_04	Users can interact with each other's reviews (comments, likes).	D
11.	FH_03_05	Neighbourhood Insights	M
	FH_04	Recommend the best Meals.	
12.	FH_04_01	The system will display the cafe's best meals based on user ratings.	M
13.	FH_04_02	The system will list the meals from most preferred to least preferred.	M
14.	FH_04_03	The system will display recommended cafes from the highest to the lowest rating.	D
	FH_05	Manage Review by Admin	
15.	FH_05_01	View Reviews	M
16.	FH_05_02	Edit Reviews	M
17.	FH_05_03	Delete Reviews	M
	FH_06	Manage Restaurant by Admin	
19.	FH_06_01	View Restaurants	M
20.	FH_06_02	Edit Restaurants.	M
21.	FH_06_03	Delete Restaurants	M
	FH_07	Add Friends and Post Blog	
22.	FH_07_01	Search Friends.	M
23.	FH_07_02	Add Friends.	M
24.	FH_07_03	View Friends Profile.	M
25.	FH_07_04	Comment on Friends.	M
26.	FH_07_05	Posting Blog.	M

Meanwhile, the non-functional requirements in Table 3 focus on the system's performance, usability, scalability, and reliability. These requirements ensure that the platform not only functions correctly but also delivers a smooth, efficient, and secure user experience. Together, these requirements guide the technical planning and architectural decisions, ensuring the system aligns with both user demands and industry best practices.

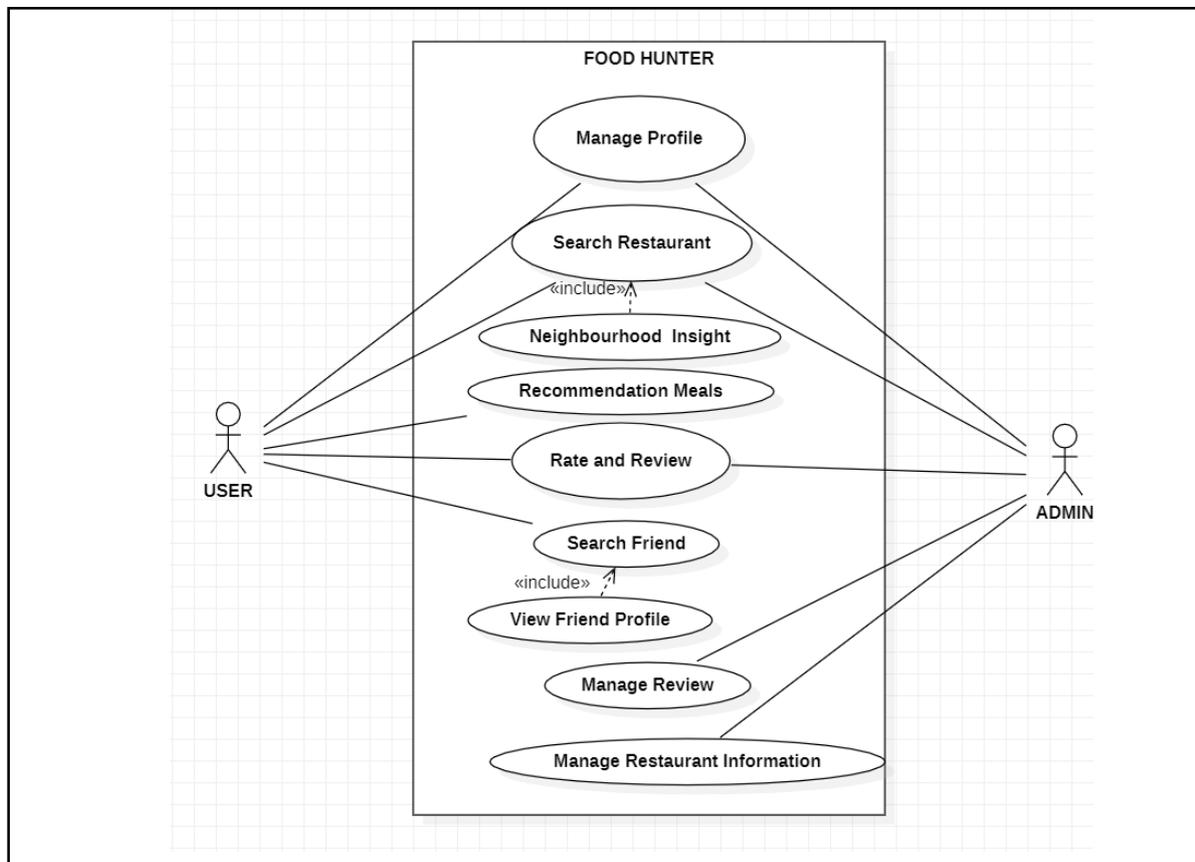
Table 3

Non-functional Requirement List

No.	Requirement ID	Requirement Description	Priority
	FH_07	Performance	
22.	FH_07_01	The time taken for each page to load is within a few seconds	D
23.	FH_07_02	The platform should have an intuitive and user-friendly interface.	M
24.	FH_07_03	The platform should accurately record and display reviews and ratings.	M
25.	FH_07_04	The platform should be compatible with commonly used web browsers (Chrome, Firefox, Safari).	M
	FH_08	Security	
26.	FH_08_01	Password requirements. Example must use lower and upper case, symbols and numbers.	M
27.	FH_08_02	User data should be securely stored and transmitted.	M

Figure 2

Use Case Diagram



During the development of Food Hunter: Hyperlocal Foodies' Experience, the project went through multiple iterations to refine the prototype until it met user needs. The UML design approach was applied with a Use Case Diagram, as illustrated in Figure 2. Each iteration focused on core functionalities while incorporating feedback to enhance features, in accordance with Agile methodology. Internal testing ensured the prototype functioned as intended. Moving to the construction phase, the final version was built

based on the improved prototype. Emphasis was placed on creating user-friendly interfaces with appealing visuals and audio elements, as well as perfecting other system details to enhance user experience.

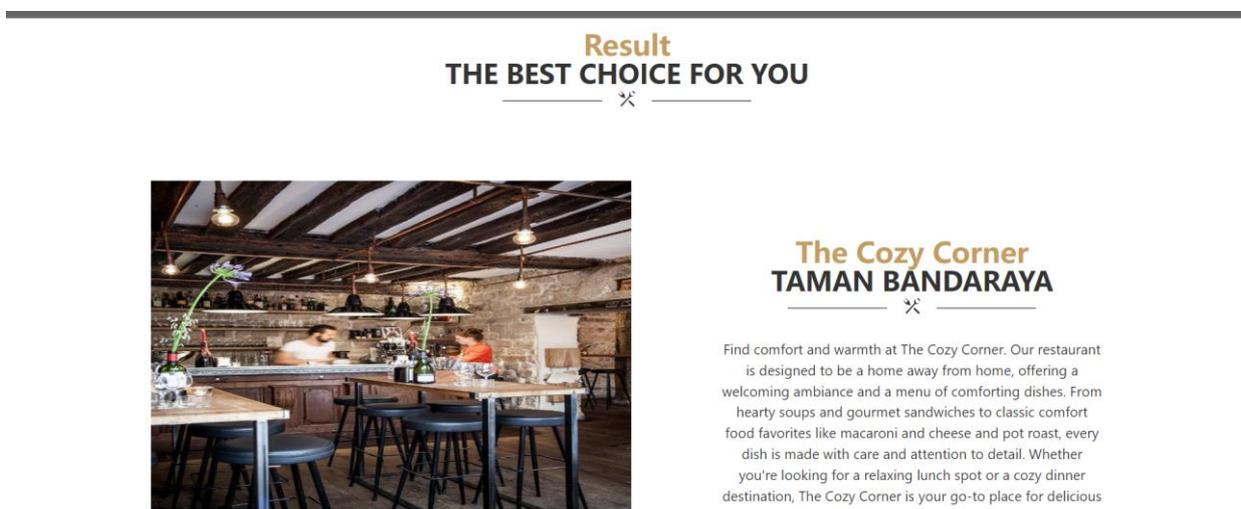
The deployment phase began with setting up the system for user access and interaction, including establishing an online presence. Necessary protocols and procedures were followed to ensure compliance with relevant standards and regulations. After a thorough evaluation, the system was made available to the public, ready for use and engagement. As an example, Figure 3 presents a sample of the developed prototype's screen.

Figure 3

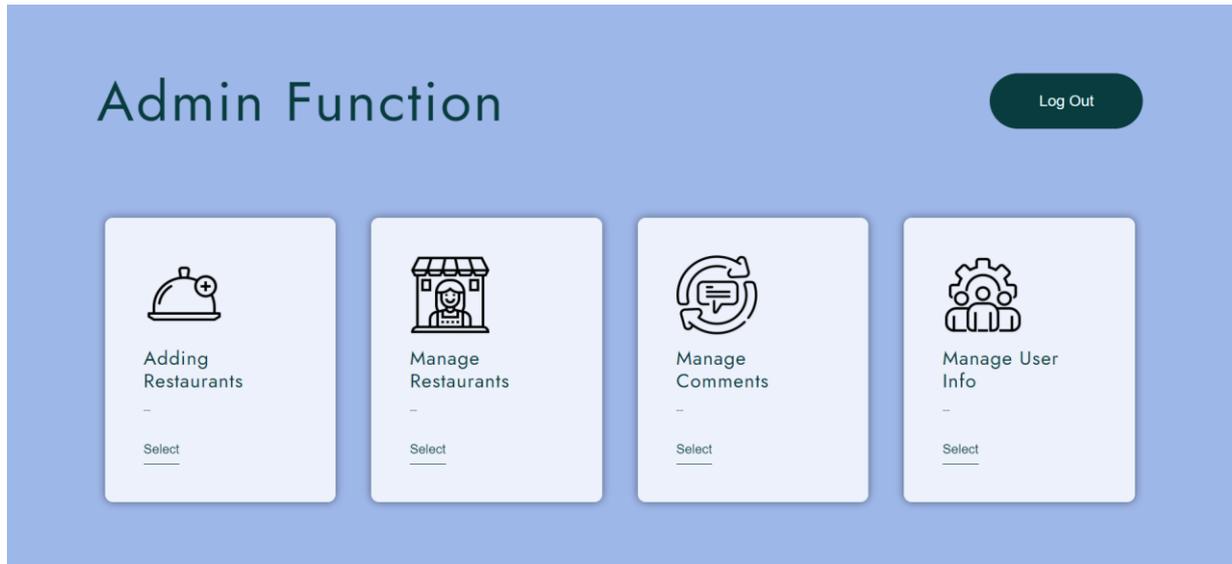
Example of the Prototype Interfaces



a) Main Page



b) Result Page



c) Admin Page

ANALYSIS AND RESULTS

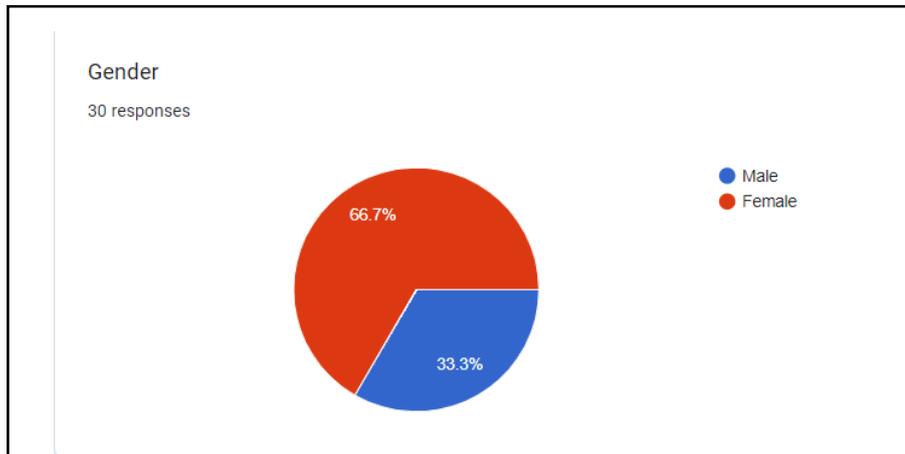
The evaluation of the FoodHunter application was conducted using a comprehensive field-testing approach. This process involved usability tests with 30 participants selected through simple random sampling from the same local community. The evaluation aimed to gather user feedback on the overall development, functionality, and usability of the application. The objective was to assess how effectively users could navigate and complete tasks, identify strengths and weaknesses, and collect suggestions for improvements.

System Implementation and Evaluation

The Food Hunter system was implemented through iterative prototyping, following Agile development practices. Low and high-fidelity prototypes were first created to validate system design and user interface choices. Successive iterations incorporated user feedback, ensuring alignment with the requirements gathered during the planning phase. The final system was deployed within the same community housing area for real-world testing. Evaluation of the system's effectiveness involved usability testing and user acceptance testing (UAT). A total of 30 participants, selected through simple random sampling, engaged with the application to perform everyday dining-related tasks such as searching for restaurants, filtering options, and submitting reviews. Data was collected through post-task surveys and Likert-scale questionnaires, which measured ease of use, trust in reviews, perceived usefulness, and overall satisfaction. The evaluation results demonstrated high levels of user satisfaction (over 90% agreement on usability, trust, and usefulness), as shown in Figure 4 and onwards in this section. Participants reported that personalised recommendations and community-driven reviews significantly improved their confidence in dining decisions while fostering engagement with local food businesses.

Figure 4

Pie Chart of Gender



Based on the findings presented in Figure 4, 66.7% of the respondents are female, while 33.3% are male. It shows that most of the respondents are female since they were randomly selected during the evaluation process.

Figure 5

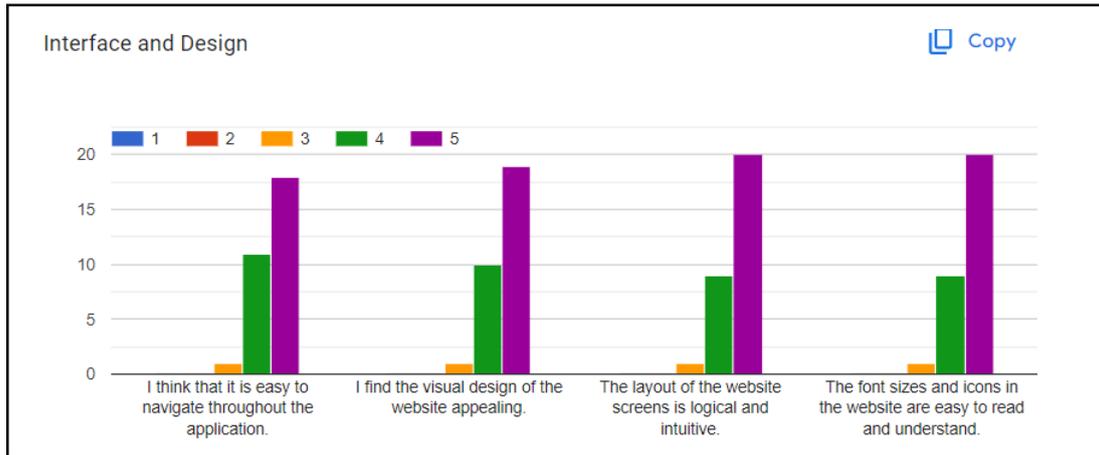
Pie Chart of Trust Review



Based on the findings presented in Figure 5, regarding reviews' trust in any website, 22 people mentioned that they do not trust the reviews on the website, while the remaining eight people trust them. This shows that most people do not trust reviews on websites due to concerns over authenticity, the prevalence of fake reviews, and potential biases from reviewers who may have ulterior motives or are incentivised to leave positive feedback. Experiences with misleading or exaggerated reviews can also contribute to this scepticism (Beirutista, 2017). On the other hand, those who do trust website reviews often do so because they have found specific platforms to provide honest and reliable feedback consistently, they appreciate the detailed insights from fellow customers, or they believe that a large volume of reviews helps to balance out any biases and present a more accurate overall picture.

Figure 6

Interface and Design Food Hunter

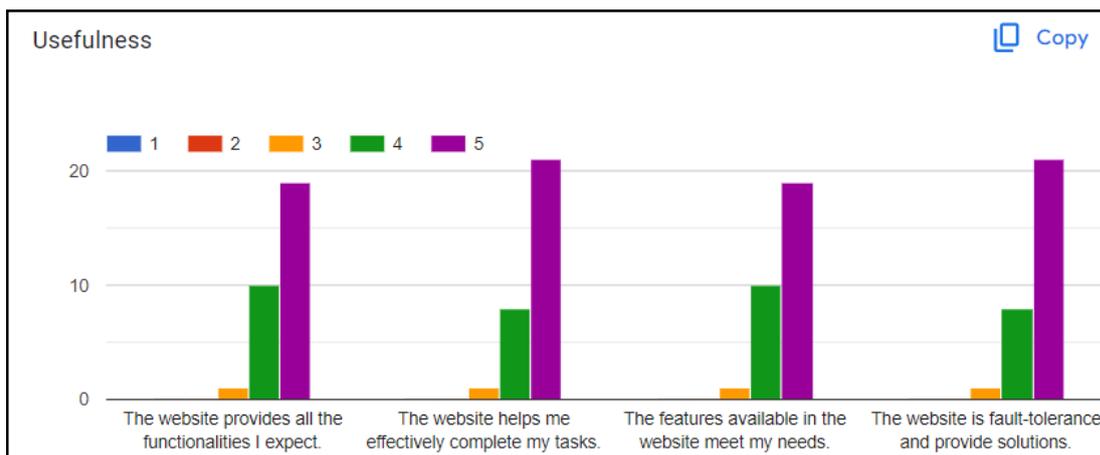


The bar chart shown in Figure 6 regarding the Interface and Design of the restaurant review system indicates a high level of user satisfaction. Most respondents find the application easy to navigate, with 60% strongly agreeing and 36.7% agreeing that it is user-friendly. This positive feedback suggests that the user interface is well-designed, allowing users to move through the application with ease. Additionally, the visual design of the website is highly appreciated, with 63.3% strongly agreeing and 33.3% agreeing that it is appealing. The lack of negative feedback in this area highlights the success of the aesthetic choices made in the design. Users also find the layout logical and intuitive, as evidenced by 66.7% strongly agreeing and 30% agreeing. This indicates that the website's organisation is user-friendly, allowing users to find information quickly and efficiently.

Furthermore, the readability of font sizes and icons is well-received, with 66.7% strongly agreeing and 30% agreeing that they are easy to read and understand. This suggests that the design choices in typography and iconography are effective in ensuring accessibility and clarity. Overall, the positive responses across all aspects of the interface and design demonstrate that the system meets user needs and expectations, making it a reliable and user-friendly platform for restaurant reviews.

Figure 7

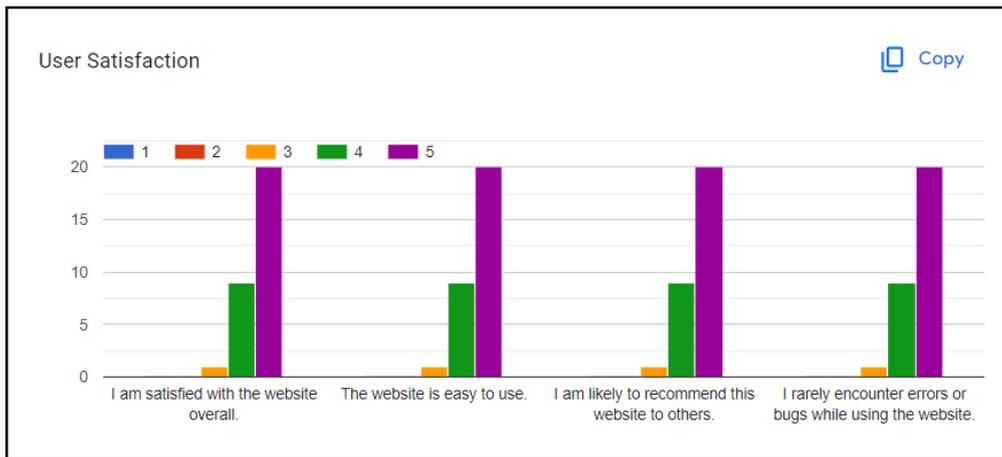
Usefulness of Food Hunter



Based on the bar chart shown in Figure 7, the responses reveal intense satisfaction with the usefulness of the restaurant review system. A substantial majority of users strongly agree or agree that the website provides all the functionalities they expect (96.6%) and helps them effectively complete their tasks (96.7%). Additionally, most respondents also feel that the features available meet their needs, and believe the website is fault-tolerant and provides solutions. These high levels of agreement indicate that the website not only fulfils user expectations but also performs reliably and efficiently, making it a valuable tool for users in achieving their goals.

Figure 8

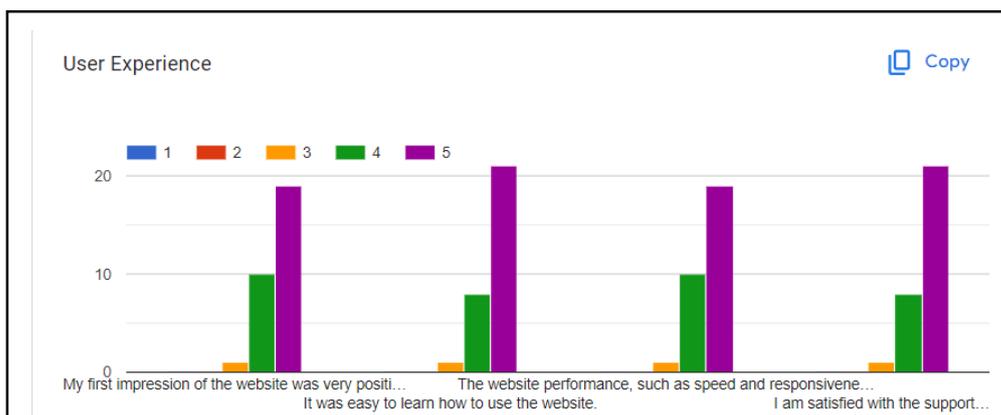
User Satisfaction Food Hunter



The Figure 8 above shows that the responses indicate high user satisfaction with the website. For overall satisfaction, 19 respondents strongly agreed, 10 agreed, and only one was neutral. Regarding ease of use, 21 respondents strongly agreed and eight agreed, showing robust support for the website’s user-friendliness. When asked about recommending the website to others, 19 respondents (63.3%) strongly agreed and 33.3% agreed, again with one neutral response. Additionally, 70% respondents strongly agreed and 26.7% agreed that they rarely encounter errors or bugs. This overwhelmingly positive feedback underscores the website’s overall user satisfaction, ease of use, reliability, and likelihood of being recommended to others.

Figure 9

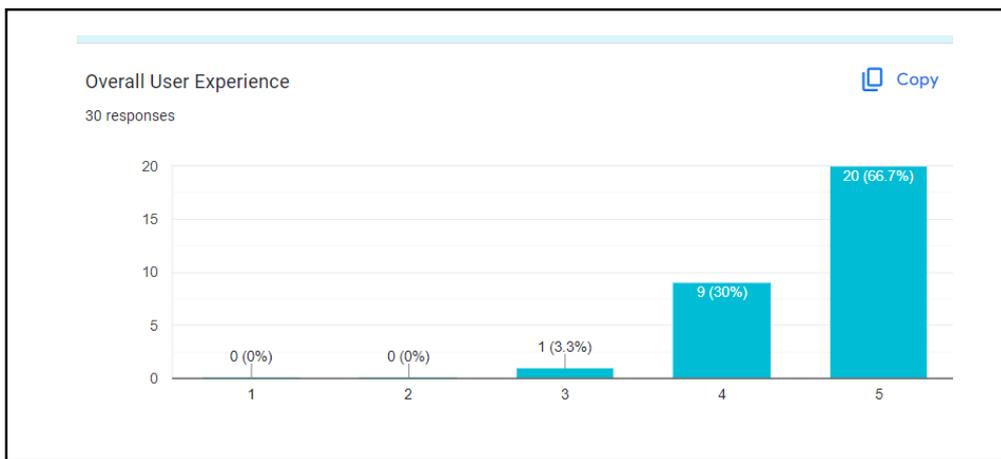
Interface and Design Food Hunter



Based on Figure 9, responses indicate a very positive user experience with the website. For the first impression, 19 respondents strongly agreed and 10 agreed that it was very positive, with only one neutral response. When it comes to ease of learning, 21 respondents strongly agreed and eight agreed that it was easy to learn how to use the website, again with just one neutral response—regarding performance, including speed and responsiveness, 63.3% of respondents strongly agreed and 33.3% agreed that it is satisfactory, with one neutral. Additionally, satisfaction with support and help resources was high, with 70% strongly agreeing and 26.7% agreeing, and only one neutral response. This overwhelmingly positive feedback highlights the website's strong performance in terms of initial impressions, ease of use, satisfactory performance, and practical support resources.

Figure 10

Interface and Design Food Hunter



Overall, the website is well-liked by users, reflecting its success in delivering a high-quality user experience. For the overall user experience, 20 respondents (66.7%) strongly agreed, 9 (30%) agreed, and only one person remained neutral.

This overwhelmingly positive feedback highlights the effectiveness of the Food Hunter in delivering a personalised and hyperlocal dining experience. The high satisfaction rates suggest that the app successfully caters to individual user preferences by offering tailored restaurant recommendations based on location, dietary needs, and dining experiences. Its thoughtful design and seamless functionality enable users to explore nearby dining options that reflect the unique food cultures of their community. By connecting users with local eateries and promoting culturally rich dining experiences, the app not only enhances user engagement but also fosters a stronger sense of community. These features collectively encourage repeat usage and positive word-of-mouth, reinforcing the app's value as a trusted companion for discovering meaningful food experiences.

CONCLUSION

Food Hunter: Hyperlocal Foodies' Experience effectively tackles the everyday issues food enthusiasts face—such as overwhelming dining choices and unreliable reviews—by delivering personalised and trustworthy recommendations rooted in hyperlocal insights. Key findings from the development reveal that focusing on micro-communities enhances user trust and satisfaction, while promoting genuine engagement with local culinary scenes. The platform's emphasis on community-driven reviews fosters credibility and strengthens users' connection to nearby dining options. The use of a structured, agile development process

ensured the platform remained user-focused, adaptable, and efficient throughout its lifecycle. Ultimately, Food Hunter not only supports small food businesses but also cultivates a richer, more connected food culture within neighbourhoods, transforming how users discover and experience local dining.

Future development of Food Hunter: Hyperlocal Foodies' Experience will align closely with the platform's core objectives of enhancing hyperlocal discovery, fostering community engagement, and supporting user-centric experiences. To deepen personalisation and relevance, the platform will integrate advanced machine learning algorithms that analyse user preferences, behaviours, and local trends. This will enable more accurate, context-aware restaurant recommendations tailored to individual tastes within specific neighbourhoods. To increase accessibility and real-time interaction, dedicated mobile applications for iOS and Android will be developed. These apps will empower users to explore nearby dining options, read and contribute reviews, and engage with local food communities directly from their smartphones. Together, these enhancements will strengthen the platform's role in connecting users to authentic, hyperlocal dining experiences while supporting the growth of small food businesses and enriching community-based culinary culture.

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