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EVENTCIBLE: The Planning Process for the Event Navigation and Tracking Mobile Application

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***Abstract*— This paper presents the planning process for the EVENTCIBLE, the event navigation and mobile application tracking. In today's digitally driven world, where access to information shapes individuals and societies, the emergence of mobile technology has revolutionised news consumption. This research delves into creating a campus event application tailored to students of Universiti Sains Islam Malaysia (USIM). Designed to cater to the dynamic university life and students' affinity for technology, the USIM event app is a centralised hub for students to discover, engage with, and participate in campus activities. The app aims to bridge the gap between active participants and those less connected by capitalising on the prevalence of smartphones among students. Offering a user-friendly interface, students can seamlessly explore upcoming events across various faculties, book, and receive timely notifications, fostering a vibrant campus community. This endeavour showcases the potential of mobile technology in enhancing student engagement and connectivity within higher education institutions, contributing to the ongoing discourse on the transformative role of mobile applications in academia. The methodology used is a hybrid methodology that integrates both waterfall and agile approaches. This combined approach ensures structured planning and execution while allowing flexibility. The implication of the research enhances student engagement and connectivity, illustrating how technological solutions can bridge gaps in campus participation and foster a more integrated university community. The significance of the research is the potential of mobile technology in promoting student engagement and bridging participation gaps within university communities. The research concludes that the EVENTCIBLE app will hopefully enhance student engagement and connectivity by leveraging mobile technology to bridge participation gaps and foster a more cohesive and vibrant campus community.**

***Keywords*— Campus event application; mobile technology; student engagement**

I. INTRODUCTION

In information dissemination, announcing upcoming events is essential in encouraging community involvement and forward society goals. From printed timetables to bulletin boards, people historically used a variety of outlets to keep up with current events [1]. However, as cell phones and technology have evolved, access to and participation in events has changed dramatically. Complementing the Sustainable

Development Goals (SDGs), especially Goal 4: Quality Education, this initiative aims to improve student involvement and connectedness within Universiti Sains Islam Malaysia (USIM). The USIM event application seeks to support the general objective of guaranteeing inclusive and fair quality education for everyone by giving students a centralised platform to explore, engage in, and remain informed about university activities. This initiative shows how mobile technology might solve SDGs by encouraging a thriving university community.

With their many applications, smartphones have revolutionised how individuals interact with information, enabling seamless multitasking and personalised experiences. In Malaysia, where technological advancements are aligned with national agendas, the integration of event applications reflects the government's emphasis on digital innovation and community engagement. Ministries and governmental bodies often promote efficient event management systems like Webex Events that prioritise end-to-end event solutions that allow event organisers to host secure events that move government priorities forward. This approach fosters greater participation and inclusivity in national initiatives and community activities. Our project, which is focused on developing the USIM event application, aligns with this Malaysian agenda by providing a platform that enhances student engagement and connectivity within Universiti Sains Islam Malaysia. Our application advances digital innovation by leveraging mobile technology to streamline event navigation and participation. It promotes active involvement in campus activities, thereby supporting Malaysia's vision for a technologically empowered and socially connected society [2].

Given the propensity of students to embrace emerging technologies, smartphones have become indispensable tools for staying informed and connected. Access to campus-related events is paramount for university students, serving as a vital resource for staying abreast of academic, social, and extracurricular activities. While some universities have already embraced mobile platforms for disseminating event information, there remains a need for comprehensive and centralised solutions regarding the specific needs of each institution.

Considering this, developing a mobile application dedicated to campus events and event navigation presents a compelling opportunity to enhance student engagement and connectivity within University Sains Islam Malaysia (USIM). Unlike the current fragmented approach to event management, characterised by disparate sources managed by various stakeholders, the envisioned mobile application seeks to combine these resources into a cohesive platform.

By leveraging the capabilities of mobile technology, the proposed application aims to smooth the dissemination of campus-related event information, providing students and faculty with a user-friendly interface for accessing event listings, registration forms, and other pertinent updates [3]. Furthermore, the active involvement of administrators and faculty members ensures effective management and oversight, enhancing the efficiency and efficacy of event coordination within the university community.

In essence, developing a dedicated mobile application for campus events at USIM represents a strategic attempt to leverage technology to foster a more connected and informed campus ecosystem. Through collaborative efforts and innovative solutions, this initiative seeks to empower students and faculty with the tools they need to thrive in an increasingly digitised academic landscape**.**

The research questions are focused on the following: What are the gaps in the existing event management mobile application? How can USIM EVENTCIBLE be fortified against potential security threats and safeguard sensitive user data? How can metrics and performance indicators be utilised to evaluate the effectiveness and functionality of USIM EVENTCIBLE?

This project addresses existing event management mobile app gaps by developing USIM EVENTCIBLE and consolidating event information for USIM students, ensuring USIM EVENTCIBLE's security through robust measures, protecting user data from potential threats, and establishing metrics to evaluate USIM EVENTCIBLE's effectiveness and user satisfaction, providing insights for improvement.

Despite growing environmental awareness, there remains a lack of comprehensive information on campus events accessible through existing mobile applications. This hinders students' ability to stay informed and engaged in campus activities, impacting their overall university experience. Current literature, including a recent research article by [4], highlights the need for improved event management solutions to address this gap and enhance student involvement in campus life.

Many event management applications fail to cater to the specific needs of users, particularly elderly and disabled individuals, who face challenges in accessing and participating in campus events. A lack of inclusive features, such as accessibility options and tailored services for diverse user demographics, exacerbates this issue. Recent research by [5] underscores the importance of inclusive design principles in event applications to address these barriers and ensure equal access for all users.

Existing event management applications often need more customisation options, making it difficult for users to filter and personalise their event preferences according to their interests and schedules. This limitation results in information overload and decreased user engagement with the platform. Studies by [6] emphasise the importance of customisable features in event applications to enhance user satisfaction and usability.

This project implies developing an event application to facilitate seamless event management and engagement within the university community. The application will cater to students and faculty committee members, offering a comprehensive suite of features to streamline event coordination and participation.

Upon accessing the application, users, including students and faculty committee members, will be prompted to create an account or log in to an existing one to access enhanced features. Once logged in, users will encounter a user-friendly interface offering a range of functionalities tailored to their respective roles.

Students will have the ability to view a curated selection of upcoming events, including pertinent faculty information, utilise advanced search and filtering options to narrow down event listings based on criteria such as faculty and time, book for events seamlessly by completing the event-specific registration form directly within the application, access a

personalised dashboard displaying a list of booked events, facilitating easy management and organisation, and receive timely notifications about event updates, ensuring they stay informed and engaged.

Faculty committee members can create and publish events within the application, providing detailed event information and relevant faculty details. They can monitor event registration and attendance by accessing comprehensive reports detailing booked students for each event and receiving notifications about event-related activities, ensuring they stay abreast of event logistics and participant engagement.

The application will not include incentives in vouchers for external products or services, as such incentives may not align with the primary focus of event engagement and management. Instead, users can accrue reward points or credits through active event participation, which can be redeemed for event-related perks or incentives within the application. Additionally, the application will not support direct financial transactions or payouts to users' bank accounts or digital wallets, focusing instead on enhancing the event experience and fostering community engagement within the university ecosystem.

This project aims to enhance community engagement and participation in campus events. The application seeks to foster a vibrant campus community where students and faculty members can quickly discover, book for, and participate in diverse events by providing a centralised platform for event management and dissemination. This initiative promotes inclusivity and collaboration and cultivates a sense of belonging and school spirit among the university population.

II. EXISTING SYSTEM

In the contemporary landscape, fostering active participation in events is paramount. Event management applications are essential for organising and participating in various events. While mainstream apps excel in general event management, there needs to be more campus-focused solutions tailored to university needs. Security is also crucial in app design, ensuring user trust and regulation compliance.

Therefore, there is a compelling opportunity to develop EventCible as a dedicated event management application customised precisely for the needs of Universiti Sains Islam Malaysia (USIM) students and faculty. By incorporating campus-specific features, security enhancements, and user-centric design principles, EventCible aims to revolutionise event management within the university ecosystem, fostering engagement, collaboration, and community cohesion.

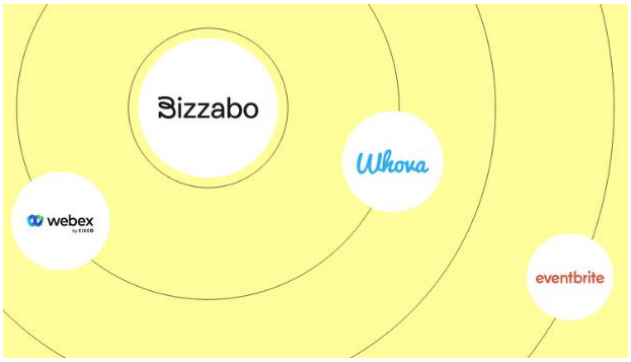

Figure 1. Malaysian list of applications for events

The selection of Whova, Webex, Bizzabo, and Eventbrite for review in Figure 1 is justified based on their prominence and relevance in the event management landscape. These applications were chosen for their widespread use and recognition in facilitating various events, from corporate conferences to community gatherings [7]. Additionally, these platforms offer diverse features and functionalities, providing valuable insights into best practices and potential areas for improvement in event management application design [8]. While other event management apps exist, these four were selected for their popularity and comprehensive feature sets [9], making them suitable benchmarks for evaluating and informing the development of USIM EventCible.

Figure 2. Whova Application

Whova (Figure 2) is a cutting-edge mobile application designed to streamline and simplify event planning and participation in Malaysia. Their mission is to empower event organisers to create engaging and successful events while fostering a vibrant and connected event community [10].

Empowering event organisers and attendees alike, Whova goes beyond ticketing and registration. They offer a comprehensive suite of features to manage all aspects of user events, from pre-event promotion and attendee engagement to on-site logistics and post-event follow-up.

Several features include seamless event creation, where users can create stunning, branded event pages in just a few minutes. Adapt the design, incorporate multimedia, and connect with their current registration and ticketing systems [11], enhanced attendee engagement: users can foster connections and interaction before, during, and after their event. They should also use features like in-app chat, discussion forums, and live polling to keep their audience engaged [12] and simplify logistics: users can also manage schedules, speakers, sponsors, and exhibitor information all in one place. Whova streamlines communication and ensures everyone is on the same page [13].

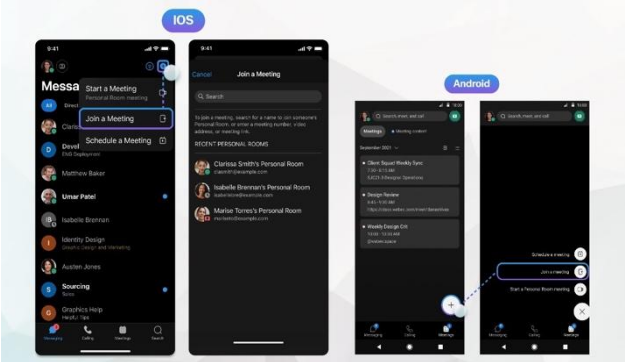

Figure 3. Webex Application

The Webex Events App (Figure 3), formerly known as Socio, represents a sophisticated event management solution meticulously crafted to elevate attendee experiences across virtual, hybrid, and in-person event settings. Rooted in the ethos of seamless connectivity and immersive engagement, this app empowers organisers to curate immersive and interactive events that leave a lasting impression on participants. At its core, the Webex Events App is a digital hub where attendees can seamlessly navigate through event information, agendas, speaker profiles, and session descriptions. With intuitive navigation and user-friendly interfaces, participants can effortlessly chart their event journey, curating personalised agendas tailored to their interests and objectives [14]. Some features are Event Information and Agenda: Users can access comprehensive event details, schedules, speaker profiles, and session descriptions, all conveniently housed within the app. Effortlessly plan their agenda and prioritise the sessions that align with your interests. Networking and Community Building: The integrated chat functionality lets users connect with fellow attendees. Discover participants with shared interests, schedule one-on-one meetings, and leverage "Shake to Connect" for an innovative networking icebreaker (if enabled by the organiser). Engage in discussions and build meaningful connections throughout the event.

Bizzabo Application (Figure 4) positions itself as an event experience operating system, transcending the limitations of a traditional event app. It empowers organisers to craft impactful and immersive experiences for attendees, regardless of whether the event is virtual, hybrid, or in-person. Bizzabo goes beyond simply providing information; it fosters engagement, facilitates connections, and personalises the attendee's journey [15]. Some features include a Unified Platform for All Event Formats: Bizzabo eliminates the need for multiple apps or platforms. It seamlessly manages virtual, hybrid, and in-person events, ensuring a cohesive experience for attendees across all formats. Personalised Agenda and Recommendations: Users can request collection by specifying their object's category and location. Attendees can build customised agendas based on their interests, receive personalised recommendations for sessions and speakers, and leverage AI-powered matchmaking tools to connect with relevant individuals. Gamification: Engage attendees with interactive challenges, quizzes, leaderboards, and rewards for achieving milestones or completing specific tasks within the event environment. By incorporating gamification, Bizzabo enhances attendee motivation and participation, creating a dynamic and enjoyable event experience.

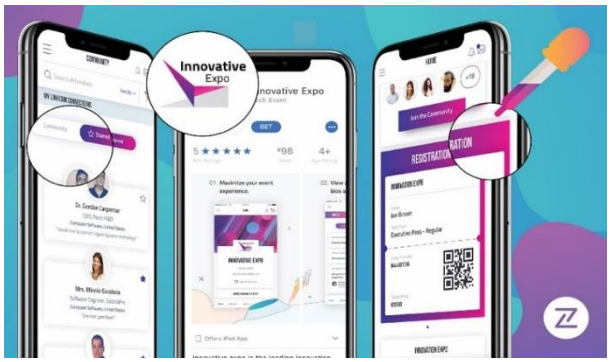

Figure 4 Bizzabo Application

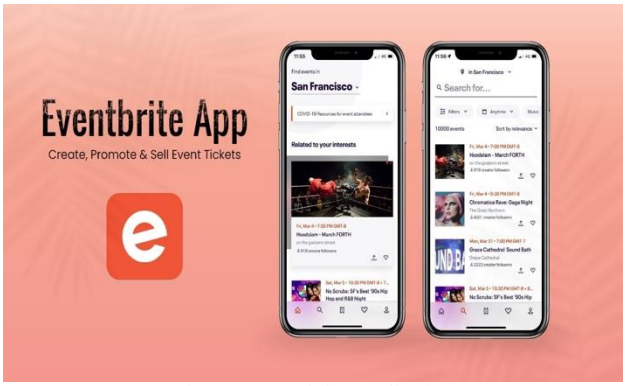

Figure 5. Eventbrite Application

Eventbrite (Figure 5) makes a name for itself as a significant player in ticketing and event management worldwide. It is a bidirectional marketplace that serves both event planners and guests.

Regarding event Organizers, Eventbrite enables anyone to plan, market, and oversee their events efficiently [16]. The platform provides capabilities to monitor attendee data, handle registrations, and expedite ticketing. To help event planners efficiently promote their events and reach a larger audience, Eventbrite also offers marketing tools.

Attendees may find and reserve a wide range of local events using Eventbrite, a one-stop shop. Thanks to the platform's intuitive layout, attendees can easily browse events by category, location, date, and interest. Within the site, they can easily purchase tickets, handle registrations, and view event details. Among the attributes are Event Creation and Management: Users or organisers can create event listings, set ticket prices and tiers, manage attendee registrations, and track sales performance – all within a centralised dashboard. Marketing and Promotion Tools: Users can leverage built-in marketing tools to promote their event on social media, reach a wider audience, and drive ticket sales. Ticketing Solutions: Users have access to a variety of ticketing options, including free tickets, paid tickets, and tiered pricing structures. Eventbrite also streamlines the payment process for attendees, ensuring a secure and convenient experience.

III. COMPARISON IN THE EXISTING SYSTEM

Table I compares the functionality and features of the chosen current system.

TABLE I. COMPARISON OF EXISTING SYSTEM

System	Whova	Webex Events	Bizzabo	Eventbrite
Strengths	Easy pre-event networking, personalised experience	Live participation tools, virtual /in-person support	Gamification, lead capture	Simple setup, ticketing options
Weaknesses	It might be less suitable for huge events	Limited free plan options	Focus on marketing might not suit all events	Limited features compared to some competitors
Log In Options	Email, Social Media, Event-specific credentials	Email, Single Sign-On, Social Media	Email, Social Media, Custom authentication	Email, Facebook, Google, Event specific
Type of the system	The mobile app, Web-based	Web-based, Integrated with Webex Meetings	The mobile app, Web-based	Web-based
Focus Of the System	Networking, Customization	Engagement, Hybrid Events	Marketing, Gamification	Registration, Ticketing
Functionality	Event scheduling, Attendee networking and Agenda customisation	Event hosting, Attendee Engagement and Reporting	Event marketing, Attendee engagement and Sponsorship management	Ticket selling, Event promotion and Attendee management
Features	Agenda management, Attendee management	Virtual breakout rooms, Polls, Q&A	Event website builder, Sponsor management	Ticket sales, Event promotion
Users of the App	Attendees, Organizers, Speakers	Attendees, Organisers, Hosts	Attendees, Organizers, Sponsors	Attendees, Organizers, Promoters
Location Tracking	Yes	No	No	No
Notifications	Yes	Yes	Yes	Yes
Payment Options	Online instant payment	Online instant payment	Online instant payment	Online instant payment
Cost	Freemium with paid plans for additional features.	Freemium, tiered plans	Paid plans	Freemium, tiered plans
Security Features	Industry-standard encryption, access controls	Industry-standard encryption, access controls	Industry-standard encryption, access controls	Industry-standard encryption, access controls
Event Information	Schedules, speaker bios, networking tools, registration forms	Schedules, speaker bios, floor plans, materials	Schedules, speaker bios, documents, live Q&A	Schedules, speaker bios, ticketing options
Offline Access	limited	limited	limited	limited
AI Integration	AI-powered recommendations: Recommends sessions, speakers, and attendees based on user interests and past behaviour.	Real-time translation: Uses AI to translate presentations and live captions into multiple languages.	Intelligent matchmaking: Connects attendees with similar interests for networking opportunities.	Fraud detection: Uses AI to identify and prevent fraudulent ticket purchases.

IV. WEAKNESSES IN THE EXISTING SYSTEM

Event management is pivotal in fostering engagement and community building within academic institutions like Universiti Sains Islam Malaysia (USIM). However, the current landscape of existing event applications presents several weaknesses that hinder their effectiveness in facilitating seamless event coordination and attendee engagement. One of the critical limitations of existing event apps is their limited accessibility, particularly for event management personnel. These apps often need comprehensive features for collecting feedback and managing event logistics, which can pose challenges for organisers, especially for large-scale events. Without robust tools for coordination and communication, ensuring attendee satisfaction and smooth event execution becomes increasingly tricky. Moreover, many event apps need more customisation options, leading to a generic user experience that fails to engage attendees or align with event branding [17]. This fragmentation in communication channels further compounds the issue, making it challenging for organisers to disseminate timely updates and important information to participants. Scalability is another challenge, particularly for event apps catering to large-scale events. These apps may face performance and reliability issues during peak usage [18], impacting user satisfaction and event success. Additionally, pricing constraints limit access to advanced features and functionalities, particularly for organisers with limited budgets or smaller-scale events. This restriction compromises the overall event experience and may deter organisers from utilising these platforms effectively. Addressing these weaknesses is crucial for enhancing event

management and fostering community engagement within USIM. By investing in more accessible, customisable, and integrated event solutions, organisers can streamline coordination, improve communication, and ultimately deliver more impactful events [19]. Through collaborative efforts and innovative approaches, we can overcome these challenges and create a more vibrant and inclusive event ecosystem for the USIM community.

V. OVERVIEW OF APPLICATION

This software is available for free download exclusively for USIM students on smartphones. The application allows users to organise events seamlessly because they can access it anywhere with an internet connection. With USIM EVENTCIBLE, organising events is made more accessible, whether for pickups or store visits. Users may utilise their mobile devices to keep updated and involved in campus events. People increasingly use their mobile devices to stay connected continually rather than spending hours looking at a computer screen after work or class.

VI. SECURITY ELEMENTS IN THE APPLICATION

Because of the heightened susceptibility to attacks and security breaches in today's digital ecosystem, it is imperative to have strong security measures within apps. Because mobile applications send and receive data over the internet, they are vulnerable to assaults [20]. Since USIM EVENTCIBLE holds sensitive user information such as personal details and event registrations, implementing strong security measures is vital to preserve user data and maintain trust in the application's service.

Password protection is the first defence against unauthorised access to user accounts and personal data. USIM EVENTCIBLE employs complex and secure password protocols to mitigate the risk of online threats and hacking attempts. Using password hashing techniques, passwords are encrypted and stored in an unreadable format inaccessible to hackers. This ensures that user passwords remain protected even in a security breach and cannot be easily compromised. Moreover, password hashing adds a layer of security by making it challenging for hackers to crack passwords, thus minimising the risk of unauthorised access to user accounts. With hashed passwords, the likelihood of stolen credentials being exploited or used to access other platforms is significantly reduced, enhancing overall security and user confidence in the application.

In addition to password protection, USIM EVENTCIBLE incorporates robust data encryption protocols to secure sensitive user information during transmission and storage. All data exchanged between the application and servers is encrypted using industry-standard encryption algorithms, preventing unauthorised access and data interception by malicious actors. This ensures that user information, including personal details and event registrations, remains confidential and secure throughout the application's usage.

USIM EVENTCIBLE implements secure authentication mechanisms to verify the identity of users and prevent unauthorised access to user accounts. Multi-factor authentication (MFA) and biometric authentication options such as fingerprint or facial recognition are integrated into the application to enhance security and prevent account compromise. These additional layers of authentication add extra protection, ensuring that only authorised users can access sensitive account information and participate in event activities.

In summary, USIM EVENTCIBLE prioritises comprehensive security measures beyond password protection to ensure user data's confidentiality, integrity, and availability. By incorporating data encryption and secure authentication mechanisms, the application provides a robust security framework that builds trust and confidence in users, fostering a safe and secure environment for engaging with campus events and activities.

VII. METHODOLOGY

A hybrid methodology is adopted to develop USIM EVENTCIBLE, integrating elements of both waterfall and agile approaches to project management. This combined approach ensures structured planning and execution while allowing flexibility and adaptation throughout the project lifecycle [21].

The waterfall methodology is implemented during the initial phases of the project, encompassing requirements gathering, system analysis, and design. This sequential approach enables thorough documentation of project specifications and system architecture, laying a solid foundation for subsequent development phases. Following a predefined sequence of steps can identify potential risks and challenges early, minimising the likelihood of errors during implementation.

Agile principles are introduced to enhance collaboration, responsiveness, and adaptability as the project progresses into the development, integration, testing, deployment, and support maintenance phases. Agile methodologies such as Scrum or Kanban facilitate iterative development cycles, enabling continuous feedback, refinement, and application enhancement. This iterative approach ensures that the development process remains responsive to evolving requirements and stakeholder feedback, resulting in a more user-centric and adaptable final product.

By combining the structured framework of the waterfall with the iterative and collaborative nature of agile, the hybrid methodology employed in developing USIM EVENTCIBLE ensures efficient project management while accommodating changing priorities and emerging challenges. This approach promotes a balanced and holistic development process, ultimately successfully delivering a high-quality and user-friendly event management application for the USIM community.

Adopting a hybrid methodology in Figure 6, incorporating elements of both waterfall and agile approaches, is significant in ensuring the successful development and deployment of USIM EVENTCIBLE. Utilising the waterfall approach in the initial stages of the project allows for a structured and comprehensive planning process. By following a sequential model, developers can meticulously analyse requirements, design system architecture, and establish a clear roadmap for development. This systematic approach identifies potential errors and shortcomings early, minimising risks and uncertainties as the project progresses.

During the analysis phase of the waterfall model, extensive research and user studies are conducted to understand the needs and preferences of USIM EVENTCIBLE users. This phase lays the groundwork for defining specific requirements and functionalities, ensuring that the application is tailored to meet user expectations effectively.

Subsequently, the design phase focuses on translating requirements into tangible solutions, including software architecture and interface design. Through meticulous planning and design, developers can envision the final product and establish a robust framework for implementation.

The project gains more flexibility and adaptability when agile approaches are used during the development, integration, testing, deployment, and support maintenance phases. Iterative development cycles, facilitated by agile principles, allow constant improvement and refinement in response to changing needs and user feedback. Throughout its existence, USIM EVENTCIBLE is guaranteed to stay adaptable to shifting requirements and new problems thanks to this iterative approach.

By combining the structured planning of waterfall with the iterative nature of agile, the hybrid methodology employed in developing USIM EVENTCIBLE ensures a balanced and comprehensive approach to project management. This approach enhances efficiency and quality and enables the timely delivery of a user-centric and robust event management application for the USIM community.

The system requirements process is one of the most critical phases of project development. As stated in the study objective and scope, we aim to develop a safe USIM Eventcible application and guarantee trouble-free user acceptance testing. Every data we obtain from journals, papers, and news sources has been carefully examined to ensure it will fulfil our needs.

The system design includes the user interfaces, system interfaces, databases, network, and application designs. This phase's primary focus is on the problem domains, such as "how we can implement it within the system?" This phase involves converting documents into a format that can be implemented and determining how the system will function. At this stage, we build a requirements list upon which we base design decisions. One or more designs are developed at this phase to achieve the intended project outcome. Depending on the project's focus, the design phase's outputs could include flowcharts, drawings, entity relationship diagrams (ERD), prototypes, and UML schemas. In addition to the distinctive qualities, the following details must be mentioned: Student/User Interface, Campus Association of USIM Interface, Lists of databases, and Requirements for Software and Networks.

The system's users and roles are listed in Table II for the user, campus association, and administrator roles.

TABLE II. USER AND ROLE OF THE SYSTEM

User	Role description
User/Student	1. Register and sign in account 2. View the events 3. Search the events 4. Book the events 5. Save the selected events. 6. Receive notifications of the events
Campus Association of USIM	1. Register and log in account. 2. View the events. 3. Search the events. 4. Receive notifications of the events. 5. Create the events.
Administrator	1. Monitor processes and activities. 2. Update system 3. Create the events 4. Check user details 5. Handle database

Figure 6 displays the use case diagram for the tasks related to students, campus associations, and administrators.

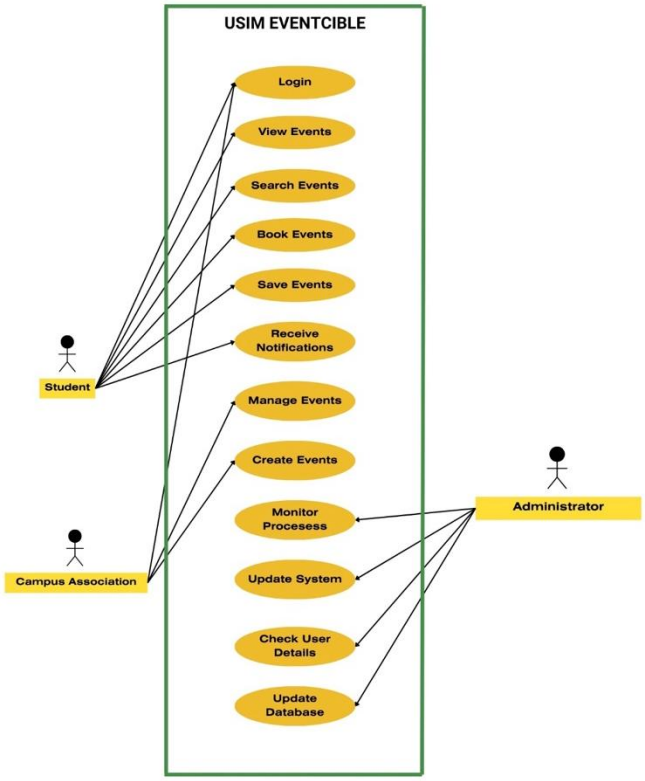

Figure 6. Use Case Diagram

The system database design diagram (Figure 7) shows all properties, entities, and the relationships between them.

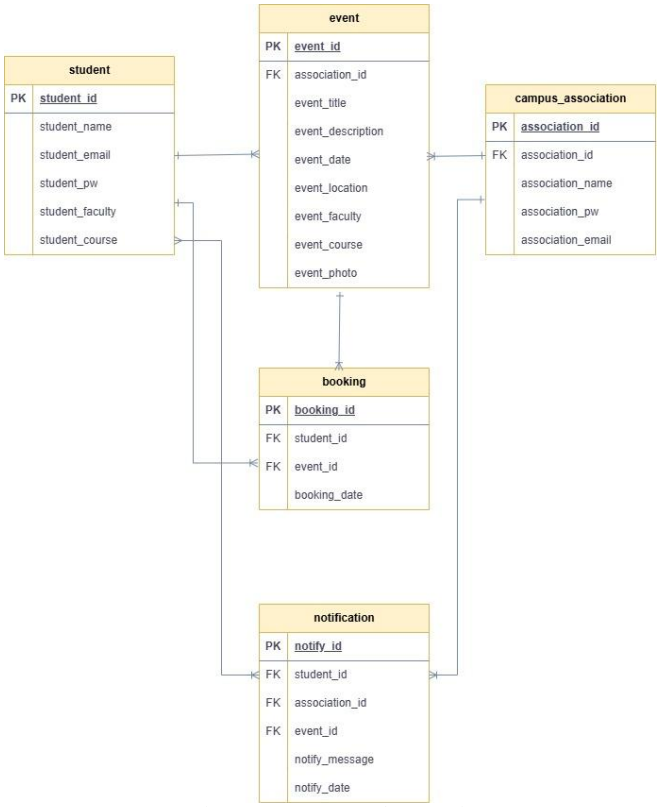

Figure 7. System Database Design

In the design phase of our project, we utilised flowcharts to visually represent the workflow for students interacting with the USIM EVENTCIBLE application. A flowchart is a diagrammatic illustration depicting the sequence of process actions or decisions. It is a valuable tool for analysing, designing, documenting, or managing processes and programs.

The flowchart in Figure 8 outlines a student's actions within the application, from login or registration to viewing events, searching for specific events, booking for events, and receiving notifications. Each step in the flowchart represents a distinct action or decision point in the user journey.

Similarly, for the Campus Association's role in managing events within USIM EVENTCIBLE, we have created a flowchart to illustrate their workflow. The flowchart in Figure 9 visualises the steps involved, including logging in or booking, viewing events, searching for events, creating new events, managing event details, and receiving notifications. Flowcharts are instrumental in depicting complex processes in a structured manner, ensuring clarity and understanding of the sequence of actions required for different user roles within the application.

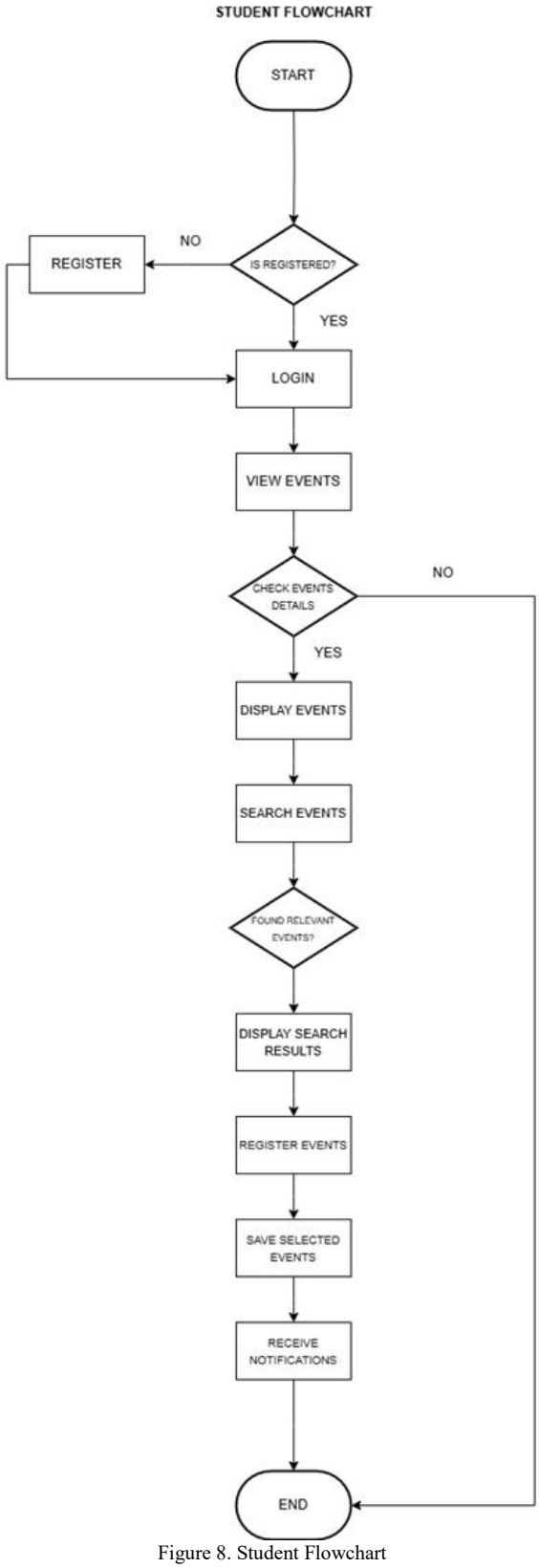

Figure 8. Student Flowchart

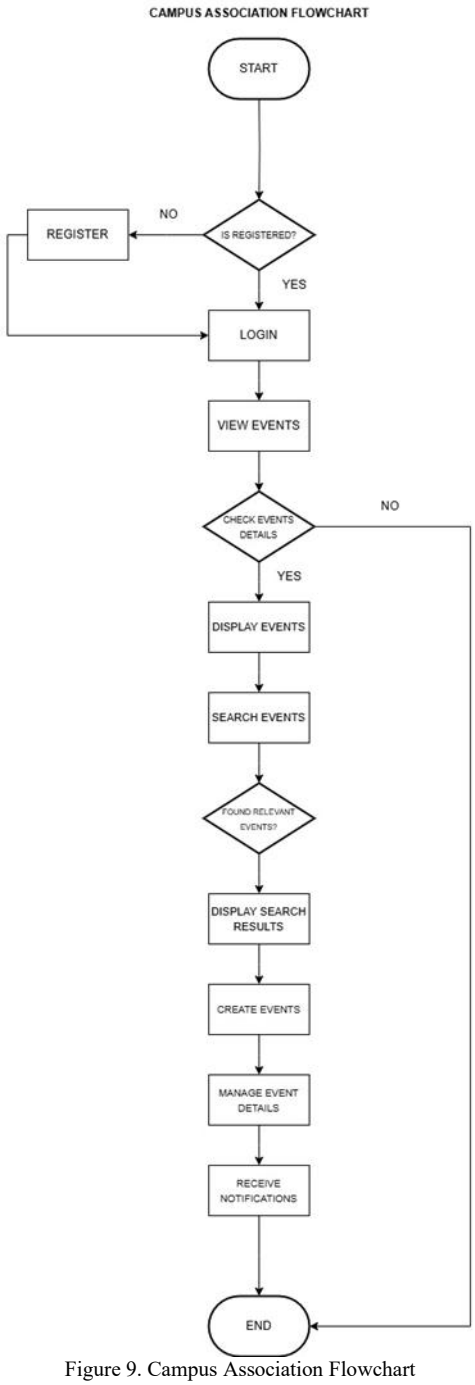

Figure 9. Campus Association Flowchart

The following steps are implementation and coding (Table III). At this point, we will list every piece of equipment utilised and the parts or designs. The USIM EVENTCIBLE application will have a login, Sign-up, User Menu, Search Events, Booked Events, Create Events, and Event Management.

TABLE III. SOFTWARE REQUIREMENTS

Language/Tools	**Description**
Flutter	Flutter is an open-source UI software development kit created by Google. It can be used to develop cross-platform applications from a single codebase for the web, Fuchsia, Android, iOS, Linux, macOS, and Windows.
Firebase	Database management system
Visual Studio Code	To develop application

Testing is the stage that follows design and involves assessing a system or its parts to see if they meet the specified requirements. Simply put, testing is executing a system to identify flaws, malfunctions, or requirements that conflict with actual needs. For this reason, we will test the functionality and usefulness of the USIM EVENTCIBLE application.

During maintenance, the programme is watched to ensure it continues functioning as intended and that any necessary updates or repairs are applied. There are numerous ways to monitor the programme, depending on how maintenance is configured. To handle it, real-time reporting or bespoke reporting systems generated automatically within the programme and automatically sent to the software event are frequently utilised.

VIII. RESULT

User interface (UI) design is how designers emphasise style or aesthetics while creating user interfaces for software or electronic devices. The goal of designers is to create interfaces that are entertaining and easy for USIM students to utilise. Among other forms, graphical user interfaces are called "UI design." This chapter will include a list of the USIM EVENTCIBLE interface designs.

The selection page for USIM EVENTCIBLE is shown in Figure 10. Before students can log in or make an account, they must choose the roles they wish to play.

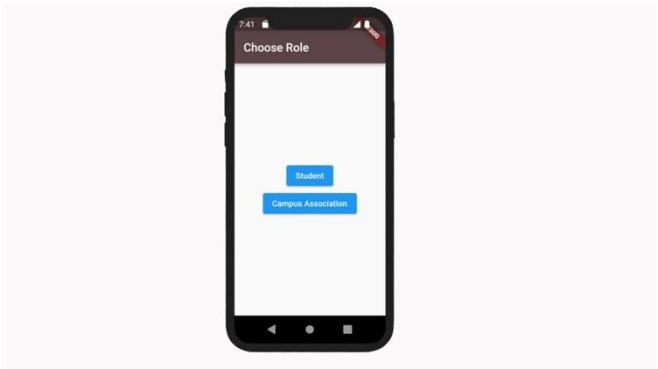

Figure 10. Selection Page

Figure 11 shows the login page. Users must enter their USIM email address and the correct password to securely access the USIM EVENTCIBLE system with their booked accounts. This system is intended for faculty members and students to use.

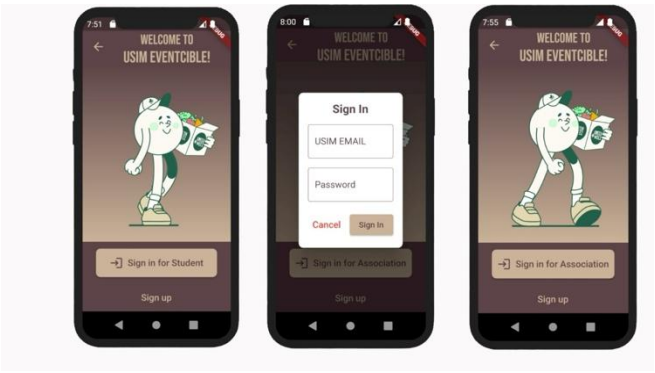

Figure 11. Login Page

The Sign-up page (Figure 12) enables new users to create an account within the USIM EVENTCIBLE system. It includes multiple input fields: one for the user's full name, another for their university email, a field for a chosen username, and two secure fields for password entry and confirmation. This ensures that all necessary user information is collected for account creation.

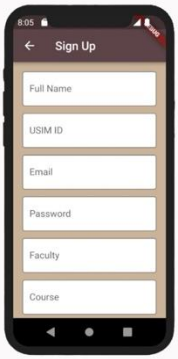

Figure 12. User Sign Up

The Home Page and Menu Selection are shown in Figure 13. The dashboard displays an overview of created events and a navigation bar. For the Menu displayed, the user may select from four options in this section based on their role: search events, book events for the student role, and create events and events management for the Campus Association role.

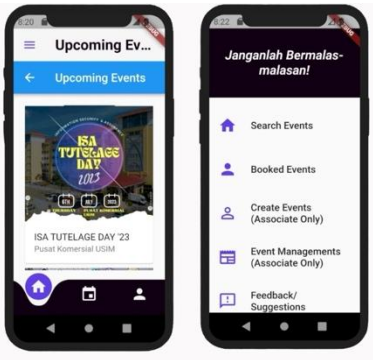

Figure 13. Home Page and Menu Selection

The search and filter page in Figure 14 is designed to help users find events that match their specific interests. It includes a search bar where users can type keywords related to events they are looking for. Below the search bar, filter options allow users to refine their search results by faculty and Course type. This ensures users can quickly find relevant events without sifting through unrelated ones.

Figure 14. Search and Filter

Figure 15 displays the event details, and the book button page enables students to book events efficiently. The organisers will share the registration form link with Google Forms for the event details. The form typically includes fields pre-filled with the student's personal information, such as their name and university email, to save time. Additional fields, such as dietary restrictions or workshop preferences, may be required depending on the event. This ensures that all necessary information is collected for the event organisers. Once the Student is confident with their filled form, a "Submit" button allows students to finalise their booking registration, confirming their participation in the event.

Figure 15. Event Details and Book Events

The "Booked Events" tab, shown in Figure 16, provides students with a customised list of all the events they have reserved. Brief facts of each event, like its name, date, and time, are displayed, making it simple for pupils to stay motivated. Using this page, students can better manage their schedules and ensure they attend all scheduled events.

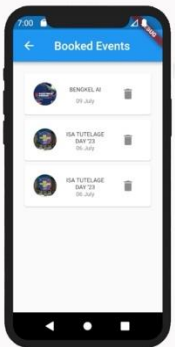

Figure 16. Booked Events

The Create Event page, a resource for Campus Association members to plan and oversee campus events, is depicted in Figure 17. The event title, a thorough description, the date, the time, and the place can all be entered. For needs or instructions, there may be additional event description fields. Similar faculty members can also establish registration requirements and other information that participants must provide on this page. After providing all the information, students can access the event through the system by clicking the "Create Event" option.

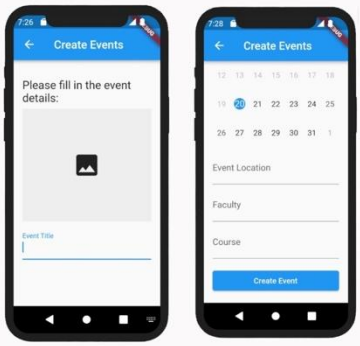

Figure 17. Create Events

Figure 18 shows that the event management page allows Campus Associations to oversee the list of students booked for their events. It displays booked students' names and contact information, making it easy for faculty to communicate updates or instructions. The event management page ensures faculty can effectively manage participant information and streamline event organisation.

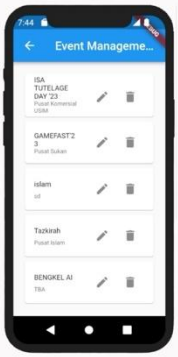

Figure 18. Event Management

IX. CONCLUSION

The justifications for establishing this application are clarified in this paper. The comparison table that has been made makes it easy to see the advantages, disadvantages, and features of each programme. USIM EVENTCIBLE will focus on the shortcomings in the existing apps to make it easier for the community to use the Event application.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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