

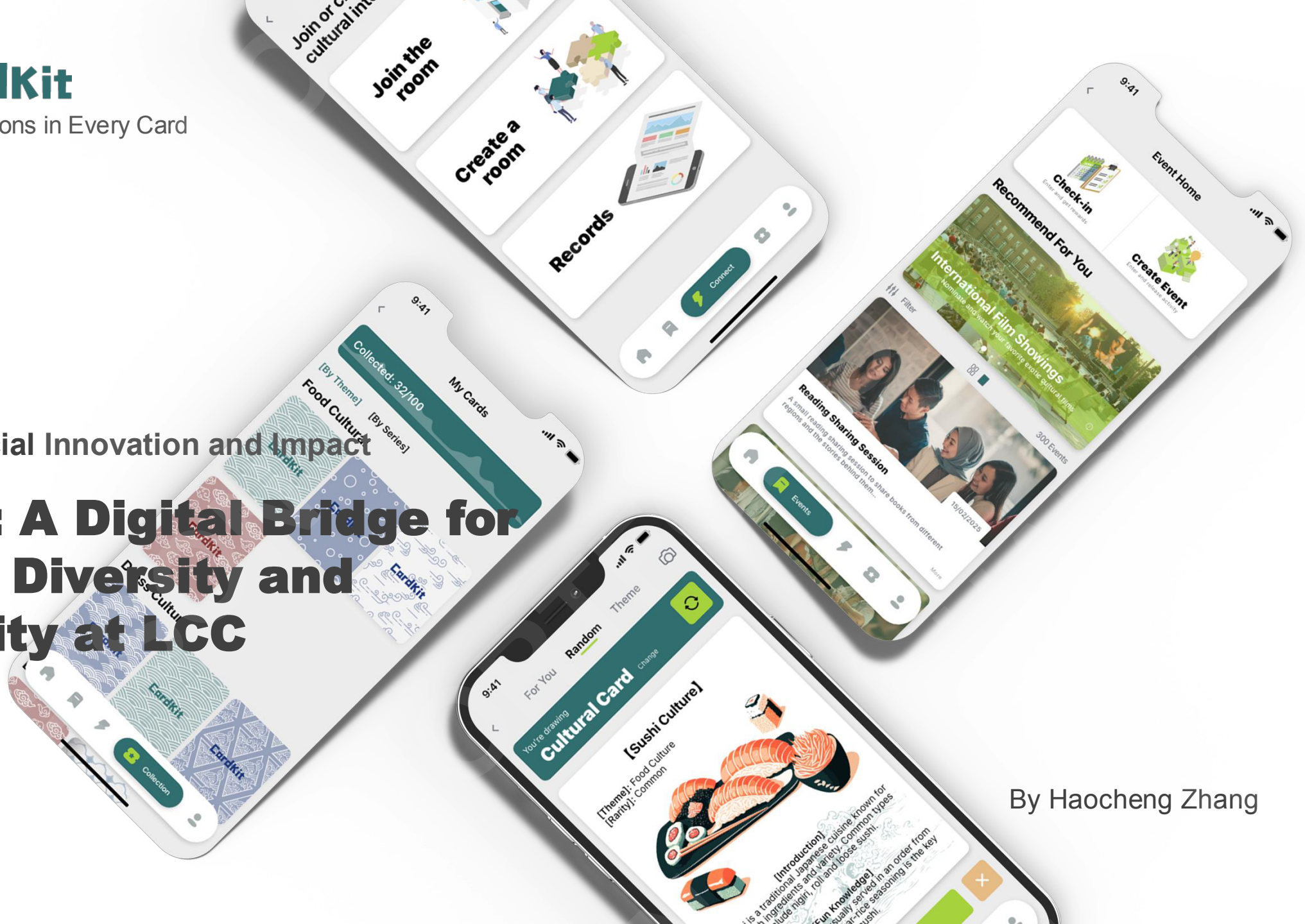


**CardKit**

Connections in Every Card

Unit 2 Eco-social Innovation and Impact

# CardKit: A Digital Bridge for Cultural Diversity and Inclusivity at LCC



By Haocheng Zhang

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# 01 INTRODUCTION

## Context And Objectives

The London College of Communication (LCC) is a multicultural campus. It brings together students from many different backgrounds. This diversity creates opportunities for cultural exchange. However, many students face challenges. Language differences and cultural misunderstandings often prevent meaningful connections. Berry's (2006) theory of acculturation explains how such barriers affect a sense of belonging. Gay (2018) also highlights the need for inclusive and culturally responsive environments.

Unit 1 research revealed important insights. Interviews, surveys, and workshops showed a strong need for shared spaces and cultural exchange. Students were dissatisfied with existing multicultural activities. They described these activities as shallow and inconsistent. International students often felt disconnected due to cultural differences. This reflects Crenshaw's (1991) concept of intersectionality, where overlapping identities, such as race and culture, can lead to marginalization.

CardKit was developed to address these issues. The app uses gamified interactions and cultural tasks to foster exchange. It creates virtual spaces for collaboration. Students can explore cultural resources and complete tasks together. Research shows that rewards and achievements help sustain engagement (Deterding et al., 2011). CardKit also promotes inclusivity by encouraging students to co-create and share traditions (Manzini, 2015).



# 02 ECO-SOCIAL CONTEXT ANALYSIS

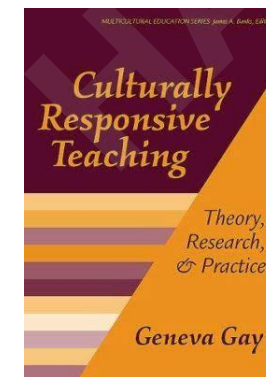
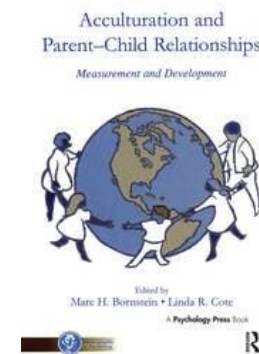
## 1. Cultural Inclusivity Challenges

Cultural barriers and a lack of belonging are common challenges in multicultural campus settings. Language differences and cultural norms often hinder communication, making it difficult for students to form meaningful connections. Berry (2006) explains that acculturation stress occurs when cultural integration is unsupported, while Gay (2018) highlights the need for inclusive spaces that respect cultural diversity.

Unit 1 research revealed that over 60% of students feel their cultural background shapes their social experiences. Many identified language and cultural differences as key barriers to engagement. International students often feel disconnected in social settings, attributing this to a lack of understanding or acceptance of their cultural practices. Students also criticized existing multicultural events as overly simplistic and lacking depth. Crenshaw's (1991) intersectionality theory demonstrates how overlapping identities, like race and culture, can amplify feelings of exclusion.

Acculturation Theory (Berry, 2006) outlines pathways of integration, assimilation, separation, or marginalization. When integration fails, social isolation often occurs. Gay's (2018) work on Culturally Responsive Teaching emphasizes the importance of creating environments that value diverse needs.

These insights informed the creation of CardKit. Using gamified tools and cultural exchange activities, CardKit helps bridge social divides. It fosters meaningful interactions, inclusion, and a sense of belonging in multicultural campus communities.



# 02 ECO-SOCIAL CONTEXT ANALYSIS

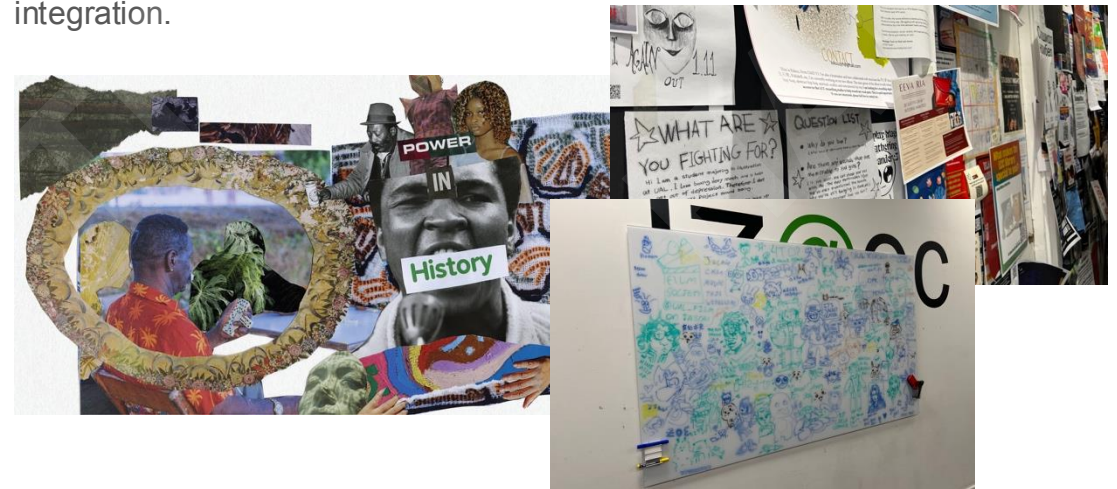
## 2. Global and Local Perspectives

Cultural integration is a key challenge in multicultural settings like the London College of Communication (LCC). While LCC's diverse student body offers opportunities for cultural exchange, it also presents barriers. International students often struggle with language adaptation and cultural differences. They must navigate an English-centered environment while overcoming obstacles that limit meaningful interactions (Berry, 2006). Local students, too, face challenges in connecting with peers from diverse backgrounds. These interactions require effort and cultural sensitivity.

Local students' experiences are often overlooked. Many find it hard to engage with peers from different cultures due to limited cultural awareness. Without adequate tools or guidance, they may feel unprepared. Yuval-Davis (2011) notes that cultural ignorance can lead to unconscious biases, widening divides. Intersectionality Theory (Crenshaw, 1991) reveals how identities like race, language, and gender shape social experiences. Local

students from minority backgrounds may face marginalization, further complicating their sense of belonging.

These challenges show the need for inclusive design solutions. CardKit addresses these issues by fostering cross-cultural interaction. It helps international students integrate into campus life. At the same time, it empowers local students to understand and value cultural diversity. By bridging these divides, CardKit promotes meaningful and sustainable cultural integration.



# 02 ECO-SOCIAL CONTEXT ANALYSIS

## 3. Implications For Design

Cultural barriers and a lack of belonging are common challenges on multicultural campuses. Acculturation is a mutual process where both the host and incoming groups undergo changes to accommodate one another. Without shared spaces or effective tools, students often struggle to exchange ideas and connect. This can lead to isolation and missed opportunities for integration (Berry, 2006). Design strategies must address these issues by combining both online and offline experiences to create lasting engagement and relationships.

Physical and virtual spaces each play a role in fostering cultural exchange. Physical spaces encourage face-to-face interactions, building trust and connection. Virtual spaces, on the other hand, offer flexibility. They allow students to engage across time zones and locations. Cultural values significantly shape behaviors and interactions, highlighting the importance of adapting tools and approaches in multicultural contexts. Tools like virtual

rooms and AR technology make online cultural exploration more accessible, while offline activities, such as collaborative card-based tasks, encourage teamwork and understanding (Hofstede, 2001).

Interactive tools help reduce barriers further. Gamified features, such as rewards and tasks, motivate students to participate. These tools provide a supportive environment for international students while helping local students understand other cultures. A combination of physical and digital experiences fosters mutual respect and meaningful connections among diverse communities (Norton, 2013).



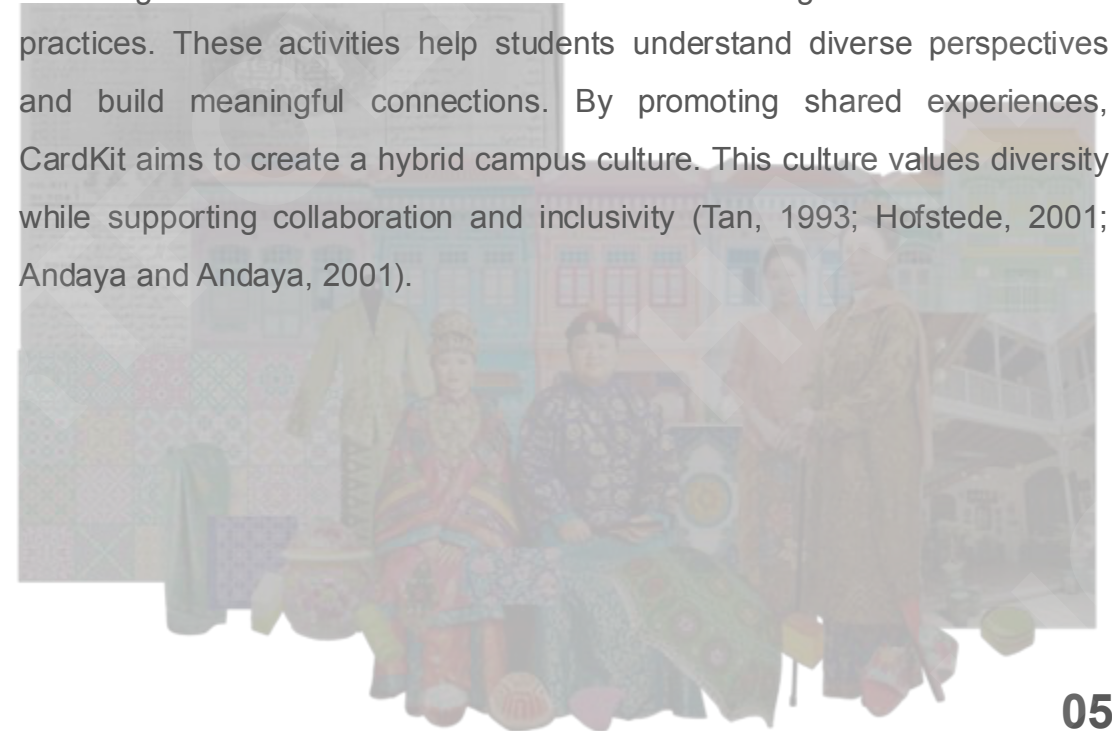
# 03 CASE STUDIES

## 1. Baba-nyonya Cultural Integration

The Baba-Nyonya culture, also known as the Peranakan, is a strong example of cultural mixing in Southeast Asia. It originated from the intermarriage between Chinese immigrants and local Malays between the 15th and 17th centuries. They are considered a multiracial group, but individual family histories vary, as does their self-identification with a multiracial identity other than Chinese (Tan, 1993; Andaya and Andaya, 2001). The integration preserved unique cultural identities while fostering shared practices and a sense of belonging (Berry, 2006; Kahn, 2006).

This case study highlights the importance of mutual respect and adaptability in multicultural settings. Berry's Acculturation Theory explains how integration allows individuals to maintain their cultural identity while engaging with others (Berry, 2006). Similarly, Hofstede's cultural dimensions suggest that shared values can create bridges across cultural divides, promoting collaboration (Hofstede, 2001).

At LCC, students frequently experience short and dynamic cultural interactions. These differ from the slow and organic integration seen in the Baba-Nyonya model. Such interactions often fail to foster deep cross-cultural connections. CardKit addresses this gap through features like cultural cards and collaborative tasks. Inspired by the Baba-Nyonya approach, it encourages students to share traditions and work together to create new practices. These activities help students understand diverse perspectives and build meaningful connections. By promoting shared experiences, CardKit aims to create a hybrid campus culture. This culture values diversity while supporting collaboration and inclusivity (Tan, 1993; Hofstede, 2001; Andaya and Andaya, 2001).



# 03 CASE STUDIES

## 2. Digital Tools For Cross-cultural Interaction

Digital tools are necessary to promote cross-cultural knowledge and discussion. Millions of people successfully demonstrate this through Tandem, a language-teaching game. For social and language exchange, it brings together customers from various parts of the world. Opportunities for important conversations are made by avoiding topics like festivals, stories, and traditions. This reflects Cultural Humility, which emphasizes the value of engaging with diverse cultures through lifelong learning and reflection (Tervalon and Murray-García, 1998).

Through personal coordination, Tandem helps users find people with similar interests and goals, increasing communication importance and engagement. Shared cultural interests, according to Belz (2003), promote genuine conversation and deeper exchanges. Selected materials and arranged suggestions are even provided by Tandem to aid users. These characteristics lessen miscommunications and foster an atmosphere that is

conducive to cultural learning (Hook et al., 2013).

Similar strategies can be employed by CardKit to enhance cross-cultural conversation. Stronger bonds may be formed by pairing individuals according to shared interests, such as "standard events" or "regional cultures." Education and conversation can be promoted through collaborative activities and pre-made society accounts. Reflection tools may further promote cultural humility by assisting users in critically examining their own cultural viewpoints (Tervallent and Murray-Garca, 1998).





# 03 CASE STUDIES

## 3. Key Insights For Design

Case studies demonstrate the value of gamification and inclusion in fostering cross-cultural connections. Gamification refers to the application of sports design aspects in non-game settings. To join users and foster a sense of belonging, Tandem, for instance, uses goal-oriented designs like speech jobs and rewards. To help cross-cultural exchange, CardKit may adopt features like job cards, achievements, and engaging rewards. People can, for instance, unlock medals or historical accounts by participating in both online and offline activities like learning about customs or working on shared tasks.

Tandem's success is largely due to its efforts to promote similar social discussions. User-generated social cards that are inspired by this may be included in CardKit to increase assistance. This approach aligns with Hofstede's (2001) cultural dimensions theory, which emphasizes the value of acknowledging and recognizing cultural diversity. By adding gaming and diversity, CardKit creates a powerful environment that fosters significant cross-cultural relationships on the campus.



# 04 DESIGN OPPORTUNITY: CARDKIT

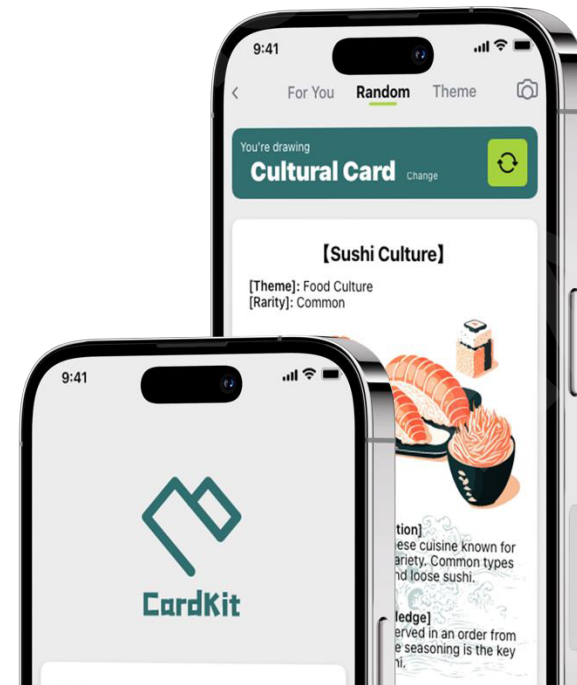
## 1. Concept Overview

A digital system called CardKit aims to enhance cross-cultural exchange in diverse schools. To gamify social change, it uses accounts as its main tool. The app encourages intercultural exchange and fosters a sense of belonging among students (Hofstede, 2001). As a resource and cultural application, each card emphasizes social elements like customs, holidays, or statements.

Three of the platform's main characteristics are integrated. Initially, the card series enables users to create their own cultural awareness files. Second, students are encouraged to look for hidden cards and historical landmarks in college during AR exploration. Joint activities or social question cards can be played in fourth, interactive rooms. These characteristics combine offline and online interactions to form meaningful connections ( Hook et al., 2013 ).

Gaming promotes ongoing commitment. People gain benefits from sharing their own cultural tales or completing cultural difficulties. Respect and

collaboration a key component of this approach, which draws from Cultural Humility (Hook et al., 2013) and intercultural competence (Deardorff, 2006). In the end, CardKit fosters a diverse, active campus community that fosters social change.



# 04 DESIGN OPPORTUNITY: CARDKIT

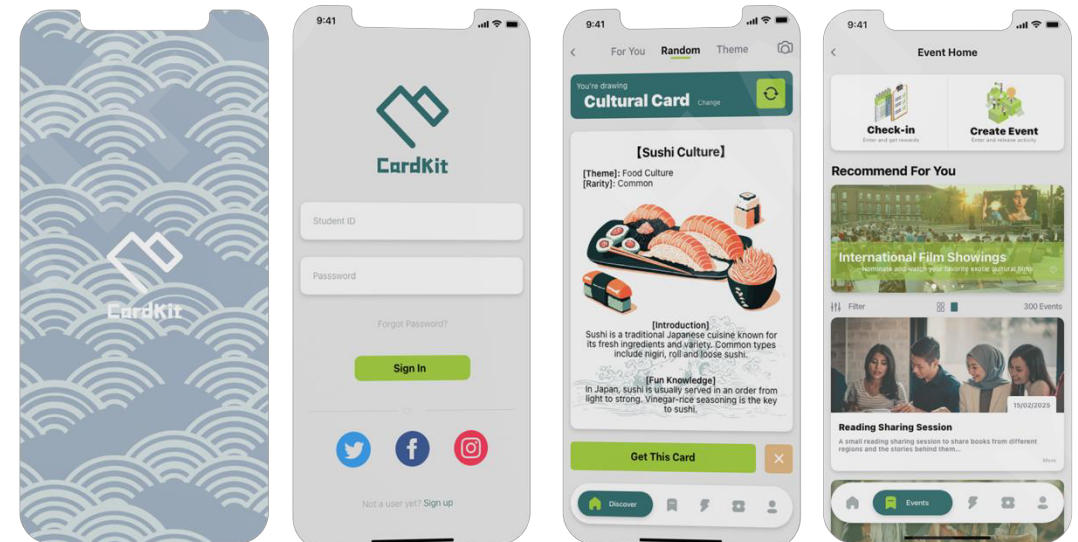
## 2. Game Rules And App Mechanics

CardKit employs gamified design and interactive mechanisms to foster cultural exchange and community building. Its core mechanics include room interactions, a reward system, and AR exploration, creating a dynamic platform for meaningful cross-cultural engagement.

1. Room Interactions: Users can create or join virtual rooms to participate in cultural tasks. Two types of cards are available:
  - Question Cards prompt discussions on topics like “What are the traditional festivals in your country?” or “Describe a signature cultural dish,” encouraging dialogue and mutual understanding (Hofstede, 2001).
  - Task Cards involve action-oriented challenges, such as “Say a greeting in another language” or “Demonstrate a cultural gesture,” adding playful and interactive elements (Hook et al., 2013). Completing tasks rewards users with cultural cards or points.

2. Reward Mechanism: Users collect cards to unlock achievements, such as “Cultural Explorer,” promoting sustained engagement. This system reinforces user motivation through progress recognition (Deci and Ryan, 1985).

3. AR Exploration: AR functionality allows users to explore campus landmarks, scan specific locations, and discover hidden cultural cards. This feature links the digital platform to real-world environments, enhancing engagement and cultural learning (Belz, 2003).



# 04 DESIGN OPPORTUNITY: CARDKIT

## 3. Access Points

CardKit ensures accessibility and engagement through multiple entry points, aligning with best practices in digital design for cross-cultural interaction (Norman, 2013). Because users can download the app on their own, anybody outside of the UAL community can use it. This adaptability improves CardKit's usability in a variety of scenarios by making it suitable for use in different educational institutions and cross-cultural settings (Hofstede, 2001).

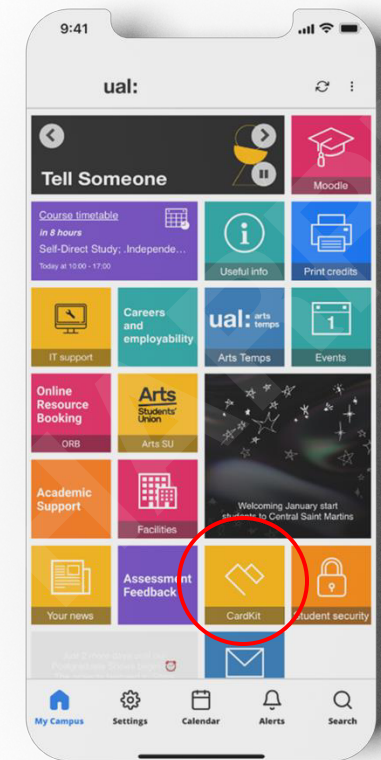
CardKit is also available to UAL students via a direct link in the UAL student app. Adoption is promoted and the user experience is made simpler with this integrated approach. By integrating CardKit into students' everyday campus activities, it eliminates obstacles like extra downloads and makes cultural exploration easier (Hook et al., 2013).

This dual-access strategy combines on-campus integration with external accessibility. It supports both local and external users, promoting inclusivity

and scalability. Through this approach, CardKit creates opportunities for meaningful cultural exchange in dynamic, multicultural communities.



Method 1



Method 2



# 04 DESIGN OPPORTUNITY: CARDKIT

## 4. Sustainability And Impact

To encourage resource efficiency and long-term cultural development, CardKit incorporates sustainability principles into its style, taking into account both social and environmental factors.

The app reduces paper-based cards and paper-based tools by replacing them with digital ones (Berkhout and Hertin, 2004). Users can access historical content on campus using AR technology without the need for more natural infrastructure, more promoting low-carbon and lasting practices.

From a societal view, CardKit creates cultural understanding and inclusivity through engaging capabilities. Engaging with students from different cultural backgrounds and developing mutual respect are promoted by activities like passport collection, engaging rooms, and reward systems. By incorporating cultural learning, CardKit transforms it into a fun and lasting exercise (Hook et al., 2013). CardKit reduces reference intake while promoting addition and

collaboration by combining socially responsible online solutions with morally responsible social communication tools. This double approach highlights how it can improve the sustainability and diversity of the school community.

# 05 DESIGN DEVELOPMENT PROCESS

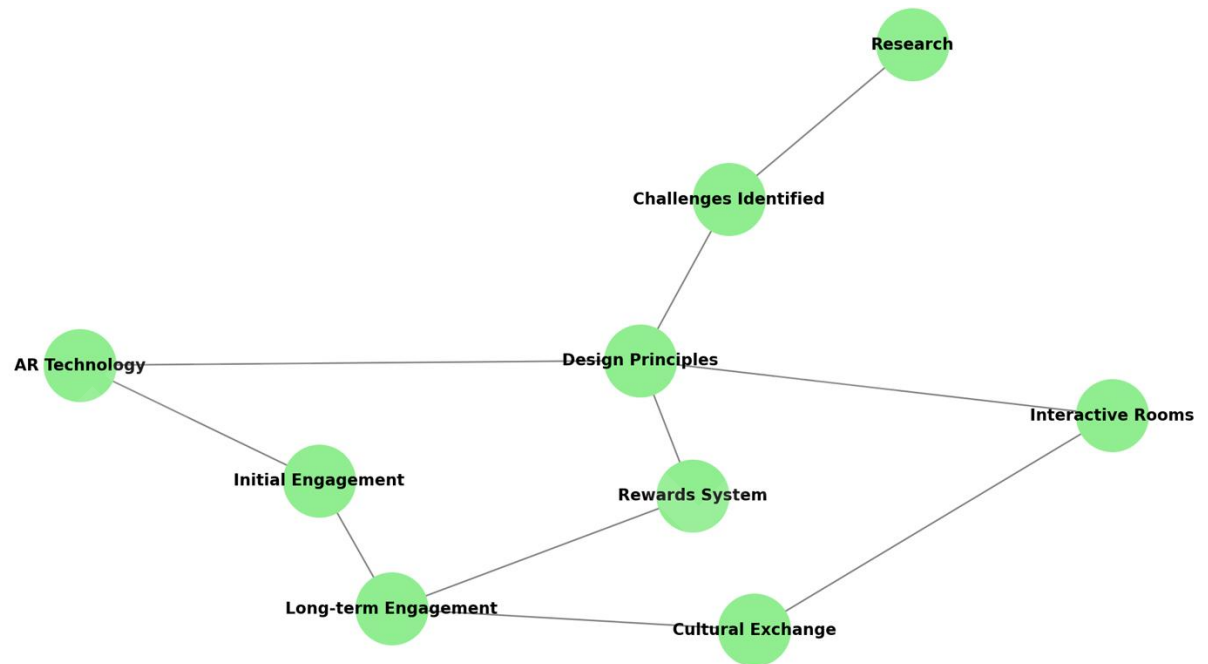
## 1. Research To Design

Research on cultural diversity and belonging in cultural schools serves as motivation for CardKit's research. Findings indicate that language and cultural differences frequently act as a hindrance. In response to this question, CardKit creates interactive environments with expertly crafted work cards and queries. Meaningful conversations and cultural exchanges are encouraged by prompts like "Share a hometown dish" or "Greet in another language" (Hofstede, 2001).

We added a rewards system and card series features to CardKit to keep people engaged and build long-term connections. In addition to fostering a greater appreciation for diversity, these features can encourage users to share and explore cultural knowledge (Deci and Ryan, 1985).

Users can discover hidden cultural treasures on campus thanks to the addition of AR technology (Belz, 2003). This blending of technologies and

real-world interaction promotes both deeper cultural knowing and first engagement.



Research-to-Design Logical Flow

# 05 DESIGN DEVELOPMENT PROCESS

## 2. Prototyping And Testing

Iterative design, based on prototyping, testing, and refinement, guided CardKit's development. The prototype initially emphasized three features: interactive rooms, card collection, and AR exploration. However, user feedback highlighted unclear instructions and irrelevant content in interactive room tasks. The team addressed these issues by simplifying task rules and localizing question cards, following user-centered design principles (Norman, 2013).

For card collection, users preferred a direct reward system. The team optimized the system, enabling immediate card unlocking after task completion, and added a dynamic progress tracker to boost motivation (Deci and Ryan, 1985).

AR exploration was refined by positioning cards at campus landmarks. This adjustment enhanced accessibility while embedding cultural context into the exploration experience (Belz, 2003).

# 05 DESIGN DEVELOPMENT PROCESS

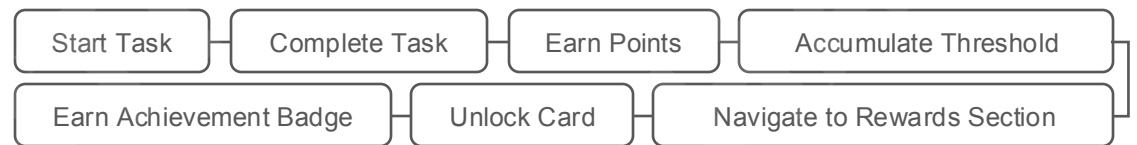
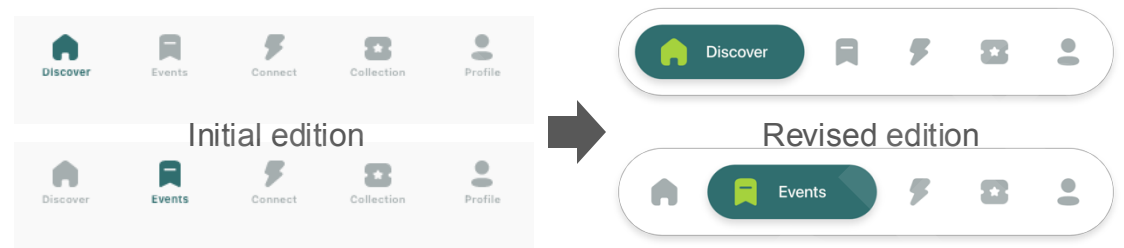
## 3. Iterative Improvements

After initial user testing and feedback, adjustments were made to the CardKit prototype to enhance usability and user satisfaction, following user-centered design principles. Designers must further recognize that user testing results may suggest radical changes, requiring them to be prepared to completely abandon old ideas in favor of new ideas that better suit user needs.

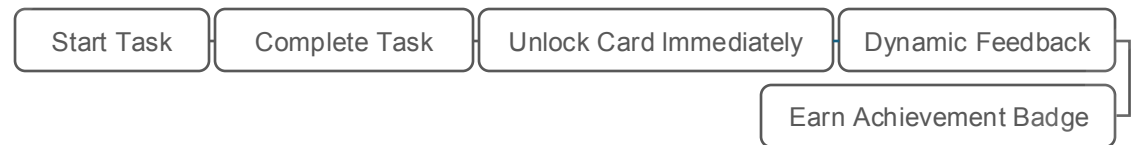
One significant improvement simplified the rewards system. Game elements can range from badges, leaderboards, and levels to more complex mechanics (Deterding et al., 2011). As shown in the figure, the revised version directly linked task completion to immediate card unlocking and added a dynamic progress tracker.

The AR exploration feature was further optimized. Cultural background information was integrated into landmarks, and card-unlocking visuals were enhanced. These updates made the exploration experience more immersive and enriched the cultural learning process.

Besides, the interface design also saw enhancements. Features like “Interactive Rooms” and “Card Collection” were prominently placed on the homepage, reducing navigation time and improving accessibility. As shown in the figure, a dynamic and interactive tab bar was added, making the interface more engaging and enjoyable.



Initial edition



Revised edition



# 06 CRITICAL REFLECTION & EVALUATION

## 1. Strengths Of Cardkit

CardKit is not an online dating software in the traditional sense. It is more like a prop card in a game. It fosters cross-cultural interaction in multicultural campus settings by combining interactivity and sustained engagement. It acts as a virtual toolbox in the form of a quick app to assist in solving deadlocks in cross-cultural communication. Features like interactive rooms, task cards, and rewards encourage users to share traditions and collaborate on activities, fostering mutual understanding. The integration of AR technology allows users to discover hidden cultural cards on campus. The app's reward system and card collection features further motivate long-term participation, promoting inclusivity and mutual respect. CardKit supports meaningful exchanges, creating an inclusive and connected campus community.

## 2. Limitations And Challenges

CardKit shows promise in fostering cross-cultural interaction but faces notable limitations. Its scalability is a concern, as the app is tailored to university settings and may lack relevance in less multicultural environments (Selwyn, 2011). Expanding to broader contexts requires additional localization and resources. Sustaining user engagement is also challenging. While gamification boosts short-term participation, long-term retention depends on culturally relevant and diverse tasks (Deci and Ryan, 1985). Cultural sensitivity is crucial, as users from reserved backgrounds may hesitate to participate in public activities (Hofstede, 2001). Addressing these challenges requires task diversity, adaptability, and community partnerships.

# 06 CRITICAL REFLECTION & EVALUATION

## 3. Future Opportunities

CardKit can expand its impact through dynamic tasks and international collaborations. Real-time, customized challenges depending on user interests, campus activities, or cultural festivals—like unlocking unique cards during international holidays—could be produced using a dynamic task system. This strategy promotes sustained use and increases engagement (Hamari, Koivisto and Sarsa, 2014).

In addition to increasing the app's legitimacy and user base, partnerships with global cultural organizations like UNESCO or cultural exchange foundations (Bouncken, Brem, and Kraus, 2016). By incorporating dynamic features and international connections (Kim, 2001), CardKit can expand beyond campus and promote greater cultural understanding and inclusion (Kim, 2001).

# 07 CONCLUSION

## 1. Key Takeaways

CardKit effectively addresses cultural inclusivity challenges in multicultural campuses by integrating interactivity with gamification. Its task card and reward system engage users in cross-cultural exchanges, enhancing understanding and respect for diverse cultures (Hamari, Koivisto and Sarsa, 2014).

The use of AR technology creates an immersive experience, blending real and virtual environments to make cultural exploration engaging and accessible (Selwyn, 2011).

Additionally, features like card collection and achievement systems promote long-term engagement, fostering a sense of belonging within a diverse community (Hofstede, 2001).

By combining technology and cultural exchange, CardKit offers an innovative, inclusive solution for building connected campus communities.

# 07 CONCLUSION

## 2. Call To Action

In the wave of globalization, designers play a vital role in cultural inclusiveness and ecological social innovation. CardKit combines design innovation with cultural integration and explores the potential of design to promote the breakthrough of cultural barriers and mutual understanding (Manzini, 2015).

When designers are faced with real-world challenges, they can promote sustainable development through innovative design solutions and create solutions that support different communities. This confirms that activities involving inclusion and using technology for social innovation have a profound and meaningful impact on society (Selwyn, 2011).

We encourage designers to prioritize cultural diversity and sustainability in their work, shaping a future where inclusivity and collaboration are central values.



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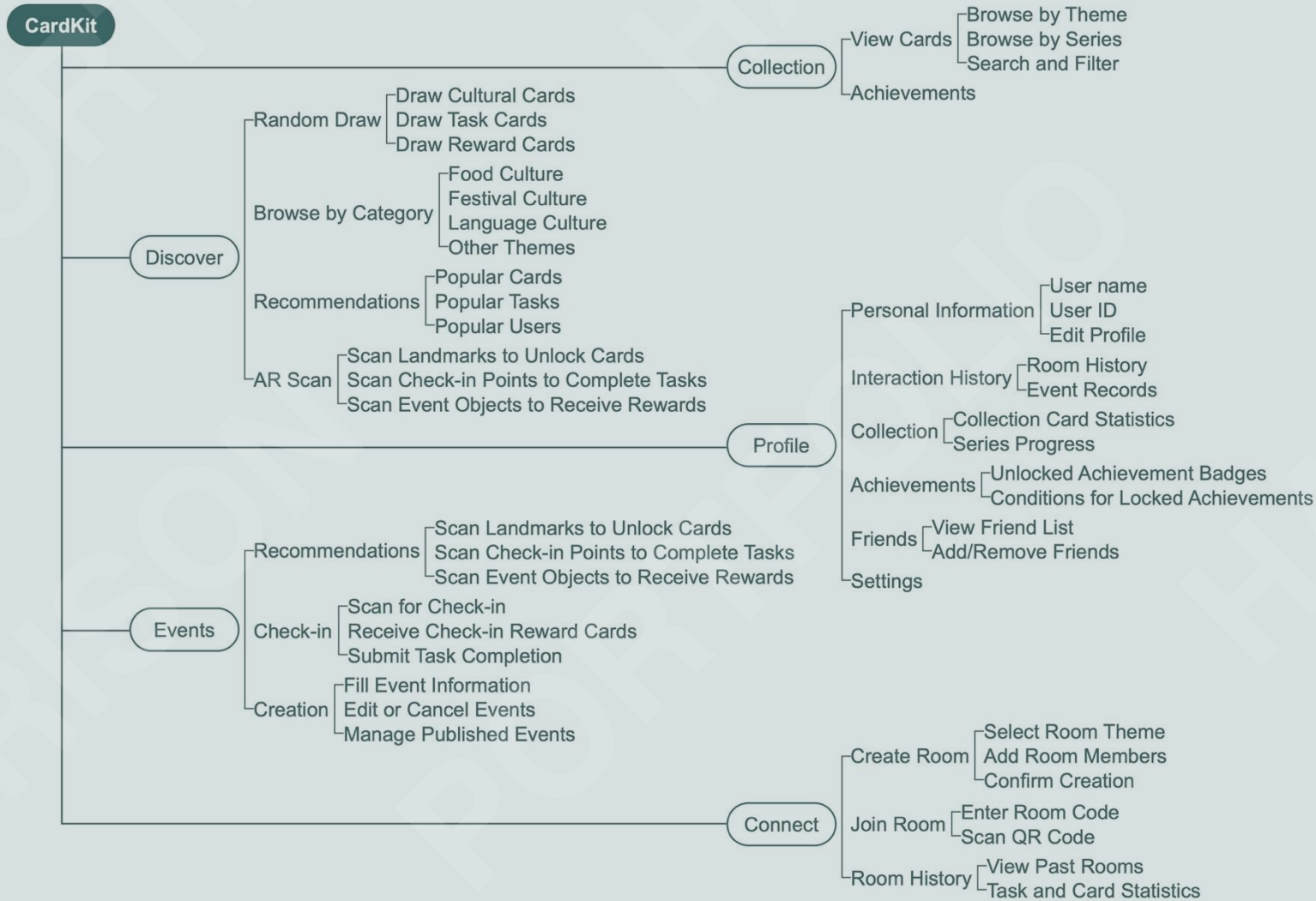
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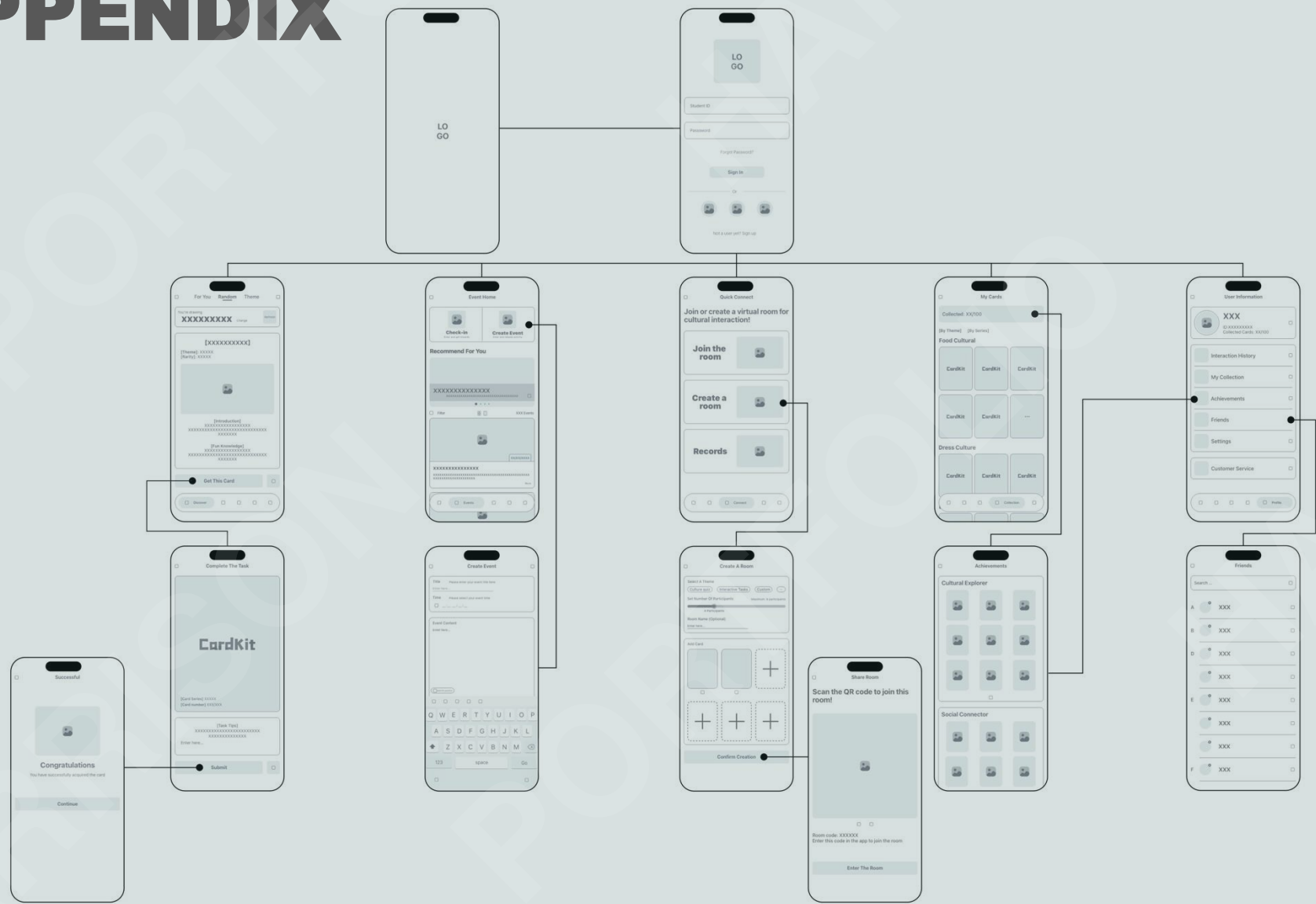
# 09 APPENDIX

## 1. Sitemap



# 09 APPENDIX

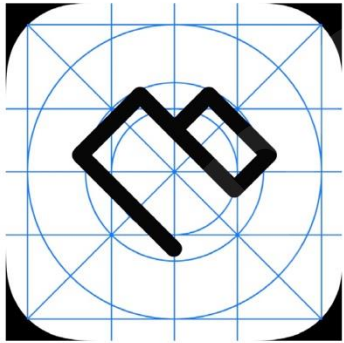
## 1. Sitemap





# 09 APPENDIX

## 3. UI Design



Original



Alight

