





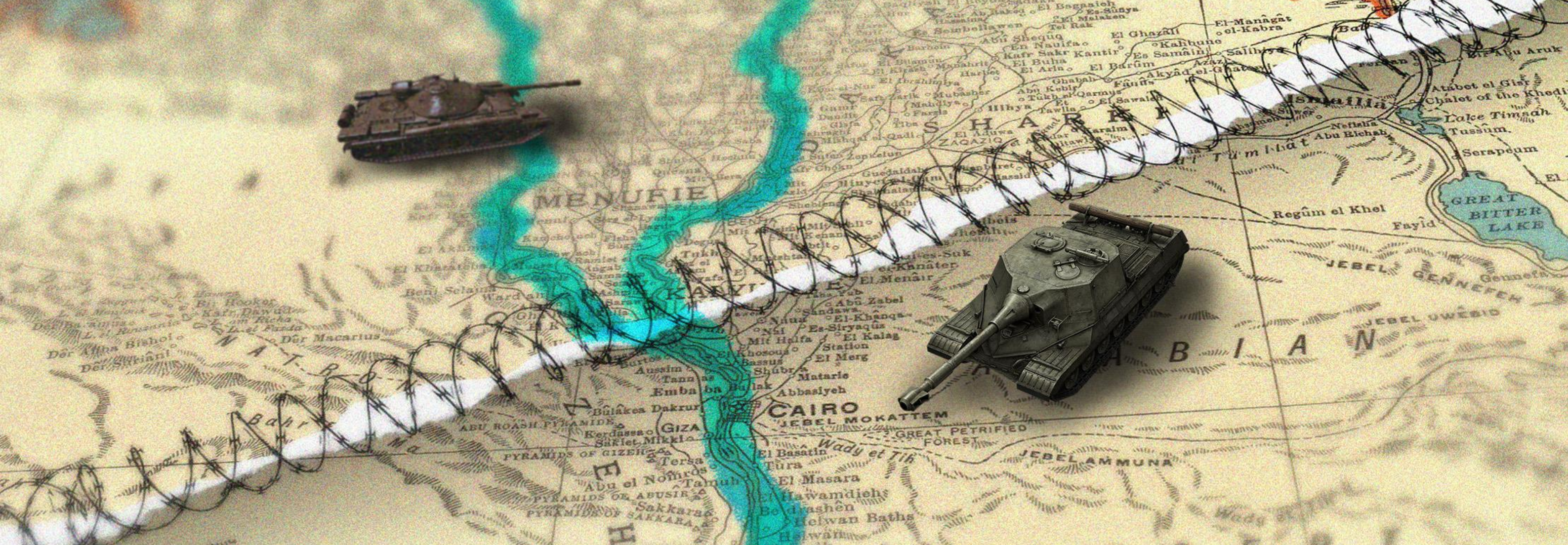
Img_1: Water as a habitat

Premise

Water is one of the five elements of the earth formulated by ancient Greek philosophy, fire, air, earth, water and aether (void). Water as a substance has not only been a source of food, energy, but an inevitable part of the **survival of all living beings**. As the most evolved species, we have manoeuvred resources like water and used it to full potential.

A pristine picture of water is painted with streams, rivers, and ponds when imagined in its natural forms. We create an ideal scenario in nature with water as an essential feature, overlooking its monotony in our daily lives.

Water in its most mundane use such as hygiene, washing, or cooking, is **unacknowledged**. It is still unacceptable in certain spaces as we have tried to steer it and, its optimum usage in designated spaces. Water in excess quantities in the form of rain or floods is **condemned for any ecosystem**. It is a form of life and destruction, a contradiction in itself.



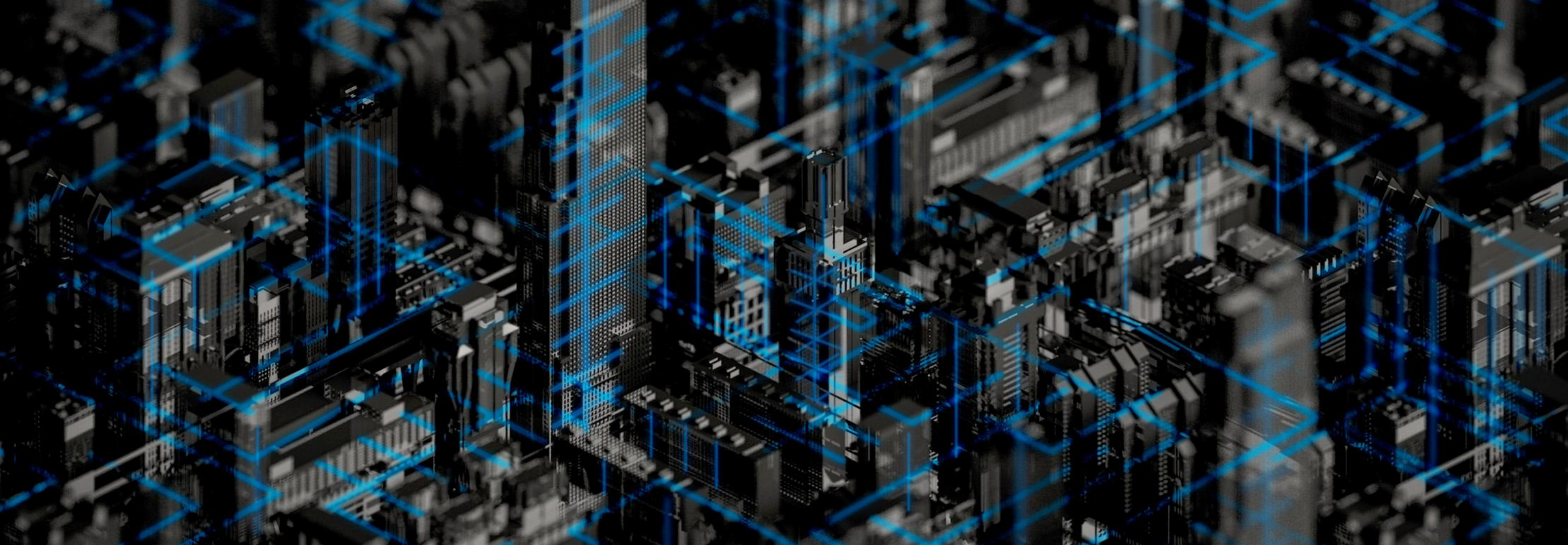
Img 2: Waters defining borders - A concept

Water War

After giving a definite direction to water, to cater our needs, we began setting limitations of usage. Water that was available for all is now being claimed and, is making physical, international and political boundaries. Freshwater in rivers and their basins that flow throughout the earth are now moulded to yield more and more potable water. It has resulted in considerable increase water consumption leading to **Global Water Crisis**.

Global water crisis is the lack of fresh water resources to meet water demand and is largest global risks in terms of potential impact over the next decade. It is manifested by partial or no satisfaction of expressed demand, economic competition for water quantity or quality. An immediate impact of **Global water crisis** was the onset of water conflicts among nations, states, communities.

Are wars the kind of solution we are looking at, and will they resolve the impending crisis of water around the corner?



Img_3: The hidden network of water supplies under the city - A concept

Issue

Water and its importance is well known, still we have been disconnected from it in urban realms. **Water is omnipresent and yet visually hidden** while it flows through a dense network below the surface. Our contact with water has dissipated into our daily chores, restricted to the water received from taps. **Lack of interaction** with water in such circumstances has lead us to having no perception at all.

An interesting water value paradox exists, that shows how we fail to evaluate it lower, compared to diamonds. This holds true even though water is a necessity where as diamonds are not.

Is this due to an anomaly in our perspective or unawareness?



Img_4: Humans and water - A concept

Brief

Water is a crucial element to our existence, yet this disengagement is ironic. **Global water crisis** was reinforced by rapid urbanization, which might be one of the reasons of its decreasing value. Efficiency in water consumption can be increased with co-operation, which is imperative in these times of growing scarcity. This can be a driving force to change the perception of water altogether and make us more resilient as a species.

How can we establish the role of water as a vital element in supporting human existence? How can we trigger a sense of value that is almost disregarded in our daily lives? How can we find new ways to connect with water in our public spaces while acknowledging its limited supply?

Building on these questions, the **design challenge** is to propose a model urban public landscape that has the ability to **(i.) sensitize its visitors to understand how crucial water as a resource is** and **(ii.) promote a better sense of consumption and conservation within them.**



Cape Town

Expected to rise by 2035 **29%**

5.8mil
Population in 2035



1st Major City to observe "Day 0" - The day city depletes its water resources completely.



Depends on rainfall for water. Below average reservoir capacity.



São Paulo

Expected to rise by 2035 **11%**

22mil
Population in 2035



Water reserves are 15%. Way too below their expected usual levels.



Lack of proper investments and poor supply systems.



Bangalore

Expected to rise by 2035 **22%**

16.8mil
Population in 2035



85% of lakes have water that can be used only for industrial cooling and irrigation.



Antiquated plumbing system that causes a lot of leakage and rising consumption.



Jakarta

Expected to rise by 2035 **28%**

13.6mil
Population in 2035



Having access to piped water, however illegal digging of wells in rife happens.



Excessive surface runoff and lack of catchment areas in the city.



Istanbul

Expected to rise by 2035 **32%**

17.9mil
Population in 2035



Reservoir level less than 30% of its capacity.



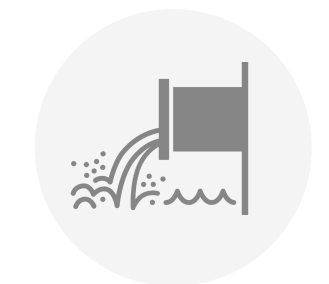
Rising population of the city.



Cairo

Expected to rise by 2035 **40%**

28.5mil
Population in 2035



90% of Egypt's water source is through Nile, but contaminated with untreated agricultural waste.



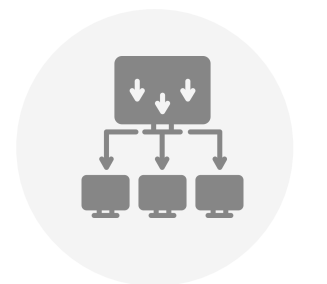
Lack of treatment infrastructure causes a lot of water to go waste or unfit for consumption.



Mexico City

Expected to rise by 2035 **17%**

25.4mil
Population in 2035



40% of water imported from distant sources instead of city's inherent supply.



No large scale operation for water reuse or recycling infrastructure.

Img 5: Probable water crisis across various megacities of the world.

Global water crisis

The social and demographic changes that are taking place around the world, are speculated to result in an urban population of 9.7 billion by 2050. As documented by UNU-INWEH, by 2030 there will be a **40% gap between water demand and water available for use**. As the water availability decreases the competition to access potable water in densely populated urban cities will increase drastically. The data presented time and time again indicates a clear situation of upcoming global water crisis already existing in 14/20 mega-cities of the world. While the effectiveness of water management varies between countries, a rapid scale-up in effort and resources will be needed for most countries. Above presented are the closest cities to reach a point of crisis due to the rising gap between its supply and demand.



Img.6: A view of the city of Istanbul

Istanbul and Water

Istanbul has intertwined its traditions rich in cultural heritage with water through centuries. Water has not only shaped the culture but also the city's architectural language at large. Aqueducts constructed in the 15th Century for freshwater supply and Hammams are some of the ways water has moulded the city as we see today. With a growing population of close to 15 million, Istanbul is stated to become Europe's most populous metropolitan area. Meeting water demands in such circumstances is now a challenge for the local authorities leading to a possible water crisis in the city. It is also visible in the reducing levels of water remaining in their reservoirs that will not be sufficient for this metropolitan city that connects Europe and Asia.



Img 7: Site plan

Site - Sarayburnu Waterfront

The site chosen for the challenge is a part of Sarayburnu waterfront. This is located at the end of Bosphorus Strait, that forms a part of continental boundary between Europe and Asia. The site is flanked by views of monuments like Hagia Sophia and Topkapi Palace in its skyline. The site is beside the Sarayaburnu Port and parking (managed by Turkish Maritime Facilities) at the end of shore-walk of Bosphorus, accompanied by a small cafe overlooking the strait. It neighbours the Ataturk's Statue (Founder of Republic of Turkey) and National flag of Turkey facing the road. Site poses as a perfect spot for landscape development for awareness of water scarcity, ironically having water in such close proximity for the visitors.

Area: 14557.67 m² (3.6 acres)

Ground Coverage: < 5%

Site coordinates: [41°01'00.4"N 28°59'11.1"E](#)

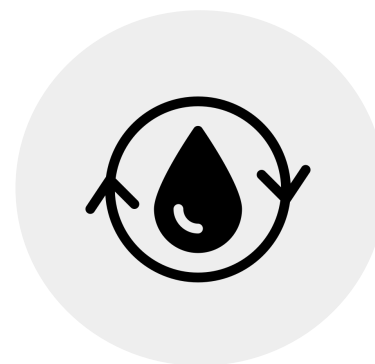
Participants can create small decks and bridges that extend to water. No built forms are permitted in/on the water.



Img 8: Aerial View of the site

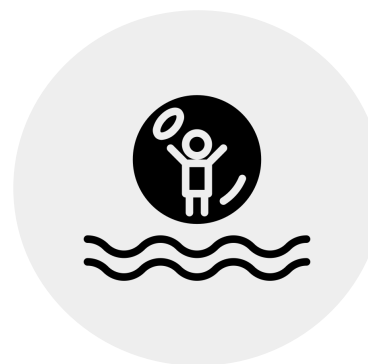
Objectives

The participants are expected to design a landscape model in the given site that resonates to the aim of water conservation as a theme. The design objectives are as follows:



Reduced Use

Use modern systems, methods & technologies to promote smarter/lesser use of water.



Celebrate

Introduces water as an essential element to support life in the context of today.



Acknowledge

Acknowledgement / Awareness of water as an exhaustible resource.



Conservation

A model that gathers/harvests more water than it consumes.



City use

The park should play as a vibrant public space of the city.

Rewards



Grants of up to a total of **15,000\$** can be won on this challenge. Learn more about the full conditions on the competition page [here](#).

Submission

You have to deliver a landscape design outcome on the following site, based on the given outlines.

- A maximum of 8 sheets. – [**2362px x 3544px**] or [**400mm x 600mm in 150 dpi**] in portrait digital format (JPEG).
- Each image should be less than **15MB**
- You can find the preset PSD, AI and INDD template files in this [link](#) and the 'Additional resources folder'.

This additional resources folder contains: Starter Literature, FAQ Questions, High Res maps, Site Section images and CAD file of the site plan.

Minimum requisites in the sheets (For a complete submission):

- Site plan (Compulsory)
- Key conceptual sections x 1 (Minimum)
- 3D views x 4
- Cover image/Thumbnail of size 2000 x 1000 px or larger in aspect ratio 2:1.
- Floor plans, images, sketches (if any) can be added to support the entry in the form of additional images.

- + Use exploded views to discuss multi levelled conceptual models better.
- + Ensure that the final sheets which are submitted do not include your name or any other mark of identification.
- + Mention sheet number on corner of every sheet.
- + This is a design ideas challenge only. There is no built commission associated with the problem
- + Plagiarism of any idea / form / design / image will be disqualified with a notice.

Registration page here: <http://competitions.uni.xyz/ripple>

Submission Deadline: October 16, 2019

Submission closes this day.

Public Voting begins: October 26, 2019

Submitted entries are open for voting.

Public Voting ends: November 16, 2019

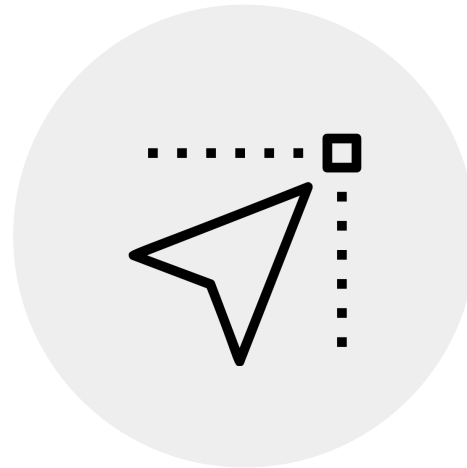
Voting ends on this date.

Result Announcement: November 27, 2019

Result day!

Judging Criteria

The entries will be judged by an international jury of the competition - To be announced:



Presentation

The fundamental to a good entry is a good presentation.



Concept/Idea

Quality of thought and intent in pre-design phase.



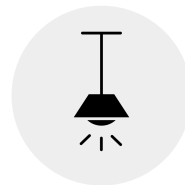
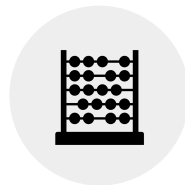
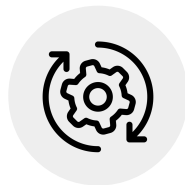
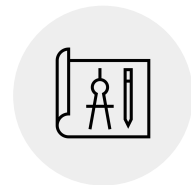
Spaces/Programme

How the spaces are calculated and ordered.



Design Output

The final architectural outcome of the solution.



The judging panel can also add other criterions based on their internal discussions - which will be in line with the problem statement. Eg. Barrier free design, , Material use, etc. Participants are advised to fulfil above given criterions first in their design.

(Ad) Institutional access:

We believe in a world more collaborative.

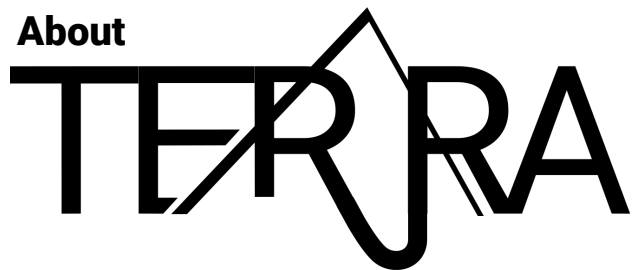
And we think academia is where it can begin.

Institutional Access™ is world's only cross institution competition programme. You can make this challenge more meaningful by bringing it to your classmates and professors working together. There are a lot of perks by entering this challenge with your institution. Follow the link to learn more.

Institutional Access™



About



Terra serves as a unit block for UNI in the field of **nature centric design**. It intends to break the fusion of traditional design barriers and methodologies by making it a platform for experimentation. It embarks on exchange of ideas between **architecture and nature**. It is a research initiative dedicated to provide opportunities for designers from all domains to explore ideas that go beyond the boundaries of architectural discipline and enrich our built environment; thereby opening up possibilities for promotion of architectural thought at a global level.

Queries: support@uni.xyz

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