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Mohammad Yazah Mat Raschid & Wan Sofia Wan Ishak

### **Urban Revolution**

Mohammad Yazah Mat Raschid

The theme for Year 4 studio projects in Stedex '13 is "Engaging the Green Initiative". The basis of this initiative is to exert design skills and awareness amongst students towards the Green Lifestyle. It is imperative that specific urban areas have adequate green spaces critical to create a livable, sustainable city with a healthy environment and an improved quality of life. In keeping with the sustainability initiatives, the students are being tested to construct a small and high rise development with potentially sustainable engagement to create green urban scenarios.

The first project, The Georgetown Urban Farming in Penang integrates urban farming as a catalyst for youth development and incorporating farming as a way of life in an urban setting. The site is located at the junction of Jalan Penang and Jalan Mac Allister with direct view towards KOMTAR and is a meeting point for youth from all over Penang due to its close proximity to the main bus and taxi terminal. Land is expensive in Penang which justifies the need for high density developments in the selected areas. Parallel to this, the site chosen for this project is currently projected for a high density development. Reflecting the project, cities after all are created for vibrancy and

dynamism, for buzz and nightlife. Nevertheless, here are good reasons for Malaysian to rethink its urban landscape. For one, global cities are being redefined with urban agriculture seen as a viable, efficient and environmentally-friendly complement to farms. The students were requested to propose spaces of community gardens to grow by giving the communities some land and the crops the gardens produce are for the community. The proposed spaces for community gardens range from 25 to 1,000 square meters. This allows the community to learn to plant seeds and experiment with using used coffee grounds as fertilizers. The project instills a sense of environmental awareness among the students.

Meanwhile, the second project; 3-Generation Housing requires the students to propose innovative expandable high rise housing that cater for growing family nucleus. As families grew and finances allowed, additions were made to the existing home with the intention of staying in them for many generations. With this in mind, the proposed project should demonstrate that today's homes could be built with expansion ideas inherent in the design. Affordability should no longer refer to inexpensive, but rather what we can actually afford. Flexible Housing refers to a housing that can adapt to the changing needs of users. It is not just the possibility of choosing different housing layouts prior to occupation as well as the ability to adjust one's housing over time. It also embraces the potential to incorporate new technologies over time, to adjust to changing demographics, or even to completely change the use of the building from housing to something else. It also denotes housing that can adapt to users' changing physical needs, in particular as they grow older or lose full mobility.

It is also envisioned that one way of easing the shortage of affordable housing is to design new and rehabilitated single family residences so that accessory apartments are easily and cost-effectively created or removed. This mode of design will facilitate the adaptation of the house to changing household needs and in so doing will broaden access to homeownership. The project is proposed at three prime areas in Kuala Lumpur: Razak Mansion in Sungai Besi, Sentul and Jalan Kuching/Kepong which are in dire needs for quality residential units to replace the dilapidated housing units.

For project 2, the students were asked to incorporate `cutting edge' expandable housing

solutions with emphasis on reducing energy consumption and impact on the environment. In addition, the project is expected to not only produce modern, striking and attractive buildings that reflect and contribute to the flavour of Kuala Lumpur City's residential architecture but also to integrate the buildings with their immediate surroundings as well.

Finally the last project, The Green Pavilion symbolizes the Green Serdang Town initiative which takes a somewhat apolitical, positive approach towards encouraging people to adopt a more sustainable lifestyle. Today, when the environment is being polluted so severely, everyone is thinking about how to save the environment from being further contaminated. Taking this into consideration it is our vision that by educating the students through this project, it will also change the mindset and behaviour of the community about global warming, climate change, renewable resources, the exciting technologies and also about recycling solid wastes and water, and the green building.

Overall, the three above-mentioned projects commemorate the effort by the faculty's passion to embark in Green Initiatives for the survival of our future generation

# Jury Review

Ahmad Nizam Radzi & Norwina Mohd Nawawi

#### Urban Farming & Youth Centre, Penang

"This project is a topical issue being deliberated currently, particularly in the western hemisphere. This project serves to fulfill two major concerns - sustainability and activity. Sprawling urban areas must address the concern of "selffeeding", by growing their own crops. This will reduce the cost of transportation from suburban farms, thereby making them cheap and reducing carbon footprint without the need for petrol-driven trucks to bring the crops to the consumers. The ideas proposed by the students were impressive and workable, indicating their passion and understanding of the objectives. Whether the youths of today are interested to "get their hands dirty" is another issue but in the future where smart phones and internet rule, this activity is surely a serious consideration for youths to give meaning to the term "sustainability".

#### -Ahmad Nizam Radzi

"The selected students' works reflect the different interpretation, effort and style of each designer to translate and express the essence of the brief into a beautiful journey of discovery. The outcome can be categorized into literal, literal yet flamboyant, and innovative. Only the versatile and inspired students can wreathe and wrest architectural phenomena beyond imagination. They dare to not only resolve the issue but able to give more than what it entails. The literal outcome work, but raw in its interpretation for perhaps engineers would love and everyone knows what its built form for. The in-between or literal-flamboyant ones are eager to be different but dare not go far; that may contravene the very purpose of their existence. Urban context, youth, community, agriculture, food, career, environment, sustainability in some sense seem to link well in this project and are successfully displayed by the students. As an architectural form as the outcome of seemingly rigorous environmental and construction studies done, the works were interesting, vibrant and commendable."

-Norwina Mohd Nawawi

#### **Generation Housing Solutions**

"This is a good and relevant project brief as the need for affordable housing is a perennial need in the context of a developing country like Malaysia. It is imperative that students are exposed to such fundamental needs durina the academic years so that these social requirements be adequately understood and addressed in the desian of habitats, particularly in the evolution of residential units to respond to family needs and sizes. The selected works are promising and innovative, giving a different perspective to the future of mass housing. It is essential that highrise is the way of the future as depicted by examples in Europe, China and Singapore. The structural logic chosen by the students may affect the costs involved for such an affordable project but really, the issue here is to look at new ideas on how we could balance out the fundamentals and the livability of families in facing up to future challenges."

#### -Ahmad Nizam Radzi

"The issue of affordable housing is endless as affordable itself is relative. As Asians and Malaysians, we like to age

the selected works seem to have met the 'physical' goal of housing and providing the 3Gs shelters. Whilst the space where each generation can breathe on one's own when one desires and socializes when permissible, how can it expand (permutated) when one desires or able to afford additional space? What is home to the different Gs? What cultural background are they from? Can they accept vertical living? Do they miss their small garden settings, pets and coffee shop just down the lane? What if one died, how will one be brought down? Different Gs have different questions as to their requirements. The three selected works are contrasting in their outcomes although similar in their approaches to a varying degree. The dancing tower, the funnel with a central spine, and the digital-boxy sprawling towers are all interesting and attracting attention. Each scheme had studied the social elements, space and configurations, horizontal and vertical relations, to a certain depth. On energy and green requirement, through their earlier research, some schemes had applied their knowledge innovatively, while others, on the safe side, go for a normative approach of materiality and orientation. As a conglomerate of vertical habitation, the social, spiritual and emotional values of the 3Gs, being the core of the project still need to be addressed succinctly in the details.

in place. Yes, indeed, I would like to stay where I am now,

come sons or daughters or grandchildren. No one is going

to take me away from my very own home. The children

can live with us, but each one of us needs our `space' for

contemplation, hobby and work. In a sweeping review,

-Norwina Mohd Nawawi

#### Green Pavilion, Serdang

"This is a follow-up to the 'energy theme' where students are expected to embrace the idea of designing a pavilion that is 'self-sustainable in energy consumption' while adapting to the latest, portable construction techniques. The various schemes selected were wide-ranging in approach, from a more conventional linear structure to a floating bubble capsule. There were some inputs in the structural aspects of the pavilions but the self-sustainability issues were not adequately addressed, partly because this was a short project. It raised the awareness on the need to integrate energy factors into design although in a small scale and proportion. "

#### -Ahmad Nizam Radzi

"A free standing portable pavilion cum landscape project is proposed to prepare, ease and attune one's mind as a catalyst to the major project. This includes a simple exercise to create public awareness of the Green agenda. What catches one attention is the ability of the pavilion to not only attract but interact consequently with the public. Another important agenda of the project was to ensure students had learned from the simple group exercises what they can each expand and apply in their respective projects – scale, portability, energy harnessing, aesthetics, identity, sense of belonging and context. "

-Norwina Mohd Nawawi

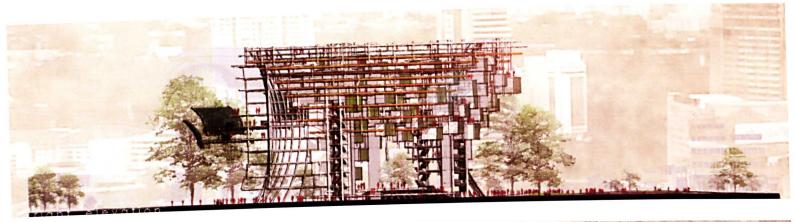


# Energy Skypark Urban Farming

Mohammad Yazah Mat Raschid & Meor Mohammad Fared

Urban farming built environment is not only meant for farming per se. Instead, it can be a catalyst for a static urban area. Whilst the intention to allow the surrounding community getting their hands dirty with soil as they learn to plant seeds and experiment with fertilizers, it is also critical to instill a sense of environmental awareness amongst the community and offer them learning aspects of science in a fun and engaging manner. Saidal brought forward the aspect of fun by introducing series of marketing platforms run by local entrepreneurs alongside the

plantation boxes reflecting a fanfare commercial environment. The continuous circulating line of platform creates a vortex that maximizes the communication between the users, operators and communities towards the internal environmental resources and the dense urban area. The process, similar to photosynthesis, generates and recycles carbon and oxygen thus invoking communication between human and plants.







Saidal Khadri Abu Kassim





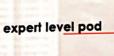
Education Pod Rental System



introduction pod in how to plant & understanding type of urban form



basic understanding of urban farm archive, to have own planting and supervise by specialist until the rate of own supervision arise.





level of understanding in urban farming satisfaction and able to generate personal planting.

group pod



pod to have a group of community to organize a group farming.

#### special pod

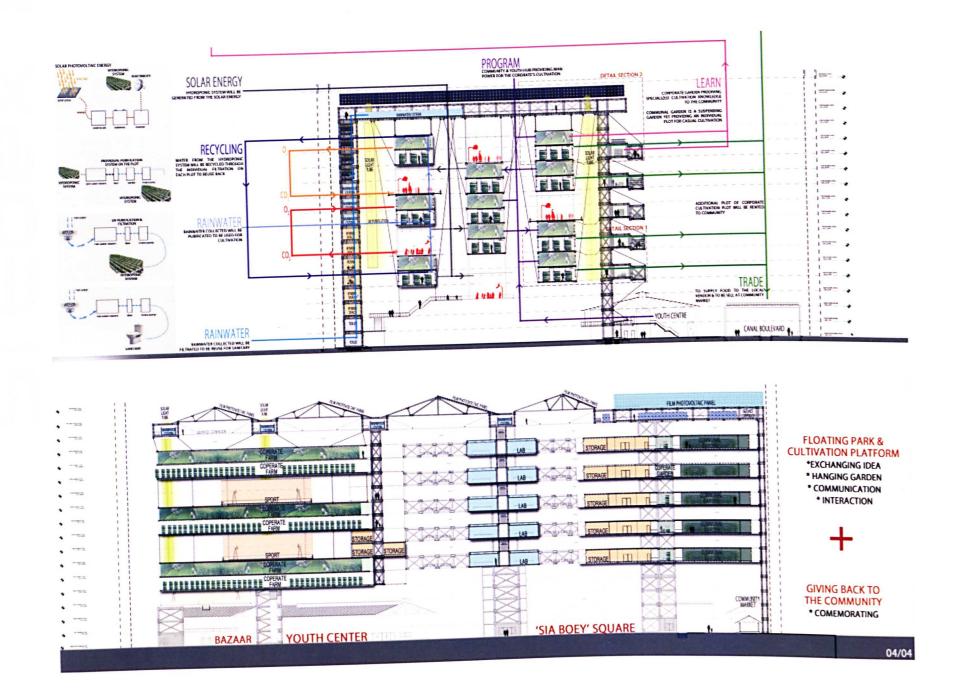
after gone through a learning process pod (beginner, medium & expert), a special pod can be rent as personel pod to practising planting system. The design to have a double volume area to accomodate different pattern of plant.

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# The Pilotis: Permeable High Tech Farm

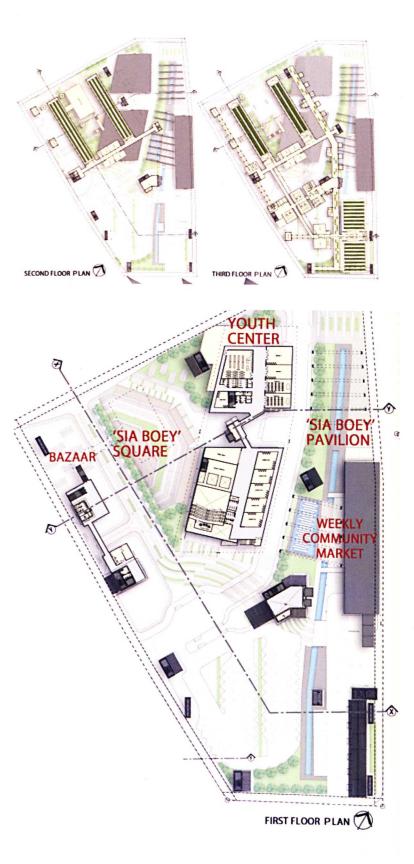
Mohammad Yazah Mat Raschid & Kalsom Mohammed



Tan Kwan Meng

The main high rise urban farming purpose is to supply raw food to the surrounding community rather than for mass productions. By this virtue, it should act as a hub that creates awareness on the importance of a self-sustainable food production without eliminating the current social and urban site context. Tan Kwan Meng realizes the strategic nature of the site as an iconic island to educate the community about the potential of urban planning and commemorating the site's historical value. The vertical urban farming hub is arranged along the main road axis and is suspended above the ground to allow public access and become a social space for interaction. For this purposes, it is also raised higher above and enclosed the existing traditional market. The suspended plantation space above the ground uses skeletal structure enhancing its true features as a plantation hub. The suspended factory-like structure hung over the pilotis does not only allow the urban setting to be more permeable but also crucial to the plant growth process.

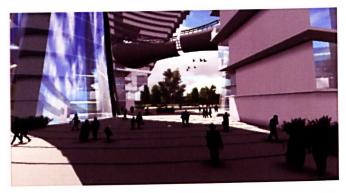




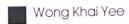
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## **Tetris 3-Generation House:** Therapeutic Living Environment

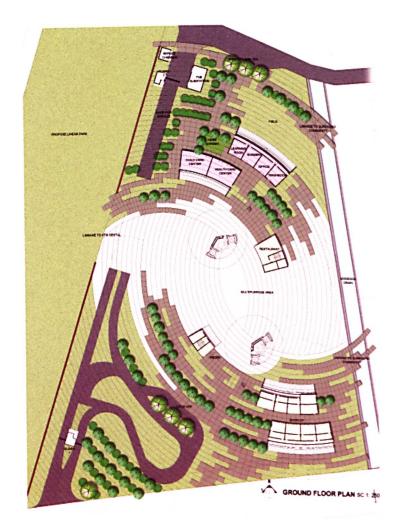




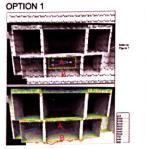




The way residential units are planned and arranged influences the living condition of the habitants. The notion of maximizing view with innovative layouts in urban setting can reduce stress and anxiety as compared to a conventional layout. The issue is further aggravated in urban areas. Wong Khai Yee resolves this issue by introducing 'Tetris' residential units arrangement of which simultaneously creates central voids serve as the communal spaces for the community. The curve shaped layout creates more exciting and vibrant spaces for different level of multi generation activities in a single multi-story residential development. The project is a new testament in providing human comfort by promoting active lifestyle in spaces created by the innovative Tetris arrangement. arrangement.

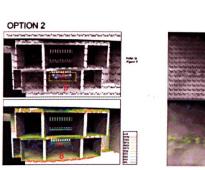




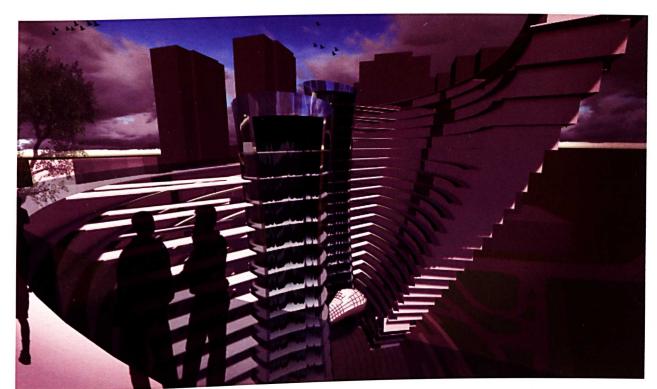


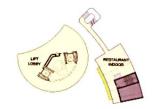
UNIT - IES ANALYSIS

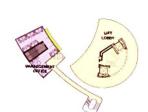






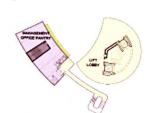




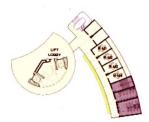


FIRST FLOOR PLAN SC 1: 250

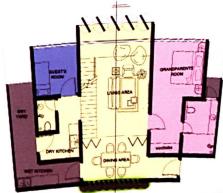




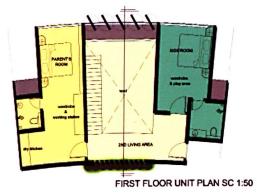
ECOND FLOOR PLAN SC 1: 250







GROUND FLOOR UNIT PLAN SC 1:50



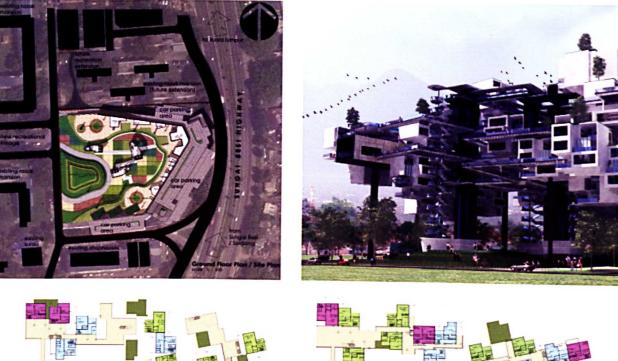
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### The Crossing: Enhancing Social Interaction

Mohammad Yazah Mat Raschid & Wan Sofia Wan Ishak

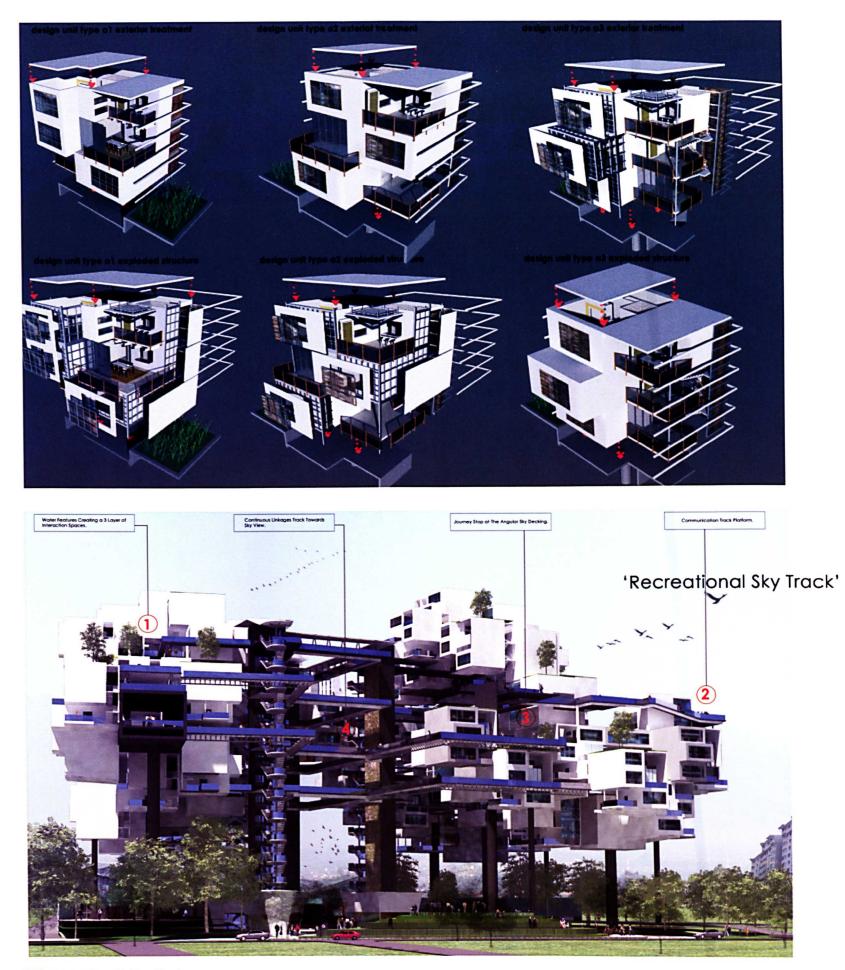
A multi-generation housing poses problems of strain or stress from depleting interactions among the community. Due to this factor, there is a need to reduce the stressful situations and ensure the harmonious living condition among them through appropriate spatial planning. Criss-crossing both the walkways and units along the boundaries by Saidal Khairi produces functional junctions that force the community to meet at strategic locations. It is a place for communal

dialogues, interactions and discussions: casual and formal. The dynamic atmosphere created by the crossing acts as the controller to enhance relationship between the old and new residential blocks. The Skypark roof garden further heightens the interaction by becoming the main community gathering space. Safely said, the conflicting space creates cohesion between the whole communities.









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