

Masters with Specialization in Multimedia (MM) Program

Computing Science Department

University of Alberta

Multimedia Program Project Report

Date:

Choose the correct enrolled code:

MM807 _____ MM808 _____ MM809 _____ MM810 _____

- **Choose either procedure 1 or 2 below for MM807 or MM808 at the discretion of the internship supervisor**
- **Procedure 1 is mandatory for MM809 and MM810**

Upon the completion of MM807, MM808, MM809 or MM810, student submits a Final Report.

- a) Signatures of both student and internship supervisor are required on the report. This is to ensure that there is no conflict with the Non-Disclosure Agreement and copyright regulations that is imposed by the supervisor's institution.
- b) The Report needs to be submitted to the MM instructor **within 5 working days before the completion** of the respective MM8xx internship course enrolled.
- c) The report needs to summarize the tasks completed based on the agreed milestones on the Approval Form. Without violating the non-disclosure agreement and copyright regulations of the supervisor's institution, student should submit a reasonably descriptive report, justifying why the student should be awarded CREDIT for the internship placement.

1. Separate Attached Report (at least 4 pages) plus Section 2 below

2. Mandatory Short Form (fill in this section, sign and submit) Mandatory

Student Name:

Internship Period from:

to:

Internship Supervisor Name:

Internship Supervisor Company/Institution:

Department:

Internship Supervisor Job Title:

Internship Supervisor Email:

Internship Company Website:

Project Title:

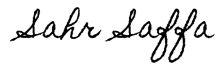
1. List all the milestones, expected outcome and deadlines as defined in the Approval Form.
2. For each task listed in 1 above, describe work completed. If not achieved, explain why and suggest solution.

Attach separate sheet if necessary. Each additional sheet should be numbered, and have the student's and supervisor's signatures.

Signatures of Student, Internship Supervisor and MM Instructor are required.



Student Signature



Internship Supervisor Signature

MM Instructor Signature

Date signed:

Leveraging Digital Multimedia User Interface and User Experience: A Case Study of C-Tribe Festival

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Abstract—As the festival capital of Canada, Edmonton’s event management industry plays a crucial role in the city’s economy. However, despite its significance, many industry players continue to rely on conventional methods, often overlooking advancements in digital multimedia, user interface, and user experience design. This report elaborates on the work I have conducted in the context of the C-Tribe Festival [2] as a case study, demonstrating how digital multimedia can significantly contribute to enhancing the event management sector in Alberta, particularly in Edmonton.

I. INTRODUCTION

Edmonton, often referred to as Canada’s Festival City, hosts a wide array of annual festivals that celebrate the region’s vibrant culture and diverse communities. Among these, the C-Tribe Festival [2] stands out as a unique event that brings together underrepresented communities, fostering innovation, creativity, and inclusivity across various industries. Its programming aims to create a dynamic environment that supports creativity in technology, music, culture, fashion, and gaming. Additionally, the festival plans to introduce a film vertical in 2025. Given the opportunities presented by this vibrant platform, there is significant potential for digital multimedia, user interface, and user experience to drive technological advancement within this sector. This report provides a comprehensive overview of the work I have undertaken to enhance the C-Tribe Festival’s user experience by leveraging digital multimedia, with guidance from the founder, Sahr Saffa, UI/UX director, Kaitlyn Eaton, and support from the entire C-Tribe team.

II. APPROACH AND METHODOLOGIES

A. Low Fidelity Wireframes

Low-fidelity wireframes are commonly employed in the fields of user interface (UI) and user experience (UX) design to draft and conceptualize abstract ideas that emerge following discussions and brainstorming sessions. This technique proves particularly useful when the ideas are still nascent and require a preliminary, rough visualization of the proposed product. Low-fidelity wireframes deliberately omit detailed visual elements such as color schemes, typography, and intricate design features. Instead, they concentrate on the fundamental structure, content, and flow within the system. By focusing on the core layout and functionality, these wireframes provide a clear

and simplified representation of how different components and interactions will be organized.

This approach is highly effective for establishing a foundational understanding of the system’s architecture and ensuring alignment among stakeholders regarding the overall direction and functionality. It allows for early-stage feedback and discussion without the distraction of detailed design elements, facilitating a more focused examination of the user experience and interface structure. Moreover, low-fidelity wireframes are a cost-effective and time-efficient way to iterate on ideas, make adjustments, and reach consensus before investing resources in high-fidelity designs. By prioritizing content and flow over visual details, this method supports the development of a well-organized and user-centric product vision in the initial stages of the design process.



Fig. 1. User Onboarding Flow Desktop Low Fidelity Wireframe

• User Onboarding Flow

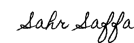
This desktop low-fidelity wireframe depicted in Figure 1 showcases the flow of how users onboard with the C-Tribe platform, including the sign-in and sign-up pro-

Student


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1

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cesses, as well as how users interact to share their accounts on social media to increase the platform's virality. In addition, Figure 2 below portrays the mobile view flow to ensure it functions well in the mobile onboarding process.



Fig. 2. User Onboarding Flow Mobile Low Fidelity Wireframe



Fig. 3. Web Application Low Fidelity Wireframe

• Web Application Flow

The low-fidelity web application wireframe displayed in Figure 3 portrays how the website should look after users sign up and log in to the C-Tribe platform. Once logged in, they will be able to access more in-depth features, including viewing all speaker lineups, the event schedule, how to get involved with C-Tribe, setting up their profiles,

accessing their passes, notifications, and chatting with our customer representatives.



Fig. 4. Cappsule App Flow Mobile Low Fidelity Wireframe

• Cappsule mobile app

As part of the product ideation, one of the delivered wireframe flows is for the Cappsule mobile app. Figure 4 above represents the ideas on how Cappsule would work, including video collections, rewards earned from user submissions, and other features such as recommendations and user settings.

B. High Fidelity Wireframes

High-fidelity wireframes are introduced in the later stages of the design process, after the content and flow established in the low-fidelity phase have been thoroughly analyzed and validated. This phase marks a significant progression from abstract concepts to a more detailed and polished representation of the product. Here, the focus shifts to incorporating the brand's visual identity elements, such as brand colors, typography, and other aesthetic details, to ensure that the final design aligns seamlessly with the C-Tribe Festival's established brand identity. This stage is crucial for creating a visually compelling and cohesive user interface that reflects the festival's unique style and values.

During this phase, I collaborated closely with the UI/UX Director, Kaitlyn Eaton and Senior Content Designer, Laura Dominguez to refine and enhance the wireframes with a high degree of precision. This involved meticulous attention

to pixel-level details, ensuring exact font sizes, color codes, and the integration of Figma components. By focusing on these aspects, we aimed to produce a design that not only meets but exceeds high-quality standards. The goal was to translate the initial abstract ideas into a well-defined and aesthetically pleasing final product that delivers an exceptional user experience and effectively communicates the festival's brand message. This detailed and iterative process ensures that every visual and functional element is carefully considered and aligned with the overall vision for the project.

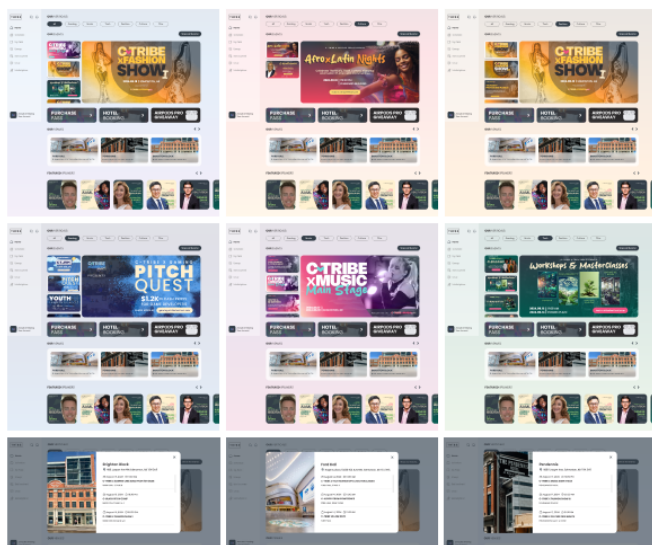


Fig. 5. Web App Desktop Homepage High Fidelity

• Web App Homepage High Fidelity

This desktop homepage [3] high-fidelity design, depicted in Figure 5, highlights efforts to address user pain points by showcasing featured programming through visually appealing banners, venue locations, hotel booking options, and featured speakers. This high-fidelity design aligns with the brand identity in terms of color style, typography, and overall layout within the design system.

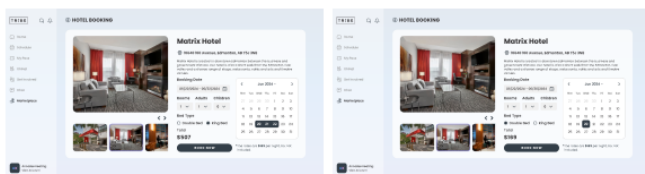


Fig. 6. Web App Desktop Hotel Booking High Fidelity

• Hotel Booking High Fidelity

This desktop hotel booking high-fidelity design, showcased in Figure 6, is thoughtfully crafted to streamline the process for our speakers, performers, and guests who are searching for accommodation during the event. By integrating user-friendly features and clear navigation, this design aims to reduce the hassles typically associated

with booking accommodations, ensuring that all attendees can easily find and reserve suitable lodging. This approach not only enhances the overall user experience but also contributes to a smoother, more enjoyable event for everyone involved.

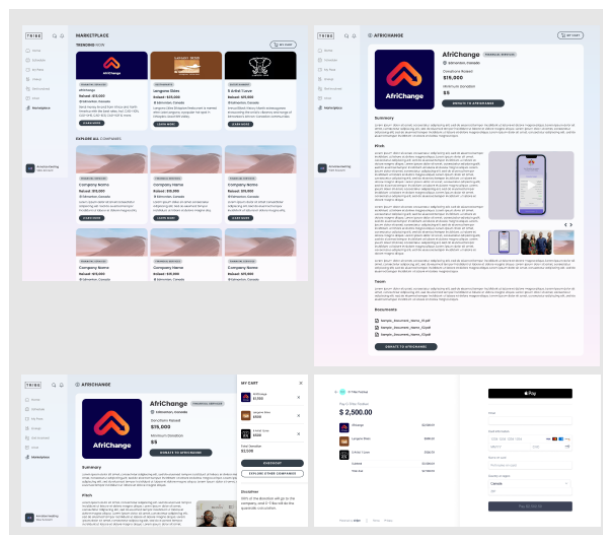


Fig. 7. Marketplace High Fidelity

• Marketplace High Fidelity

Figure 7 showcases the high-fidelity design of the marketplace [7], a platform specifically developed to support companies in their efforts to raise donations. This design highlights key features intended to streamline the donation process, making it easier for businesses to connect with potential donors and effectively manage contributions. By offering a user-friendly interface and clear navigation, this marketplace platform is designed to enhance the overall experience for both companies and donors, ultimately helping to increase the success and reach of fundraising initiatives.

C. Responsive Layout

As mobile devices continue to advance in both functionality and screen resolution, the demand for responsive layouts has grown significantly. This evolution in technology has heightened the need for user interface and user experience designs that are capable of adapting seamlessly across various device types and screen sizes. We must be able to ensure that end users can view content clearly and interact with it effortlessly, regardless of the device they are using. This includes not only maintaining a high-quality layout but also optimizing the overall user experience to be intuitive and visually appealing on smartphones, tablets, and other mobile devices. By prioritizing responsiveness, we can guarantee that the content remains accessible and engaging, providing a consistent and high-quality experience across all platforms. In the case of the C-Tribe Festival, as depicted in Figure 8, I have also provided a responsive layout for the live streaming platform [9] to ensure that users can view the live streaming

event not only on their desktops but also on their mobile devices.

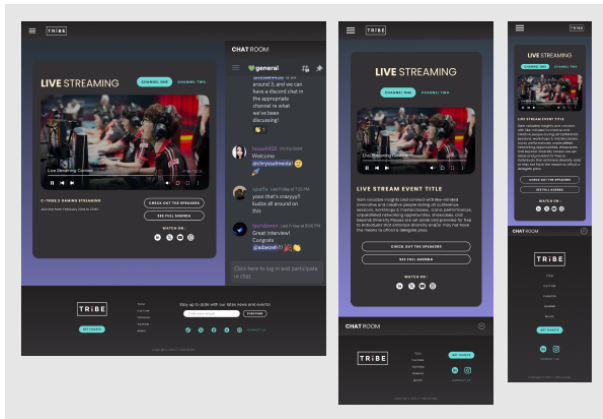


Fig. 8. Live Streaming High Fidelity Responsive Layout

In addition, I also worked closely with Senior Content Designer Laura Dominguez to provide the responsive layout for the homepage [2], vertical web pages [12], as well as the passes [8] page as portrayed in Figure 9 and Figure 10.

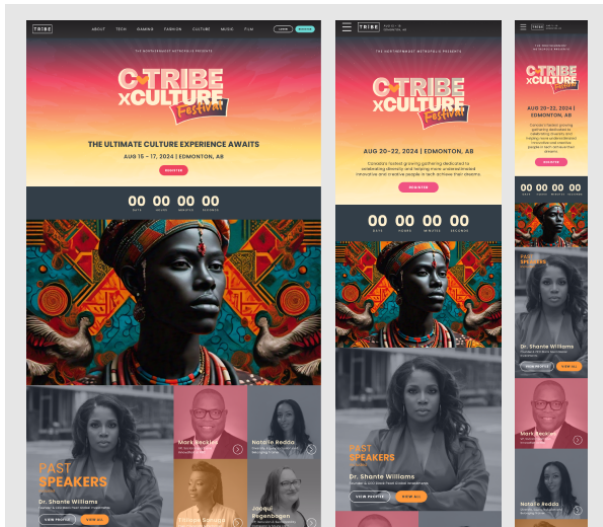


Fig. 9. Culture Vertical High Fidelity Responsive Layout

D. Interactive Prototype

After establishing the high-fidelity product, an interactive prototype is developed to allow users to engage dynamically with the interface. This prototype is crucial for preliminary usability testing, helping designers observe user interactions and identify areas for improvement before final implementation. For the C-Tribe Festival, I took the initiative to record the interactive prototype and convert it into a GIF image. This approach was designed to effectively communicate the details of the release update to users. The GIF serves as a dynamic visual tool that can be easily embedded into both the festival's website and email communications. By using this

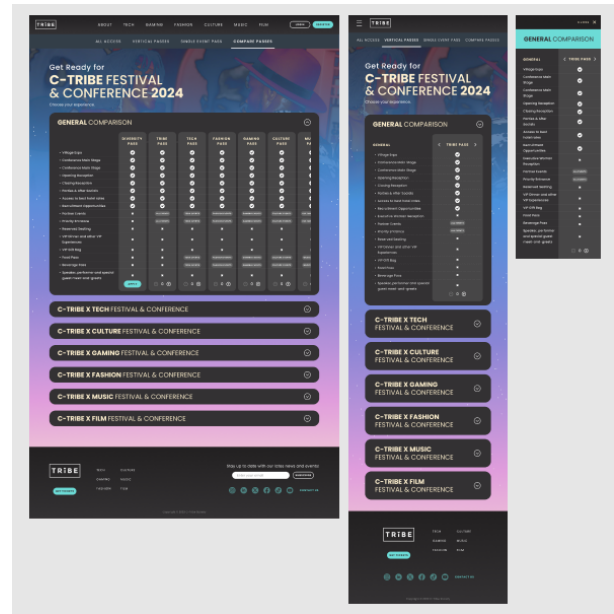


Fig. 10. Passes Comparison High Fidelity Responsive Layout

format, we ensure that users receive a clear and engaging explanation of the new features and updates. This method not only enhances user understanding but also provides a consistent and visually appealing way to present important information, thereby improving the overall communication strategy for the festival, as depicted in Figure 11.



Fig. 11. Interactive Gif Prototype for Release Page and Email

E. Competitor Analysis

Competitor analysis is undoubtedly beneficial as one of the key considerations in the decision-making process for building the product's user experience. This ensures that our product remains relevant and can compete effectively with other players in the market. For the C-Tribe Festival case,

I also captured some competitor flows, such as SXSW [4], depicted in Figure 12; Inventures volunteer forms [1], shown in Figure 13; and Startupfest [9], illustrated in Figure 14.

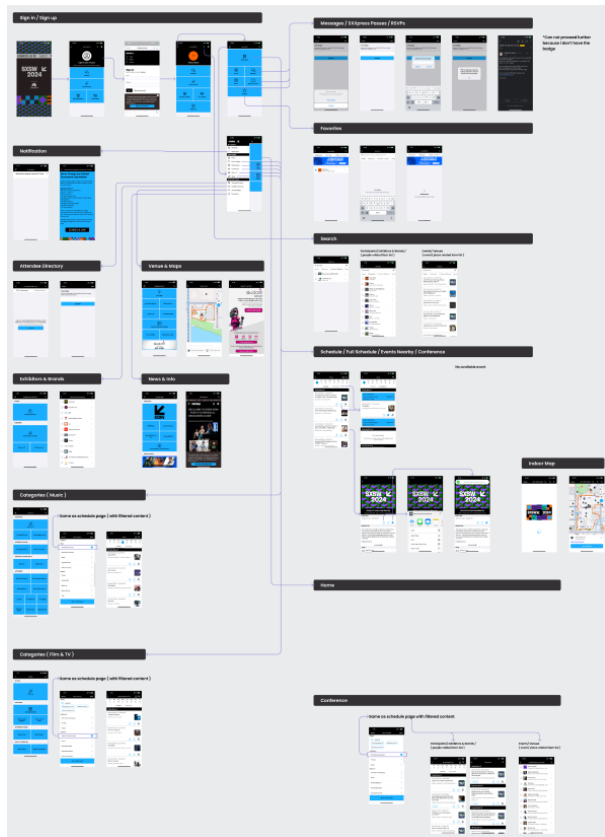


Fig. 12. SXSW Interaction Flow

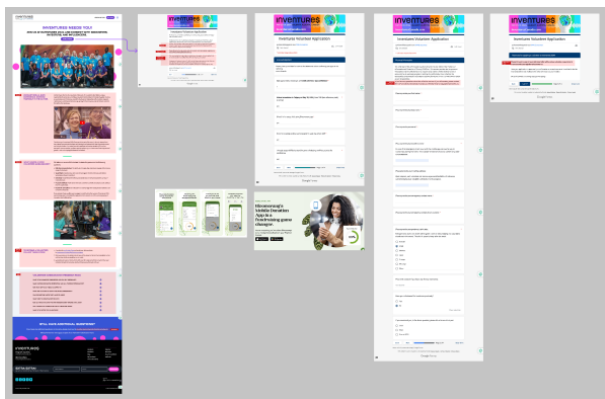


Fig. 13. Inventures Volunteer Application Interaction Flow

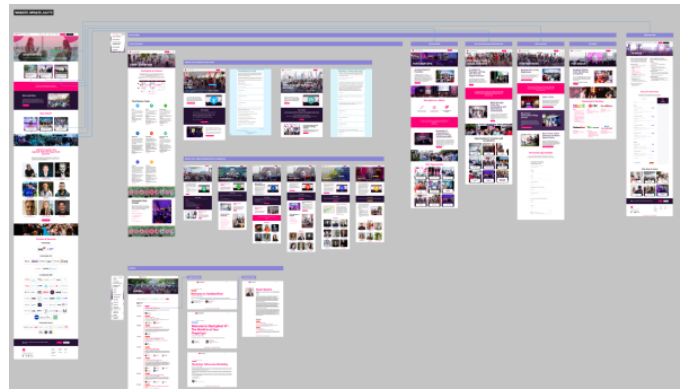


Fig. 14. Startupfest Interaction Flow

range of feedback from festival attendees and participants. The feedback collected was multifaceted; a significant portion of inquiries were focused on clarifying uncertainties related to operational procedures, such as the precise location of the venue, designated meeting points for various events, and accurate event timing. These details were crucial for ensuring that participants could navigate the festival smoothly and without confusion. In addition to these operational queries, some feedback highlighted areas for potential product improvement. Notably, users expressed confusion regarding the process for filling out their user bios, indicating a need for clearer instructions or a more intuitive interface. Furthermore, there were requests for an unsubscribe button in our email campaigns, underscoring the importance of providing users with straightforward options for managing their communication preferences. This comprehensive feedback was invaluable for identifying both operational issues and areas for enhancement, which will contribute to refining the festival experience for future events.

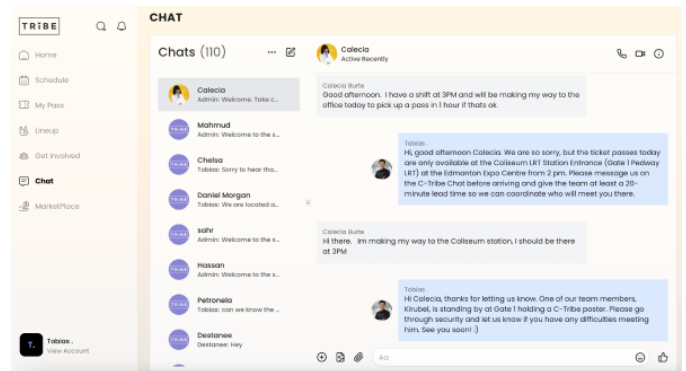


Fig. 15. C-tribe Customer Service Chat Platform

F. Qualitative Data Gathering

In the context of qualitative data gathering for the C-Tribe Festival, I took on the role of a customer service representative, directly engaging with customers through our chat platform [11] to address their inquiries and concerns, as depicted in Figure 15. This role involved managing a diverse

G. Quantitative Data Gathering

In terms of quantitative data gathering for the C-Tribe Festival, I worked closely with the team to develop the C-Tribe forms [6] designed to systematically collect user data, as showcased in Figure 16. These forms cater to all verticals

and functionalities, including application forms for speakers, volunteers, fashion models, fashion designers, artists, and more across various categories such as general submissions, technology, music, and gaming. The forms are integrated into our system and are reflected in the admin panel, as shown in Figure 17, facilitating comprehensive data management. The quantitative demographic data gathered through these forms can then be subjected to in-depth analysis and visualization. This process is crucial for identifying trends and patterns, which will inform strategic decisions and improvements aimed at enhancing the overall experience of future C-Tribe Festivals.



Fig. 16. C-tribe Forms User Data Collection

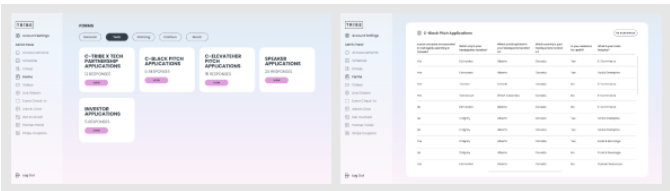


Fig. 17. C-tribe Forms Admin Panel

H. Content Scheduling

Since scheduling and location information are critical aspects of event management, it is essential that this information is prominently displayed on the website and remains accessible to our guests at all times. By ensuring that guests can easily access up-to-date details about the event, including timing and venue, we can significantly reduce any potential confusion and enhance their overall experience. This is particularly important for providing clear information about the speakers and performers who will be participating in the event. To address this, I designed a comprehensive event card layout that integrates detailed information about each speaker and performer for every event. Furthermore, I also updated the C-Tribe admin panel to include the scheduled event and speaker

details, ensuring that all information is efficiently managed and readily available for administrative purposes. This updated layout and integration are illustrated in Figure 18.

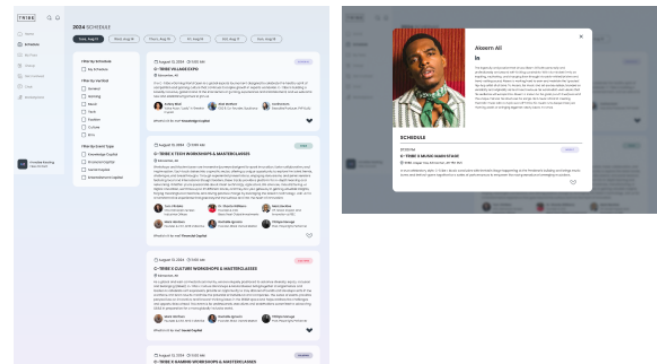


Fig. 18. C-tribe Festival 2024 Content Scheduling

III. CHALLENGES AND FURTHER IMPROVEMENT

Despite of this success story case study on how digital multimedia user interface and user experience can be used to enhance the overall c-tribe festival user experience, it also comes with various challenges and room for further improvement based on my observation.

• Fast paced and dynamic environment

Like many startups, the pace and direction of development are heavily influenced by the market’s fluctuating demands. This dynamic environment often necessitates trial and error to identify effective solutions. Therefore, it is crucial for technology infrastructure to be adaptive, resilient, and robust, enabling quick responses to changes and challenges. This adaptability helps the company meet user needs, stay ahead of trends, and maintain a competitive edge.

• Enhance the experience of people collisions

With the gathered qualitative and quantitative data, we can enhance the user experience by strategically accelerating interactions within our network. Analyzing these insights helps identify areas for optimization, streamline processes, and foster a more dynamic community. This approach improves user engagement and supports our goal of creating a vibrant, collaborative environment with more opportunities for connection.

• Continuous product improvement

With over 1,300 product users as of August 2024, this milestone shows the product meets market demands effectively. The growing user base highlights the product’s success in addressing needs and preferences. This achievement emphasizes the importance of user experience in maintaining engagement, attracting new users, and fostering a positive reputation. Continuously refining the user experience is crucial for sustaining growth and long-term success.

IV. CONCLUSION

This C-Tribe Festival case study demonstrates how digital multimedia can significantly enhance the event management sector in Alberta, with a particular focus on Edmonton. By showcasing the application of advanced technologies and multimedia strategies, the study highlights the potential for innovation and improvement in managing and executing large-scale events. Additionally, it reflects my skills and expertise as a software engineer and designer, with NOC 21231, which is listed as an in-demand occupation on the Alberta ALIS website [5]. This alignment underscores the relevance and value of my work in the current job market and contributes to the ongoing development of the industry in the region.

REFERENCES

- [1] Inventures Canada. <https://inventurescanada.com/>.
- [2] C-Tribe Festival Conference. <https://www.ctrifestival.com/>.
- [3] C-Tribe Dashboard. <https://clabs.ctrifestival.com/>.
- [4] SXSW Conference Festivals. <https://www.sxsw.com/>.
- [5] Occupations in Demand alis Government of Alberta. <https://alis.alberta.ca/occinfo/occupations-in-alberta/occupations-in-demand/>.
- [6] C-Tribe Get Involved. <https://clabs.ctrifestival.com/get-involved>.
- [7] C-Tribe Marketplace. <https://clabs.ctrifestival.com/marketplace>.
- [8] Startupfest. <https://www.startupfest.com/>.
- [9] C-Tribe Gaming Live Stream. <https://gaming.ctrifestival.com/watch>.
- [10] C tribe Chat. <https://clabs.ctrifestival.com/chat>.
- [11] C tribe Culture. <https://culture.ctrifestival.com/>.

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