hybrid FUTURES

CityScraper

Sustainable Skyscraper Design Challenge

https://**competitions**.uni.xyz



Img 1: A usual impression of a skyscraper - Concept

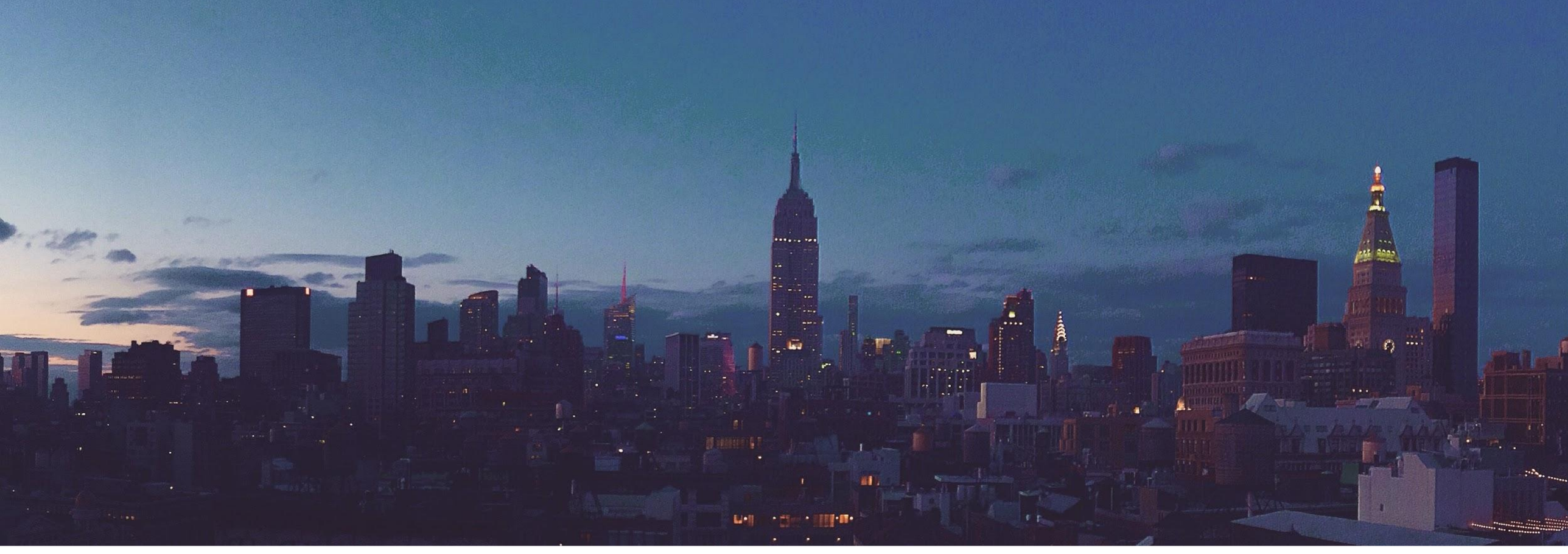
Premise

The promise of jobs and prosperity, among other factors, pulls people to cities. According to national geographic magazine, half of the global population already lives in urban areas, and by 2050 it is expected to swell to two-thirds. The side effect of this are the most pressing problems facing the world today also come together: Disconnect between the buildings, the city and Environmental Degradation.

As the cities continue to grow, the way we construct and manage buildings has never been more crucial to global economic and social development. Overpopulation in cities is a pressing issue, **silently aggravating the forces behind the current environmental problems**.

The vital task in a city is to pack a lot of people in one place without depleting the quality of life.

The soul of the city is in its people, culture, and heritage, architecture adds the character to it. But as we progress in time today, all we see is tall glass cutting edge buildings disconnected with the people and the city around. We must figure out how to make our cities more livable and sustainable without triggering the seemingly inevitable march of duplicity.



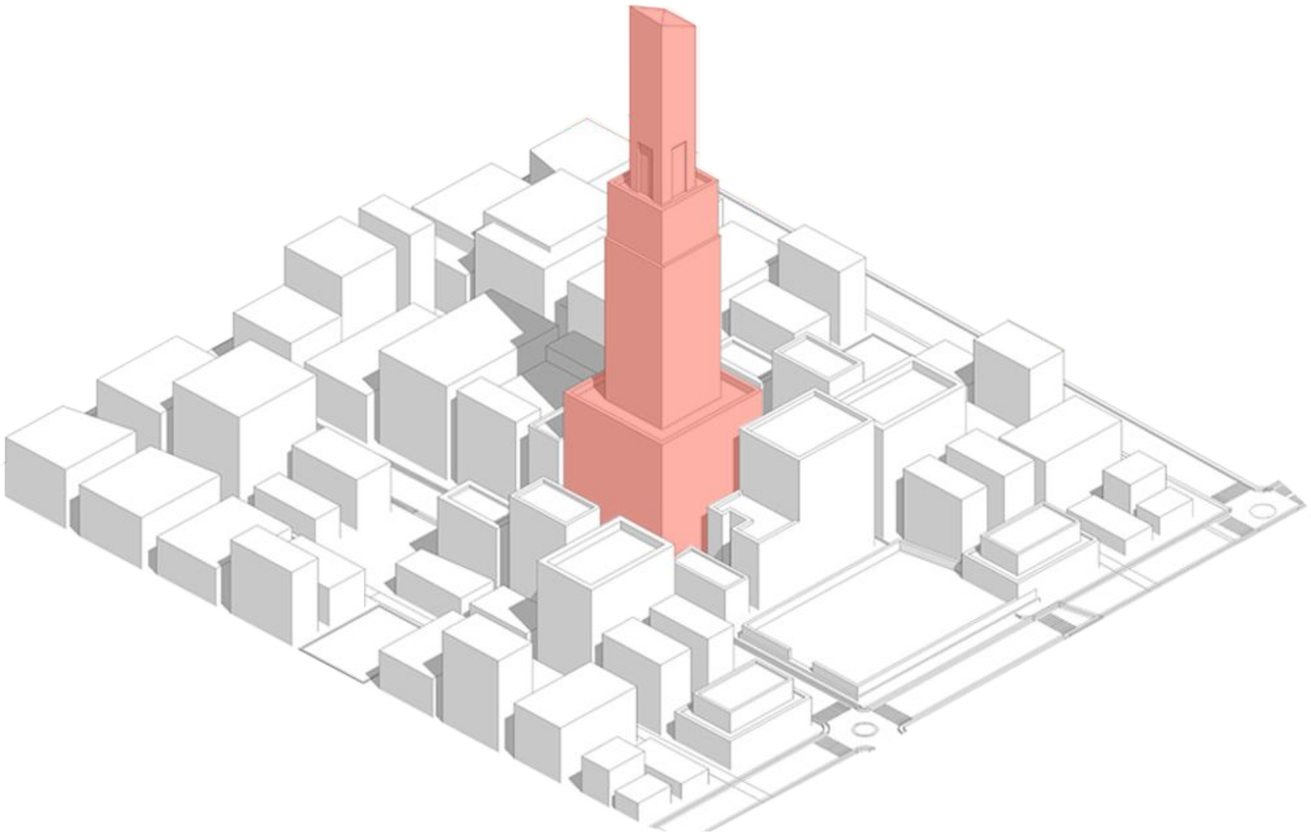
Img 2: Skyscrapers also have a city beneath it - A view of Empire states at night.

A Skyscraper

Skyscrapers as the name suggests, refers to the vertical desire to reach to the skies and live among the clouds. Increasing urbanisation in the recent decades has meant an upturn in construction of high rise building and towers all over the world making them a benchmark for the future buildings. Expanding cities horizontally to accommodate overpopulation would destroy more natural resources, therefore, the idea of the vertical cities is favoured. Present changes in occupation distribution and its interdependence on urban population growth due to migration, skyscrapers have shown functional benefits as well as an architectural style.

Urbanisation and white collar revolution has led to rampant sprawl in urban areas but, we can't run away from the harsh reality of limited land available for construction. Besides making the city affordable and architecturally interesting, high rise buildings are **greener** than sprawl and can foster **social capital** and **creativity**.

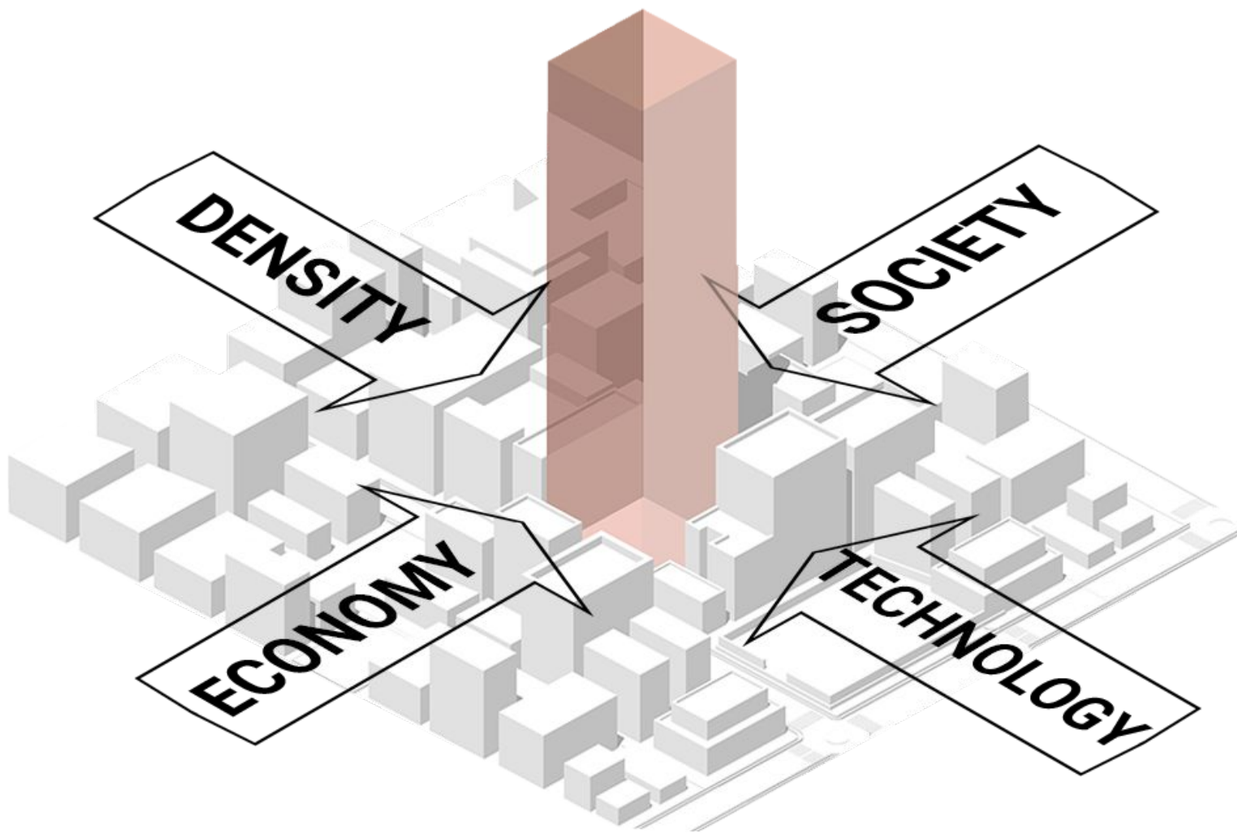
So, ***if density is unavoidable then how can we as a community turn density as a solution?***



Img 3: Physical model of skyscraper

Physical View

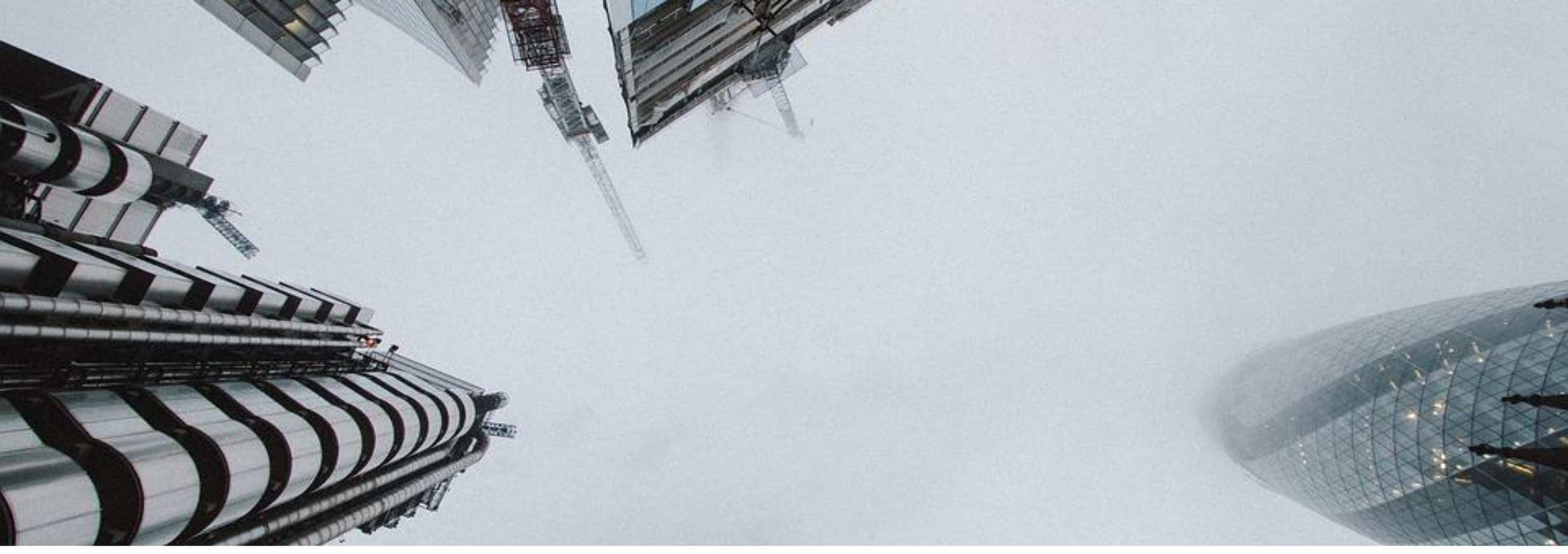
A skyscraper acts as a distinctive landmark, stamping an imprint on urban landscapes where no common man can afford to live.



Img 4: What intersects while building a skyscraper.

Value View

But eventually it is a common point where Capital, People, Talent and Technology coincide. The responsibility goes way beyond the site because of the resources and time put into its construction.



Img 5: Disconnect between building and its surroundings

Issue

Selfish city

A skyscraper acts as a **distinctive landmark**, stamping an imprint on urban landscapes where no common man can afford to live. It's not the cars but the buildings that's the number one cause of greenhouse gases. According to time magazine, buildings account for 40% (IPCC)of energy consumption in the US
Skyscraper shapes the skyline of the city but neglects the lack of interaction with the city streets and its people.

Presently, skyscrapers are designed like an **island**: **anchored at one spot**, whereas they should be designed as **stems to a city** that are made to grow the economy, environmental conditions, social and cultural well being. Skyscrapers stand high and mighty symbolising power and strength of a city and it's high time that they start contributing towards the future development of the city around.



Img 5: disconnect between building and its surroundings

Brief

Generous city

The **cityscraper** is a symposium that explores the relationship between a high rise building and the city around it. The challenge here is to design a dynamic and adaptive vertical community that serves the needs of the inhabitant at the same time being a flag bearer of global responsibility towards the city below and the planet around.

In this challenge, the design of the skyscraper springs from the rising issues of the city like, deforestation, pollution, water scarcity, waste management, etc and many growing urban issues that continuously persist which are solved with capital, engineering, and mainly offered to skyscraper design.

The aim is to engage the design without any constraints in the most creative way possible. What does a skyscraper look like to you in the future ? What are the social, cultural, environmental, historical and urban responsibilities of these mega-structures?

Objectives



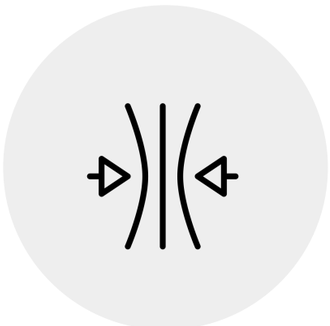
Functionality

should be functionally and structurally stable and follow local safety norms.



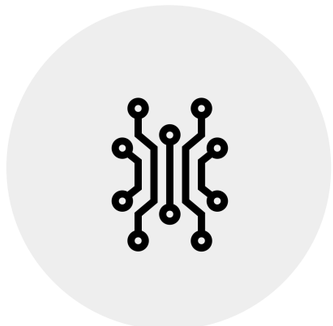
Purpose

Establishing a purpose that the building serves for the benefit of the city



Life Cycle

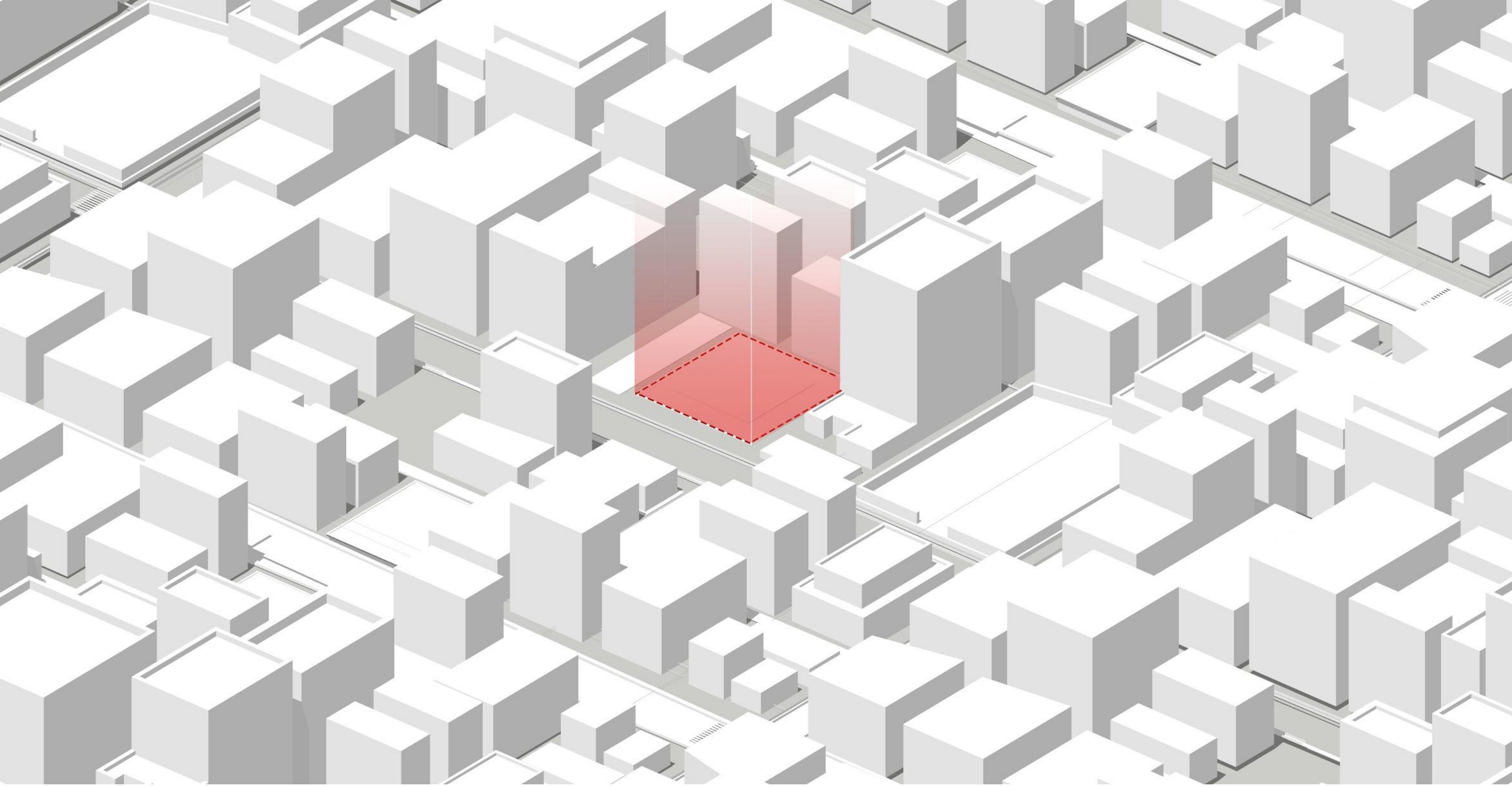
It should be able to sustain its form and function for the distant future.



Futuristic

Should take technical advancements into account (design & program).

The following objectives can be a point of beginning to conceive this design. Participants can assume their own contexts and users before initiating their design process.



Img 1: conceptual model of the site and its context

Place

The site for design can be selected in any city anywhere in the world. The place of choice can be a near future urban condition or rooted in times of today. The chosen site need not be vacant/undeveloped. If there is construction on the site you may consider it empty for this design problem.

The minimum site area for the cityscraper should be 1 acre and it should not exceed 6 acres.
There are no height or floor plate restrictions.

Recommended



Suggested for studio problems in tall building studios of Academics.



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Submission

You have to deliver an architectural outcome on the following site, based on the given outlines.

• A maximum of 4 boards / sheets. – **[2362px** x **3544px]** or **[400mm x 600mm** in **150 dpi]** in portrait digital format (JPEG).
• Each image should be less than **15MB**

This additional resources folder contains: FAQ Questions,

Minimum requisites in the sheets are 3 sheets/boards + Cover image containing:

This is the link for new file sizes, here.

• 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.
• Answer 6 FAQ questions as given in the 'additional resources folder'. Export these Q&A as an image and upload it as your last image while submitting. These images will not be included in the maximum submission boards/sheets count.

+ The team limit for this competition is 4 members maximum.
+ 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/realization is associated with the problem
+ Plagiarism of any idea / form / design / image will be disqualified with a notice.

Registration page here: https://competitions.uni.xyz/cityscraper/info/about

Discover the competition schedule and deadlines here: Schedule

Rewards



Grants of up to a total of **20,000$** can be won on this challenge. Learn more about the full conditions on the competition page here.

Judging Criteria

The entries will be judged by an international jury of the competition on the following criterions:

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. Participants are advised to fulfil above given criterions first in their design.

About

Hybrid Futures is a unit block for UNI in the field of Architecture that covers the field of near future architectural thought. It intends to break the barriers of design ideologies that are short sighted and aligns itself to futuristic thought. This arm of Uni banks on growing technological advancements to frame architecture in the megacities of tomorrow. It is a research initiative dedicated to providing 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 design thought process at a global level.

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UNYT CityScraper

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