UNYT

HAPTIC

Architecture you can ***touch***.

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



Img 1: The Millennium Centre in Cardiff Bay, Wales, showcasing contrasting materiality. Source

Premise

All tangible architecture is born at the confluence of design, technique, and execution. No great architectural work is bereft of it. However, the one element of architecture that not only encompasses all three, but also sometimes supercedes them is Building Material. It is the dimension of architecture that helps it attain the physical, tangible form it develops into. All truly sensational buildings, achieve a fine balance between their design, the intangible and the material, the visible part, the tangible, while merely functional buildings aspire to it. The knowledge of its properties, both visual and tactile, its utility, suitability, application, and availability are an inimitable part of both the practice and education of architecture.



Img 2: An indicative image of a material mood board. Source

Materiality in Architecture

Material in Architecture has bourne significance not only as an element of construction, but also as an element of aesthetic. This belief peaked during the time of the Bauhaus movement, ushering in a new wave of 'modern' architecture that revelled in the display of the building's constructional constituents rather than its cosmetic concealment. The belief of that movement was rooted in honesty and transparency towards the building's user and fellow designers, and thus lead to a greater degree of appreciation for the science and artistic endeavour of material choices in buildings. Through various mutations and layers, the movement, or the belief has found its way to current architecture. However, can this connection between user/designer and material be made even stronger? **Can architecture itself serve as a showcase of its own composition?** Can adding an interactive element to it help in better understanding of materials and construction?



Img 3: 'No Fear of Glass' by Sabine Marcelis, a sculptural intervention that responds to the materiality of Mies van Der Rohe's Barcelona Pavilion. Source

Brief

The brief is to design a showcase for building material in architecture itself: a **"Museum of Materials"** to promote knowledge, understanding and appreciation of the role of material within construction and architecture.

Over the past few years, museums have moved from displaying preserved objects to housing sensory, experiential narratives. Thus, the exhibits in the Museum of Materials can be anything that relates to material: homogenised blocks of different materials, both conventional and upcoming, sustainable and ostentatious, interior and exterior, structural and cosmetic; or a monolithic slab of unprocessed raw material. The idea is to draw attention to the physical, **tactile** and visual properties of building material through both the display and the building itself becoming characteristic of that, in an attempt for the visitor to touch these, explore, be inspired and gain knowledge of material characteristics and construction techniques.



Engaging/Involving/Educative

The element of interaction with the material displays must be incorporated to enhance the educative aspect of the material museum.



Tangibly Tactile

Participants must find a way for the material exhibits to be physically accessible to the visitors.



Experiential

The idea of the museum and its design must be rooted in creating a holistic experience for visitors.



Reflective/Representative

In essence, participants must look for the material museum to represent material in and of itself, through innovative use of its own materials.

Objectives

The above are the more qualitative aspects that the design of the material musuem must satisfy, and can be a beginning point for participants to conceive their design, concept and ideas related to it.

The **Museum of Materials** has a unique opportunity of being both, a traditional display housing artefacts, as well as a more experiential outlet. The displays in this case, building materials, will have two aspects to their curation, display, and the experience they provide: **tactile and visual**, allowing visitors to fully engage. This would end up dictating the design of the building and its interiors, and that is what this challenge is about.

Visual Experience



As can be inferred from the name, this part of the material museum has to do with what the material specimens look like. There are certain aspects of the museum's design that are to be unique to the visual experience, including:

- **Texture**
- **Colour**
- **Luminescence**
- **Reflectivity**
- **Transparency/ Opacity**
- **Detail/Layers**

Tactile Experience



This part of the material museum has to do with what the materials feel like. For this, a way for the visitors to engage with the specimens physically must be devised in the design. This aspect includes:

- **Texture**
- **Density**
- **Fineness/ Coarseness**
- **Smoothness/Roughness**

Design Guidelines

The aspects stated above may serve as a criterion for **segregation of the display of materials**, as well as factors to be emphasised on in the museum's display to ensure an **interactive and holistic experience combining both.**

the EXHIBIT

The exhibit in this museum is material itself: in all its forms, shapes, properties. And that alone can have a lot of myriad forms of representation/display. However, those forms of display are what guide the design of the museum and the spaces within, just as most experiential museums today. It is entirely up to the participants as to what they wish is displayed: from the softest fabric for furnishing to the hardest stone. Some of these distinctions in material (not exhaustive) are stated below.

Interior Materials



Exterior Materials

Conventional Materials



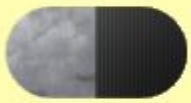
Emerging Materials

Sustainable Materials



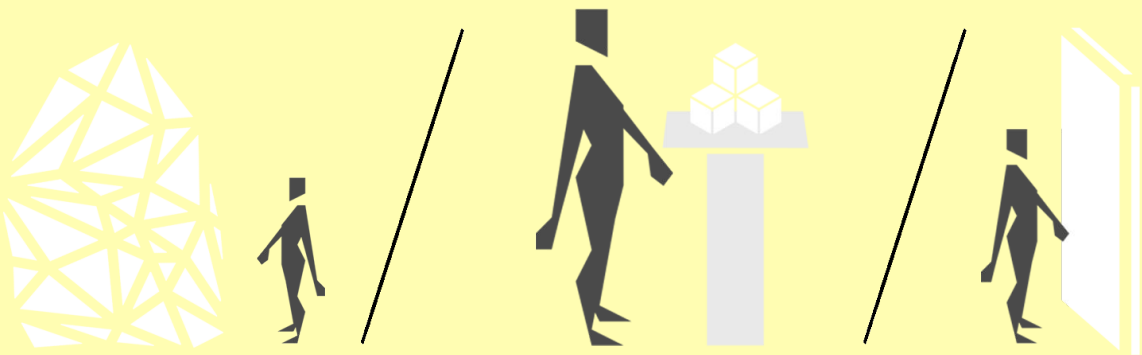
Ostentatious Materials

Structural Materials



Cosmetic Materials

etc.



The above infographic indicates the size/shape/form of material exhibits that designers and participants are free to play around with. Depending on the material being displayed, they can be raw, uncut, monolithic blocks, homogenised blocks on typical display platforms, homogenised slabs, or any other form that participants think complements their design and the competition objectives well. In all these, however, an interactive, tactile element must be maintained.

Space Program



Administrative

- Offices
- Information Centre
- Curatorial Centre



Public

- Seminar Hall (for workshops etc)
- Cafeteria
- Shop



Display Spaces/ Galleries

- Primary Design Element
- Temporary/Permanent
- Small/Medium/Large Scale



Services

- Toilets/Lavatories
- Storage
- Mechanical

*List of spaces are only indicative and not exhaustive, indicating a bare minimum for a museum to function. Participants are free to explore, innovate, and add more facilities/spaces to their design as they see fit.



Barcelona, Spain

Barcelona is a city on the coast of northeastern Spain with a population of roughly 1.6 million. It is one of the world's leading tourist, economic, trade fair and cultural centres, and its influence in commerce, education, entertainment, sports, media, fashion, science, and the arts all contribute to its status as one of the major global cities. Architecturally, the city is world renowned for the works of Antoni Gaudi, the Barcelona Pavilion by Mies Van Der Rohe, and has now gained prominence as a smart city with its highly developed infrastructure.



Img 4: The Torre Diagonal and Museu Blau as examples of modern architecture in Barcelona, showcasing the city's avant garde architecture and materialism. Source

Context

The architecture and built context of Barcelona has been stated to be rather flamboyant, ranging from Antoni Gaudi's world famous renaissance architectural works to the present. A lot of Catalan modern contemporaries have since contributed to Barcelona's changing cityscape, and it was put into motion after Mies van Der Rohe brought Bauhaus to the Barcelona Pavilion for the world exhibition. While the construction hasn't really slowed since then, the turn of the 21st century saw the transformation of historic buildings and recent years have brought fantastical skyscrapers to the city's skyline. Another distinctive element of the city's architecture is its instantly recognisable urban planning, the superblocks. The site thus chosen is also highly reminiscent of these architectural features, while being close to the city centre and commercial core as well.



Img 5: Aerial View of the Site.

Site Plan

The proposed site for the material museum is located a little offset from the city centre housing the major tourist attractions, but is located at a driveable distance from the Sagrada Familia, Plaça de Catalunya and the Gothic Quarters of Barcelona. As can be seen, the site is surrounded by traditional superblocks as well as modern skyscrapers. The district is particularly famous for graffiti art on its walls, and the street on which the site lies, Carrer de Bilbao, is a complete testament to that. All areas near the site are bicycle and pedestrian friendly.

Guidelines

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

• Recommended number of sheets/presentation images/boards:

5 (Five) of size **[2800px** x **3500px]**in portrait digital format (**JPEG only**).

Minimum 3 (Three) & **No maximum sheet limit.** Each image should be less than **15MB.** (Do not submit PNG format)

Minimum requisite submission are sheets/boards + Cover image containing:

• Site plan (Compulsory)
• Key conceptual sections x 1 (Minimum)
• 3D views x 4
• Cover image / Thumbnail of size 2000px x 1000px or larger in aspect ratio 2:1.
• Answering 6 FAQs #
• This is the link for new file sizes, here.

#The FAQ's have to be answered as instructed in the FAQ document in the 'additional resources folder'.

Deadlines

Discover the competition schedule and deadlines on the competitions page or on this link - Schedule.

Resources

This competition contains additional resources that contains a set of files useful to complete the competition submission. This folder is made available on your profile dashboard automatically as soon as you register.

This additional resources folder of this competition contains:

Submission Format files in PSD | AI | InDD, FAQs, High Res maps, Site Images and CAD file of the site plan.

Rules

+ The competitions is open for **students and professionals** from all the disciplines of design.

+ The team limit for this competition is **4 members maximum per team.**

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+ You can register more than one team but they have to be registered separately.

+ Ensure that the final sheets submitted **do not include your name or any other mark of identification**. Your submission is linked to your user account which stands as your identification.

+ This is a design **ideas challenge only.** There is no built commission/realization associated with the problem.

+ In case of publication in yearbook we will reach out separately for selected entries.

Pro-Tips

+ Use exploded views to discuss multi levelled conceptual models better.

+ Mention sheet number on corner of every sheet.

+ Plagiarism of any idea / form / design / image will be disqualified with a notice.

+ All the sheets or images will be viewed on a digital device. **e.g.** Laptop screen or projector. Uploaded sheets or images will not be physically printed for evaluation. The submission hence should be prepared for digital viewing only.

+ Submit JPEG images only. (PNG will not function)

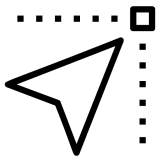
+ Learn



Awards

Grants of up to a total of **24,000$** can be won on this challenge. Learn more about the full conditions on the competition page here.

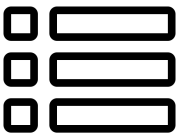
The entries will be judged by an international jury of the competition on the following criterions:



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 Outcome
The final architectural outcome of the solution.

Judging Criteria

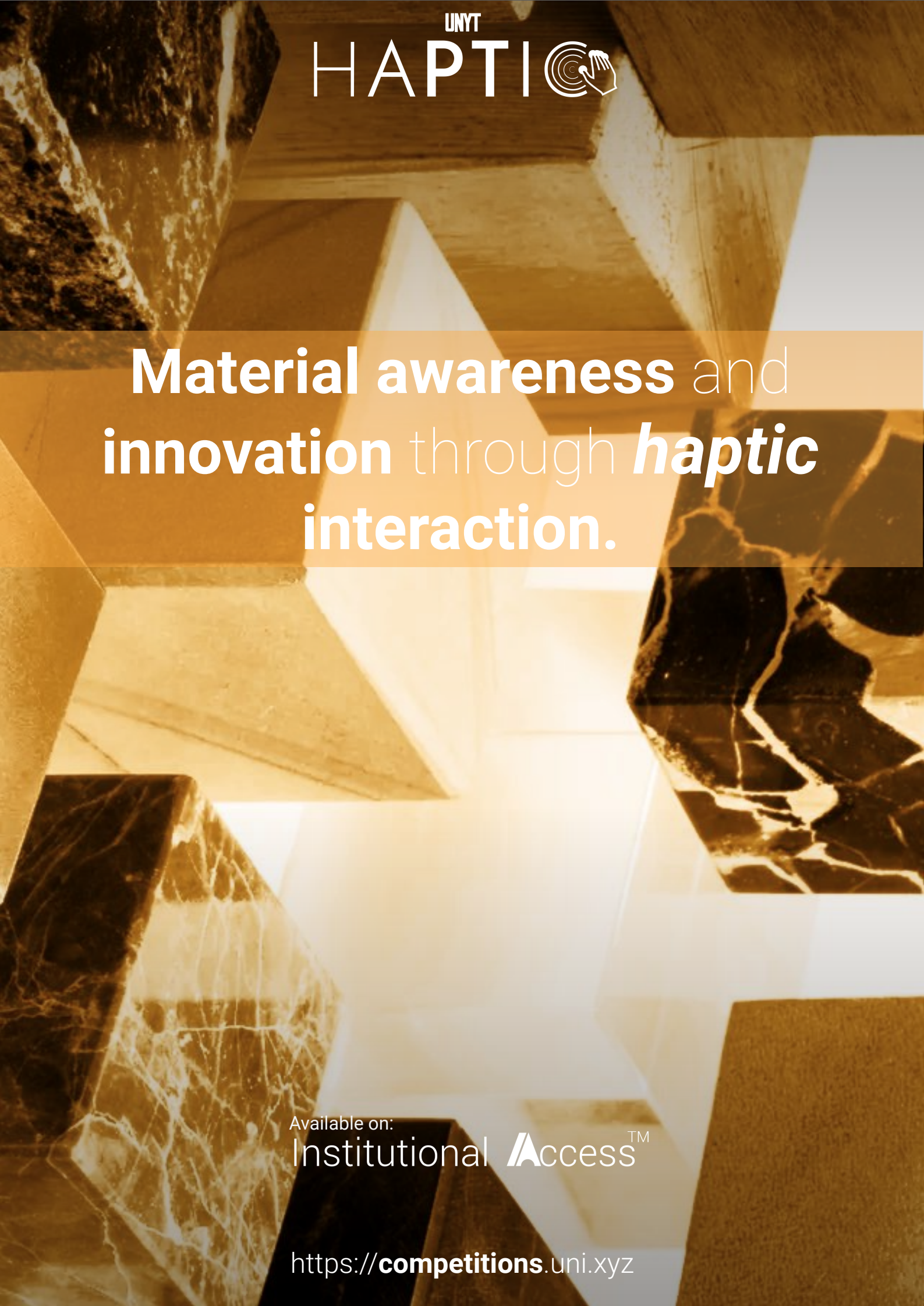
The judging panel can also add other criterions based on their internal discussions - which will be in line with the problem statement. Participants are advised to fulfil above given criterions first in their design.

About



Unyt serves as a part of UNI in the realm of **typological discoveries.** It intends to break the fusion of traditional design barriers and methodologies by making it a platform for experimentation. It embarks on mobilizing ideas where creators can elementally question the buildings we create. It is a research initiative dedicated to providing opportunities for designers from all domains to explore ideas that go beyond the restrictions of usual architectural discourse.

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