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e - Proceedings



Proceeding for International Undergraduates Get Together 2024 (IUGeT 2024)
"Undergraduates' Digital Engagement Towards Global Ingenuity"

1st Edition



Organiser :

Department of Built Environment Studies and Technology, College of Built Environment, UiTM Perak Branch

Co-organiser :

INSPIRED 2024. Office of Research, Industrial Linkages, Community & Alumni (PJIMA), UiTM Perak Branch

Bauchemic (Malaysia) Sdn Bhd

Universitas Sebelas Maret

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Astaka Ghetaran Senada

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ABSTRACT

Our assignment for this project was the Fusion Timber Challenge: Uniting Design and Sustainability. In essence, the main focus of this project is the use of timber as a retreat. In addition, we were instructed to integrate the design of the timber retreat with other elements such as materials, cultural practices, design styles, and innovative technology applications. In this project, we fused timber with traditional Malay materials and cultural elements. We have proposed with a brilliant idea to form from a subject matter, Gambus, which is known as traditionally a classical Malay music of Malay Ghazal and traditional performances such as Zapin and Hamdolok.

KEYWORDS: Malay traditional, astaka Ghetaran Senada, gambus, timber, glass

DESIGN DESCRIPTION

The well-crafted Astaka Ghetaran Senada draws inspiration from Gambus. Gambus is traditionally a classical Malay music of Malay Ghazal and traditional performances such as Zapin and Hamdolok. In this project, we have utilized Gambus as our subject matter and primarily drew inspiration from it for almost every designated furniture and feature. This project also highlights that the fusion timber is met through the seamless integration of sustainable timber with modern design elements. Interactive art installations and flexible furniture not only enhance the overall student experience, but also foster collaboration and creativity. In this design, our group has specifically selected a few materials to be fused with timber. As we all know, using timber as the primary material results in the lowest carbon dioxide emissions. We also used aluminum because it is an ultragreen technology due to its production power source. We also have glass that boasts nearly 100% light transmission, which automatically increases ventilation. In this project, we designed our Astaka Ghetaran Senada in the shape of a Gambus, which not only occupies a significant amount of interior space but also has an oval shape that benefits our surrounding areas. Our Astaka Ghetaran Senada has allowed us to design numerous pieces of furniture that instantly provide more activities in our space.

NOVELTY AND UNIQUENESS

Our Astaka Ghetaran Senada stands out due to its uniqueness, which stems from the properties of our subject matter, Gambus. The Gambus has provided us with a variety of ideas for both internal and external construction. For starters, we used the head figure of the Gambus as inspiration to construct a walkway that leads into our Astaka Ghetaran Senada. As we use timber material as the primary material, we all know that timber is one of the most environmentally friendly building materials; it also contributes to the health and wellbeing of building occupants. And thanks to advances in technology, timber is more durable and long-lasting than ever before. Solid timber constructs this walkway towards our Astaka Ghetaran Senada, and the shape

of the archway mirrors the rattan strings of the Gambus. The main reason we chose to use rattan material for the archway is due to its unique properties. As we all know, rattan is water resistant, making it ideal for use in outdoor furniture sets. As we take steps further inside, you will encounter the beautiful, magnificent interior of our Pavilion. I would first like to begin to explain the ground floor designs.

Firstly, regarding the ceiling design, it's crucial to note that we have incorporated one of the characteristics of the Gambus plant into the design. It is prominent and clear that we have used the uniqueness of the flower designed as the ceiling. For the roof material, we opted for the popular natural wood. We chose this material for the roof due to its long-term sustainability. This unique design enhances the Gambus's property that we displayed on the ceiling. The stairs that allow us to transport from the ground floor to the first floor are well constructed with wood material. Wood is a fantastic building material, as it is light and has a high load-bearing capacity. Its low weight means that transporting it is much more energy efficient. As we climb to the top, the circular shape that serves as a railing fence is made of glass material. Glass helps us to insulate us from the cold, protect us from the sun's glare, reduce noise from outside, and help keep us safe and secure. It can also contribute to increasingly important economic and sustainability goals.



Figure1: Exterior of Astaka Ghetaran Senada



Figure 2: Ruang Serayu



Figure 3: Ruang Beka

BENEFITS TO MANKIND

The design showcases this activity as a destination for visitors. We have constructed this with timber as the main source of this panel. This material not only provides strength but also contributes to the overall harmony of our design. The design aims to provide access for outsiders to select books and charge their gadgets, which is why we have included electricity plugs. Additionally, this design incorporates a specific mirror that is attached to each panel. This feature enables visitors to alleviate their stress by capturing aesthetically pleasing photos. Most importantly, the ground floor level has provided Coway for outsiders to refill their empty bottles and take a sip of H2O. As we reach the top floor, the circular shape that serves as a railing fence is made of glass material, ensuring our safety. As we proceed to the furniture section, it becomes evident that we have chosen the circular shape of the Gambus property as our designated furniture design. These pieces of furniture give us a great deal of space that accommodates plenty of people to sit and relax. We also added some floral elements that highlight the area's euphonies. This area on the second floor not only provides a space for relaxation, but also serves as a stress-relieving zone, thanks to the presence of game equipment like Foosball. We aim to encourage frequent visits, enabling individuals to learn from the available books and engage in activities like board games. In this way, people can release their stress by playing board games, which not only open their minds and strengthen them, but also foster stronger relationships among individuals.

COMMERCIAL POTENTIAL

Our Astaka Ghetaran Senada stands out due to its uniqueness, which stems from the properties of our subject matter, Gambus. Gambus has provided us with a variety of ideas for both internal and external construction. Our Astaka Ghetaran Senada is comprised of two floors, Ruang Serayu on the ground floor and Ruang Beka on the first floor. Both floors offer ample space for a variety of activities, including reading books and taking beautiful photos. Not to mention, we have also provided a space to store bicycles and also a unique stone bench that allows outsiders to sit and relax while enjoying the outside scenery.

CONCLUSION

In summary, it's important to understand that this design is based on the Fusion Timber Uniting Design and Sustainability concept. It's crucial to note that we have incorporated various materials, including glass and aluminium, into our design to create an exceptional piece. Simply put, responsibly harvested timber is considered sustainable. To incorporate one tree into your home's new timber feature, you must plant a new tree in its place. Our pavilion is more than just a design; it provides us with comfort, safety, and aesthetics that are very much needed in our daily lives.

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Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
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