

Powered by RIBA Design Charette at Cityscape intelligence architecture workshop - Egypt 2022

Digital gallery – winning proposals

First place winner

Proposal title: The green crack: bridging the social gap

School: Arab Academy for Science and Technology Alexandria

Students:

- George Adel El Menchawy
- Yasmine El Sayed Saber
- Malak Moataz El Salmly
- Nayra Essam Gouda

Brief description:

Where one lives should never be a determinant of citizen rights or restrict opportunities for economic and social mobility. However, this is not always the case in Cairo. The quality of life and available opportunities can diverge dramatically from one neighbourhood to another leading to great injustice. When unequal neighbourhoods are very close together or even adjacent, this creates visible inequality which becomes apparent to both.

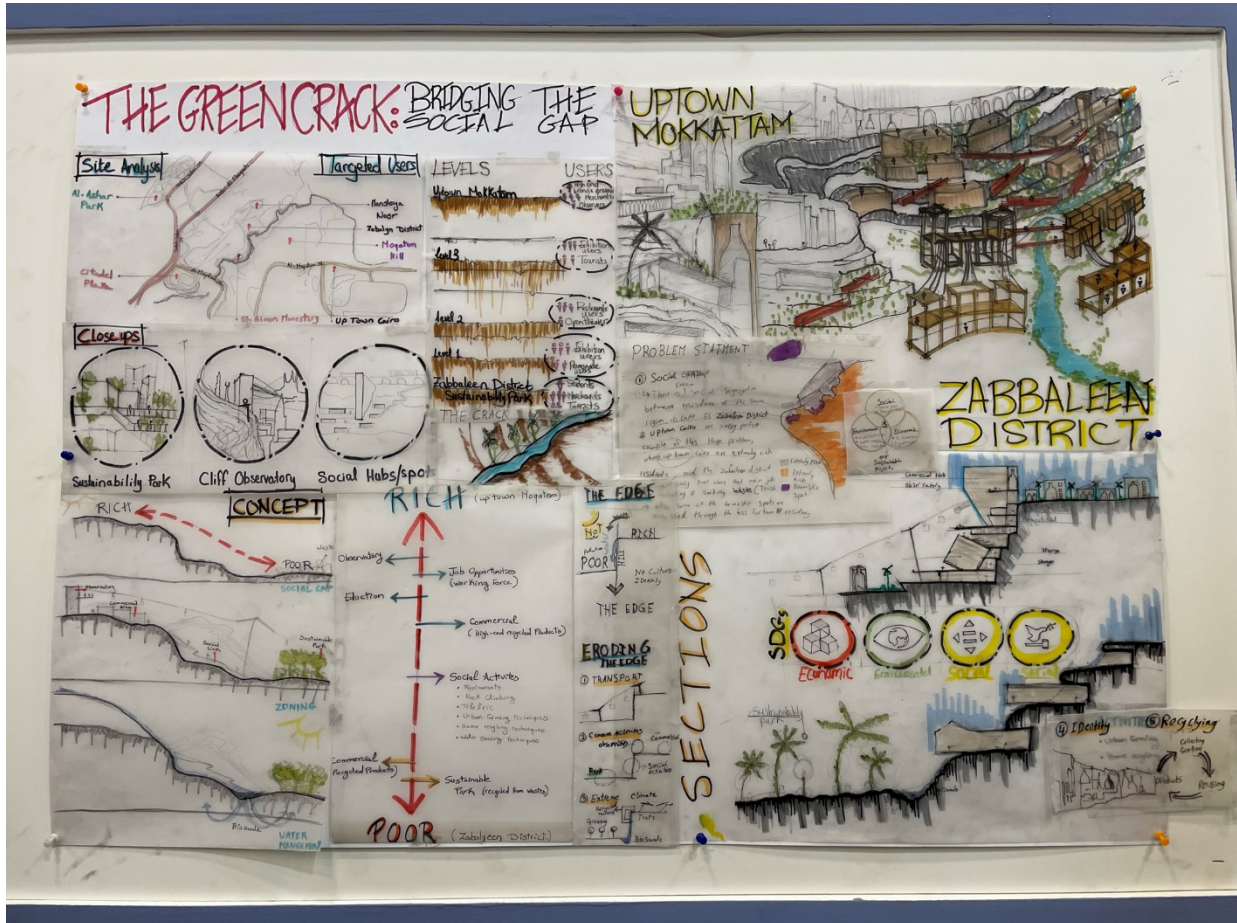
In order to demonstrate this issue, the site lying between Al Mokattam cliff and Al Zabaleen neighborhood was chosen as it perfectly fits the issue. The cliff of Al Mokattam forms an edge between the upper rich neighbourhood that is referred to as Uptown Mokattam, and the lower poor neighborhood, Al Zabaleen. The poor neighbourhood in this example has also a huge problem with waste management since the garbage of Cairo is being collected, sorted and stored in this neighbourhood.

The design's idea was to provide a sustainable solution that would erode this edge in order to connect the two sides of it and allow interaction through a well-designed connection that deals with the present injustice and inequality. The solution should also preserve the desert identity of the cliff and the character of Cairo. Thus, the solution could achieve social sustainability through green methods.

This goal inspired the solution's concept, which is to create scenarios that would make the poor merge into the rich community and would also make the rich people seek the poor community. This scenario was imagined as a crack that connects the upper side all the way to Al Zababline neighborhood and along this crack there would be different functions to merge both communities. And it was specifically thought of as a green crack to deal with the harsh climate conditions of the site. There are also restaurants and social places, an observatory, and an open theater to see Cairo from above. The crack is also meant to be connected horizontally with the surrounding touristic

attractions like Simon monastery. Moving to the upper edge of the crack there is a market for high end recycled materials to create job opportunities for the people working in the waste management neighborhood.

The two ends of the crack were also connected with cable cars to ease transportation. The crack has also a water management strategy the collects rainwater for reusing it. Through this solution we believe we tackled economic, environmental, and social sustainable development goals.



Second place winner

Proposal title: One step towards nearly zero carbon
 School: Arab Academy for Science and Technology Smart Village

Students:

- Hanna Ahmed Hiekal
- Sohair Taher El Geziry
- Khaled Ossama Kamel
- Shahenda Essam Mohamed Abdelwahab

Brief description:

Our team decided to think of multiple solutions, all trying to achieve nearly zero carbon. In Cairo, we chose the areas near the Nile; El Zamalek, NI Gezira and a condensed area at el Sayeda Zeinab. Started first by finding the problems, figured out it's causes then suggested solutions. For the condensed areas thought of making overhanging green pedestrian walks/bridges so residents could walk, jog or cycle above the condensed areas safely while surrounding famous landmarks such as Ibn Tulun mosque.

Suggested making tanks under the buildings to filter the grey water and reuse it to water the green roofs and façades or any surrounding green areas while the black water may be used as fertilizers. In addition to that, to minimize the use of ACs. Suggested cooling down the buildings by passing cool water from the Nile River through pipes inside the building's walls and floors. Last but not least, to benefit from the huge amount of vehicles used every day, came up with the suggestion of making a device like that of a speed bump, with a spring inside, each time a car passes over it, the mechanical system absorbs its kinetic energy and transfers it into electrical power. All integrating and working in harmony trying to reach zero carbon.



Third place winner (shared)

Proposal title: Injecting modularity; Developing a self-sufficient community

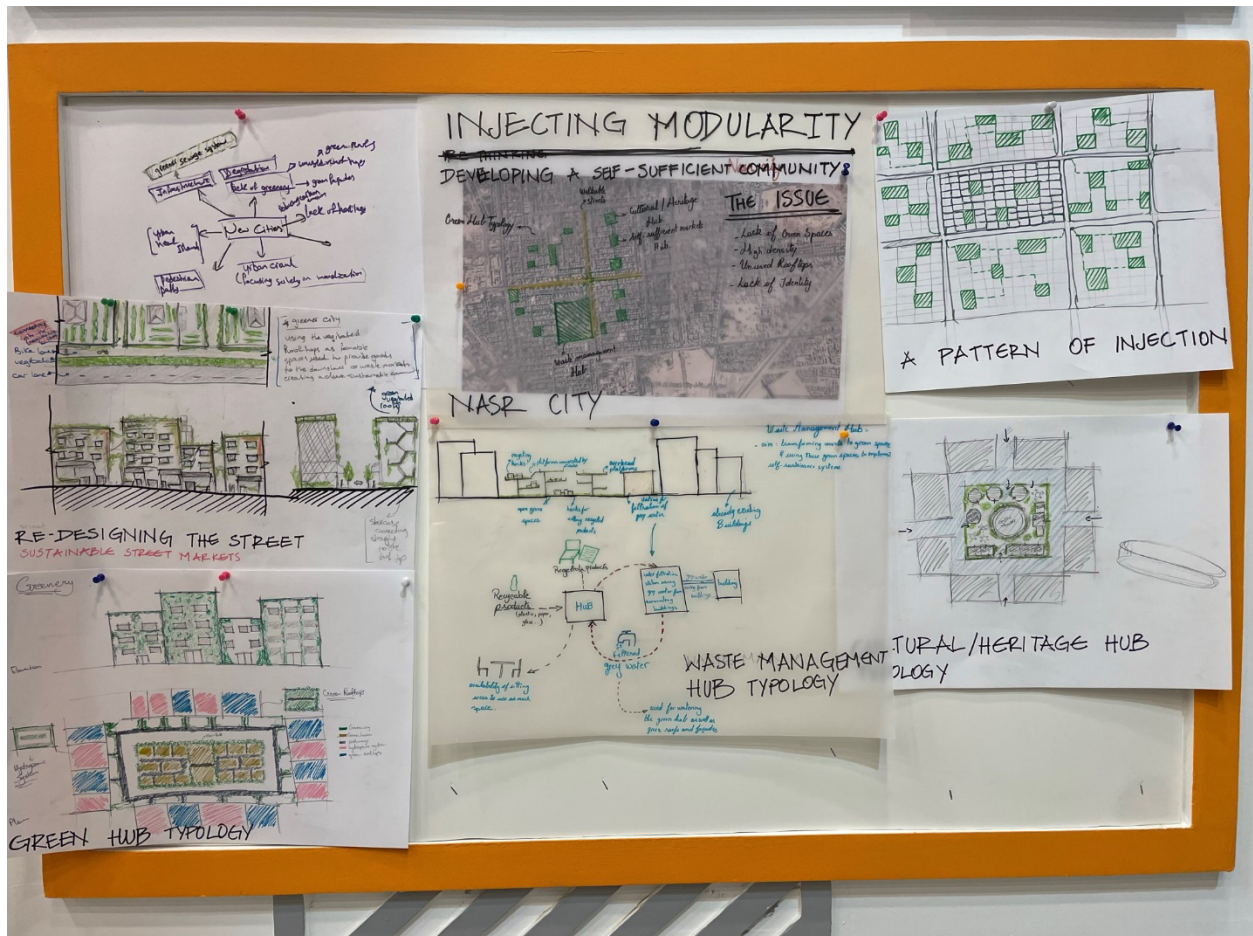
School: Arab Academy for Science and Technology Smart Village

Students:

- Sarah Moustafa Sami
- Tarek Ahmed Abdul Karim
- Shahd Osama Khaled
- Merhan Mohamed Ali Adam

Brief description:

As a team we chose to find solutions for the problem of lack of greenery and the degradation of nature in Cairo. We picked Nasr-City as a site and started trying to implement sustainability on the existing modular layout by creating a prototype of green hubs, in place of unused voids, that would consist of open green spaces used for different purposes (e.g. waste management, greenhouses, heritage/culture awareness activities...). We also suggested the utilisation of the huge number of unused rooftops by planting them as well as the façades.



Third place winner (shared)

Proposal title: The inundation of the pyramids of Giza

School: Arab Academy for Science and Technology Alexandria

Students:

- Farah Gheith
- Omar Walid
- Lujaina Abdelmohsen
- Aya Saeed

Brief description:

The inundation of the pyramids is a proposal to relink the Nile route with an axial touristic street leading up to the pyramids. The idea proposes the refurbishment of the Nile Boat Houses to be used as a transportation hub and double as a waste-collecting agent. The street of El-Tersa, parallel to the popular Al-Haram street, is where the proposed route will begin, in which users will be able to begin their journey with a Nile cruise, and end it with an elevated pedestrian path that brings them to an intimate view of the pyramids.

For our climatic treatment, we used the basic elements of earth and life, and accentuated them through environmental treatments, proposing vertical water walls along the street, that act as humidifiers in order to improve air quality. Bringing together modern Egypt and ancient Egypt seamlessly in a greener, more pedestrian-friendly experience.

