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## ESTABLISHMENT OF *TAMU* WELCOMING HUB: A LOOK-OUT PLATFORM, ENTRANCE ARCHWAY AND BRIDGE RAILINGS AT THE KAED MALAY HERITAGE LIVING LAB

Mohammad Afizul Mohd Sukiman, \*Nur Ulfah Awatif Umairah Alias,  
Sufian Hamat, Aida Kesuma Azmin and Sharina Farihah Hasan  
Department of Architecture, Kulliyyah of Architecture and Environmental Design  
International Islamic University Malaysia

### ABSTRACT

This research aims to identify the ideal potential of design for the KAED Malay Heritage Living Lab of International Islamic University Malaysia (IIUM) as part of the university's project to celebrate the public space in the university. It means to promote community bonding and celebrate knowledge as aspired by the IIUM's motto, "The Garden of Knowledge and Virtue". The design proposal of the additional structures aims to celebrate the Malay traditional heritage setting together with its current attraction, the 'Rumah Perak', known as *Rumah Kutai Beranjung*. It was originally built in the 1910s in Perak. It was disassembled, restored, and relocated to the KAED Heritage Living Lab in 2018. Under this initiative, a multidisciplinary KAED student group comprising Architecture and Quantity Surveying students collaborated to design the additional structures including the look-out platform, archway, and bridge railing at the site. KAED Heritage Living Lab serves as a pedagogical space for IIUM Community. Site analysis and case study have been conducted during the study to recognise the elements of Malay traditional architecture and construction, to celebrate the spirit of the place, in line with IIUM's mission and vision. The *Tamu* concept has been applied to bring back the sense of welcoming to the public community around the space to benefit from the site setting, including IIUM students and education society. The design creates interactive areas where students and the public can engage with knowledge in various forms, support outdoor learning and community engagement in a natural setting, and create public spaces that celebrate the diverse cultural community of the university.

**Keywords:** Rumah Perak, Rumah Kutai, KAED Heritage Living Lab, Public space

\*Corresponding author: [umairahalias@gmail.com](mailto:umairahalias@gmail.com)

### INTRODUCTION

The risk of cultural heritage disappearing due to modernisation, globalisation, and assimilation is real. Preserving and safeguarding them are crucial, given factors such as development, modernisation, climate change, and assimilation of *Malay* cultural heritage. Recognising this urgency, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has established working committees and manuals to ensure that cultural heritage around the world receives proper attention and protection. Consequently, it becomes imperative to conserve and once more emphasise the splendour of Malay culture and heritage within the community. According to UNESCO (2021), Heritage encompasses both tangible and intangible aspects, including natural and cultural elements, movable and immovable items, as well as historical records, inherited from the past and passed down for their unique significance. The notion of 'heritage' has transformed significantly over time. While initially limited to physical remnants of cultures, the concept has progressively broadened to encompass present-day living culture and modern forms of expression.

Founded in June 1996, the Kulliyyah of Architecture and Environmental Design (KAED) at IIUM aims to cultivate professionals in the built environment sector. What sets KAED apart is its pioneering integration of Islamic principles through the *Tawhidic* educational approach.

This approach seeks to strike a harmonious balance between Man, Environment, and the Creator. In the domain of built environment, the *Tawhidic* design approach involves harmonising architecture with the climate, the site, and the socio-cultural requirements of the local populace. Therefore, the goal of KAED's Integrated Multidisciplinary Project (KIMP) course is to help students improve their ability to collaborate with other members of the design and construction team. Furthermore, students will improve their professional skill set, including leadership, by participating in initiatives, management and communication (Bahrudin et al., 2022).



**Figure 1:** The archway perspective of the proposed design.  
(Source: Authors)

## METHODOLOGY

The methodology illustrated in Figure 2 was employed to attain the objective of the intended design project. It commenced with a literature review, conceptualisation, followed by an examination of successful analogous projects through precedent and case studies. The progression then encompassed the formulation of the proposed additional structures for KAED Heritage Living Lab.

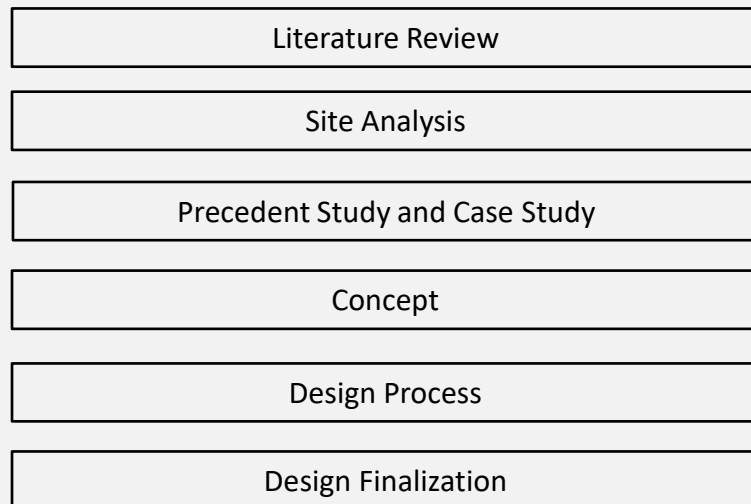


Figure 2: The methodology used in this study.

## LITERATURE REVIEW

### KAED Heritage Living Lab

According to the Kulliyyah of Architecture and Environmental Design (KAED) at the International Islamic University Malaysia (IIUM), Gombak campus is actively promoting the Malay Enclave Teaching Lab (METL) to ensure it offers ample learning opportunities for upcoming generations. This effort particularly aims to showcase the culture to international visitors who come to the university, enabling them to appreciate the Gombak Cultural Heritage through the surrounding environment, facilities, and various activities. The Kulliyyah has relocated the Perak house, now named the KAED Malay Enclave Teaching Lab, which will serve as a teaching laboratory for KAED students. Additionally, this enclave will play a vital role in conserving traditional built heritage while also promoting it to the local community. Local endorsement allows the living lab to be utilised for cultural activities and events, and open for rent to both staff and the general public. As a result, the adjacent open space to the Perak house will be effectively utilised rather than going to waste.

## Malay Heritage, Culture and Beliefs

Malay heritage and architecture embody a rich tapestry of cultural, historical, architecture and artistic elements specific to the Malay community in Southeast Asia. According to Sujak et al. (2021), the heritage reflects the traditions, beliefs, and way of life of the Malay people, often characterised by a blend of indigenous practices and influences from Islam, which is deeply ingrained in the culture.

Malay architecture is renowned for its intricacy, incorporating detailed woodwork, intricate carvings, and distinctive roof designs. Traditional Malay houses, known as *rumah kampung*, are elevated on stilts, featuring steeply pitched roofs with graceful curves that provide efficient rainwater drainage and natural ventilation. These houses are crafted using indigenous materials like timber, bamboo, and thatch, showcasing the region's resourceful construction techniques.

Malay heritage encompasses not only architectural marvels but also music, dance, literature, and customs. Traditional arts like *silat* martial arts and *wayang kulit* shadow puppetry showcase the deep-rooted cultural practices and storytelling traditions of the Malays. *Batik*, a method of dyeing fabric using wax-resistant techniques, is another integral aspect of Malay heritage, creating intricate and vibrant designs that hold symbolic meanings. Furthermore, the concept of *ukhuwah* or brotherhood is emphasised within the Malay communities, echoing the Islamic principle of unity among the believers. The Islamic calendar and its rituals, including fasting during *Ramadan* and celebrating *Eid* festivals, are integral to Malay life, reinforcing their connection to the wider Muslim world.

Overall, the Islamic influence on Malay heritage and architecture showcases a harmonious fusion of faith, aesthetics, and cultural identity, creating a unique and enduring legacy that resonates with the spiritual and artistic values of both Islam and the Malay people.

## Malay Heritage Preservation

Malay heritage preservation refers to the efforts aimed at safeguarding and conserving the cultural, architectural, artistic, and historical elements that are intrinsic to the Malay community's identity and history. This involves initiatives to protect traditional practices, artifacts, architecture, language, customs, and other aspects of Malay heritage from degradation, loss, or extinction. Such preservation endeavors often involve a combination of educational initiatives, legal frameworks, community engagement, and sustainable development practices to ensure that the richness of Malay heritage continues to be passed down to future generations.

In 2005, an amendment during the January Parliamentary Session extended heritage preservation responsibilities to both the Federal and State Governments. The Concurrent List of the Ninth Schedule of the Federal Constitution was amended to include heritage preservation, granting authority to the Parliament and State Legislative Assembly to create legislation in this regard. The National Heritage Act 2005 is an example of a law passed by the Parliament that pertains to heritage preservation (NM Suaib et al., 2020).

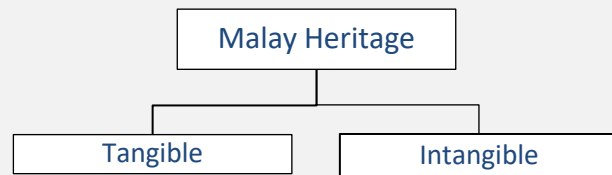


Figure 3: The types of Malay Heritage

### Intangible Malay Heritage

Tangible heritage includes objects like artifacts and historical sites, structures, or buildings that become heritage. If these artifacts, sites, structures, or buildings are no longer used, disappear, or get destroyed, the symbols of the nation's identity and civilisation are lost. For instance, places like the historical buildings, as well as the architecture of Malay houses, are examples of tangible heritage. If a *keris* is discarded, sold, or no longer used in our lives, the nation's identity and civilisation are lost. Therefore, it is important to preserve, use, and register the history of *keris*. PEDAWAM (Preservation and Registration of Heritage Artifacts of Malay Culture) registers heritage artifacts to preserve ownership history and the history of the artifacts. When an artifact has a registration certificate, it becomes the "birth certificate" of that artifact, and its value becomes significant in the market.

### Tangible Malay Heritage

Intangible heritage encompasses knowledge and practices integrated into everyday life. This includes local wisdom in Malay traditional medicine, artistic expressions like architecture, carving, *silat* martial arts, visual arts, music, and landscape design, as well as etiquette and customs. If this local wisdom is not put into practice or is given attention, the essence of the nation's identity and culture will be lost. According to PEDAWAM (2021), an example of intangible heritage is the ethnoscience of Malay traditional medicine, which involves knowledge of local herbs like *air kelapa*, *daun hempedu bumi*, cloves, salt, *daun semambu*, and *daun ketum*. This knowledge, inherited from ancestors, serves to maintain health, prevent diseases, and treat both existing and emerging health issues, such as during the COVID-19 pandemic.

This concept of preserving intangible heritage also resonates with the Malay tradition of "tetamu" or hosting guests. The warmth, respect, and customs extended to guests are all part of this intangible heritage, reflecting the values ingrained in Malay culture and contributing to its preservation. Just as neglecting intangible heritage can erode a nation's identity, failing to uphold the customs of hospitality for guests can diminish the cultural richness that "tetamu" embodies. If both tangible and intangible heritage are not practiced and manifested by the nation itself, the loss of cultural identity and heritage occurs.

### Heritage Tourism

As shown in Figure 4 & 5 in Sarawak, heritage tourism is emphasised, particularly at historically significant sites. The establishment of the Sarawak Cultural Village in 1990, showcases replica ethnic houses and cultural heritage exhibitions, has become a popular heritage tourism attraction by allowing tourists to personally experience and observe the region's heritage and contemporary culture. Moreover, observing prominent cultural heritage exhibitions in each constructed replica house, visitors are also exposed to less apparent cultural elements, especially through cultural dance performances in the performance hall. As such, every visitor who comes will be treated to cultural dance performances. As a result, prioritising heritage preservation in tourism offers diverse advantages, including cultural enrichment, unique identity creation, sustainable practices, economic growth, job creation, education, community empowerment, revitalisation of historical areas, and attraction of a varied visitor base, contributing to a vibrant and responsible tourism sector.



Figure 4



Figure 5

Figure 4 shows the activities held in Sarawak Cultural Village.

Figure 5 shows the Rumah Melayu existed in Sarawak Cultural Village (Source:www.mahamahu.com.)

### Attitudes toward Nature and Islamic Influence in Malay Heritage

Upon the advent of Islam, the existing motifs underwent gradual reform to adhere to Islamic principles, leading to the metamorphosis of carvings featuring *Kala* and *Makara* motifs into floral designs; these transformations were influenced by artisan expertise, natural influences, and religious beliefs (Yusof et al., 2021).

Azmin et al. (2021) also mentioned that pre-Islamic Malay society, encompassing animism, Buddhism, and Hinduism, created art influenced by these beliefs, symbolically expressing devotion to higher powers; the shift to Islam transformed these artistic forms to harmonise with Islamic principles, yet retained a strong connection to nature and spirituality, as seen in repeated depictions of plants in Malay art. Following the introduction of Islam to Johor in the early 14th century, architectural carvings shifted from mythical and animistic motifs to floral and geometrical designs, exemplifying the impact of religion on the culture and motif choices within the community's houses (Yusof et al., 2021)

## Islamic Motifs in Malay Woodcarvings

Ibrahim et al. (2019) explain that carving art involves creating decorative patterns inspired by various elements, such as original Malay and Javanese *awan larat* motifs, with carvers use natural resources for creativity, resulting in diverse variations including floral, fauna, cosmic, geometric, and calligraphic motifs. Floral motifs dominate the majority of pattern, followed by geometrical motifs, as the earliest period of woodcarving after the arrival of Islam. Geometrical motifs hold the second-highest proportion, succeeded by calligraphic and cosmic motifs.



Figure 6

Figure 7

Figure 6 and Figure 7 show the combination of a calligraphy and fauna motifs. (Source: Yusof et al., 2021)

From this analysis, it can be inferred that floral, geometrical, calligraphic, and cosmic motifs are all permissible in Islam due to their absence of creature or animal elements. In contrast, fauna or animal motifs are the least frequent, representing the lowest percentage, as their usage is prohibited in Islam. Rashidi et al. (2019) suggested that the use of Islamic motifs in carvings represent a form of worship and obedience to Allah and allow appreciation of His creations while staying humble before His powers.

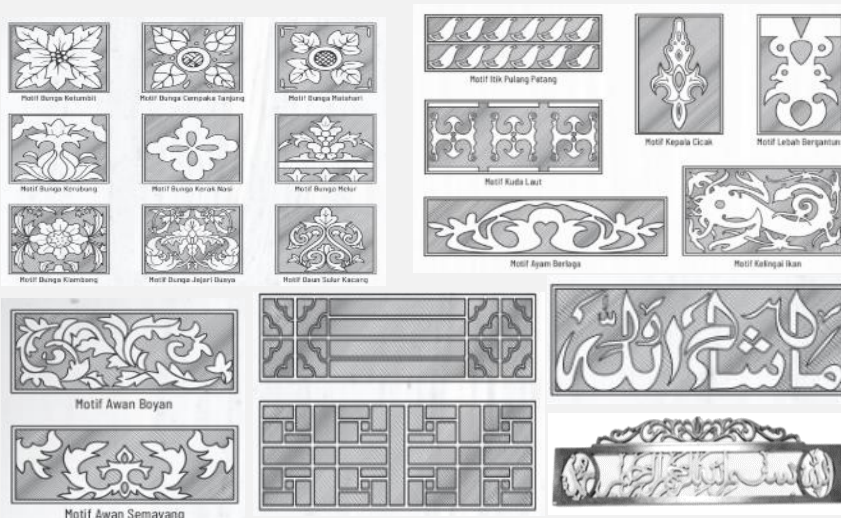


Figure 8 shows the floral, fauna, cosmic, geometric and calligraphy motifs accordingly. (Source, Rashidi et al., 2019)

## PRECEDENT AND CASE STUDIES

### The Look-out Bird Watching Tower at Pasir Ris, Singapore

The Look-out Bird Watching Tower at Pasir Ris features multiple levels of viewing points, allowing visitors to observe birds and their natural surroundings from various elevations. This design enhances the birdwatching experience by providing diverse perspectives and angles for spotting different species and behaviors. From each level, visitors can enjoy panoramic views of the park's ecosystems, making the tower a versatile and engaging platform for bird enthusiasts of all levels.



Figure 9



Figure 10

Figure 9 and Figure 10 shows the look-out Bird watching at Pasir Ris, Singapore. (Source: [Littledayout.com](http://littledayout.com))

### Raptor Tower, Kranji Marshes, Singapore

The Raptor Tower at Kranji Marshes designed by Staphen Caffyn presents a unique architectural marvel that not only offers an exceptional viewing experience but also embodies a symbolic representation. Designed to mimic a protective bird atop a tree, the 10.65-meter wooden tower provides an elevated perspective of the surrounding marshes. This architectural marvel seamlessly blends its purpose with its form, creating a visually striking landmark that also serves as an educational hub. The incorporation of open-air observatory decks and educational boards not only enhances the functionality of the tower but also engages visitors by facilitating bird identification and highlighting key landmarks. Furthermore, the tower's design aligns with the natural environment, showcasing a harmonious relationship between human intervention and ecological context.



Figure 11



Figure 12

Figure 11 and Figure 12 show the Raptor Tower, Kranji Marshes, designed by Staphen Caffyn, (Source [www.land-arch.net.com](http://www.land-arch.net.com))

## DESIGN CONCEPT

### Tetamu ; Bertamu

In Malay culture, "tetamu" refers to a guest or visitor who is welcomed into someone's home, often with hospitality and warmth reflecting the values of community, generosity, and social harmony. When a person is considered a "tetamu," he or she is treated as an honoured guest, regardless of the relationship with the host.

Islam greatly encourages its adherents to consistently put effort into fostering strong connections among family members and the broader community. The act of visiting each other (*ziarah*) is a recommended practice in accordance with the teachings of Prophet Muhammad (peace be upon him). Engaging in this practice can potentially lead to an extended lifespan and increased sustenance, blessings bestowed by Allah. This responsibility holds even more significance when someone like our sibling is facing difficulties or illness. Nonetheless, when partaking in visits, it is crucial for us, as Muslims, to adhere to the guidelines set by Islam to prevent any harm to the bonds of kinship. Figure 5.1 (a) and (b) illustrate the *Bertamu* tradition by Malay Culture especially during Hari Raya Celebration and other ceremonies. The protocols of both visiting and being visited are a shared responsibility between hosts and guests. In this context, it is imperative to consistently maintain proper conduct and manners, ensuring that the act of visiting genuinely reinforces familial ties rather than weakening them.



Figure 13



Figure 14

Figure 13 and Figure 14 illustrated the *Bertamu* tradition by Malay Culture especially during Hari Raya Celebration and other ceremonies. (Source: Google Images)

"Tamu" is set to be a welcoming hub, bridging people from all walks, especially the IIUM community. Known for its global Islamic education, IIUM's mission is to nurture excellence infused with Islamic values in learning, research, and more. With visitors and foreign students converging, *Tamu* stands as their gateway to the world of Malay Heritage, a source of pride. Figure 5.2 illustrates the intertwining elements from the concept Tamu with KAED Heritage Living Lab.

The *Tamu* Welcoming Hub is a friendly space where people from all walks of life, including the IIUM community, come together. Inspired by IIUM's global Islamic education, it is a place of shared experiences and connections. Designed with a mix of modern and Malay heritage elements and blend in with KAED, it is a place focused on Malay cultural exploration. From Malay art and craft, its craftsmanship and its architecture, there is something for everyone. It is not just a place; it is a warm embrace, where cultures meet and friendships begin. The *Tamu* Welcoming Hub brings IIUM's mission to life and fostering deeper understanding of Malay Heritage and Culture.



Figure 15: illustrates the intertwining elements from the concept Tamu with KAED Heritage Living Lab

The comprehensive layout was developed through extensive research involving precedent studies and case analyses. This research led to the recognition of the movement and underlying principles of the esteemed Malay woodcarving motif, the *awan larat* motif, which draws inspiration from Islamic influences. These elements served as the primary source of inspiration for the circular arrangement adopted in the overall design plan. The fundamental aspects of the *awan larat* motif, encompassing its starting point, hierarchy, linearity, unity, and rhythm, have been seamlessly integrated into the design layout.

This rationale harmoniously aligns with the original concept, which aims to establish the site as a communal gathering space and encourage visitors to explore the entire area. The circular arrangement offers a panoramic 360° view of the proposed design as a cohesive entity. The design effectively fosters a strong relationship between humanity and nature, affording visitors the opportunity to not only admire the site's aesthetic beauty but also immerse themselves in the richness of the local cultural heritage and the serene natural surroundings.

This viewing platform will be focusing on Malay Heritage education. In order to attract people to learn, it must be fun and enjoyable. The idea is to create a full usage of 'edutainment' system into the building design curriculum, as shown in Figure 5.3. By implementing this innovative edutainment system, authors aim to engage a diverse audience, with a particular focus on attracting new *tetamu* and providing them with a rich exposure to the fascinating world of Malay Culture Heritage. The incorporation of interactive and entertaining elements into the viewing platform promises an immersive and enjoyable learning experience that is tailored to resonate with the younger generation to weave an engaging narrative that showcases the depth and beauty of Malay heritage.



Figure 16: The combination of education and entertainment to create an edutainment approach to the design.



Figure 17: The design development inspired by the *awan larat* or curvilinear motif in Malay traditional motif. (Source: Author)

### Inspiration from *Awan Larat* motif for *Tetamu* Concept

The *awan larat* motif, a significant element in Malay design, can be related to the concept of *tetamu* or guests. Just as the intricate *awan larat* design reflects the owner's personality and connection with nature, it can also symbolise the warm and intricate relationship that the host has with their guests. Just as the motif weaves together intricate patterns, the relationship between the host and guests is complex and interconnected. The design's beauty and detail could signify the care and attention the host puts into welcoming and accommodating their guests, mirroring the cultural value of hospitality in Malay society. Just as the *awan larat* motif combines various elements to create a harmonious whole, the host's efforts in receiving guests involve combining various elements of warmth, respect, and cultural traditions to create a welcoming and harmonious environment.

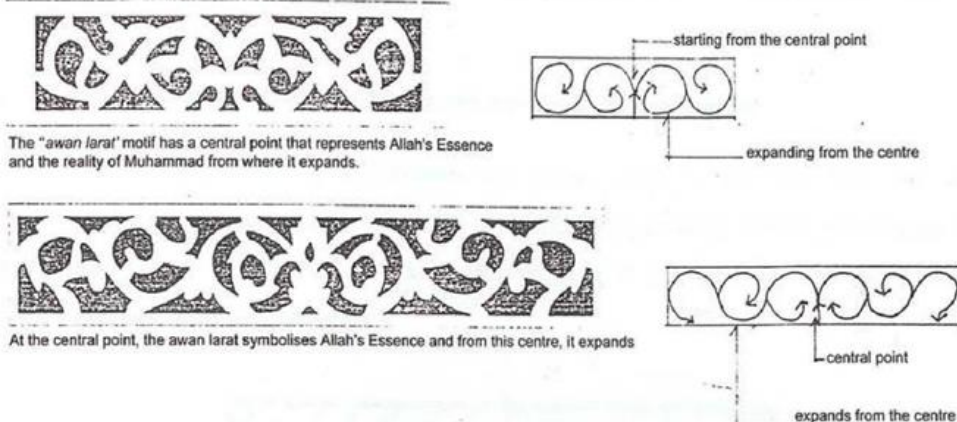


Figure 18: The principle of *awan larat* motif. Source: Jasmon (1983)

### SWOT Analysis



- Amplified by its strategic location immediately after the entrance, ensuring effortless access for all visitors. This thoughtful circulation design not only enhances user experience but also promotes inclusivity and convenience.
- The site is its susceptibility to becoming watery and muddy during rainy periods. This issue could impede the site's functionality and negatively impact user experience.
- The site can become a focal point for social interactions, discussions, and collaborative learning. With the right amenities, seating arrangements, and conducive environment, it can cater to diverse preferences, fostering a sense of community and enhancing the overall appeal of the location.
- The site contends with the challenge of insects and mosquitoes posing a threat. This issue could potentially impact the overall experience of visitors and occupants.

### Design Development via Site Analysis

The study centres around the usage and impact of courtyards and compound at the International Islamic University Malaysia (IIUM) campus, with a focus on the Kulliyah of Engineering and Kulliyah of Economic and Management Science. These open spaces are valued for learning and relaxation, serving as natural havens within urban environments. The research aims to assess the effectiveness of these courtyards by understanding preferred activities and identifying challenges faced by students and staff. Notable scholars emphasise the importance of such spaces for outdoor learning. The study involves surveys to uncover activities desired by the community and obstacles hindering current usage. The findings reveal various issues preventing to successful courtyards' utilisation. Recommendations based on these findings could involve infrastructure improvements and tailored solutions to enhance the appeal and functionality of these spaces.

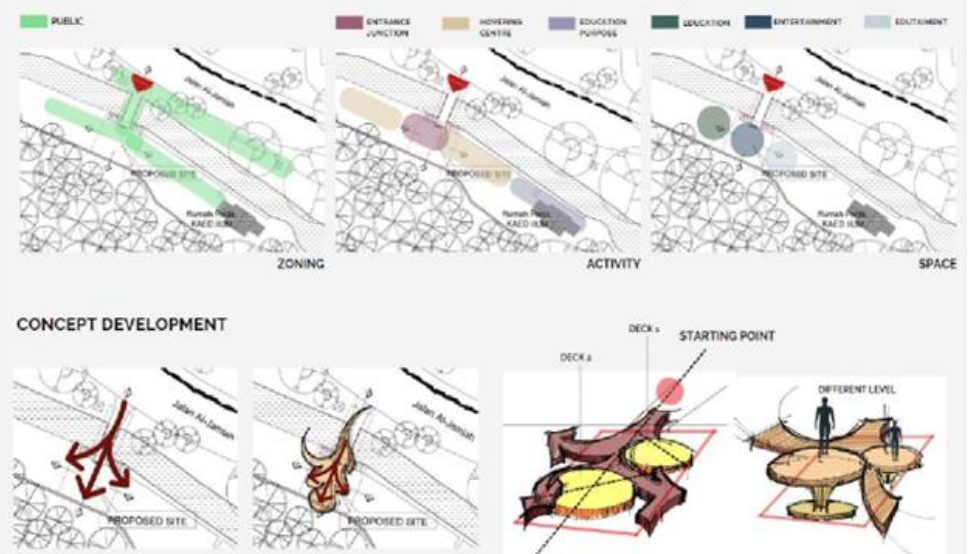


Figure 19: illustrates the intertwining elements from the concept *Tetamu* with KAED Heritage Living Lab.

## DESIGN FINALISATION

### THE ARCHWAY AND RAILINGS



Figure 20: The Archway



Figure 21: The railings



Figure 22: Tamu Look-out Platform

The entrance to this experience is thoughtfully designed to provide visitors with a warm and inviting welcome. As they approach, they are greeted by an archway and a bridge that connect them to the platform. These architectural elements play a crucial role in creating a sense of hospitality and setting the tone for the overall experience. The archway, constructed using materials like wood, stone, or metal, serves as the gateway. It is adorned with curvilinear motifs, adding an artistic and welcoming touch. To engage multiple senses, soft and warm lighting along the archway and bridge, and landscaping elements such as plants and flowers are incorporated. This holistic approach ensures that visitors feel a sense of anticipation and excitement from the moment they arrive, setting the stage for a memorable experience ahead.

### THE PLATFORM



Figure 23



Figure 24



Figure 25

Figure 23, 24 & 25 shows the view of Tamu Look-out Platform



Figure 26



Figure 27



Figure 28

Figure 26, 27 & 28 shows the landscape design

## PLATFORM ANALYSIS



Figure 29: Platform Plan



Figure 30: Axonometry View



Figure 31: The Front Elevation



Figure 32: The Rear Elevation



Figure 33: Section X-X of the platform



Figure 34: Section Y-Y of the platform



## CONCLUSION

The *Tamu Welcoming Hub* is a space dedicated to fostering inclusivity and cultural exchange, particularly within the IIUM community. It serves as a gateway to Malay Heritage and promotes excellence infused with Islamic values in learning and research. This hub combines modern and Malay heritage elements, offering a wide range of experiences related to Malay art, craftsmanship, architecture, and culture. It aims to bring people from diverse backgrounds together, encouraging connections and friendships. Inspired by the traditional awan larat motif, the design is both inviting and aesthetically pleasing. The entrance is thoughtfully designed to create a warm and welcoming atmosphere, featuring an archway and bridge adorned with curvilinear motifs, soft lighting, and landscaping elements. Overall, the *Tamu Welcoming Hub* embodies IIUM's mission and promotes a deeper understanding of Malay Heritage and Culture.

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LECTURERS		
1		SUFIAN BIN HAMAT
2		TAN CHIN KENG
3		AZRIN BIN MOHD DIN
4		AIDA KESUMA BINTI AZMIN
5		SHARINA FARIYAH BINTI HASAN
6		NUR ULFAH AWATIF UM AIRAH BINTI ALIAS
7		MUHAMMAD AZMEER BIN MUHAMMAD
8		FADZIDAH BINTI ABDULLAH
No	Matric No	STUDENTS
1	2117691	AHMAD ABDULLAH BIN MOHD ZAILANI
2	2116809	MUHAMMAD HUSAINI BIN MOHD SHAMSUDDIN
3	2119256	NURISH ALEYA BINTI NASARUDIN
4	2117516	AISHAH SOFEA BINTI MUHAMMAD AJIS
5	2115036	BALQIS BINTI HAMZAH
6	2118125	LUQMAN HAKIM BIN MD MAHTAR
8	1819389	CHENG ZIHAO
9	2119216	NURUL ATIERAH BINTI MOHD ZAHARI
10	2118275	DANISH IRFAN BIN ROSTAM AFFANDI
11	2112647	MOHAMMAD AFIZUL BIN MOHD SUKIMAN
12	2113018	NURUL NAJWA BINTI MOHD SYAHRIN
13	2118700	BALQIS FARHANA BINTI MOHD ARIFFIN
14	2118469	MUHAMMAD RUSYDAI BIN ROHAIZAN
15	2117068	SITI BATRISYIA ASYIQEEN BINTI SHEIKH MOHD AMIR
16	2116907	AMIRUL ZIKRI BIN JOEHARI
17	2113036	LAILY ARISSA BINTI NOR RIZAL
18	2116870	NOR FARAH ALEEYSHA BINTI ZAINULABADIN
19	2110164	NUR ALESSYA DARLIANA BINTI RASDI
20	2016345	NURSHAMEER BIN D N MUBEEN
21	2118003	MUHAMMAD ZULHUSNI BIN MOHAMMAD HAIRUL ISAM

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