Journal of Informatics and Web Engineering

Vol. 4 No. 2 (June 2025) eISSN: 2821-370X

Improving Culinary Informatics through Meaningful Social Web Engineering

Suraya Nurain Kalid[1*], Fahmi Mikail Fahrid[2], Sin-Ban Ho[3]

[1,2,3] Faculty of Computing and Informatics, Multimedia University, Persiaran Multimedia, Jalan Multimedia, 63100 Cyberjaya, Malaysia

**corresponding author: (suraya.nurain@mmu.edu.my, ORCiD: 0000-0003-4514-377X)*

Abstract - This paper gives a good reflection about social web engineering aspirations to ardently see the truth to enlighten culinary concentration and wisdom. With the compassionate path to discover food and engage customers to share content with loving kindness spread to every corner. There are so many features realized, which include direct interfaces through intuitive interfaces to lead the daily food streamlining. May one engaged with constructive creation to grow compassions in every culinary living sharing. Contentment would develop in our heart involved in different phases put forward in this paper. The initial phase begins with honesty in planning and design. Next, the right livelihood of background study brings about requirements definition. This cast out diligently the interactive user conceptualization to arouse wholesome of good and wise design diagrams. With this, the users can reach the goal of registering and establishing profiles. This practice leads to steady mindful culinary owners as well as food enthusiasts. Watching the different choices in food, this social web engineering model delves to equanimity and attention to seek the right locality of certain cuisines. In addition, the model takes the opportunities for the effort to share fine speech with ratings and photos uploaded to assist in deciding dining choices. The peaceful location, especially with good healthy promotions, would help the culinary businesses to start the presentation of menu and events from the beginning. This research moves on to unlock the healthy choice filled with exploratory hats to make every day fantastic learning adventures to ready and learn social engineering guidance. In conclusion, the mobile mechanism can help to present important pieces of advice to learn and practice useful culinary informatics.

Keywords— Social Web Engineering, Culinary Informatics, Experience, Mobile Intuitive Mechanism, Improving Food Discovery

Received: 21 October 2024; Accepted: 27 January 2025; Published: 16 June 2025

1. INTRODUCTION

Culinary enthusiasts constantly seek unique and delectable dining experiences in our fast-paced world. With the advancement of technology, numerous websites and blogs have been developed to share information about dining establishments that provide a great dining experience [1]. However, this becomes challenging when most websites merely present static information without fostering engagement or interaction with food business owners. Many existing sites follow a blog format, and their content may not have been updated in years. Consequently, the reviews and ratings provided might no longer be relevant. This situation poses difficulties for food enthusiasts on the quest for the finest cuisine. From the perspective of food business owners, the search for effective ways to connect with and gain insights from their target audience is a constant effort. In an ever-evolving culinary landscape, staying attuned to customer preferences, feedback, and emerging trends is crucial for success. Whether through personalized marketing

campaigns, interactive social media engagement, or direct communication channels, food business owners seek to foster meaningful connections that enhance their offerings and elevate the dining experience.

Bridging the gap between food enthusiasts and food business owners is essential. For food lovers, it means discovering hidden gems, sharing delightful experiences, and staying informed about the latest gastronomic trends. Meanwhile, food business owners gain direct insights, refine their offerings, and build lasting relationships with patrons. Hence, this research aims to fulfil three objectives. Firstly, to enable users to easily discover a diverse range of food options, including restaurants, food stalls, and food trucks, all within a seamless and intuitive interface. Secondly, to engage honest and truthful speech in connecting daily food experiences speaking and engagement. Thirdly, cultivate compassion for every online living to keep local culinary business with valuable marketing growing wisdom.

There are four key questions to be explicitly addressed. The first key question leads to seeking the relevant and steady enlightenments in dining information arises. Second, the authors need to concentrate on the existing technology to engage culinary attention dynamically. Third, we need to cultivate the right state of engineering adoption for business owners to aspire their customer segment. Fourth, fostering mutual happiness for the wellness and blessings for the fine speech among culinary informatics users. By addressing these key questions, the research aims to develop a comprehensive understanding of the needs and preferences of both food enthusiasts and business owners. Ultimately, this will lead to the creation of a more interactive and beneficial culinary ecosystem.

2. BACKGROUND STUDY

In this social web engineering, the authors examined five widely used systems in the marketplace or on the World Wide Web: FoodAdvisor (FA), Yelp.com (Y), X, formerly known as Twitter, Instagram (IG), and Facebook (FB). Firstly, FA contains the web system that caters to food enthusiasts, guiding users through diverse culinary experiences. This resource facilitates users' discovery of culinary delights and dining venues. However, these recommendations are solely viewed and read by the user. As illustrated in Figure 1, the webpage only provides information. It does not support user interactions such as leaving comments or other forms of engagement.

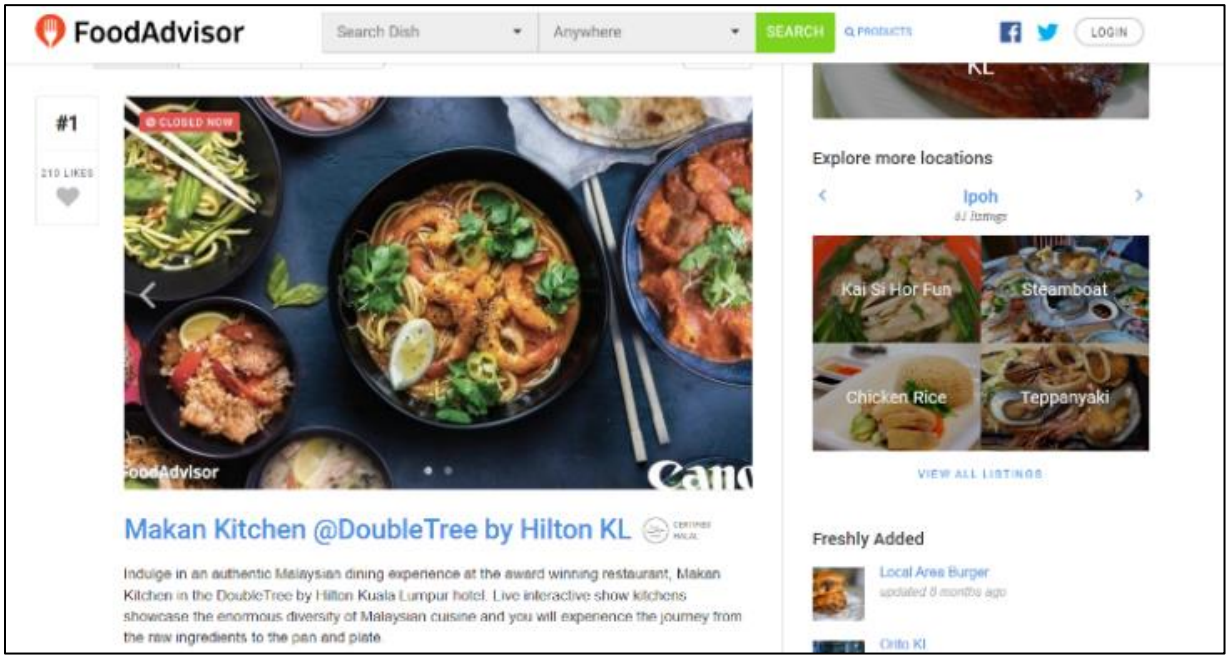

Figure 1. Illustration of the Eatery Informatics without User Interaction

A website that can perform data modification such as add, edit delete operations generally uses MySQL or other database management system (DBMS) for data storage, Hypertext Preprocessor (PHP), Java or other development tools for their backend [2]. On the other hand, a static website is developed using only scripting languages such as HyperText Markup Language, Cascading Style Sheet (CSS), and JavaScript [3]. It does not have backend processes or a database, so it is faster to load and reduces the loading time. However, these websites are usually content-driven and limit user interaction and engagement [4], [5]. It is crucial to have a well-designed user interface to enhance user interaction and engagement [6]. A static website might contain a wealth of information but lacks interactivity. Certainly, the FA paradigm struggles with static appearance with limited interactivity in engaging kindness of user to modify content [7].

Next, let us look at the important points of the general website naturally with non-focused content. This single niche is spread with entire various things [8]. In line with this paradigm, one can see the important points of Yelp.com. From moment to moment, Yelp.com follows the plentiful culinary suggestions in many lines of services. This shows many local businesses, representing the important opportunities of culinary. Based on the simple visualization effort, one can be more accessible to boundaryless guiding [9]. Nevertheless, the presentation of this paradigm would be challenging. The contents in this paradigm have laciness in in-depth write-up. Figure 2 goes over the general range content. With many pictures tell one something about the titles of topics, the user interactivity needs further deeds to render more specific states [10]. No deceiving, no harsh, and no idle talk would need to be observed further to improve this paradigm. To succeed further with more meaningful social web engineering, it is important to have the virtue to take good care of adequate social exercise. This breadth of focus could also affect the site's ability to build a loyal, recurring user base, as the varied content might not consistently appeal to the same group of visitors [11].

Figure 2. The Different Topics Provided on the Yelp System

Social media is widely recognised as a highly effective platform for business promotion and product advertising, reaching a vast audience with diverse interests [12], [13], [14]. However, when it comes to marketing businesses related to gastronomy or sharing experiences related to dining, certain social media platforms may not provide the optimal environment or user base for effective engagement and response. In the following paragraphs, we shall discuss a few popular social media platforms and their suitability in advertising and sharing content related to gastronomy.

The first paradigm is X, formerly known as "Twitter". Renowned for its dynamic feed page, X allows users to create posts incorporating text and various media forms, facilitating a rich tapestry of expression and communication. However, its emphasis on concise content constrains the depth of food reviews and discussions, potentially leaving those searching for comprehensive food-related content unsatisfied. Furthermore, despite using 'food' as a keyword in the search bar, some posts may not pertain to culinary topics, as shown in Figure 3. Additionally, the fast-paced

nature of X feeds may result in food-related posts being quickly superseded by posts from other content categories, reducing their visibility and potential for engagement [15].

The next paradigm is Instagram. Instagram is a premier media-sharing platform, highly acclaimed for its ability to connect users through its visual and text content and the colourful sharing of daily activities, moments, and interests [16], [17]. It is especially favoured for spotlighting the finest in culinary exploration, with food enthusiasts and businesses using it as a go-to venue to showcase tantalising dishes and dining destinations [18]. The platform's emphasis on visual content establishes it as a premier space for sharing photos and videos, enhancing the content's appeal and engagement [16], [18]. Platforms like Instagram, which focus on visuals, as shown in Figure 4, may not be suitable for detailed food-related discussions. Additionally, Instagram's user engagement, mainly through likes and short comments, may not effectively promote thorough food experience dialogues.

Figure 3. The Search Results for the Keyword 'Food' Display Unrelated Content

Figure 4. The Description of the Post's Constraints Fails to Fully Convey the Content

Another paradigm of social media is Facebook. Facebook is a global social networking platform that allows users to connect and interact with various content, including personal updates, news, and business promotions [19]. The wide variety of topics on Facebook can pose a challenge for food-related posts to stand out amidst the sea of diverse content. The platform's algorithm, subject to frequent modifications, may hinder the reach of posts to the intended audience such observed in the environmental science effects [20]. Figure 5 shows some posts that are not relevant to the search keyword. Furthermore, despite Facebook's support for a wide array of content types, its user interface might not be as user-friendly or aesthetically pleasing for sharing culinary content compared to platforms like Instagram, which are more visually centric. Additionally, a user profile that lacks content centred around food can lead to comments that deviate from the main topic. This is demonstrated in Figures 6 and 7, where some comments are not related to the core content of the post.

Social web engineering involves designing, developing, and maintaining a social media platform. Social web engineering is a software engineering model to facilitate interactivity and enhance the user experience [21]. Figure 8 illustrates the phases involved in social web engineering. The first phase is requirement gathering, which can be accomplished through interviews, surveys, or conducting background studies on the existing system. Once the requirements are collected, the second phase involves analysing them to ensure they are complete, consistent, and feasible for implementation. In the third phase, application design takes place, where wireframes and prototypes are developed. This step is crucial for visualizing the outcome and minimizing errors.

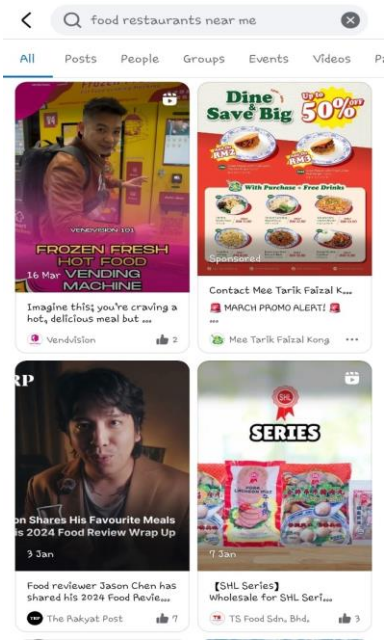

Figure 5. Example of Search Results that are Irrelevant to the Keywords Entered

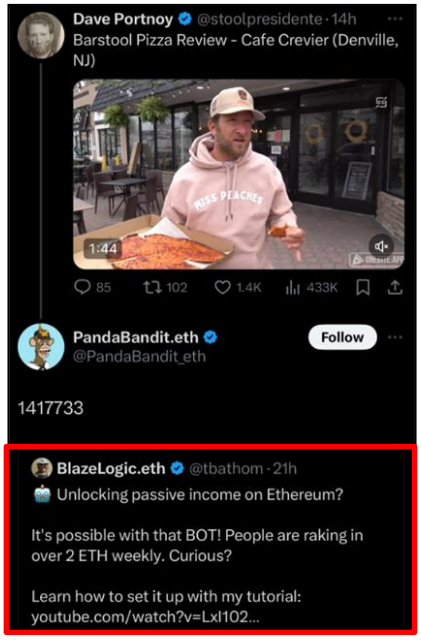

Figure 6. The Unrelated Comments on Food-Related X Post

Additionally, use case diagrams and sequence diagrams are created to illustrate the system flow based on the requirements, while an entity relationship diagram is developed to understand and visualize data storage. The fourth phase is application development, during which the application is built using various tools and frameworks. This development consists of two parts: front-end development and back-end development. Finally, in the last phase, the completed application is delivered, and user acceptance testing is conducted to gather user feedback. This feedback is essential for developers to improve the application based on user experiences [22].

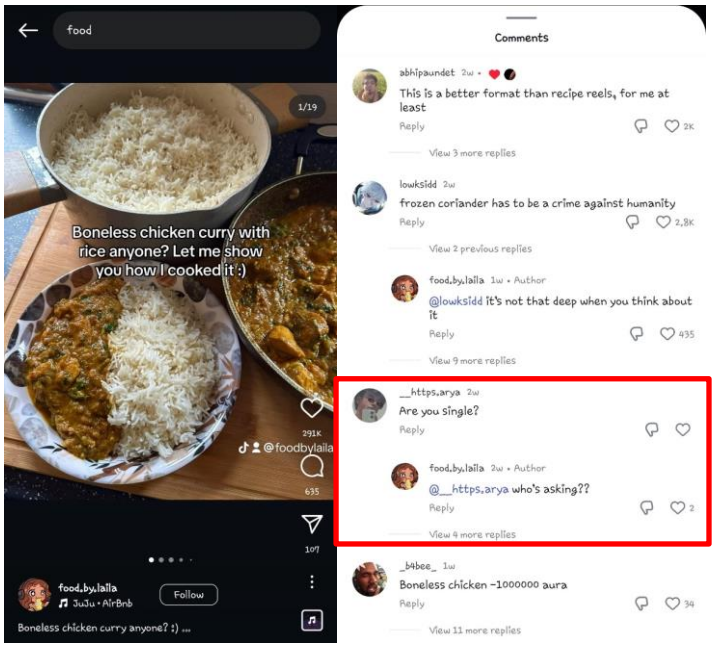

Figure 7. The Unrelated Comments on Food-Related Instagram Post

Figure 8. The Phases of Social Web Engineering

Based on our study and research, we would like to propose a food-centric social platform designed to enhance interaction between culinary enthusiasts and food business owners. Table 1 highlights the important things and good advice for our proposed system compared to other systems. This pertains to the practice of joyful engineering heeds of advice observed with radiation of the benefits for culinary owners and food enthusiasts. One should resist the temptation of non-relevant information. The proposed system can reposit the generosity of content and feedback sharing from people. It is very important to serve the features to help others to bring positive actions in giving to other people in various ways. Respecting the features listed with contented mind, one must know how to deploy meaningful social web engineering to generate good culinary situation.

Table 1. Heeding Good Advice Towards the Well-Being of the Meaningful Proposed System

Features	Website/Application					
	FA	Y	X	IG	FB	*PS
User Profile	✓	✓	✓	✓	✓	✓
Restaurant/Business Profile				✓	✓	✓
Follower/Subscriber System		✓	✓	✓	✓	✓
User Posting/Blogging	✓		✓	✓	✓	✓
Restaurant/Business Posting				✓	✓	✓
Post Feed			✓	✓	✓	✓
Rate and Reviews Page	✓	✓			✓	✓
Likes and Comments (Posts)		✓	✓	✓	✓	✓
User Interactions			✓	✓	✓	✓
Video/Photo Content			✓	✓	✓	✓
Food-Only Content/Services	✓					✓
Food Filters and Categories Required when Posting	✓	✓				✓

**Proposed System*

One must always be aware of what the community is thinking of the available features. Knowing what is going on and mindfulness to aware of what is happening would let us engineer meaningful social web. There is another framework like React Native can cause the harmony between different environment such found in Android and iOS. Using the harmony back-end of Node.js deployment brings goodness in the mobile interaction with the server among groups of people. Additionally, we use AppWrite, an open-source platform, for our data storage needs.

3. RESEARCH METHODOLOGY

This section explores the requirements and methodologies for creating a social platform catering to food enthusiasts. Food enthusiasts constantly search for culinary experiences and are eager to share their gastronomic insights. Simultaneously, food business owners aspire to engage with their valued customers and patrons actively. The primary goal of this platform is to create a seamless channel for effective communication and information exchange between food enthusiasts and food businesses. Functional requirements describe the interactions between the system and the user. They specify data processing operations such as CRUD operations [23]. This platform's target users are food enthusiasts and food business owners. Tables 2 and 3 show the functional requirements for both users.

Table 2. Food Enthusiast's Functional Requirements

Food Enthusiasts
Can register, log in and log out.
Able to view a post.
Able to Like a post.
Able to place a comment on a post.
Able to delete a comment on a post.
Able to search for food businesses or another user.
Able to view food businesses/other users' profiles.
Can place a rating and review on food businesses' reviews page.
Can create a post (pictures/videos).
Able to delete a post.
Able to edit a post.
Able to view and update their profile.

Table 3. Food Business Owner's

Food Business Owner
Can register, log in and log out.
Able to view a post.
Able to Like a post.
Able to place a comment on a post.
Able to delete a comment on a post.
Able to search for food businesses or another user.
Able to view food businesses/other users' profiles.
Can create a post (pictures/videos).
Can upload menus on their page.
Able to view their ratings and reviews given by other users.
Can reply comments on the review page.
Able to delete a post.
Able to edit a post.
Able to view and update their profile.

3.1. Technological Background for Culinary Informatics

There are numerous technologies available to implement the system [24]. One notable tool is Visual Studio Code (VS Code), a code editor developed by Microsoft. VS Code is accessible on Windows, macOS, and Linux, making it a versatile choice for developers across different platforms [25]. It is renowned for its high performance, user-friendly interface, and extensive customization options, which can be enhanced through a wide range of extensions and themes. The front-end framework shapes the user experience and app performance across devices. We recommend React Native, an open-source framework by Meta, for building mobile apps with JavaScript and React. React Native enables developers to create natively rendered apps for iOS and Android using a single codebase, streamlining development and maintaining high performance with a native look and feel.

We propose using Appwrite for the database. Appwrite is an open-source backend-as-a-service (BaaS) platform that makes app development easier. It provides secure user authentication, a real-time NoSQL database, file storage, server-side functions, and real-time communication. With built-in security, scalability, and role-based access control, developers can focus on user experiences while efficiently managing the backend. Its modular design and strong community support make Appwrite a flexible and powerful tool for modern applications. Figure 9 shows the visual representation of the recommended system technology for culinary informatics improvement.

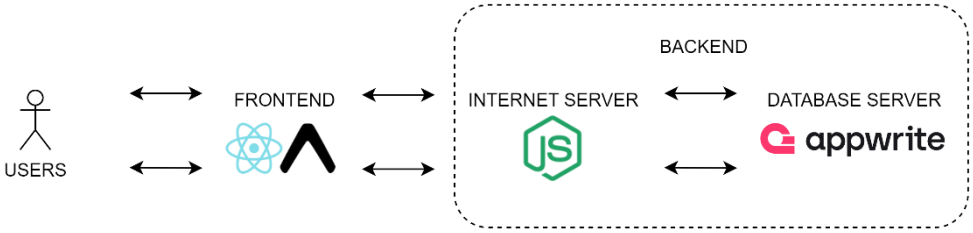

Figure 9. The System Technology for Culinary Informatics

Additionally, we recommend considering Expo, an open-source platform built around React Native. Expo enhances the development process by offering a suite of tools and services for building, deploying, and iterating on native iOS and Android apps from the same JavaScript codebase. It simplifies setup and development with features like an easy-to-use build service, a powerful development environment with live reloading, and a comprehensive library of pre-built components and APIs (Application Programming Interfaces). Back-end development is crucial for data management, secure communication, and seamless interaction between the mobile frontend and server-side services. We recommend using Node.js, a free, cross-platform server framework that runs JavaScript on the server using the

V8 engine. Node.js allows developers to write server-side applications in JavaScript, simplifying full-stack development by handling both client-side and server-side code.

3.2. Culinary System Overview

Figure 10 provides a visual representation of the overall view of the culinary system. This platform connects individuals with a passion for food, including general users, food business owners, and administrators. General users, who are food enthusiasts, can browse and share food-related content, follow food businesses, leave reviews, and interact with other users over the internet. Food business owners can create and manage their business profiles, post updates about their products or services, engage with customers, and receive feedback, all facilitated by the internet server. Administrators oversee the platform's operations, manage user accounts, ensure compliance with platform policies, moderate content, and handle technical or user issues. The system relies on a robust database server to store user information, business details, and content, ensuring a seamless and engaging user experience.

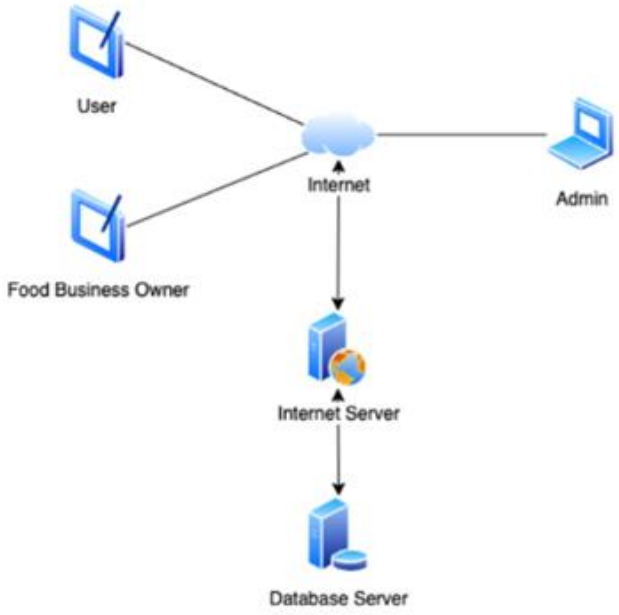

Figure 10. Culinary System Overview

4. RESULTS AND DISCUSSIONS

4.1. Results

Building upon the outlined methodology in the previous section, the authors subsequently delve into engineering the culinary informatics system. We aim to recommend a mobile mechanism that bridges the communication gap and improves engagement between food enthusiasts and food businesses. In this section, some of the application's primary functions were demonstrated. Figure 11 illustrates the user profile for food enthusiasts. On the user profile screen, essential details include the user's profile picture, username, and follower count. A noticeable 'Follow' button lets other users connect with this account. Below the profile information, a curated collection of food images showcases the user's posts, offering insights into their culinary experiences and interests within the platform.

Figure 12 illustrates the food business owner's profile screen, prominently displaying essential details about their establishment. At the top of the screen, the business name is featured, providing a clear and recognizable identity for the establishment. Accompanying this is the user handle, a unique identifier allowing easy tagging and interaction within the platform. The profile image, often showcasing the business's logo or signature dish, serves as a visual representation, enhancing brand recognition and appeal.

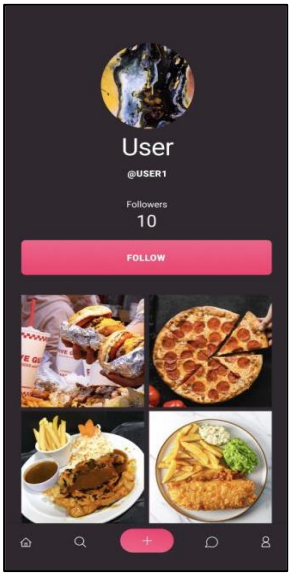

Figure 11. Food Enthusiast Profile

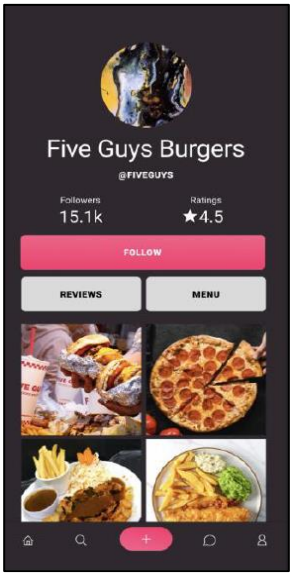

Figure 12. Food Business Owner Profile

The user profile can be edited to allow users to update their personal information. Furthermore, in Figure 13, the screen menu takes steps to generously provide the modular form that practice for the good state of happiness, joy and peace to follow the culinary owners' profile. This menu screen brings about the good states of food and beverage matters uploaded with the mindful checked prices. This leads to the correct actions to be ordered by the customers. One very good way is to practice and cultivate more love to begin an experience of loving kindness for beverages and food states to be important. The very powerful posting spreading informative explanation would cut the delusion of knowing the wise things to order in the menu.

Figure 13. The Culinary System Menu Screen

The result screens outlined in this section can give kind traits for culinary informatics. When we have the opportunity the present our team work from the project, this proposed system speaks louder than words. The real expressions help one to reflect and act accordingly to systematic navigation. For instance, the star rating enables customers to get feedback and review the food served. One should not judge based on one's appearance. Similar in a way, anything that attracts in external appearance may not be worthwhile to consume. With the latest posts, the users can determine the inherent quality of culinary. This is a very important lesson to learn. One needs to investigate the detailed reviews. An idle mind is the influence of bad hats. It means all the negative thoughts from the inner mind can be overcome with positive constructive culinary offerings. In other words, the reflection that we should do include fruitfully occupied to find our system with good and constructive informatics. One must also know the right thoughts offered by social engineering to make sure that one does not idle mind doing nothing.

Figure 14 shows the stitch in time for edit post that could deal culinary immediately. With the place's location, one can wisely take steps for consultation on how to reach the eateries. Similarly, one can ask the reflections of the others to resolve culinary promptly. That is the very important thing to consider posting updates instantly. A stitch in time saves nine. When one plants the updated information in terms of immediate culinary, it would likewise note the actual natural good deeds awarded from social web engineering good results. Figure 15 reflects the systematic rating drawn subsequently in an organized systematic mechanism.

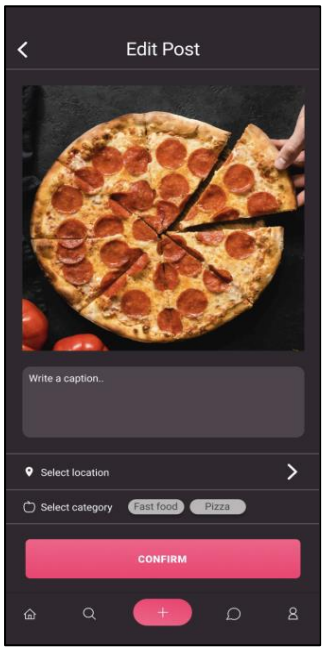

Figure 14. The Posting Screen to Share the Virtuous Quality of Culinary Experienced

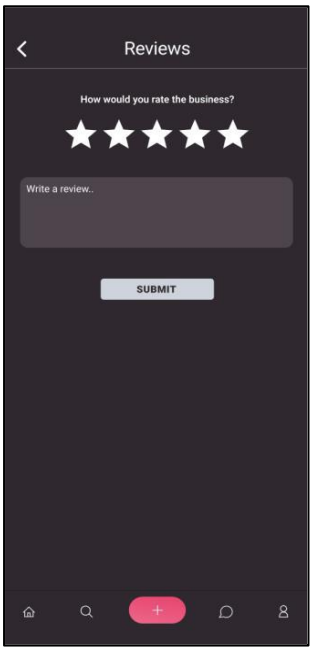

Figure 15. The Wise and Organized Rating Mechanism to Follow with Review

From Figure 15 illustration, one would have to be careful on the given ratings and reviews. One must be very careful about the input and reflection of reviews. The important thing is that one must apply what we learnt from the reviews shared. Additionally, Figure 16 displays the review screen, where each review prominently showcases the customer's name, profile picture, descriptive comment, and a star rating that reflects their overall satisfaction. When reviewing customer feedback, the owner can select a specific review for a personalised response, as per Figure 17. They can type their reply in the provided text field and submit it by clicking the 'Reply' button. This interactive feature enables food businesses to engage with customers and publicly address comments or concerns.

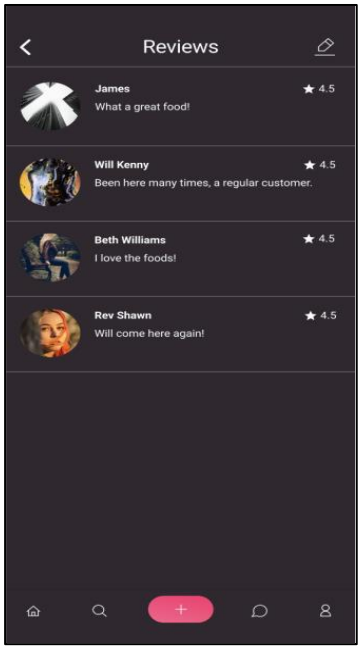

Figure 16. User Reviews on the Establishment

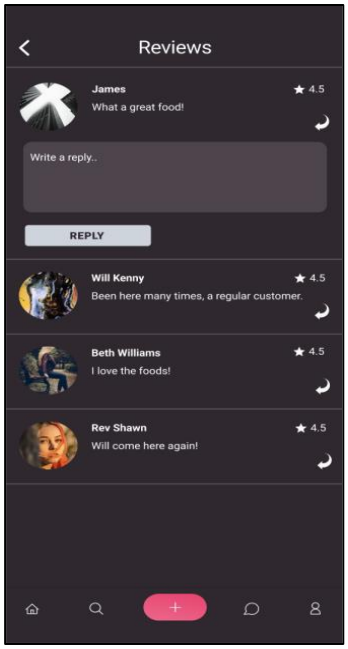

Figure 17. Reply Review Section

Figure 18 illustrates the administrator's dashboard screen. A system dashboard facilitates user analysis and management of key system metrics [26], [27]. The dashboard provides a comprehensive summary of the total number of users and businesses on the platform, offering a clear snapshot of overall activity. This feature allows administrators to monitor the platform's growth and engagement levels. Additionally, administrators can refresh this data quickly, ensuring they always have access to the most up-to-date information. This real-time data access is crucial for making informed decisions and managing the platform effectively. The generate report pop-up screen offers the administrator a range of reporting choices once they click the 'Print Report' button from the admin dashboard screen. This functionality is specifically produced to assist the admin in acquiring concrete records of the application's usage data, which can be used for reporting or analysis.

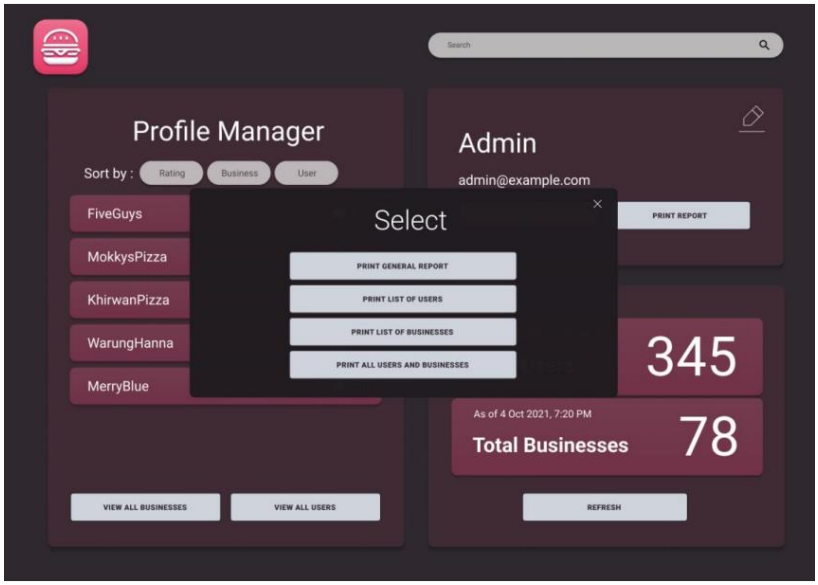

Figure 18. Administrator Generates Report Pop-Up Screen

4.2. User Acceptance Test Result

A user acceptance test was conducted to assess the application's usability, user-friendliness, relevance of information, and overall effectiveness. A questionnaire was created for this evaluation, and 31 respondents were received. Age, gender, employment status, and location were collected to understand the respondents' demographics. The respondents are between 22 to 45 years old, with 23% female and 77% male respondents. Most of the respondents are employed, 26% are students, and 3% are unemployed. As for the location, 68% of the respondents are staying in sub-urban areas, 29% are staying in urban areas, and 3% are staying in countryside areas. Moving on to the questions about the application, the first section of the questionnaire focuses on the application's usability and ease of use. The second section evaluates the features, relevance of the information provided, and effectiveness of the services. Finally, the last sections evaluate user satisfaction with the culinary system. Figure 19 shows the responses about ease of use and attractiveness. For question 1, which asked respondents to rate the ease of use on a scale of 1 (not intuitive) to 5 (very intuitive), 48% of respondents gave a score of 5, while 45% rated it 4. Only 6% rated it 3. In question 2, which asked about the appeal of the interface on a scale of 1 (not appealing) to 5 (very appealing), 45% found it very appealing (rating 5), 42% rated it a 4, 10% rated it a 3, and 3% rated it a 2.

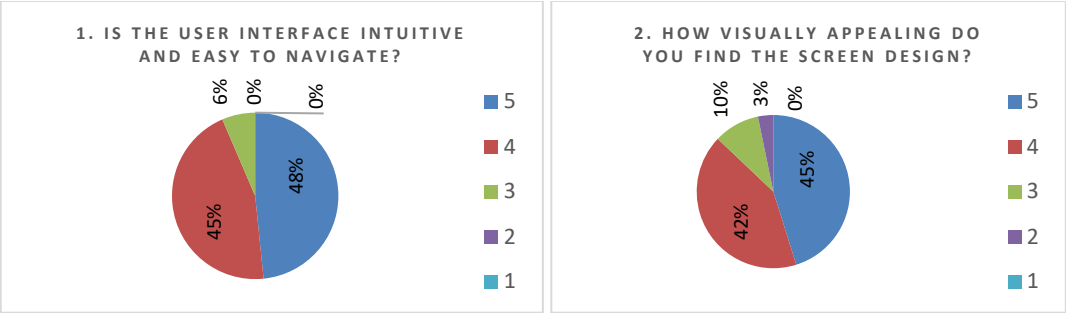

Figure 19. Questions and Responses on the Culinary System Usability and Ease of Use

Figure 20 presents the responses which assess the application's features, the relevance of the information provided, and the effectiveness of the services offered. In question 3, respondents rated the relevance of the information and its ability to facilitate engagement on a scale from 1 (not relevant and does not facilitate engagement) to 5 (very relevant and facilitates engagement). The findings showed that 42% rated it a 5, 48% rated it a 4, and 10% rated it a 3. Question 4 focused on the application's ability to encourage interaction among food enthusiasts, asking respondents to rate it on a scale from 1 (very able) to 5 (not able). The results indicated that 45% rated it at 5, 48% rated it a 4, and 6% rated it a 3. Finally, question 5 inquired about the usefulness of the content shared by food business owners, with respondents rating it on a scale from 1 (not useful) to 5 (very useful). The results revealed that 35% rated it very useful (5), 61% rated it a 4, and 3% rated it a 3.

Figure 21 highlights the responses regarding the user satisfaction with the application. For question 6, which asked respondents to rate their overall satisfaction with the application on a scale from 1 (not satisfied) to 5 (very satisfied), the results were as follows: 42% of respondents were very satisfied, 55% rated it a 4, and 3% rated it a 3. In summary, the survey results show that the users have responded positively to the application towards improving culinary informatics. Regardless of their demographic backgrounds, most respondents found the user interface intuitive and the design visually appealing for social web engineering. Feature accessibility and the relevance of the content were also highly rated. The analysis shows that the application is beneficial not only for employed individuals but also for students and unemployed individuals. Additionally, most respondents believe the application encourages user interaction and provides valuable information in consistent to techniques such found in [28], [29]. Overall, respondents expressed general satisfaction with the application. To further enhance its quality, it is important to focus on improving the user interface to make it more appealing and to enhance the accessibility of its features [30]. Using these good measures, one would be able to ensemble towards the machine learning mechanisms towards predicting the informatics growth trends and optimisations.

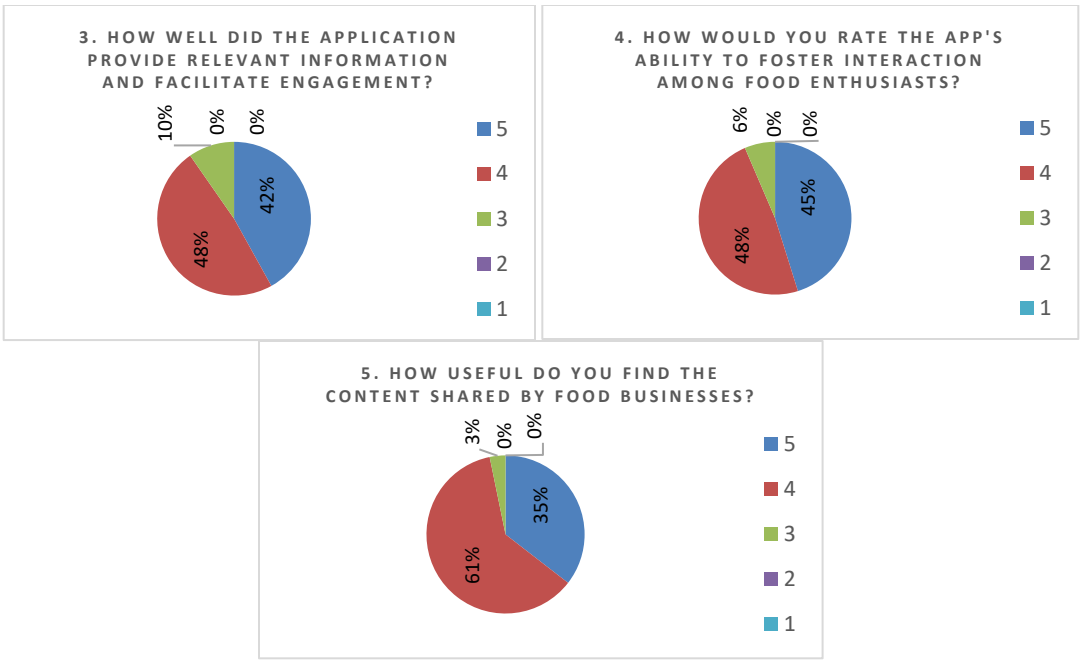

Figure 20. The Features, Relevance of the Information Provided, and the Effectiveness of the Culinary System

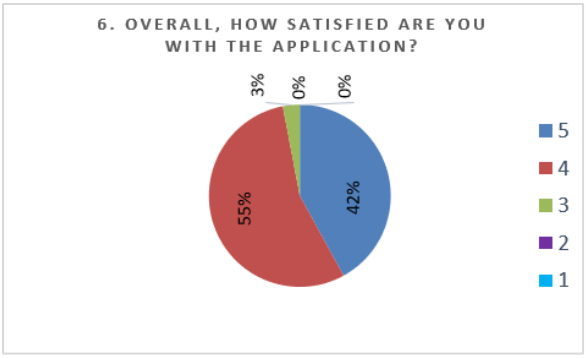

Figure 21. The User's Satisfaction with the Culinary Informatics System

5. CONCLUSION

Food hunting is one of the most anticipated activities for locals and tourists like [31], [32], [33]. Food enthusiasts frequently encounter challenges in discovering distinctive dining experiences in the ever-growing culinary world. In current social web engineering to address the first key question, the exploration of food or culinary experiences often gets mixed in with other topics, as conversations tend to cover a much broader range. For instance, when someone searches for food-related keywords, the search results may not specifically focus on cuisine or dining experiences. At the same time, food businesses strive to establish more effective connections with their target audience. A noticeable void exists in the market for a platform that facilitates the discovery of new eateries, sharing dining experiences, and empowers businesses with direct customer engagement and feedback. Hence, this research aims to bridge the gap between food enthusiasts and food businesses by leveraging a dedicated social platform [34]. By providing a space where users can explore diverse culinary options, share their reviews [35], recommendations [36], and interact with like-minded individuals, the platform aims to create a vibrant and dynamic food culture.

For the second key question, the proposed social web engineering provides features such as creating posts, sharing reviews, and a comments section, enhanced by technologies like social media integration and effective user interface

design [37], which can improve engagement among food enthusiasts. It is important to apply mindfulness in cultivating meaningful social web engineering. When we practice the informatics technological guidelines more wisely, the third key question is addressed from the beginning to the end by putting in the energy and time to follow the good mechanism lessons learnt from the culinary system. For local food businesses, this can help to market their business more effectively and reach a wider audience. Finally, the fourth key question is explicitly answered through the dynamic interaction between food enthusiasts and food businesses to foster a mutually friendly and beneficial environment, which can lead to mutual growth.

ACKNOWLEDGEMENT

A version of this paper was presented at the first International Symposium on Information Technology and Web Engineering (SITWE 2024), held in Malaysia on 23rd-24th October 2024.

The authors would like to thank the anonymous reviewers for their valuable comments.

FUNDING STATEMENT

The authors received no funding from any party for the research and publication of this article.

AUTHOR CONTRIBUTIONS

Suraya Nurain Kalid: Conceptualization, Formal Analysis, Investigation, Methodology, Validation, Visualization, Writing – Original Draft Preparation;
Fahmi Mikail Fahrid: Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Validation, Visualization, Resources, Supervision, Writing – Review & Editing;
Sin-Ban Ho: Project Administration, Resources, Supervision, Writing – Original Draft Preparation

CONFLICT OF INTERESTS

No conflict of interests was disclosed.

ETHICS STATEMENTS

Our publication ethics follow The Committee of Publication Ethics (COPE) guideline. https://publicationethics.org/

REFERENCES

[1] G. Mainolfi, V. Marino, and R. Resciniti, "Not just food: Exploring the influence of food blog engagement on intention to taste and to visit," *British Food Journal*, vol. 124, no. 2, pp. 430–461, Oct. 2021. doi: 10.1108/bfj-04-2021-0400.

[2] X.-X. Cho, S.-B. Ho, and C.-H. Tan, "Improving asthma treatment adherence by integrating weather information with responsive web technique," *AIP Conference Proceedings*, vol. 3153, p. 030005, Jan. 2024. doi: 10.1063/5.0216655.

[3] M. E. K. K. Khairi, S.-B. Ho, and C.-H. Tan, "Real-time tracking and category filtering of an automated system for trading cards collections," *AIP Conference Proceedings*, vol. 3153, p. 060001, Jan. 2024. doi: 10.1063/5.0216659.

[4] C. M. Chituru, S.-B. Ho, and I. Chai, "Integrating Spatial Computing with Clinical Pathology for Enhanced Diagnosis and Treatment Informatics in Healthcare," *JOIV International Journal on Informatics Visualization*, vol. 8, no. 3–2, p. 1762, Nov. 2024. doi: 10.62527/joiv.8.3-2.2951.

[5] S. Kalid *et al.*, "Enhancing Personalized Healthcare with an Effective E-Healthcare Management System," *Journal of System and Management Sciences*, vol. 14, no. 2, Jan. 2024. doi: 10.33168/jsms.2024.0230.

[6] J.-L. Goh, S.-B. Ho, and C.-H. Tan, "Weather-Based Arthritis Tracking: a mobile mechanism for Preventive strategies," *Journal of Informatics and Web Engineering*, vol. 3, no. 1, pp. 210–225, Feb. 2024. doi: 10.33093/jiwe.2024.3.1.14.

[7] S.-B. Ho, E.-Y. Chew, and C.-H. Tan, "Streamlining dental clinic management for effective digitisation productivity and usability," *Journal of Informatics and Web Engineering*, vol. 3, no. 2, pp. 70–85, Jun. 2024. doi: 10.33093/jiwe.2023.3.2.5.

[8] W.-X. Ong, S.-B. Ho, and C.-H. Tan, "Enhancing Migraine Management System through Weather Forecasting for a Better Daily Life," *Journal of Informatics and Web Engineering*, vol. 2, no. 2, pp. 201–217, Sep. 2023. doi: 10.33093/jiwe.2023.2.2.15.

[9] D. I. Jusuf, "Optimizing SEO (Search engine Optimizing) strategy to increase visibility and achievement of marketing goals," *Lead Journal of Economy and Administration*, vol. 2, no. 2, pp. 98–103, Nov. 2023. doi: 10.56403/lejea.v2i2.150.

[10] G. A. Makho, S.-B. Ho, and I. Chai, "Exploring the potential of artificial intelligence in the medical sector for patient well-being: A review," *AIP Conference Proceedings*, vol. 3153, p. 030003, Jan. 2024. doi: 10.1063/5.0216651.

[11] K. Toften and T. Hammervoll, "Niche marketing research: status and challenges," *Marketing Intelligence & Planning*, vol. 31, no. 3, pp. 272–285, May 2013. doi: 10.1108/02634501311324618.

[12] S. Manalo, "Effectiveness of social media marketing in the restaurant industry," *International Journal of Research Studies in Education*, vol. 9, no. 7, Nov. 2020. doi: 10.5861/ijrse.2020.5916.

[13] C. L. N, D. Luna, Ma. C. E, and E. F. A, "Impacts of social media in promoting food products," *International Journal of Tourism and Hospitality*, vol. 1, no. S1, p. S27, Dec. 2021. doi: 10.51483/ijth.1.s1.2021.s27-s43.

[14] Y. Joshi, W. M. Lim, K. Jagani, and S. Kumar, "Social media influencer marketing: foundations, trends, and ways forward," *Electronic Commerce Research*, Jun. 2023. doi: 10.1007/s10660-023-09719-z.

[15] R. K. J. Yik, S.-B. Ho, and C.-H. Tan, "Improving the prediction resolution time for mobile Eczema support system," *AIP Conference Proceedings*, vol. 3153, p. 030007, Jan. 2024. doi: 10.1063/5.0216658.

[16] C.-W. Teoh, S.-B. Ho, K. S. Dollmat, and C.-H. Tan, "Machine Learning Prediction Model for Early Student Academic Performance Evaluation in Video-Based Learning," *International Journal of Membrane Science and Technology*, vol. 10, no. 2, pp. 1529–1544, Sep. 2023. doi: 10.15379/ijmst.v10i2.1822.

[17] B. Datta and P. Kaushik, "Brand Awareness through Instagram Advertising," *Asian Journal of Management*, vol. 10, no. 2, p. 100, Jan. 2019. doi: 10.5958/2321-5763.2019.00017.9.

[18] B., Handayani, "Foodstragramming of solo dining experiencescape: The fear of missing out," *International Journal on Food System Dynamics*, 12(1), pp. 83-94, 2021. doi:10.18461/ijfsd.v11i5.77

[19] R. Haque, S.-B. Ho, I. Chai, and A. Abdullah, "Improved ADAM-based feedforward deep neural network model for personalized asthma predictions," *Journal of System and Management Sciences*, vol. 13, no. 2, Apr. 2023. doi: 10.33168/jsms.2023.0217.

[20] C.-H. Tan, S.-N. Lee, and S.-B. Ho, "Assessing the environmental effects on dengue fever and Malaysian economic growth," *International Journal of Environmental Science and Development*, vol. 13, no. 2, pp. 49–56, Jan. 2022. doi: 10.18178/ijesd.2022.13.2.1371.

[21] R. Haque, S.-B. Ho, I. Chai, and A. Abdullah, "Parameter and hyperparameter optimisation of deep neural network model for personalised predictions of asthma," *Journal of Advances in Information Technology*, vol. 13, no. 5, Jan. 2022. doi: 10.12720/jait.13.5.512-517.

[22] C.-W. Teoh, S.-B. Ho, S. Khairi, and C.-H. Tan, "Predicting Student Performance from Video-Based Learning System: A Case Study," *Journal of Logistics Informatics and Service Science*, Aug. 2022. doi: 10.33168/liss.2022.0306.

[23] C.-W. Teoh, S.-B. Ho, K. S. Dollmat, and C.-H. Tan, "Ensemble-Learning Techniques for Predicting Student performance on Video-Based Learning," *International Journal of Information and Education Technology*, vol. 12, no. 8, pp. 741–745, Jan. 2022. doi: 10.18178/ijiet.2022.12.8.1679.

[24] R. Haque, S.-B. Ho, I. Chai, and A. Abdullah, "Optimised deep neural network model to predict asthma exacerbation based on personalised weather triggers," *F1000Research*, vol. 10, p. 911, Sep. 2021. doi: 10.12688/f1000research.73026.1.

[25] S. B. Ho, S. L. Chean, I. Chai, and C. H. Tan, "Engineering Meaningful Computing Education: Programming Learning Experience Model," *2021 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, pp. 925–929, Dec. 2019. doi: 10.1109/ieem44572.2019.8978920.

[26] M. Holjevac, and T. Jakopec, "Web application dashboards as a tool for data visualization and enrichment," *2020 43rd International Convention on Information, Communication and Electronic Technology (MIPRO)*, IEEE, pp. 1740-1745, September 2020. doi: 10.23919/MIPRO48935.2020.9245289

[27] S.B. Ho, I. Chai, and C.H. Tan, "Leveraging framework documentation solutions for intermediate users in knowledge acquisition," *International Journal of Information Science* 3(1), pp. 13-23, 2013. doi: 10.12691/ijefm-4-2-3

[28] R. Haque *et al.*, "Intelligent Health Informatics with Personalisation in Weather-Based Healthcare Using Machine Learning," in *Lecture notes on data engineering and communications technologies*, 2021, pp. 29–40. doi: 10.1007/978-3-030-70713-2_4.

[29] S. B. Ho, I. Chai, and C. H. Tan, "AN EMPIRICAL INVESTIGATION OF METHODS, FOR TEACHING DESIGN PATTERNS WITHIN, OBJECT-ORIENTED FRAMEWORKS," *International Journal of Information Technology & Decision Making*, vol. 06, no. 04, pp. 701–722, Nov. 2007. doi: 10.1142/s021962200700271x.

[30] I. Ibriwesh, S.-B. Ho, I. Chai, and C.-H. Tan, "A controlled experiment on comparison of data perspectives for software requirements documentation," *Arabian Journal for Science and Engineering*, vol. 42, no. 8, pp. 3175–3189, Feb. 2017. doi: 10.1007/s13369-017-2425-2.

[31] A. Tahiri, I. Kovaçi, and A. T. Petkoska, "Sustainable tourism as a potential for promotion of regional heritage, local food, traditions, and Diversity—Case of Kosovo," *Sustainability*, vol. 14, no. 19, p. 12326, Sep. 2022. doi: 10.3390/su141912326.

[32] T. Zhang, J. Chen, and B. Hu, "Authenticity, quality, and loyalty: local food and sustainable tourism experience," *Sustainability*, vol. 11, no. 12, p. 3437, Jun. 2019. doi: 10.3390/su11123437.

[33] J. Fountain, "The future of food tourism in a post-COVID-19 world: insights from New Zealand," *Journal of Tourism Futures*, vol. 8, no. 2, pp. 220–233, Jul. 2021. doi: 10.1108/jtf-04-2021-0100.

[34] A. Brombin, G. Mascarello, A. Pinto, S. Crovato, G. Ricaldi, M. Giaretta, and L. Ravarotto, "New ways of spreading food safety online: the role of food bloggers in risk communication," *British Food Journal*, 124(3), pp. 775-794, 2022. doi: 10.1108/BFJ-01-2021-0044.

[35] Z.-S. Lim, A. Yulastri, S.-B. Ho, and C.-H. Tan, "Enhancing Travel Planning Efficiency with a Comprehensive TripEase GenAI Mechanism," *International Journal on Advanced Science Engineering and Information Technology*, vol. 14, no. 6, pp. 2090–2097, Dec. 2024. doi: 10.18517/ijaseit.14.6.11985.

[36] W.-E. Kong, T.-E. Tai, P. Naveen, and H. A. Santoso, "Performance Evaluation on E-Commerce Recommender System based on KNN, SVD, CoClustering and Ensemble Approaches," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 63–76, Oct. 2024. doi: 10.33093/jiwe.2024.3.3.4.

[37] A. K. A. Razack and M. F. M. Saad, "Enhancing Cybersecurity Awareness through Gamification: Design an Interactive Cybersecurity Learning Platform for Multimedia University Students," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 21–40, Oct. 2024. doi: 10.33093/jiwe.2024.3.3.2.

BIOGRAPHIES OF AUTHORS

	**Suraya Nurain Kalid** is a lecturer at Multimedia University. She received her master's in information technology from the Multimedia University, Cyberjaya, Malaysia. She is currently pursuing her PhD at Multimedia University. Her research interests are machine learning and software engineering. She can be contacted at email: suraya.nurain@mmu.edu.my.
	**Fahmi Mikail Bin Fahrid** is a final-year undergraduate student pursuing a Bachelor of Computer Science (Honours) at the Faculty of Computing and Informatics, Multimedia University. His academic interests and research focus on innovative fields such as culinary informatics and social web engineering, with a strong foundation in software engineering. Fahmi has developed his skills in designing and building software solutions throughout his studies, showcasing a commitment to leveraging technology to address real-world challenges. Passionate about interdisciplinary research, he strives to contribute to the growing intersection of technology and societal needs. Fahmi can be reached at fahmimikail86@gmail.com.
	**Sin-Ban Ho** is an Associate Professor at Multimedia University. He received his PhD in information technology from the Multimedia University, Cyberjaya, Malaysia, and teaches Computer Science at Multimedia University, Cyberjaya, Malaysia. His research interests include health informatics, empirical research approach, computer education, and patterns. He is a senior member of the IEEE, IEEE Computer Society, and IEEE Education Society. He can be contacted at email: sbho@mmu.edu.my.