



The Dwelling 2023 | Architecture Competition

Archetype team - 12/01/2024

Νικήτές Διαγωνισμού

International design competition platform Volume zero has announced the results of **The Dwelling 2023** Architecture Competition.

Humans traditionally have thrived on social dialogue creating communities based upon work, education, place of origin, etc. aligning interests, and a place for incubation of skills, values, and ideas fueling civilizations. These Communities play a pivotal role in defining the social fabric and embedding values and virtues by which an individual perceives the world outside this habitat.

The world is transforming at a breakneck speed putting a strain on our resources. In a quest for a better life,

millions across the globe have been moving to cities every day. This has resulted in a rise in densely populated urban areas along with a lack of land resources and financial constraints to provide sufficient housing for the masses.

This phenomenon has led to a rise in innovation focusing on unconventional ideas like Smart Homes, Pod Houses, Social Housing, Co-Living Spaces, Tiny Houses, Micro Houses, Hostels, etc., making a home accessible to many and simultaneously helping achieve one's aspiration. The concept of these revolutionary homes encouraged for making the innovation of maximum functional area in a minimum footprint, thus redefining the perception of Sustainability in urban dwellings. The Competition challenged its participants to come up with inventive and sustainable solutions for urban dwelling clusters. Participants were encouraged to create functional, aesthetically pleasing designs that cater to the personal and communal needs of its inhabitants. The proposed archetypes should address space constraints, maximize functionality, and reflect the cultural identity of the community.

Volume Zero Competition thanks all the competitors for participating in this competition and for contributing to this competition's research. Participants from more than 37 countries contributed valuable concept ideas to the contest, which was evaluated by a panel of international experts. The winning projects have been awarded a total cash prize of \$4,000 distributed to the first 3 team winners.

The esteemed jury for judging this competition consisted of **Arash Aliabadi** (DAAZ Office), **Jurgen Mayer H.** (J. Mayer H. Architects), **Pa Li** (Studio APL), **Sachin Rastogi** (Zero Energy Design Lab), **Doan Thanh Ha** (H&P Architects), **Akshay Heranjal** (The Purple Ink Studio), **Tang Hua** (Tanghua Architects), **Mattia Chinellato** (SO - IL).

The top three winners were awarded total prize money of \$4,000 while ten entries received Honorable Mentions. Here are the winning entries.

FIRST PLACE

Timber Tales

Ooi Yong Rong

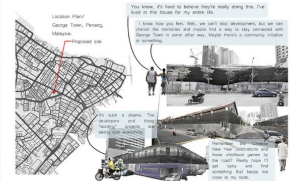
Malaysia



Timber Tales

Issues and Occupants

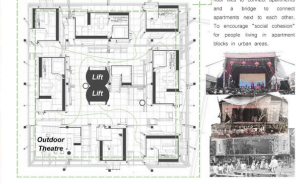
In response to the escalating trend of urban redevelopment and the consequent displacement of long-time residents, the concept involves the construction of timber-tale dwellings and an abandoned cinema building. This forward-thinking endeavor aims to provide enhanced housing options for 100 individuals, granting them an opportunity to remain in proximity to their cherished roots and observe the transformation of their beloved town.



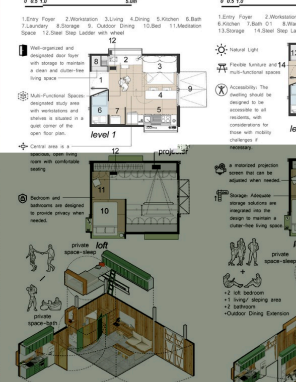
Concept

The project seeks to infuse new vitality into the heart of George Town, a city renowned for its rich history and cultural heritage. Drawing inspiration from the authentic George Town street scene, the design pays homage to the spirit of vibrant local culture and community. In this representation, the dwellings situated atop the cinema structure symbolize the very essence of the stage itself, with each home ensuring the role of a script in the collective narrative of life in George Town. These dwellings, elevated not solely as places of residence but also as platforms for individual expression, empower their occupants to actively participate in shaping the ongoing story of the city. The project offers a unique opportunity for these individuals to maintain their ties to their hometown while enjoying upgraded living conditions.

Floor Plate



2 users unit / scale 1:100 / area 247.57 sqft
6 users unit / scale 1:100 / area 462.85 sqft



SECOND PLACE

Vitalizing Watertanks

Kevin Chellakudam

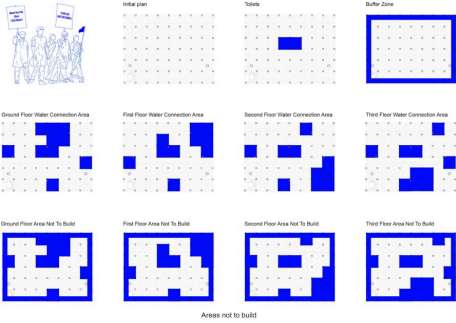
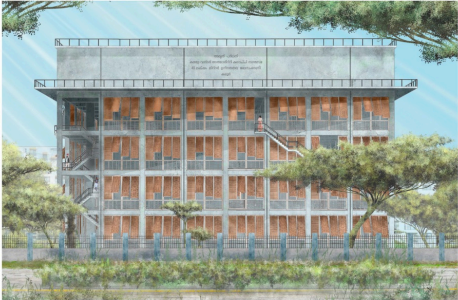
Switzerland

Vitalizing Watertanks - Affordable Dwelling Solution For Slums

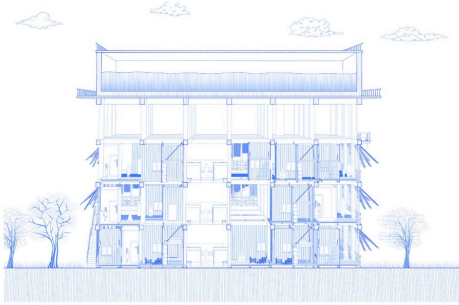
Due to the lack of proper infrastructure and water, the slums in Emakulam - India, locate close to the water sources. Given the fact that most building on water canal banks open their toilet outlets in to the canals, improper sanitation facilities, they not only pollute the water source, but also disease outbreaks here are ubiquitous. With the city facing increased threat of waterlogging, Kerala Shipping and Inland Navigation Corporation (KSINC) is expediting the implementation to revive the water canals, forcing the slums to shift location. Most residents are either a tenant or homeless, so the project asks how do we ensure land ownership for the people?

« Vitalising Watertanks » is an alternative solution offered to the government to create social dwellings. Located in Kallor, India, it aims to inhabit the empty part of the structure that supports a working water tank, while encouraging construction in dialogue with the community, bringing them closer and reducing labour costs. The goal is to design self-sustained modular pods with a variety of compositions, while still respecting local dynamics and culture. These pods explore the concept of prototype and modular construction to create public or private spaces. The modularity of the project fosters a manual and adaptable approach to grant residents the ability to construct living units that can be adjusted to the size of the family. In this innovative approach, private spaces for individual families are provided within the pods, while common areas such as the living, bathroom, and kitchen spaces are shared among residents. This arrangement optimizes space utilization, promoting a sense of community and effectively saving space introducing a participatory approach, where residents, in discussion with their neighbors, decide on and layout of their pods, while the water areas remain fixed.

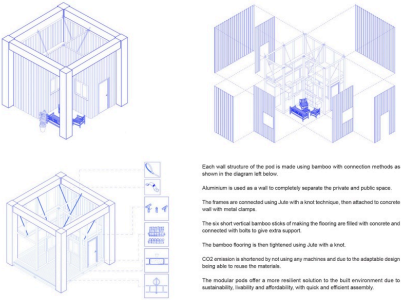
The initial site is situated at PLRWA-34, Kallor, Kochi, Kerala 682017, India. There are four desired locations in Emakulam and an additional 18 watertanks distributed throughout Kerala where this model can be applied, further expanding the availability of more social dwellings. It aims to reduce slums and revive water canals, maintaining flexibility and practicality for the users while balancing the cost and the residents' needs.



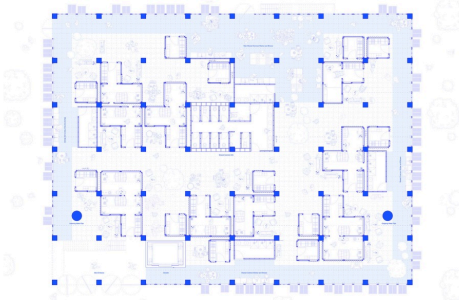
Areas not to build



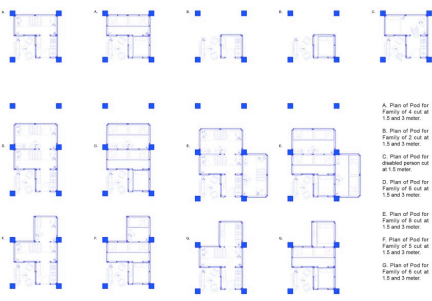
Section at Scale 1:175



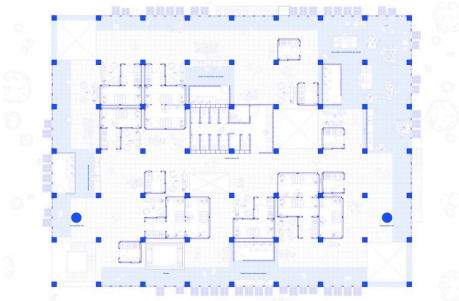
Connection of the Modular Pods



Possible Proposal Ground Floor Plan at Scale 1:150 with High Population Density



Plan of Modular Home Pods adjustable to size and needs of Family at Scale 1:150



Possible Proposal Ground Floor Plan at Scale 1:150 with Medium Population Density

THIRD PLACE

CARE CO-OP

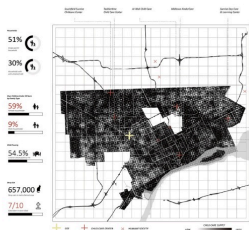
Shujian You

United States

A community that links vulnerable households

In Detroit, an 'flexible archipelago of households and single family houses is continually being produced due to the de-demolition, which disintegrates the notion of community, and being challenging especially for smaller households including single parent and single households. While the site is a child care desert as well as a desert of animal shelters, this project focuses on providing a dwelling community that links vulnerable households, where Children, single parents, single people and cats accompany and care for each other, in an informal intimate neighborhood.

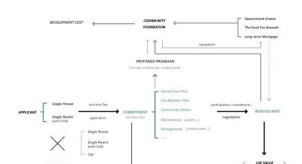
Background of Detroit & Context of Site



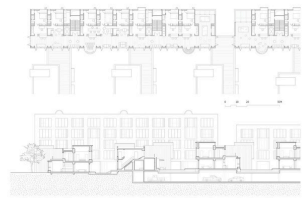
Urban & Placemaking Strategies



Dwelling Development Mode



Enlarged Plan & Section

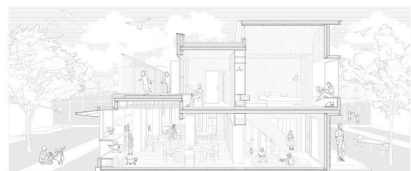
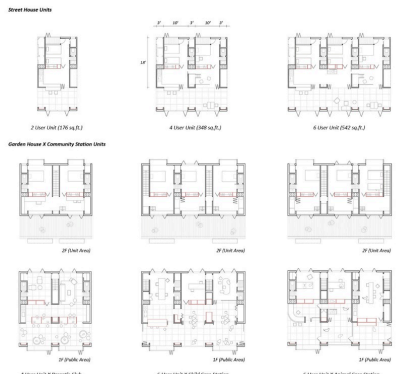


CLT System & Partition System Assembly

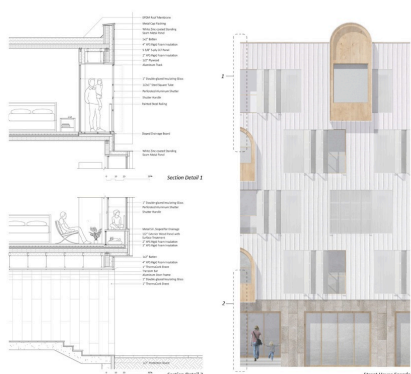
Household & Programming Concepts



Unit & Household Design



Details & Material



United States

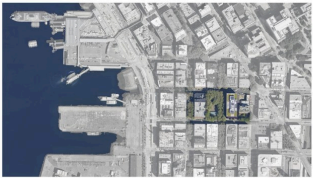


The Topic/The Site

A "fight" with homeless people for public space.

The housing issue in Seattle has led to a significant increase in the homeless population. In the downtown area of Seattle, due to a lack of public open spaces, more and more squares, such as Pioneer Square, have been occupied by tents, which serve as living spaces for homeless people.

However, residents living around these squares have been continuously complaining about this situation and hope to see the homeless people moved elsewhere. This has sparked a discussion on how homeless individuals can share public spaces with other citizens.



VZTD233637427

Site

The site is named Occidental Square, a beautiful square in Seattle that used to be occupied by tents.

Topic:

Can we transform a conventional square into a residential area for homeless people without disturbing the residents living nearby

POP-UPS

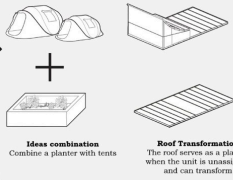
Temporary residence for homeless people



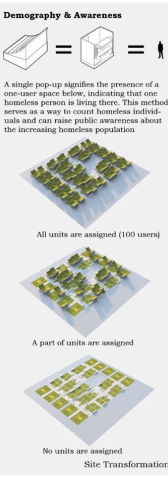
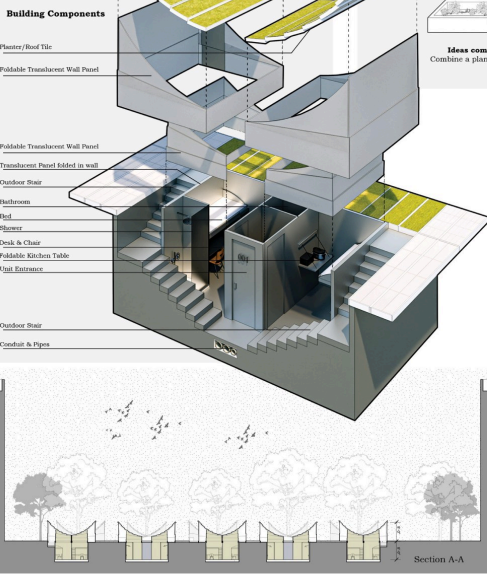
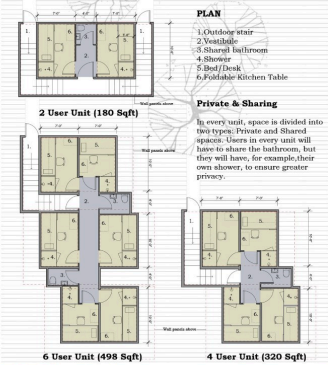
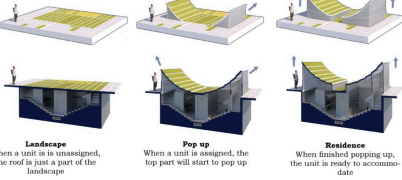
The Concept

The public square is a valuable open space for people living nearby. However, most of the time, the space is not utilized to its full potential. This project aims to apply multifunctionality to the public square while addressing social issues

Residence Integrates with Public Square



The transformation from a landscape to a residence



Honourable Mention 2 - rethinking GRANJA

Denise Morado, Pedro Medeiros De Faria and Rodrigo Rocha De Freitas

Brazil

Rhea Walter, Radhika Rajan and Apurva Wasule

India



DWELLING UNITS
The dwelling proposal for Makoko envisions a transformative urban plan, centered around vertical housing zones comprising 2-6 dwelling occupancy units, each with a working space for craftsworkers, bedrooms, living rooms and kitchens.



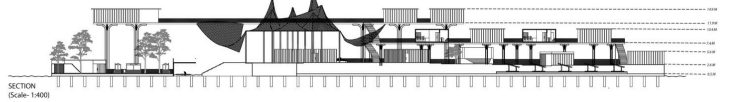
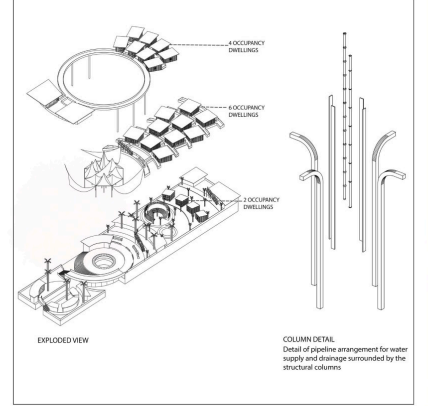
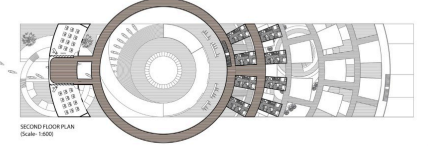
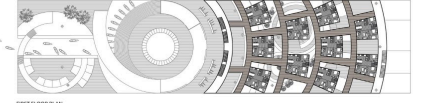
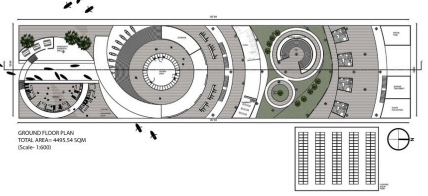
MARKET AREA
A designated local market will facilitate existing trade within the community. This includes the pre-existing trade of handicrafts, aquaculture and organizing the current haphazard growth of the makoko market.



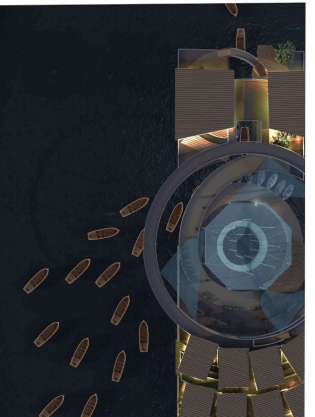
COMMUNITY SPACE
The ground floor area has been divided into multiple communal spaces such as a library, kids' playground, a stepped seating area and walking tracks.

TIDAL REVIVAL

This comprehensive design aims to create a self-sustaining mini-city for Makoko, enhancing living conditions and fostering socio-economic empowerment, without trying to displace its soul and identity rooted in aquaculture and stilted houses. It aims to enhance their homes with adaptable infrastructure, improved sanitation, communal spaces, while honoring their waterfront lifestyle. In the future, these modular units could form an aquapolis along the Lagos lagoon, showcasing Makoko's raw, authentic beauty.



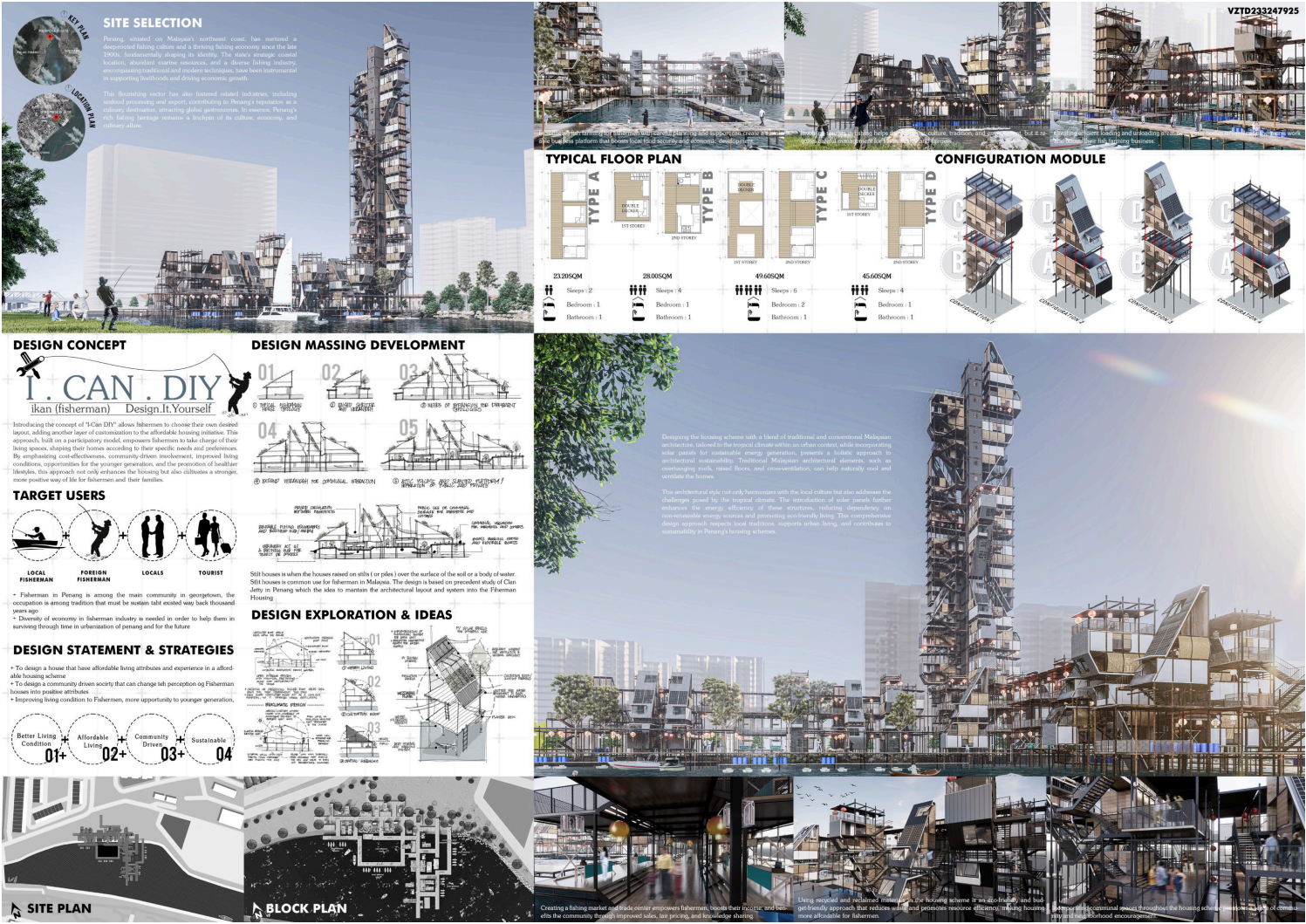
A symbol of progress and modernity, Lagos showcases the epitome of urban advancement with its towering skyscrapers, modern infrastructure, and vibrant economy. Nestled within the heart of Lagos Lagoon lies Makoko, a fishing community that paints an entirely contrasting narrative. Imagine a world where homes balance on slender pillars seemingly defying gravity, hovering precariously over the murky waters. The vibrant essence of Makoko lies in its lively festivals, traditional music, and the local market, which serves as a hub of economic activity. Navigating the labyrinth of waterways, Makoko grapples with basic infrastructure, limited access to education and healthcare amplifying its challenges. It emphasizes the importance of addressing urban inequalities in the quest for preserving the unique cultural heritage of communities like Makoko. Makoko's story is one of resilience against adversity. It beckons for attention, for change, for a chance to bridge the gap and bring dignity to every dwelling and every dream that stands on these stilts.



Honourable Mention 4 - I. CAN. DIY

Adib Aslam, Amir Arsyad Bin Rosidi and Mohammad Hassan Azri Bin Mohd Naim

Malaysia



Honourable Mention 5 - An Integrated Dwelling Community

Jingyi Zhou and Chuanqi Gao

United States

An Integrated Dwelling Community Re-imagining a Russian Social Housing

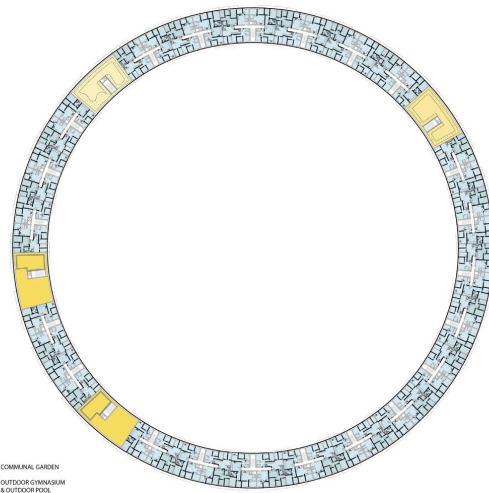
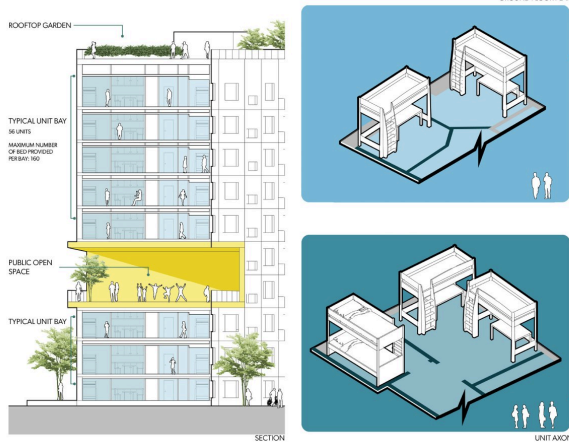
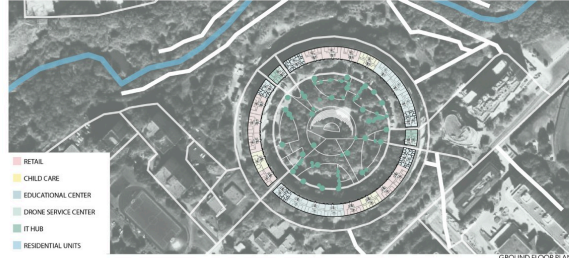
In the Western of Moscow, amidst the bustling cityscape, there stand two iconic round houses—two nine-floor residential buildings built circularly in 1970 and function as a testament to human ingenuity and the enduring spirit of unity. Once, this structure proudly bore witness to the grandeur of the Moscow Olympics, a beacon of global harmony and sporting excellence. Yet, as the pages of history turned, so did the purpose of this symbol, evolving to embrace a new narrative of compassion and solidarity.

Moscow has had a significant Ukrainian presence since the 17th century. In the wake of the Ukrainian conflict, roughly 2.8 million Ukrainian residents who sought refuge from the horrors of war went to Russia. The need for social housing became increasingly urgent, and the round house, with its historical significance, we hope to emerge as an emblem of hope and support for Ukraine's refugees. This transformation, an inspired reimagining of a cherished landmark, symbolizes the profound capacity of humanity to respond with empathy and open arms in times of crisis.

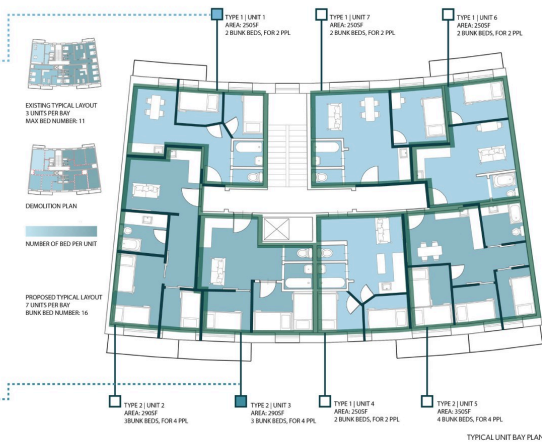
By optimizing the apartment layout and free some space for public area, the reconfigure project aims to unfold a new chapter of the round house, bringing new life through the compassion and the renewal, making the social housing extend beyond mere shelter; it offers essential services that empower refugees on their journey to self-sufficiency. Medical care, education programs, vocational training, remote workstations—all are provided to uplift those who have experienced profound hardship. Creating multi-functional public area and living units, the project aims to create a sweet home for people to against life and financial difficulties, and engage with their communities.

The architectural design seamlessly blends modernity with a respectful nod to the building's storied past. New programs such as roof top gardens with drone facilities, public gathering spaces, and commercial areas are designed to advocate for community engagement with non-human intelligence. Each apartment within the social housing complex is more than just a place of residence; it is a sanctuary where individuals and families can begin anew, rekindling their dreams with dignity and hope. The round house is not just a dwelling; it is a nurturing community, fostering connections among residents and weaving a tapestry of friendship that transcends national boundaries.

The round house, once a symbol of Olympic ideals, could embody a different ideal—a vision of a world where kindness, empathy, and the desire for peace conquer conflict and division. In reimagining this Russian social housing for Ukraine's refugees, we celebrate the boundless spirit of humanity, proving that love knows no borders, and the pursuit of peace can be an everlasting journey.



COMMUNAL GARDEN
OUTDOOR GYMNASIUM & OUTDOOR POOL
CHILDREN PLAYGROUND
RESIDENTIAL UNITS



Honourable Mention 6: TRANSIT PLUG - in

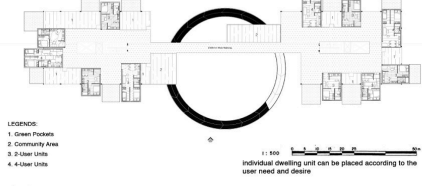
Subham Sinha, Swarna Kanti Ghosh and Aditya Aryan

India

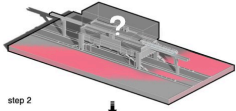
TRANSIT PLUG-in

Developing in Los Angeles is essential due to the challenges posed by skyrocketing rents, gentrification, and the shortage of affordable housing options. These issues strain the living conditions, and the city's social fabric is negatively impacted.

plan :



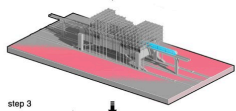
step 1



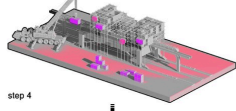
Why develop on roofs?

Parasitic constructions on rooftops can enable space optimization in densely populated cities by using the underused roof of existing buildings, hence restricting urban growth.

step 2



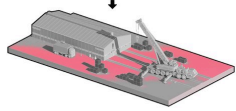
step 3



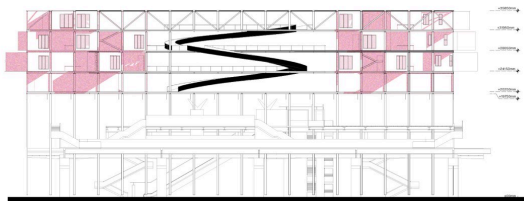
Why construct on top of a monorail station?

It maximizes land utilization in metropolitan areas when land is expensive and limited. This approach addresses the critical housing need in populated cities while reducing urban sprawl. It also reduces commute times for locals by facilitating easy access to public transportation.

step 4



elevation - a :



step 5

2 User Unit standard unit for small family. Modules are custom designable.

total area : 23 sqm



step 6

4 User Unit standard unit for medium size family. Can be replaced according to need.

total area : 32 sqm

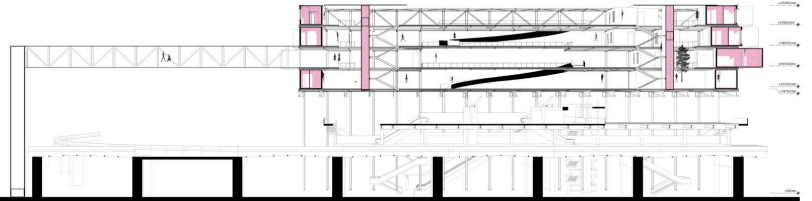


step 7

Multi User Unit customised unit for bigger family.



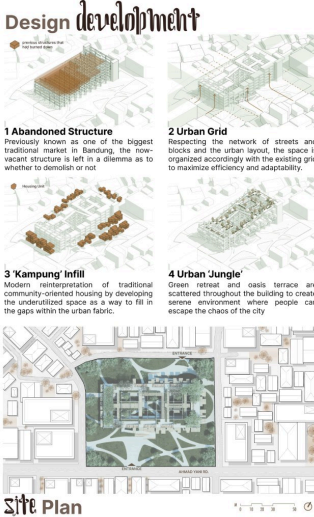
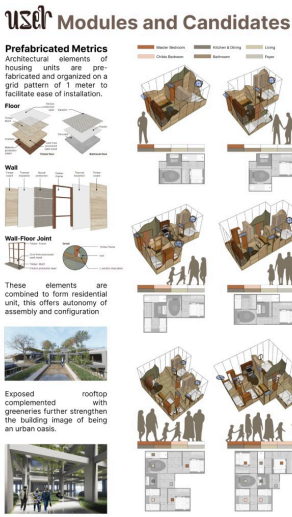
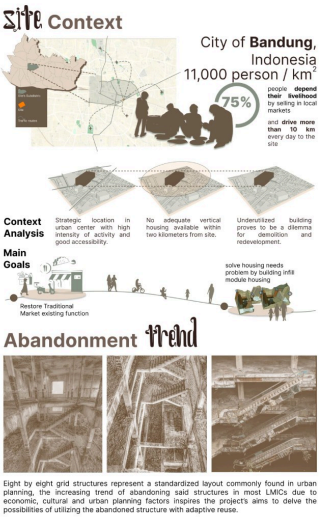
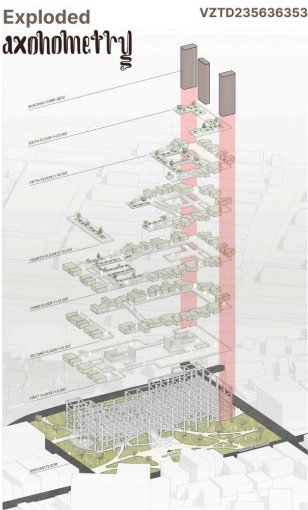
section - a - b :



Honourable Mention 7 - Matrix

Regita Pramesthi, Fabian Hosea and Frederick William

Indonesia




Honourable Mention 8 - A LIVING LAUNDRY LANE

Gaurav A Jain, David Stephen and Bindiya S

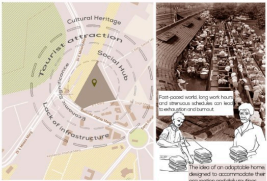
India

A LIVING LAUNDRY LANE:
Transforming Spaces, Connecting Lives



We chose our base in a unique and iconic part of Mumbai's landscape, that offers a glimpse into the daily lives of the people who work there and the city's enduring traditions.

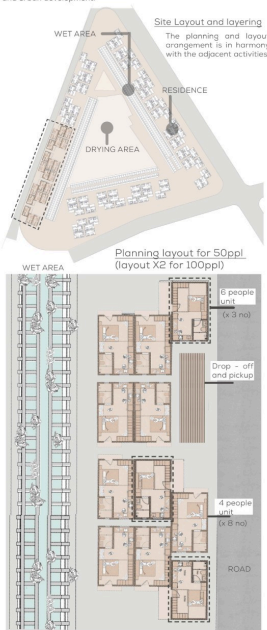
Dharavi Ghat is a famous open-air laundry area and a landmark that has been in operation for over a century and serves as a testament to Mumbai's rich cultural and historical heritage.



In recent years, there have been efforts to integrate a residential component into the Dharavi Ghat area to address both housing needs and urban development.

Site Layout and layering
The planning and layout arrangement is in harmony with the adjacent activities.

Planning layout for 50 ppl (layout X2 for 100 ppl)



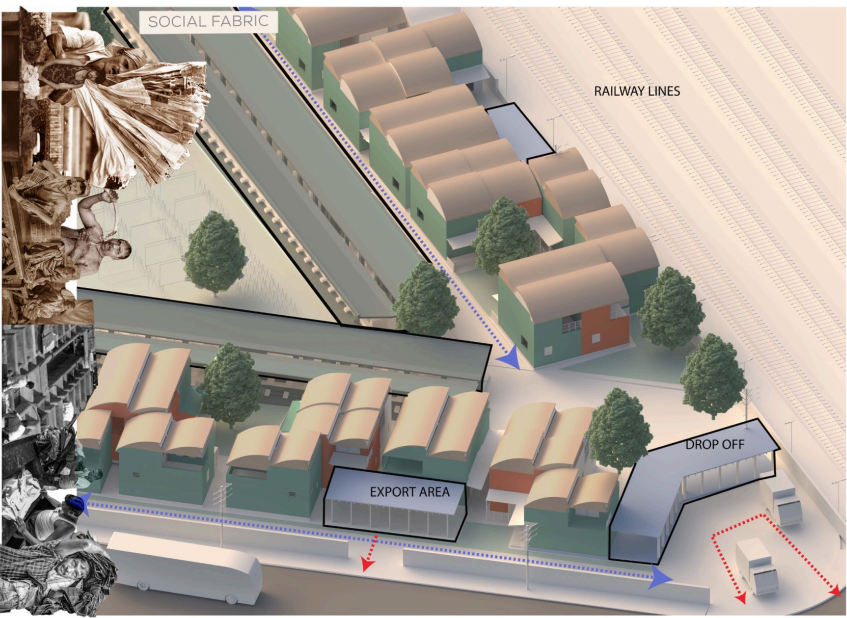
WET AREA

RESIDENCE

DRYING AREA

Drop - off and pickup

ROAD



SOCIAL FABRIC

RAILWAY LINES


EXPORT AREA

DROP OFF

We conceptualized an innovative solution for space-saving and adaptable living. Our focus was on foldable furniture, a concept that seamlessly blends functionality with aesthetics.


The core idea was to create furniture pieces that could transform a small living space into a versatile, multi-functional environment. We designed folding tables, chairs, and beds that could be easily stowed away when not in use, providing residents with the flexibility to maximize their living area.

Our foldable furniture design not only addressed the challenges of urban living but also promoted sustainable practices by utilizing eco-friendly materials and reducing the need for excess furnishings. It was our way of contributing to the future of compact, adaptable, and aesthetically pleasing living spaces.



Iron table

Pull - out




6 people unit

4 people units

wet area

Dry area

VZTD235548923



FLOOR PLANS

4 PEOPLE UNIT

Non working hours

Working hours

First floor plan

First floor plan

Ground floor plan

Ground floor plan



6 PEOPLE UNIT

Non working hours

Working hours

First floor plan

First floor plan

Ground floor plan

Ground floor plan

Honourable Mention 9 - DIGNITY

Sakshi Sandeep and Vamsi Changavalli

India

DIGNITY

THE BEAUTY OF A BEACH DOES NOT REVEAL THE DEPTHS OF OCEAN THAT REINFORCE IT.

CONSTRUCTION WORKFORCE FOR SOME OF THE WORLD'S MOST EXQUISITE AND ADVANCED BUILDINGS COME FROM SOUTH-ASIAN COUNTRIES. THESE WORKERS ARE OFTEN SHOWN AN ILLUSION OF REALITY AND LURED INTO SOME OF THE WORST LIVING CONDITIONS IN SOME OF THE WORLD'S BEST CITIES.

SINCE MAJORITY OF MIDDLE EASTERN COUNTRIES ARE MOVING INTO MORE OF A TOURISM BASED SOCIETIES THIS IS AN PERFECT OPPORTUNITY TO CREATE AN INVITING SPACE FOR THESE WORKERS.

PROJECT DIGNITY SERVES AS AN EXAMPLE OF WHAT CAN BE ACHIEVED. THE STRUCTURE'S CORE VALUES ARE DERIVED FROM SOUTH-ASIAN VILLAGE HOUSE PLANNING AND ITS FORM TO MEET SUSTAINABILITY GOALS OF THE MIDDLE EAST.



USER

CONSTRUCTION WORKERS FROM SOUTH ASIA IN MIDDLE-EAST

CURRENT LIVING CONDITION:



WORKERS PAY DIFFERENT AMOUNTS BASED ON THEIR BEDS LOCATION. MIDDLE IS GENERALLY CONSIDERED TO BE SAFER AND ALSO COSTLY.

BACK HOME:

SOUTH ASIAN HOUSE AND TOWN PLANNING HEAVILY EVOLVED OUT OF HAVING COURTYARDS, BACKYARDS AND COMMUNITY SPACES

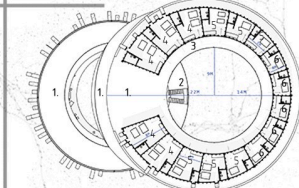


THE SOLUTION RING

THE STRUCTURE IS PLANNED WITH TWO OFF-CENTERED CIRCLES. SPACES CREATED AIMED TO PROMOTE EQUALITY OF PEOPLE FROM THE OUTSIDE AND IN THE SEMI PRIVATE SPACES WITHOUT CREATING ANY DIFFERENCE BASED ON ECONOMIC OR OTHER FACTORS.

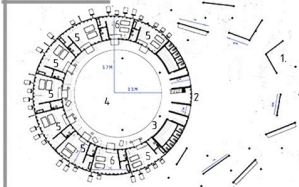


TOP FLOOR PLAN



1. COMMUNITY AREA / COOKING AREA 2. STAIRCASE 3. CORRIDOR 4. TYPE 1 HOUSE (40SQM) 5. TYPE 2 HOUSE (30SQM) 6. TYPE 3 HOUSE (20SQM)

GROUND FLOOR PLAN



1. SCHOOL 2. STAIRCASE 3. BACKYARD 4. COURT YARD 5. TYPE 1 HOUSE (40SQM) 6. TYPE 2 HOUSE (30SQM)

EDUCATION + GROWTH

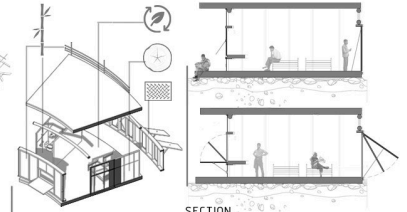
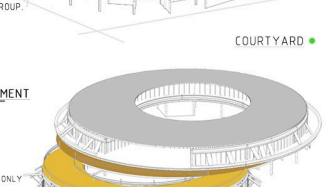
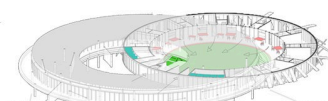
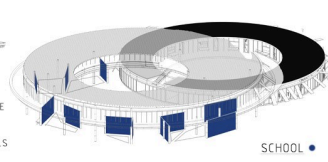
CHILDREN IN THESE COMMUNITIES ARE OFTEN IGNORED. AN ADEQUATE SPACE IS PROVIDED FOR NGOS AND OTHER INSTITUTIONS THAT ALSO HELP TO DEVELOP SKILLS OF THE LABOUR FORCE.

CONNECTED COMMUNITY

COURTYARDS HELP PEOPLE FEEL MORE CONNECTED AND INCLUDED AS GROUP. ALL THE HOMES OPEN UP TO COURTYARD AND COOKING AREA OVERLOOKS IT. CREATING A CO-WORKING COMMUNITY ZONE.

COOKING AND COMMUNITY ENTERTAINMENT

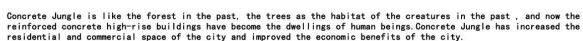
COOKING OF GROUP RATION IS THE ONLY COMMUNITY ACTIVITY THAT TAKES PLACE EVERYDAY. THE SPACE IS DESIGNED TO BE FULLY VISIBLE FROM THE WHOLE BLOCK SO THE INDICATION OF GROUP ACTIVITY IS INSTANTLY NOTICED.



Honourable Mention 10 - CONCRETE JUNGLE

Terry Cai, Chico Von and Kz Lai

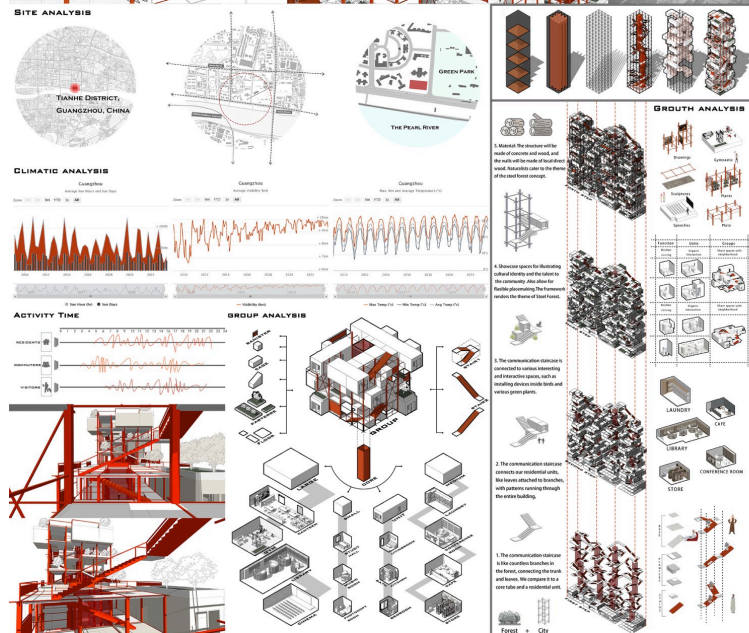
China



For more than 100 users, we designed a multi-functional residential complex to solve the housing crisis and meet the comfort of living, while increasing the diversity of space, promoting mutual communication between people and revitalizing the vitality of the city.



FLOOR PLAN



SECTION PLAN

The full result for the competition **The Dwelling 2023 Architecture Competition** can be found at volumezerocompetitions.com.