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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

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Universitas Tridianti (UNANTI)

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Verdant Eden

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ABSTRACT

Verdant Eden Space Design is a unique space design that combines nature, recreation, and modernity, offering a peaceful retreat within the university park. The park features architectural elements that evoke natural forms, fostering a seamless integration between built environments and the natural world. Elevated pathways and dynamic structures with solar panels to generate power, adorned with vertical gardens and climbing plants, this space invites visitors to explore and interact with their surroundings. Eco-friendly walkways with footsteps generate power meander through the park, offering varying perspectives and encouraging discovery. The sculptural canopy, with its organic shape providing shelter and shade, enhances the park's tranquil ambience. The park also features recreational elements like a rock-climbing wall and a skate bowl, blending relaxation with activity. These features cater to a wide range of activities, from quiet contemplation to physical exercise. Verdant Eden Space's design exemplifies how urban spaces can be transformed into multifaceted environments that promote healing, well-being, environmental awareness, and community engagement. It serves as a model of thoughtful design that enhances design student life and urban living, providing a vital green space that fosters a deeper connection to nature and offers a respite from the urban hustle toward sustainable space design.

KEYWORDS: Space design, wellbeing, healing space, green design, contentment

DESIGN DESCRIPTION

UiTM Perak, with its background as a university with design as its main niche, needs to have a space for recreation, rest, and exercise for design students whether from the built-up environment program or the art program to always stay fit and healthy. A situation like this will give more advantages to students in the learning process and work to produce the best results. Verdant Eden Space design is a serene space that combines natural and modern elements to create a harmonious environment that promotes well-being and environmental awareness. The design offers various activities, from relaxation and contemplation to physical exercise and social interaction. Key features include sculptural canopies, vertical gardens, elevated pathways made from sustainable materials, and recreational areas like a rock-climbing wall and skate bowl. The idea behind the design is:

- Concept and Ideas – Design is a niche area and strength for the UiTM Perak campus, the metaphor of the hand is very closely related to students whether they are Alam Bina students or Art students.
- Solar Panel Roof Structure – not just for shade but also designed to generate electricity from solar energy

- Footstep power generation system – a combination of terracotta floor finish pattern design and footstep power generation system by piezoelectric sensor technology in the production of electricity for use by plug points for users
- Foot Massage – the use of materials from river stones and pebble wash of various grades is not only used as a floor finish pattern design but also as a therapy and foot massage.
- Rock Climbing wall – one of the attractions of this space for exercise and training mind focus as well as self-resilience
- Multi-layer Seating & Skating – some users can make the elevated space as a seat, reading as well as a platform for skating activities.
- Herbs and plant landscape – the selection of Cambodian trees with flowers and flower trees to repel mosquitoes is available for the user's sense of smell therapy
- Green design – the combination of the design elements suggested above makes it an environmentally friendly space design.

Overall, the space design functionality and performance are multifunctional, supporting both passive and active uses. Transparent and semi-transparent materials in the canopies create an interplay of light and shadow, adding to its tranquil ambience. The user interface and user experience are ensured through well-placed pathways and clear signage, while elevated walkways and strategically positioned seating areas provide comfort and convenience. The space design caters to a wide range of users, including families, professionals, students, and fitness enthusiasts. Its design ensures there is something for everyone, making it a valuable addition to any urban area. Applications include relaxation and recreation, community events, and educational activities. Benefits include enhanced well-being, environmental sustainability, and community engagement. The space design is a model of innovative urban design that transforms city spaces into vital green sanctuaries, fostering relaxation, inspiration, and community engagement. By incorporating eco-friendly materials and promoting biodiversity, the park supports environmental conservation efforts and fosters social interaction and community building.



Figure 1: Design concept



Figure 2: Verdant Eden

NOVELTY AND UNIQUENESS

Verdant Eden Space Design is an innovative concept that transforms unused locations into brilliant green parks. This design incorporates sophisticated green technology, such as vertical gardens and solar-powered lights, to promote an eco-friendly atmosphere. The combination of nature and infrastructure provides new recreational opportunities for users, especially design students. This strategy not only revitalizes the UiTM landscape area but also encourages sustainable university life, establishing a new standard for future urban planning and development.

BENEFITS TO MANKIND

Humanity benefits a lot from the Verdant Eden space garden design. By creating green areas that improve air quality, it tackles important problems like urban traffic and pollution. By using eco-friendly designs and materials, this park encourages sustainability. It is economically beneficial to local companies and property values. As a teaching tool, it functions as a living laboratory for urban planning and environmental studies. It promotes community involvement and well-being by providing a socially and culturally inclusive venue for a range of activities. While it revitalizes areas and enhances the quality of life for locals, it also establishes a precedent for creative urban solutions globally.

COMMERCIAL POTENTIAL

There are a lot of economic possibilities for space design. The market is driven by the growing need for creative infrastructure solutions and green spaces in cities. Due to its distinctive design, it has a competitive edge and draws both investors. Public-private partnerships, event and concession revenue, and sponsorships can all be a part of the business plan. Scalability is excellent, and the idea may be applied to different places. The design is proposed with the aim of meeting the lifestyle of design students who desire a healthy life, recreation, and an increased source of inspiration can be used as an example and built in other places whether public or private universities.

CONCLUSION

Verdant Eden Space Design is a university-specific sustainable urban space that integrates natural elements with modern architectural innovations. It offers a harmonious environment for design students, promoting physical health, mental well-being, and creative inspiration. The space is a hub for physical activities, social interactions, and educational experiences. Innovative features like solar-powered structures, footstep power generation, and eco-friendly materials set a new standard for green design in educational institutions. The scalability and adaptability of the project make it a model for future urban planning and university campus development. It enhances campus quality of life, fosters community engagement, and contributes to environmental sustainability.

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SITI BASRIYAH SHAIK BAHARUDIN
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