

exhibition design

for DDS 2014

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Approval Sheet

The project titled 'Exhibition Design for DDS 2014' by Sugandha Jain is approved for the partial fulfillment of the requirement for the degree of Master of Design in Product Design.

Guide:

Chairperson:

Internal examiner:

External examiner:

Date:

Declaration

I declare that this written submission represents my ideas in my own words and where others ideas and words have been included ,I have adequately cited and referenced the original sources. I also declare that I have adhered to all the principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/ source in my submission. I understand that any violation of the above will be cause for disciplinary action by the institute and can evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Acknowledgement

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I am thankful to my wonderful friends who were part of this amazing journey of explorations and surprises. They stood by my side in the dark hours of uncertainty and refusals of ideas. They gave me strength and motivation to keep going and helped me to stay positive.

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1. Abstract

Exhibition is a process of exhibiting exhibits in a way that could appeal and be understood by people who comes to view it. Exhibition design is about designing the space in which products or exhibits are exhibited. It is a continuously evolving field, with the requirement of coming up with lots of creative and practical solutions. It's about a challenge of developing communicative environments that 'tell a story' in a three-dimensional space.

Industrial Design Centre is a premier design school in India, established in 1969, by the Government of India at the campus of Indian Institute of Technology, Mumbai (IIT Bombay). There are currently 5 disciplines in IDC comprising of Industrial Design, Visual Communication, Animation Design, Interaction Design & Mobility and Vehicle Design.

Design and Degree Show (DDS) 2014 is the annual design conference and showcase of design & works by the passing out batch of IDC from 5 disciplines. DDS is a very important event for IDC and it is only through this medium that the work which happens in IDC can be shown to people outside IDC, which includes designers from the industry, students, aspirant designers, layman etc. DDS exhibition should also reflect upon the design methodology and teaching of one's learning in two years of IDC.

There are 14 people in Product design discipline and 8 in mobility & vehicle design who needs panel display as well as pedestal for displaying models. While 33 people from visual communication, interaction design and animation, all put together who just needs panel display, as they have no models. The projects across these 5 discipline are so diverse that, it is quite challenging to put them under a roof with a connecting theme and doing justice to the individual display.

The aim of the project is to come up with an exhibition space design for conducting DDS 2014 with deconstructivism as a theme. The designing task includes panels, panel support, temporary seating, circulation pattern and lighting system. As it has to happen at two different places, it should be modular, easy to transport, assemble and dismantle. Execution of the exhibition should happen really fast as very limited time and labour is available.

The final concept has been derived keeping in mind that it should be able to break the notion of typical panel and stand idea, rather it integrates panels with exhibition space design. It is based on the ideas of deconstructivism and uses the same design language of DDS logo 2014. It has the transparency and opacity of DDS logo and the vibrancies of a college exhibition. It can be easily assembled, dismantled and transported well.

2. Introduction

'Exhibition design for DDS' has been taken as a P3 topic for the first time in IDC. Earlier the exhibition design for DDS used to happen in a really short span of 10-14 days and so it was very much limited to frugal designs. It was difficult to get case study for the same as it always used to happen in a very hurried manner and at the last moment. There are no properly documented studies following proper design methodology. Above all working on a live project means, working in tandem with deadlines and budget constraints and it has had its own sets of issues. There were issues like implementation issues, budget issues, getting accessibility to proper material, labor issues. To make graphic team decide upon the visuals of panels, all the panel supports were made at 1:1 scale, which was quite challenging. The design has to be worked out in a limited budget of 2 Lakhs rupees. Since it represents the work of passing out batch, there were many meetings, with the batch and the exhibition team to explain the idea and convince them. The journey of coming up with the final design has gone through lots of clashes of opinions, acceptance and rejection of design solutions.

This project involves study of Design and Degree Show, which has happened over the years, and temporary exhibitions. It also include study of principle of deconstructivism, which was the theme decided for DDS of year 2014. User studies were conducted keeping in mind the various kind of people and their expectations who comes for design exhibitions. Exhibition should encourages the participation of all the disciplines in IDC, showing the technological advancement in design field, representing the ideas of IDC and possibilities of design/ ideas.

3. Deconstructivism

“If I had to risk a single definition of deconstruction, I would say without words, more than one language”

- Jacques Derrida

Deconstructivism is a development of postmodern architecture that began in the late 1980s. It is influenced by the theory of “Deconstruction”, which is a form of semiotic analysis. According to the Encyclopedia Britannica deconstruction is “a form of philosophical and literary analysis, derived mainly from work begun in the 1960’s by the French philosopher Jacques Derrida that questions the fundamental conceptual distinctions, or ‘oppositions’, in Western philosophy through a close examination of the language and logic of philosophical and literary text...In popular usage, the term has come to mean a critical dismantling of tradition and traditional modes of thought.”

Deconstructivism is characterized by fragmentation, an interest in manipulating a structure’s surface or skin, non-rectilinear shapes which appear to distort and dislocate elements of architecture, such as structure and envelope. A movement, which challenges the existing ideas. In other words in deconstructivism the basic idea of an object is smashed completely into smallest possible pieces, each of them is carefully thought over and then re-constructed back with new logic.

3.1 History of deconstructivism

Deconstructivism started to come into public notice in 1982 when Parc de la Villette architectural design competition was won by Jacques Derrida and Peter Eisenman and Bernard Tschumi’s. The other important event in the history of deconstructivism was Museum of Modern Art’s 1988 Deconstructivist Architecture exhibition in New York, and the 1989 opening of the Wexner Center for the Arts in Columbus, designed by Peter Eisenman.

<http://goo.gl/9nf1t9> as on 8th April, 2014
<http://goo.gl/4z6mR> as on 8th April, 2014
<http://goo.gl/X62gY> as on 8th April, 2014
<http://goo.gl/ZnO6Dz> as on 8th April, 2014

3.2 Why deconstructivism still valid today?

*“I always dream of a pen that
would be a syringe.”
— Jacques Derrida, Jacques
Derrida*

deconstruction is not a style or ‘attitude’ but rather a mode of questioning through and about the technologies, formal devices, social institutions, and founding metaphors of representation. It is and will always be relevant in design industry as through questioning the existing norms, traditions one can come out with new design directions.

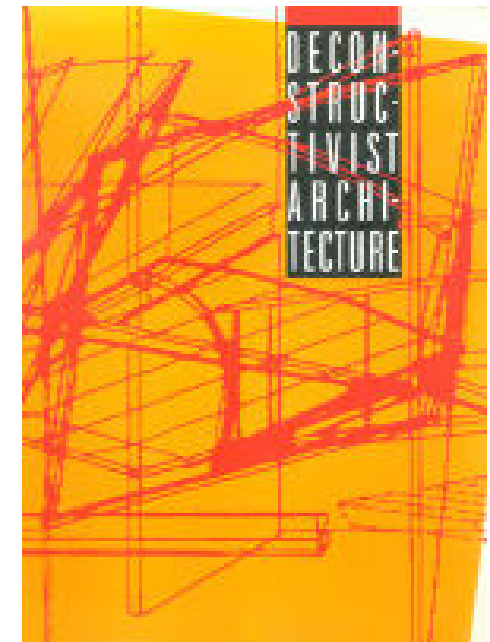
3.3 Museum of Modern Art's 1988 Deconstructivist Architecture

The projects in this exhibition mark a different sensibility, one in which the dream of pure form has been disturbed. It is the ability to disturb our thinking about form that makes these projects deconstructive. The show examines an episode, a point of intersection between several architects where each constructs an unsettling building by exploiting the hidden potential of modernism.

— Phillip Johnson and Mark Wigley, excerpt from the MoMA Deconstructivist Architecture catalog



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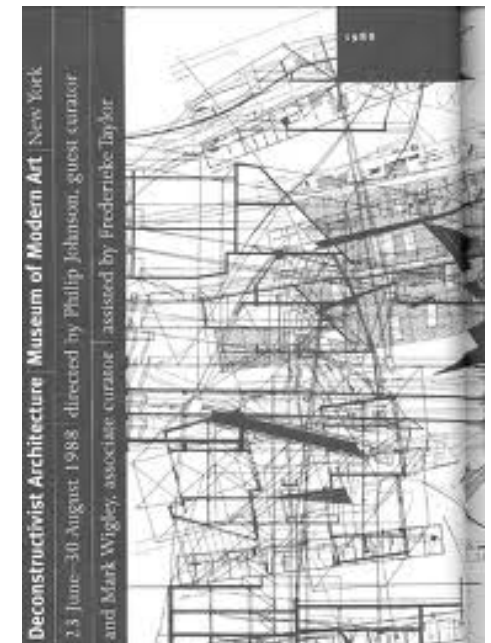


<http://goo.gl/YkVgYe> as on 8th April, 2014

It was an exhibition organized by Philip Johnson and Mark Wigley in which the new movement, which started after post modernism era work were displayed. Whereas earlier the emphasis was on the clean industrialized Modernity, this in contrast of earlier illustrated “a new sensibility in architecture” characterized by work that recognized the “imperfectibility of the modern world” and addressed “the pleasures of unease.” The New York exhibition featured works by Frank Gehry, Daniel Libeskind, Rem Koolhaas, Peter Eisenman, Zaha Hadid, Coop Himmelb(l)au, and Bernard Tschumi. Exhibition included drawings, site plans and models of

their recent works. Their shared stylistic qualities included slashing lines, leaping arcs and warped planes. The exhibition demonstrated sharpness, small catalogue of ideas behind all the crooked walls and wilting surfaces. Wigley also proclaimed that for the new architects, ‘form follows function’ has been replaced ‘function follows deformation’. These projects illustrate that Decon worked/works best (maybe only) at small scale, for leisure facilities, and in graphic imagery.

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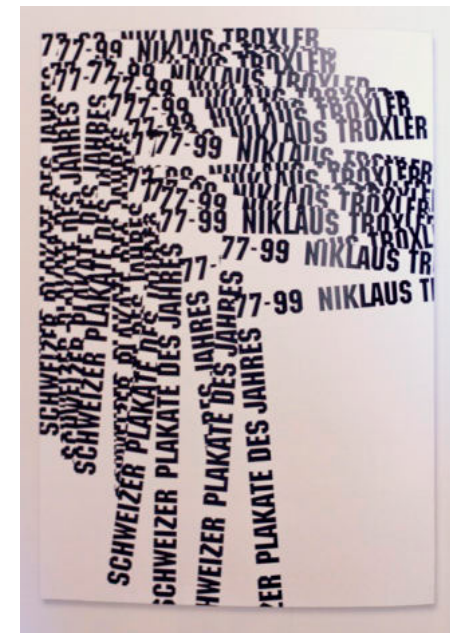
3.4 Deconstructivism in literature

“A text is not a text unless it hides from the first comer, from the first glance, the law of its composition and the rules of its game. A text remains, moreover, forever imperceptible. Its laws and rules are not, however, harbored in the inaccessibility of a secret; it is simply that they can never be booked, in the present, into anything that could rigorously be called a perception.”

— Jacques Derrida

According to French philosopher Derrida people in Western culture, tend to think and express their thoughts in terms of binary oppositions. He aims to erase the boundary between binary oppositions. Something is white but not black, masculine and therefore not feminine, a cause rather than an effect. Other common and mutually exclusive pairs include beginning/ end, conscious/ unconscious, presence/ absence, and speech/ writing. Deconstructors see works in terms of their undecidability. They have different view from the formalist view and they believe that text could be more

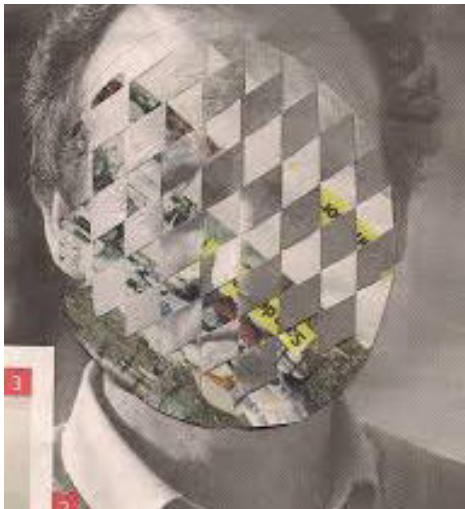
radically heterogeneous. In a deconstructivist reading, text reveals the incompatible possibilities, and it becomes impossible for the reader to decide among them.



<http://goo.gl/MIP3zC> as on 12th April, 2014

<http://goo.gl/yjF486> as on 12 th April, 2014

3.5 Deconstructivism in art



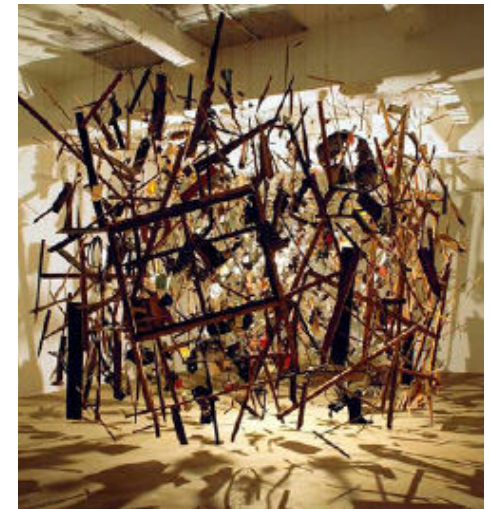
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<http://goo.gl/roHrxI> as on 12th April, 2014



<http://goo.gl/M1Xuyl> as on 12th April, 2014



<http://goo.gl/3zGBqJ> as on 12th April, 2014

Deconstructivism art questioned every conventional form of art. One of the main feature of this is fragmentation, slicing and splicing. The art object can be interpreted in many ways depending upon the viewer.

3.6 Deconstructivism in fashion



<http://goo.gl/oVt32o> as on 16th April, 2014



<http://goo.gl/5Qxfct> as on 16th April, 2014



<http://goo.gl/Jvk4ch> as on 16th April, 2014



<http://goo.gl/q7kXKL> as on 16th April, 2014

It is the literal dismantling of clothes in order to destroy fashion. Elements of deconstruction include vintage linings sewn on the outside of clothes, exposed zippers and seams. They strip away the aesthetic illusion associated with clothes to reveal the forms of construction that lay beneath.

3.7 Deconstructivism in accessories



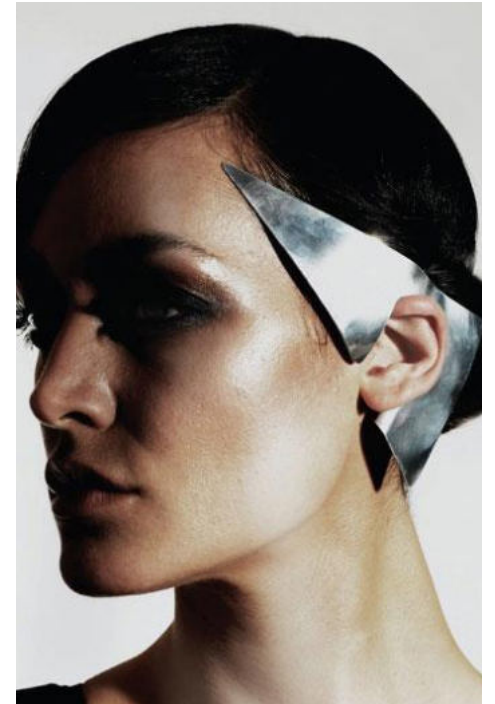
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<http://goo.gl/LAzr1S> as on 16th April, 2014



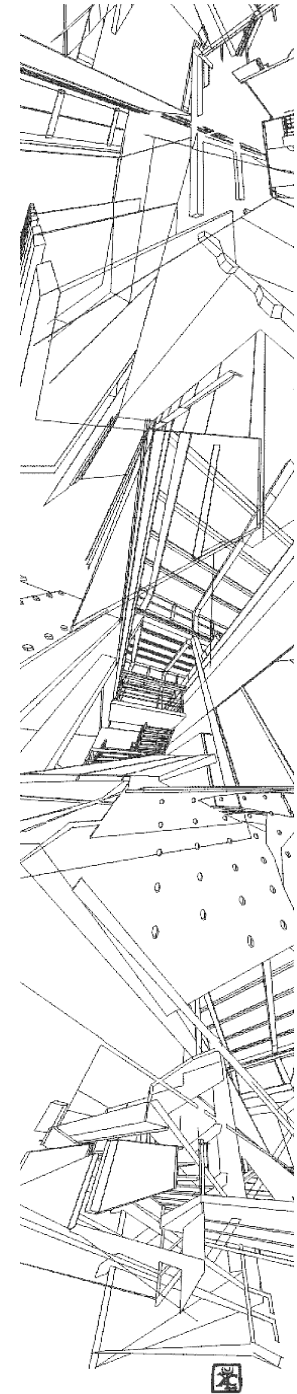
<http://goo.gl/9GRcQu> as on 16th April, 2014

The term deconstruction has been used to describe the rebellion against traditional forms in art. Basically, they call attention to the visuals and mechanics of production.

3.8 Deconstructivism in architecture

In deconstructivist philosophy function does not play the key role, 'free play of design' have been emphasized more. In a sense to make architecture/design a pure art. It provokes shock, uncertainty, unease, and distortion by challenging familiar ideas about space, order and regularity in the environment. In deconstructivist architecture, you will find structures, which serve no purpose, materials not suited to the climate, designs which do not fit with buildings next to them or

the neighborhood, colors that do not blend with their surroundings. Famous architects associated with deconstructivism are Peter Eisenman, Frank Gehry, Zaha Hadid, Rem Koolhaas, Daniel Libeskind, and Bernard Tschumi.



Frank O Gehry

Guggenheim museum in Bilbao



This building waste structural resources by creating functionless forms. Apparently designed without accounting for the local climate. The spectacle of a building often overwhelms its intended use, especially in the case of museums and arenas. The buildings do not seem to belong in their surroundings.

<http://goo.gl/61tOu9> as on 20 th April, 2014

Ray and Maria Stata Center



It looks as if it's about to collapse. Columns tilt at scary angles. Walls teeter, swerve, and collide in random curves and angles. Materials change wherever you look: brick, mirror-surface steel, brushed aluminum, brightly colored paint, corrugated metal. It's a metaphor for the freedom, daring, and creativity of the research that's supposed to occur inside it.

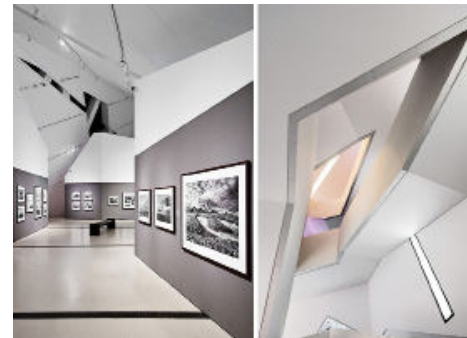
<http://goo.gl/7mr0U> as on 20th April, 2014

Daniel Libeskind

Ontario Museum in Toronto



<http://goo.gl/cNnsql> as on 20th April, 2014



<http://goo.gl/ElsKhR> as on 20th April, 2014

This building challenged anthropometrically space. Challenged the conventional openings of the building. Apparent instability in overall form. Stark and extremely sharp angles are used.

Jewish Museum in Berlin



<http://goo.gl/dIJMTx> as on 20th April, 2014



<http://goo.gl/Zal4D7> as on 20th April, 2014

Libeskind offered a radical, zigzag design. Architect challenged the very values of harmony, unity and stability. The building is an example which challenged the idea of form follows function.

Zaha Hadid

Furniture



<http://goo.gl/Eqcg2C> as on 20th April, 2014



<http://goo.gl/zbFDp4> as on 20th April, 2014

Challenged the basic idea of Function followed forms. The shape is dynamic in form. It has a free play of design, just a sense of pure art.

Peter Eisenman

Wexner Center



<http://goo.gl/uggyzh> as on 20th April, 2014

There are many illusionary spaces, serving no function at all. Building provokes shock, uncertainty, unease, distortion by challenging familiar ideas about space, order and regularity in the environment.

4. Exhibition

An exhibition, in the most general sense, is an organized presentation and display of a selection of items. In practice, exhibitions usually occur within museums, galleries and exhibition halls, and World's Fairs. It means communication and storytelling through environmental experiences that inform, entertain, and inspire. Exhibition designers create spaces with physical or tangible experience, as well as emotional and intangible ones. Exhibits in an exhibition can vary from huge number to a solo exhibit.

DDS has become an integral part of IDC since last few decades. There are events like alumni meet, workshops, exhibition and conferences. At present there are 5 disciplines: product design, mobility and vehicle design, interaction design, visual design and animation design whose works will be displayed.

4.1 Types of exhibitions :

Permanent exhibitions

These exhibition spaces are those which does not change with time. Once products are exhibited they are permanently displayed there. Eg. exhibition deign of an meuseum, art galleries.

Temporary exhibitions

When the display of exhibit is for a limited time it comes under temporary exhibition. Eg. handicraft exhibitions, art exhibitions, trade fair, automobile trade fair, design and degree shows etc.

Interpretive Exhibition



<http://goo.gl/tTjDnq> as on 20th May, 2014

Interpretive exhibitions are those exhibitions, which require data to explain the exhibits. Generally text, maps or charts are used to explain the concept and background of the exhibit. Example of such exhibitions are history, science, design exhibition.

Commercial exhibition



<http://goo.gl/7aDqwU> as on 20th May, 2014

These exhibitions are those, which are solely based with a specific interest of showcasing and demonstrating the latest products, service, study of recent trends and opportunities in a specific interest or industry. These are generally called trade fairs, trade shows or expos. These may be open to public, while others can only be attended by company representatives and members of press.

Art Exhibition



<http://goo.gl/NSNtAM> as on 20th May, 2014

Art exhibitions are those which exhibits the artifacts of different kinds like painting, sculptures, installations, crafts, interactive art etc.

5. Literature case studies

Animation exhibitions



<http://goo.gl/6dRhlc> as on 20th May, 2014

NID animation exhibit, Ahemdabad



<http://goo.gl/2pqR2L> as on 20th May, 2014

Australian Centre for the Moving Image (ACMI) exhibition



<http://goo.gl/C1AAx9> as on 20th May, 2014

Swansea Metropolitan University Degree Show 2009



<http://goo.gl/rrMTbg> as on 20th May, 2014

NID mobility Exhibition, Ahemdabad

Product design



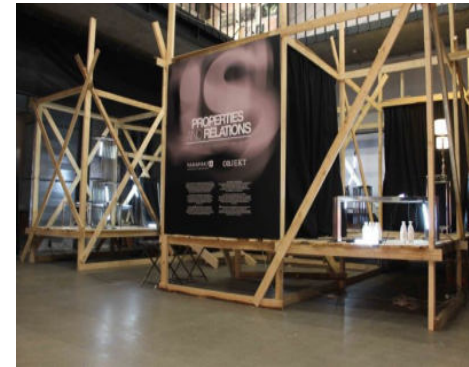
<http://goo.gl/lZduF7> as on 20th May, 2014

Swiss design award exhibition



<http://goo.gl/7n6zgH> as on 20th May, 2014

New designer Exhibition 2012, London



<http://goo.gl/dLZiaj> as on 20th May, 2014

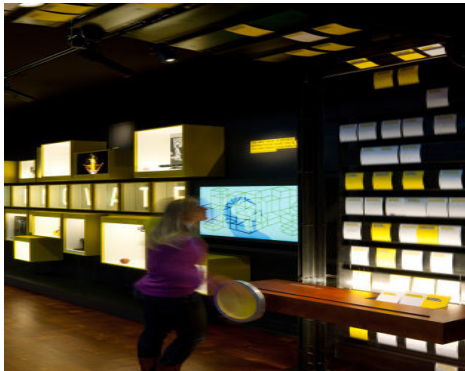
Moscow Design Week 2013 by Alan Khadikov, Moscow



<http://goo.gl/WJFlsY> as on 20th May, 2014

New designer Exhibition 2010, London

Interaction design exhibitions



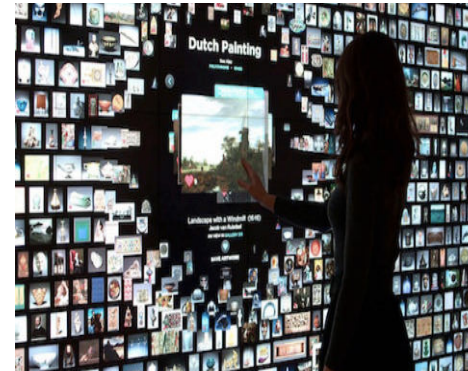
<http://goo.gl/4kwrhe> as on 20th May, 2014

Bezos centre for innovation ,
Ahemdabad



<http://goo.gl/v4dxoY> as on 20th May, 2014

The Walt Disney Family Museum,
California



<http://goo.gl/S6Mse3> as on 20th May, 2014

Cleveland Museum of Art



<http://goo.gl/Ykg7Kp> as on 20th May, 2014

Zamek Cieszyn

Visual design exhibitions



<http://goo.gl/MiwCiz> as on 20th May, 2014



<http://goo.gl/9zDVUy> as on 20th May, 2014



<http://goo.gl/jldBj0> as on 20th May, 2014



<http://goo.gl/7DJNHI> as on 20th May, 2014

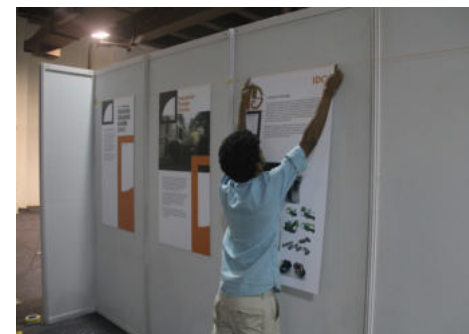
6. DDS case studies

DDS 2013



Design of panels are straight and simple, though it does not represent the talent and vision of a design student. It is highly tilted towards craftsmanship.

DDS 2012



Light does not fall on the board. Design of panels does not represent the various design courses which one attend during idc tenure.

DDS 2009



Frames are difficult to transport from one place to another. Lighting on the panel is not appropriate. It creates a glare on the sheet thus making it difficult to read.

DDS 2008



Panels affect the circulation space. One cannot get very close to the panels. Chances of toppling down the panels are huge. Panel frames are huge and thus wasting a lot of material.

7. Case study

Nehru Centre



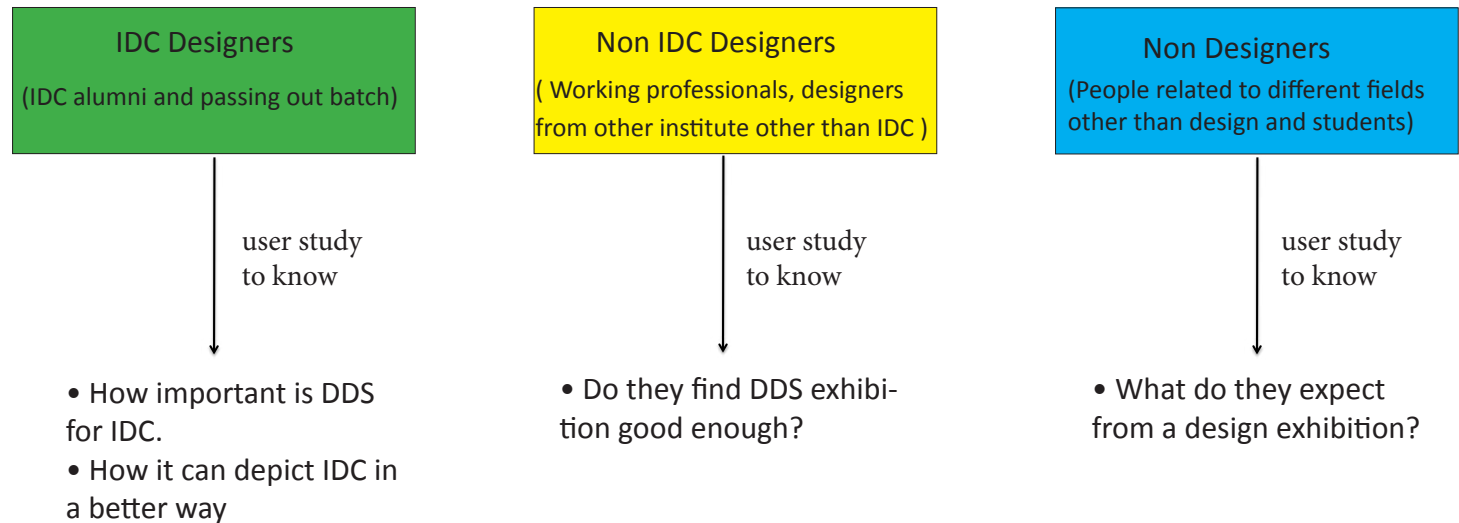
Kala Ghoda



Heavy panels to transport. Very easy to assemble and disassemble. Exhibitions using this kind of panels becomes very monotonous.

8. User Study

A questionnaire was prepared and circulated among the people who comes to visit a design exhibition.



Insights from user study are :

- Design should be innovative and creative.
- Clear mapping as to which section of products is present where.
- For execution of setting up the panels there is very limited time, so design should be easy to assemble and disassemble.
- Independence for unique individual expression should be given .
- Should be more interactive.
- Exhibition should be colorful and vibrant representing the enthusiasm and zeal of college students.

9. Project brief

To design exhibition space for conducting DDS 2014 considering Deconstructivism as a theme.

Exhibition should encourage the participation of all the disciplines in IDC, which in itself shows the technological advancement in design field, represent the ideas of IDC and future and possibilities of design/ ideas.

The designing task includes panels, panel support, temporary seating, circulation pattern and lighting system.



Logo For IDC DDS 2014 - It follows the crispiness of sharp angles and fragmentation

10. Design Constraints

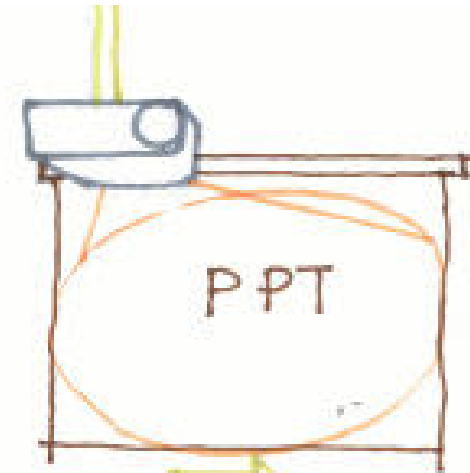
Design constraints to be followed are :

- Budget of the exhibition is limited to 2 lakhs rupees.
- Exhibition is to be hosted at 2 places, so display units should be easily transportable, assembled and disassembled.
- Space contrast in Nehru Centre and VMCC.
- Execution of the exhibition should happen really fast as very limited time and labor is there to arrange for display.
- Layout of exhibition should be simple and easily accessible.
- It should be unique in its sense and should represent the IDC design principle.
- Visual ergonomics also plays an important role in the whole exhibition.
- It should follow deconstructivism as a theme.

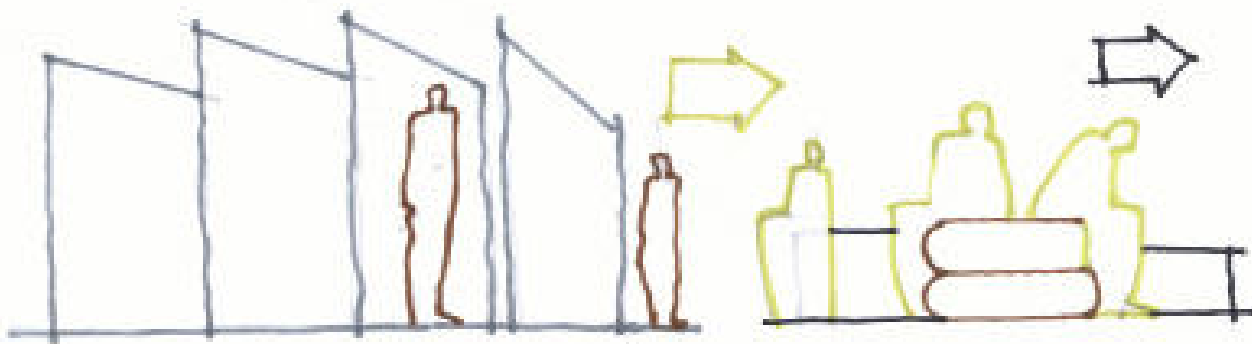
11. Activities involved in DDS 2014



*To and fro from IDC to exhibition venue.
Exhibition commodities need to be
transferred from IDC to DDS venue*

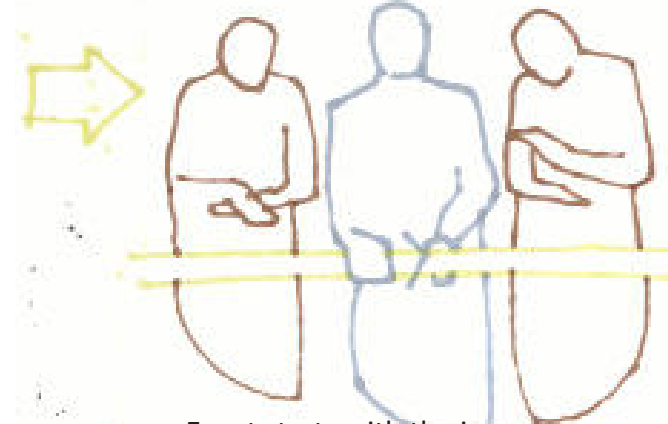


Presentation and seminar are
organized in DDS



Final year batch's work are exhibited along
with IDC key projects.

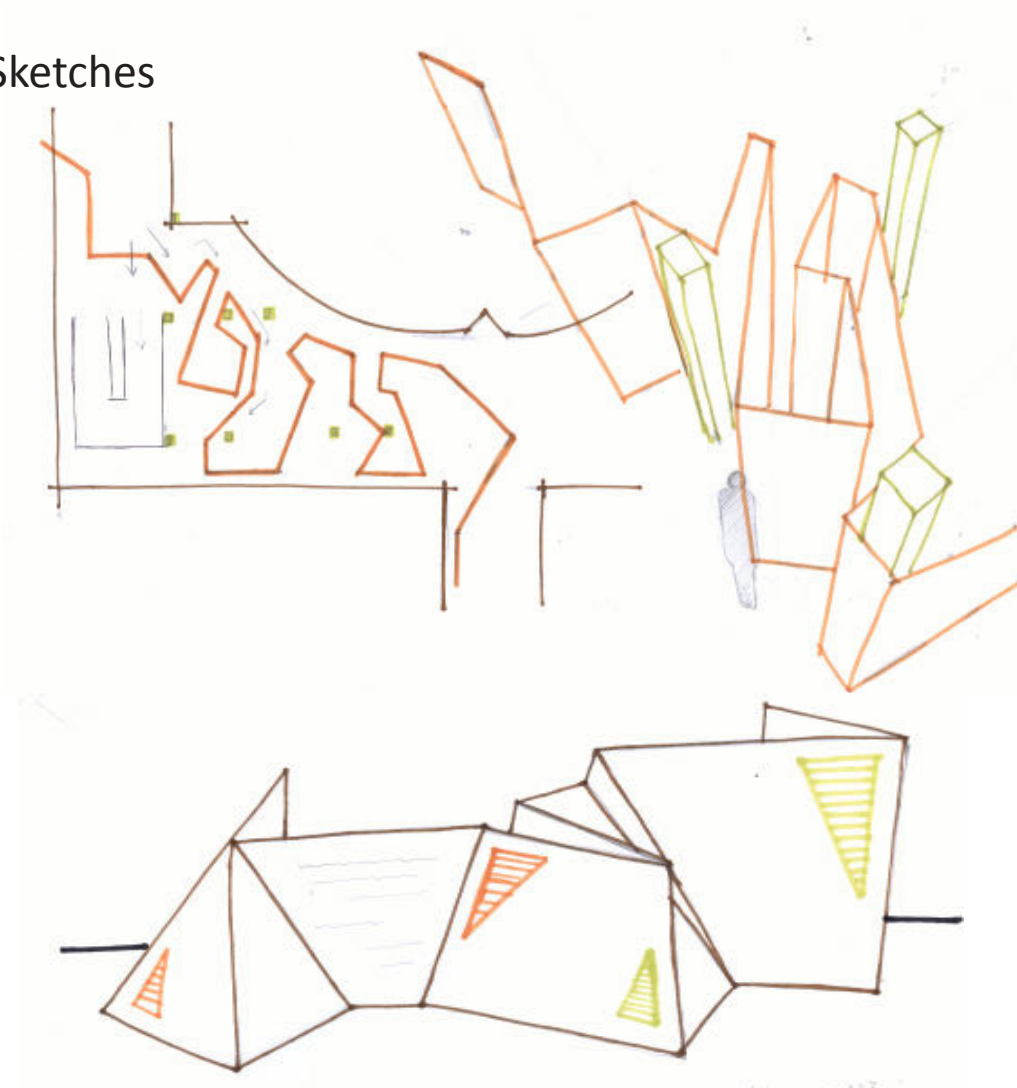
Alumni interaction happens



Event starts with the inau-
guration.

12. Initial Ideations : phase I

12.1 Initial Sketches

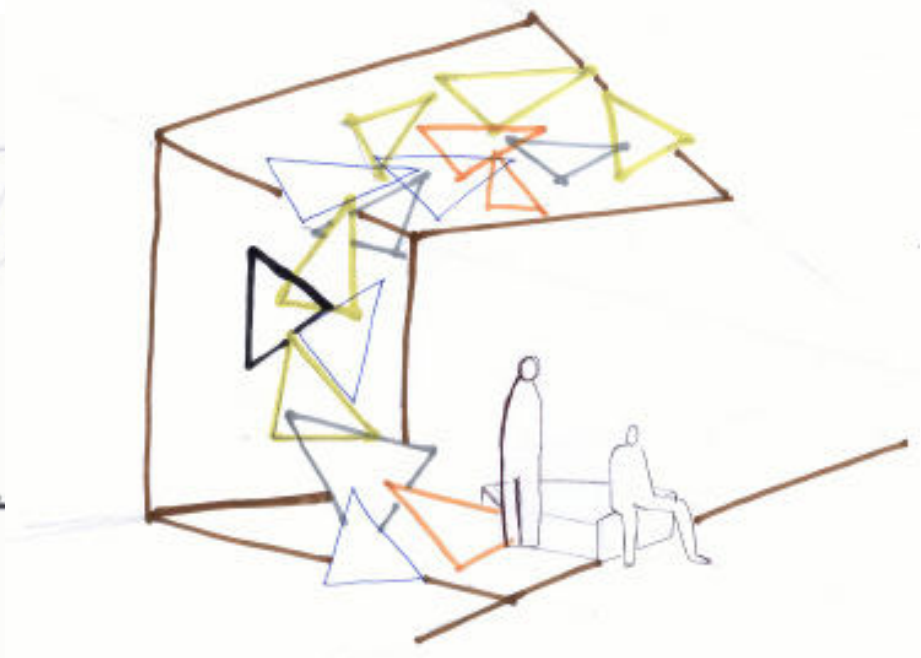


Maze as a concept has been explored, so that when a person enters he is directed to go through all the projects displayed. There will be just one entry point and exit point of the exhibition. But the problem with this kind of circulation pattern is that if one, wants to see a particular domain projects he has to travel through all the domain projects.

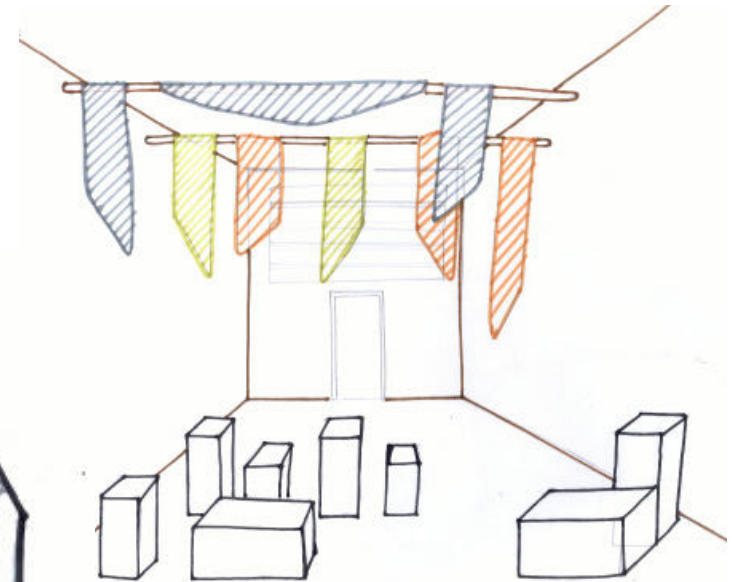
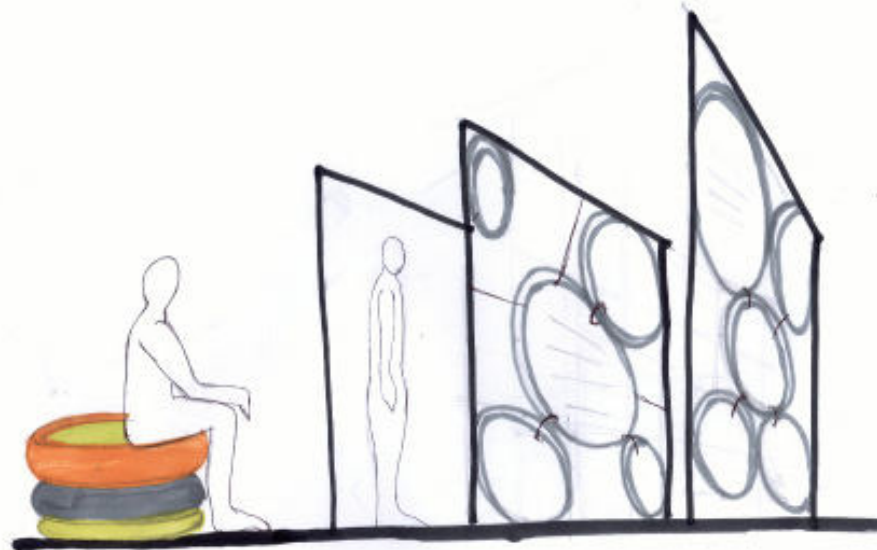
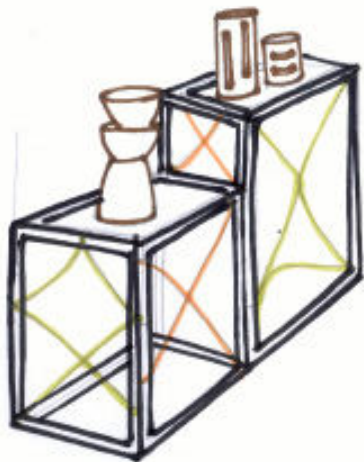
Initially the material thought for this kind of exhibit is cardboard, but then there are market limitations for the same, and there could be issues with the strength and stability of the same.



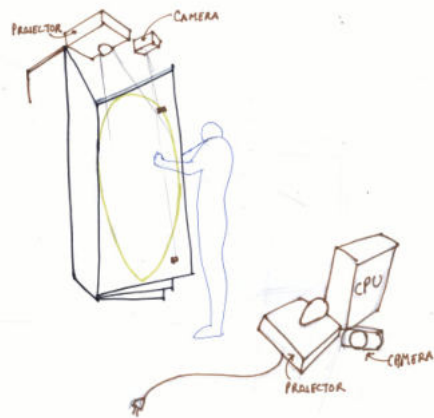
In this idea the cube has been fragmented into different parts of the exhibit. Some parts can be used as a seating and some as a panel support. By fragmenting different parts in different shapes and dimensions, interesting arrangement can be achieved.



This idea is based on modularity. The display on panels goes from floor to ceiling, and thus it also acts like an installation. The pieces could be arranged in different angles and directions. The conventional method of viewing the information at an eye level has been questioned.



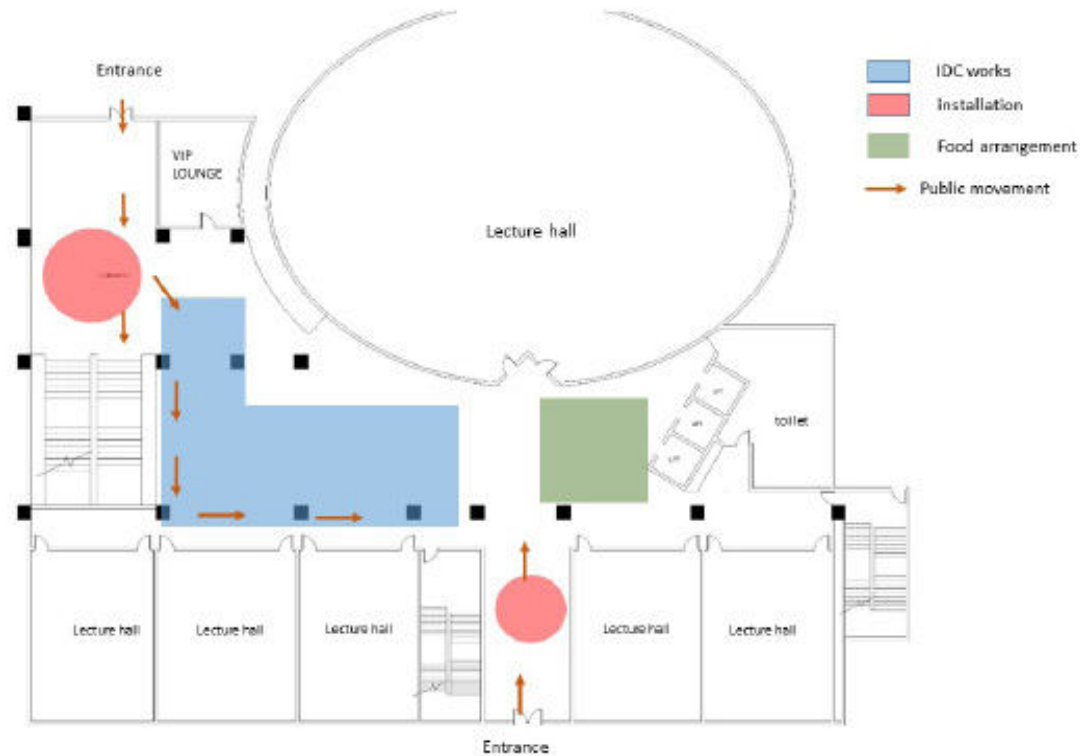
It's an idea where all the models were proposed to keep at a place of double height ceiling. It's a symbolic way to represent that sky is the limit and one has to go a long way after passing out from IDC. It's inspired by the approach of Daniel Libeskind in Jewish museum.



The projects can be viewed by augmented display. But then comes the constraints of budget and implementation of the idea. All the students profile can be clubbed together in a form of a book and person can flip through the pages as he goes from one person to another.

This set of ideas were inspired by the idea of giving individual identity to each domain of projects, so that variety comes into picture. For mobility and vehicle design use of scrap tyre has been used, for animation used television boxes can be used. For craft related projects, pedestal out of bamboo and jute can be used, so that it supports crafty look.

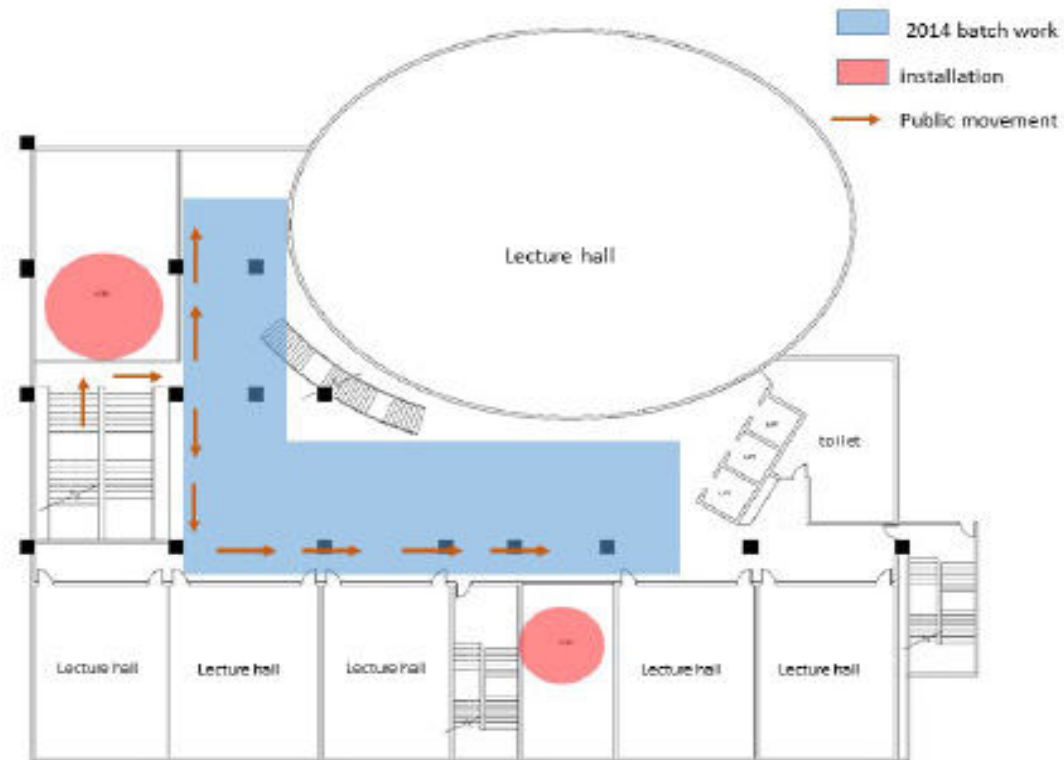
12.2 Zoning



Ground Floor

Zoning was done keeping in mind the easy accessibility/ performance of various activities which are going to happen in the VMCC area during three days event of DDS. Space allocations for various task/ display are as following:

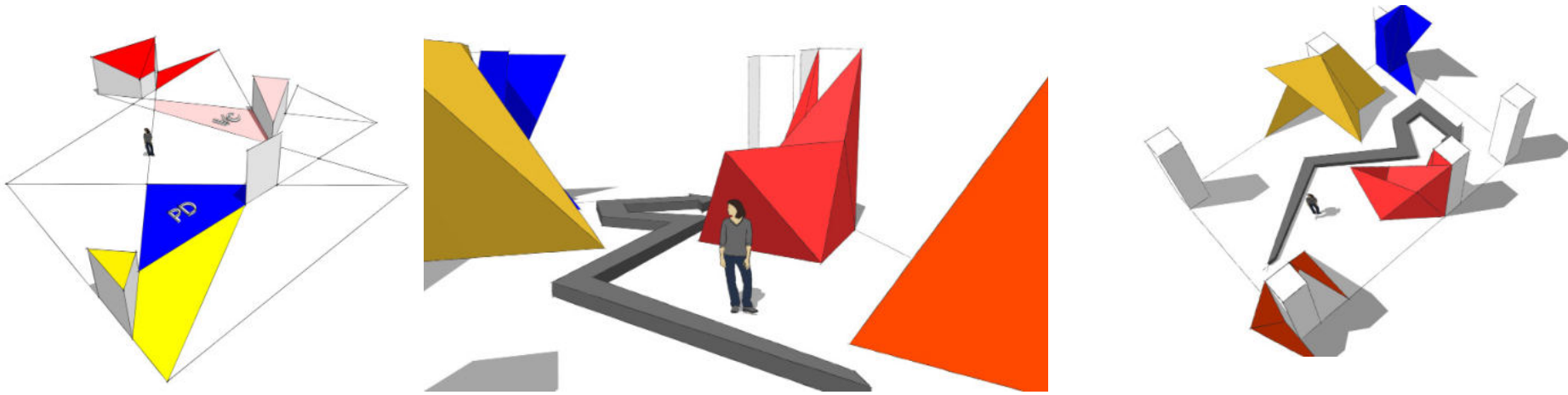
- Each discipline
- IDC highlight projects
- Ph.D. projects and faculty projects
- Placement interviews
- Food arrangements
- Reception area
- Art installations



First Floor

First floor is reserved for the display of passing out batch, so that there remains a continuity of display and it is undisturbed by rest of the activities. Art installations are near the entrance and near the staircase, which sort of directs the movement from ground to first floor. Ground floor consists of spaces for reception, food arrangements, and IDC projects, Ph.D. and faculty projects.

12.3 Iterations

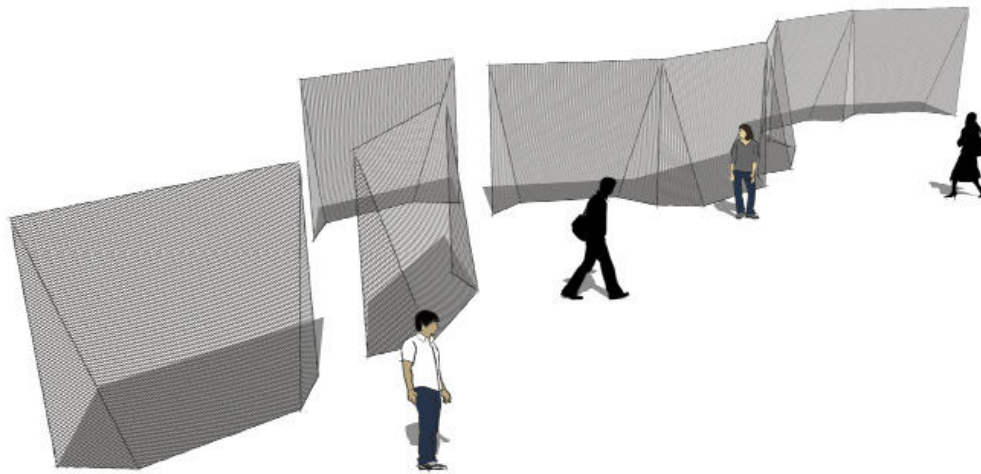


The initial ideas were based on mere special arrangement and a direct application of DANIEL LIBESKIND's design language and lines. The ideas shown here are part of my free exploration to free my mind and break out of conventionalism. The idea of deconstructivism was also studied in details during this time.

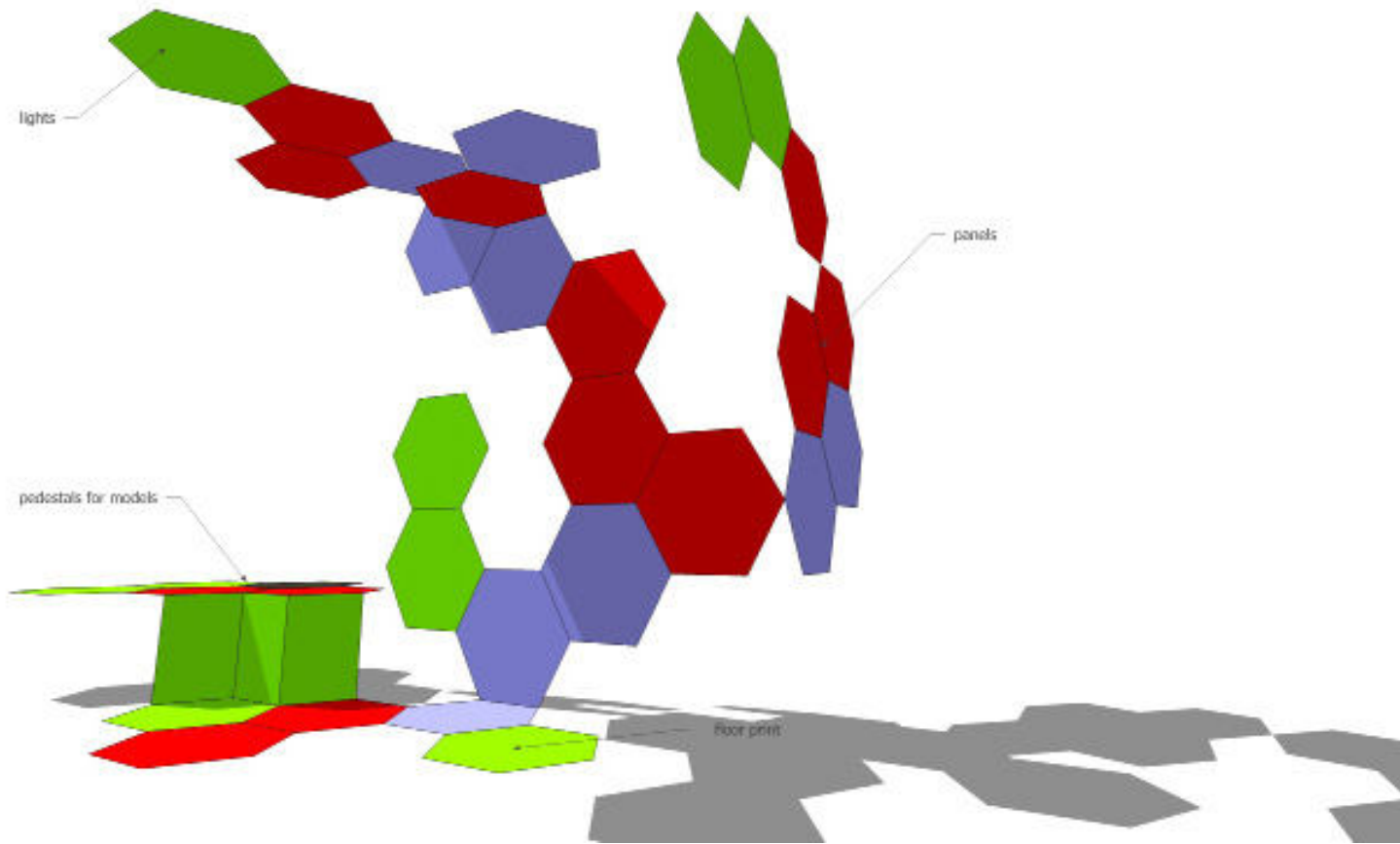
Some conventional ideas were also explored during this period. This was done to make myself understand and recognise all the essential components of an exhibition. Throughout the process the context of DDS was also kept in mind. Transporting a whole exhibition from one place to another will obviously pose its own constraints.



Some of the initial ideas were also more in to sustainability, re using of scrap material. TV back cover, used tyre etc. were also considered for this. The ides of a single element arranged in different configuration that can grow from floor to ceiling, always fascinated me. Shown here is one such concept.



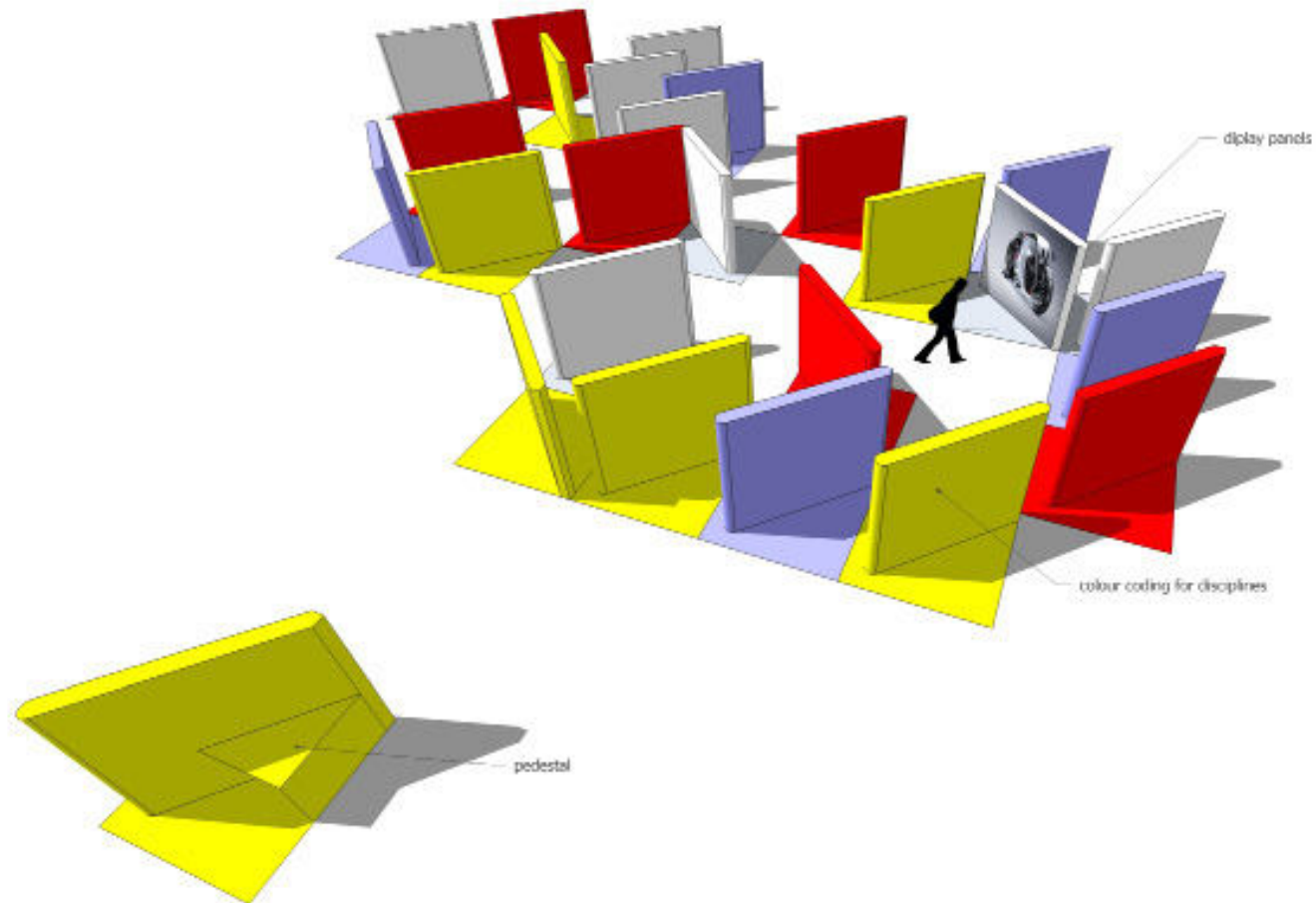
I also tried some conventional ideas initially which were based on easy mantling and dismantling and handling convenience. The design also tried to incorporate bamboo and pvc l_bows for the junctions. This idea was a mere up gradation of the panel and pedestal concept and the idea didn't go completely with deconstructive ideas we had in mind. The design also could be configured at will. But design had to be changed in the end. Shown here are some of the initial exploration I did with meshes and other material which could provide me transparency and rigidity. The same ideas were also tested with carton boards. I visited Lahor market at south Mumbai during this time to search for the material. The idea was to create a labyrinth of panel with varying opacity values to create a drama. This could also be modular and self standing. Show here are the images the here mentioned ideas.



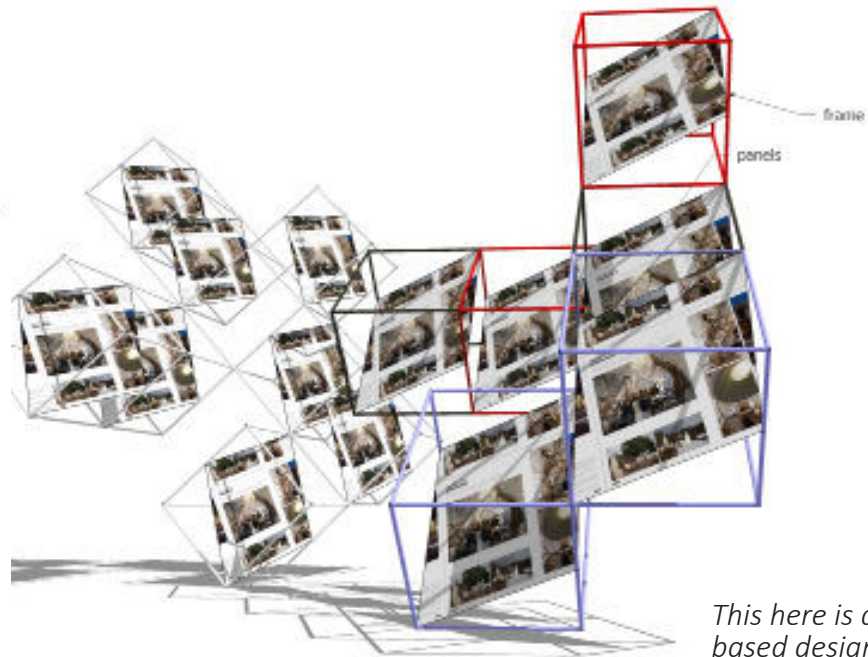
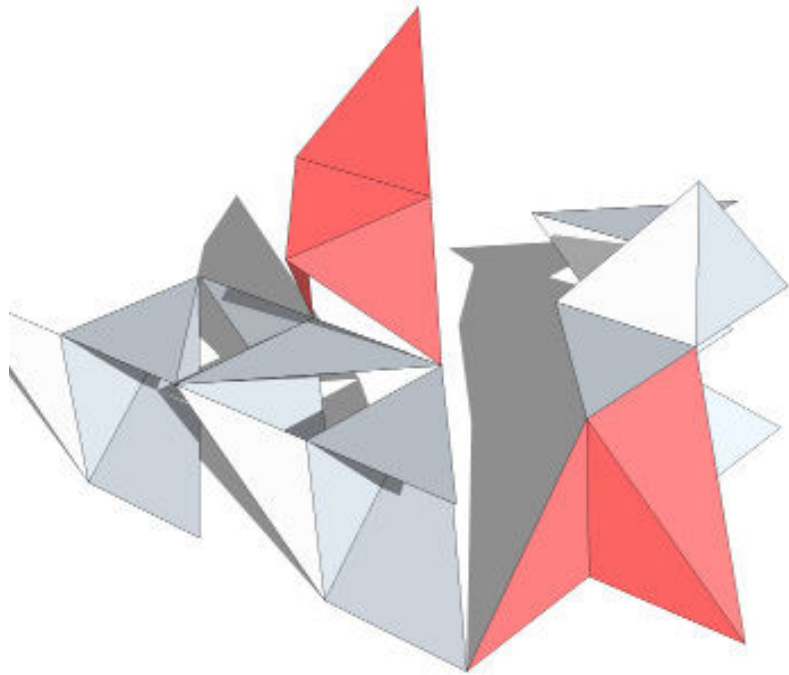
The same idea explained in case 2 was further explored here. The idea was to treat different departments or disciplines differently. There could be different shapes or fractals that could be repeated to make a form that could flow from floor to roof. One of such idea is demonstrated here with hexagons. This could perform various functions at various level. It could be pedestals, ceiling light etc.



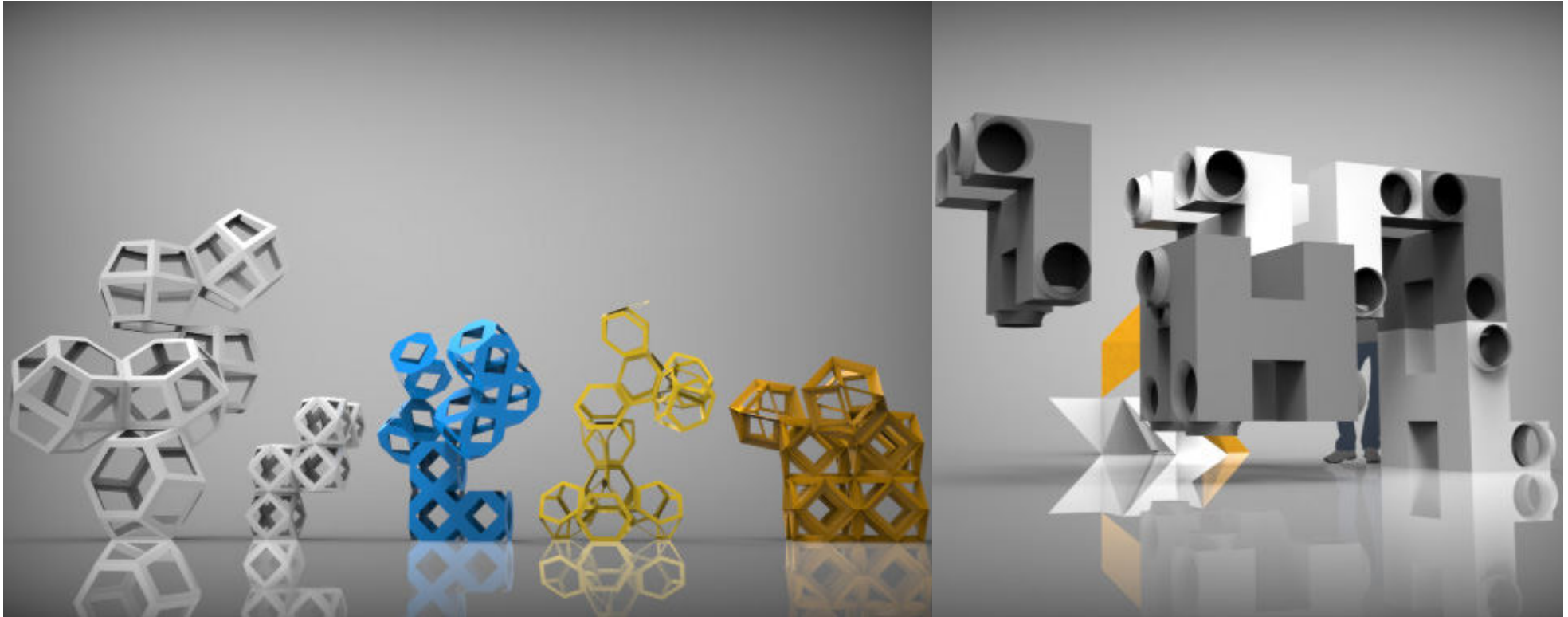
The next idea is about giving more justice to student in terms of the area available for displaying their works. This is sequence of cubes with a pivot support on the frame. Each cube can show one project each, with all the usable four faces explaining the project. In this way the panel area can be multiplied too.



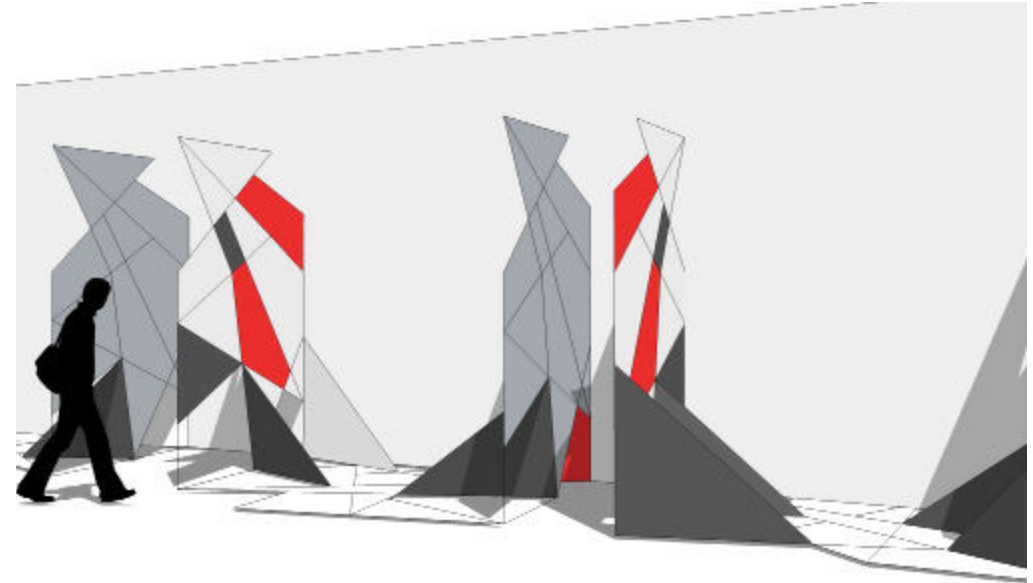
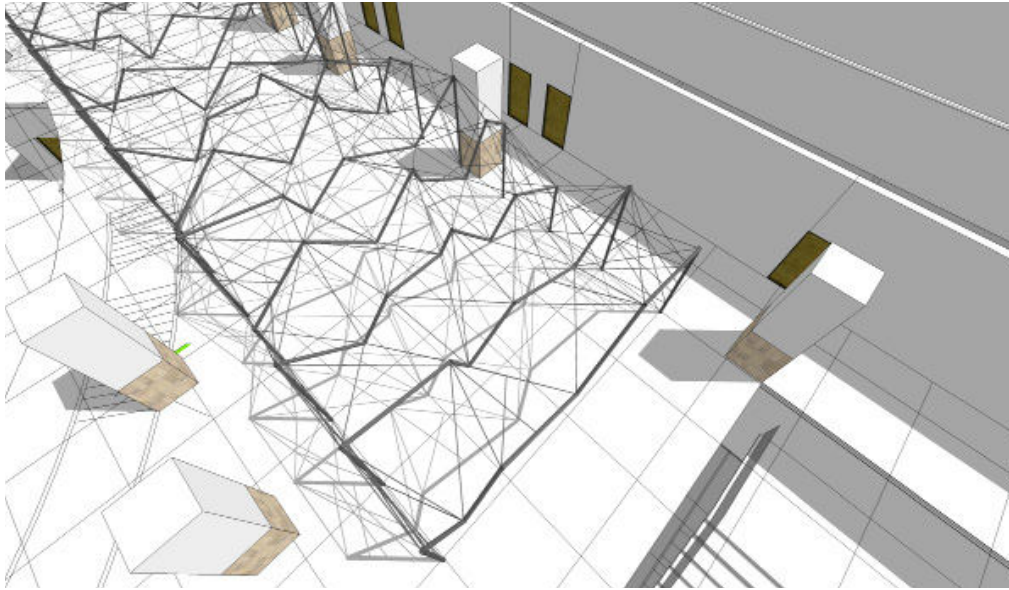
The third idea here is about giving individual booth to student to demonstrate their works. This means to come with modular big units that could be arranged in different patterns, or may be like a puzzle to create individuality and freedom. These units could also be colour coded for different departments.



This here is another modular units based design that is taken directly from the DDS logo itself. Sharp and triangulated units when arranged in different pattern could create a labyrinth of interest panel supports. The second idea demonstrated here is a of a panel support which form the framework of a cube. The units contain panel kept diagonally inside. These units will also make it easy to transport and arrange. This is also in fact based on modularity.



These are apparently modular units based on chamfered tetrahedrons, cubes and pyramids. This when arranged could create interesting patterns and it is also possible that there could be made out of paper based on origami and could be lay flat while transporting.



Transforming the entire space to make people or visitors feel like they are inside a space of sharp edges and crystal based designs. This also means enhancing the drama of the overall exhibition. The idea was to come up with a couple of frame made from GI tubes which could then be repeated to create the drama. The design though would turn out to be expensive and hence dropped.

A normal corrugated paper based design enriched in the design

language of the DDS logo which would flow from one face to the other through the floor is shown here. This idea was not meant for the whole exhibition, but rather it was meant for initial IDC panels at the entrance of the exhibition.

12.4 Analysis

The design was then taken for a review section with the DDS team. The idea was to know in details the budget, the timeline, and the number of people who would work under this design or the whole exhibition setup. The design thereafter was reviewed by the exhibition and visual design team. It also helped me in getting a brief idea about what we are looking at as a team. Here are the points from the discussion:

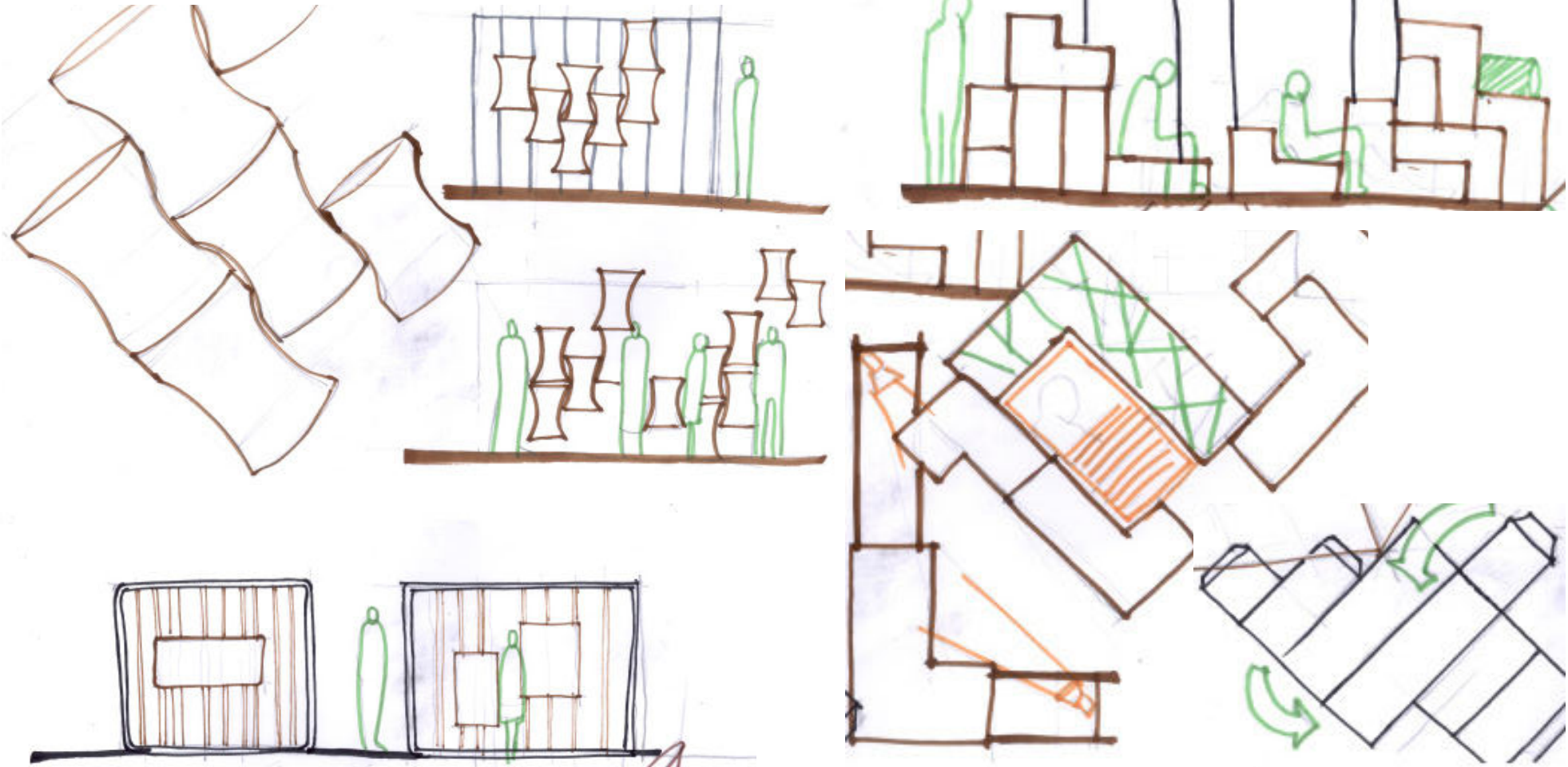
- Designs are mostly expensive.
- They are hypothetical and detailing this would be difficult.
- Some of the designs cannot be dismantled and transported the provided timeline. Also to put them together back again might require the presence of someone who knows about it.
- Some of the designs doesn't offer enough area for panel based on three projects.
- The elements were cluttering and confusing.
- Material specification was also required.

- The provided money is 2000 rs per head at the maximum.
- Another issue as discussed would be rain around that time and design material should be water proof and the whole construction should be tough enough.
- Unlike last time people didn't want to settle for a typical panel support design and rather they wanted something much better. The design also demanded integrated lighting.

This coupled with certain other insights demanded a complete rethinking and the project was back on paper again. Based on all the points discussed and some detail consideration in to all that, the second set of ideas were developed for PHASE II

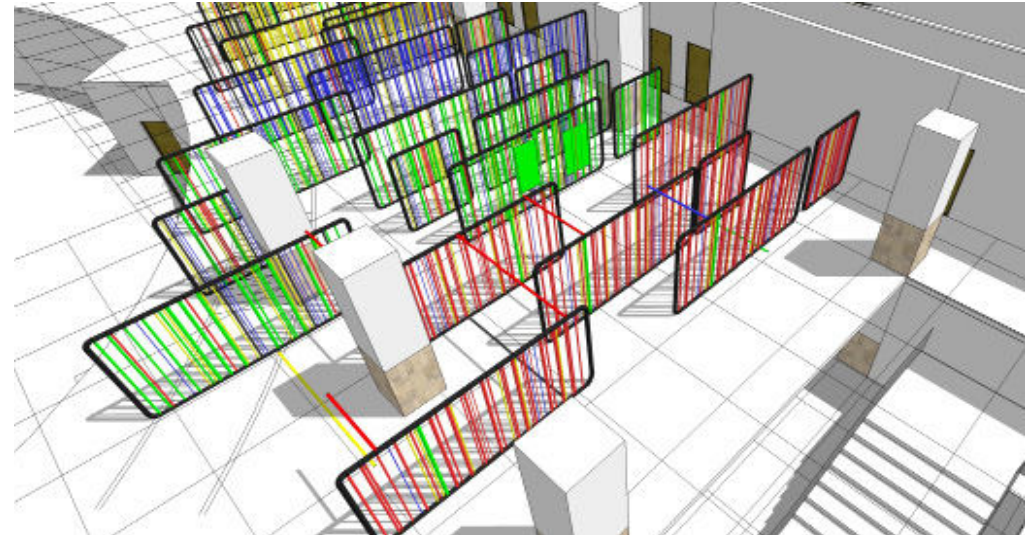
13. Ideations: phase II

13.1 Initial Sketches



Free hand sketching just to explore and loosen up. These sketches are detailed out in the pages ahead.

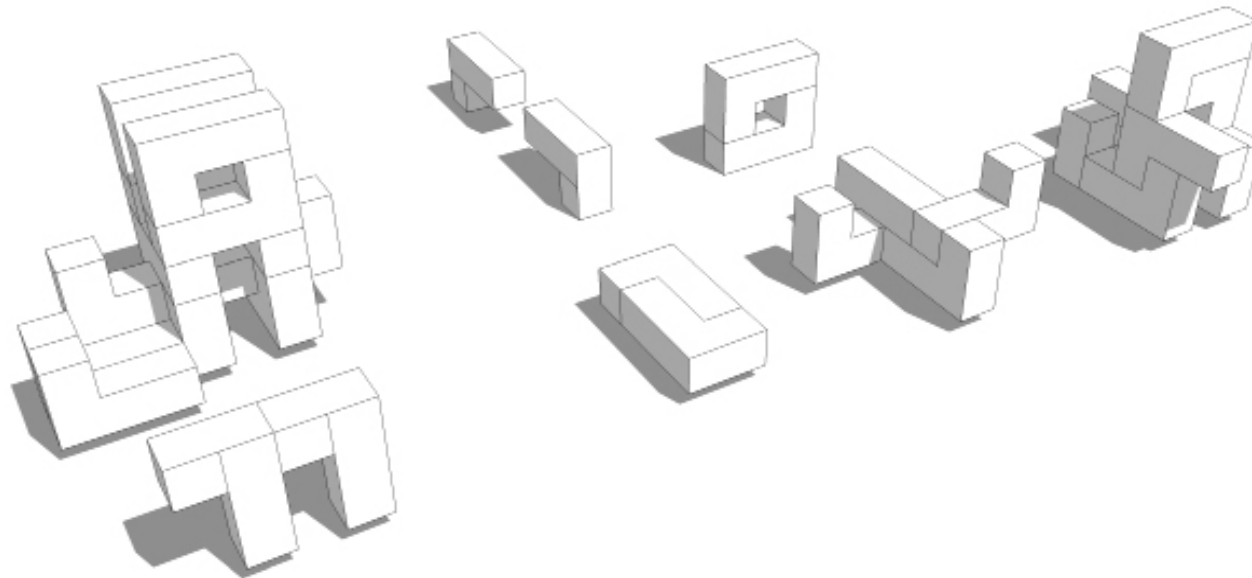
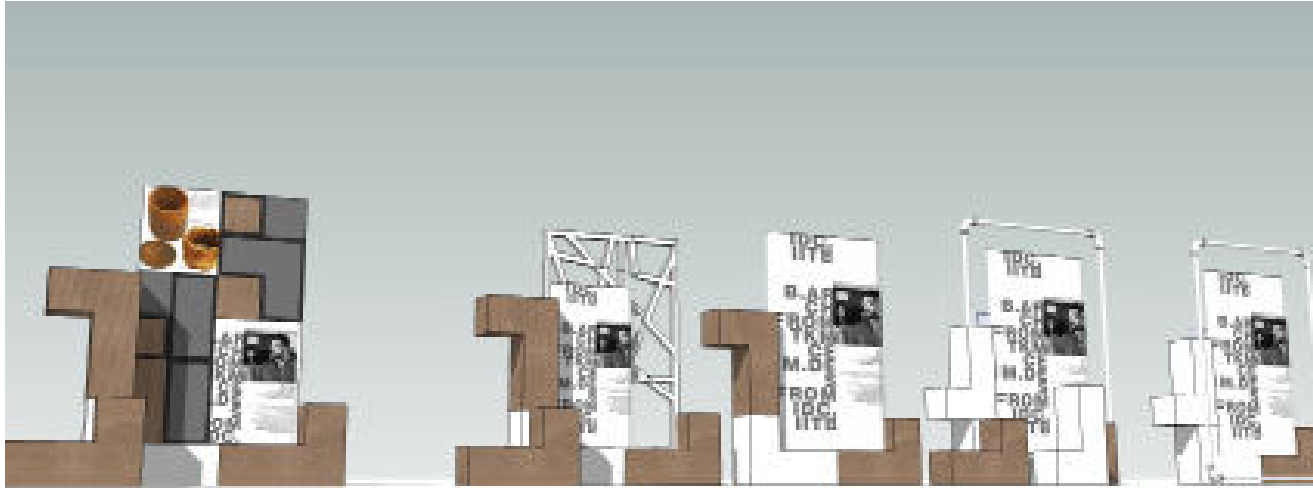
13.2 Iterations



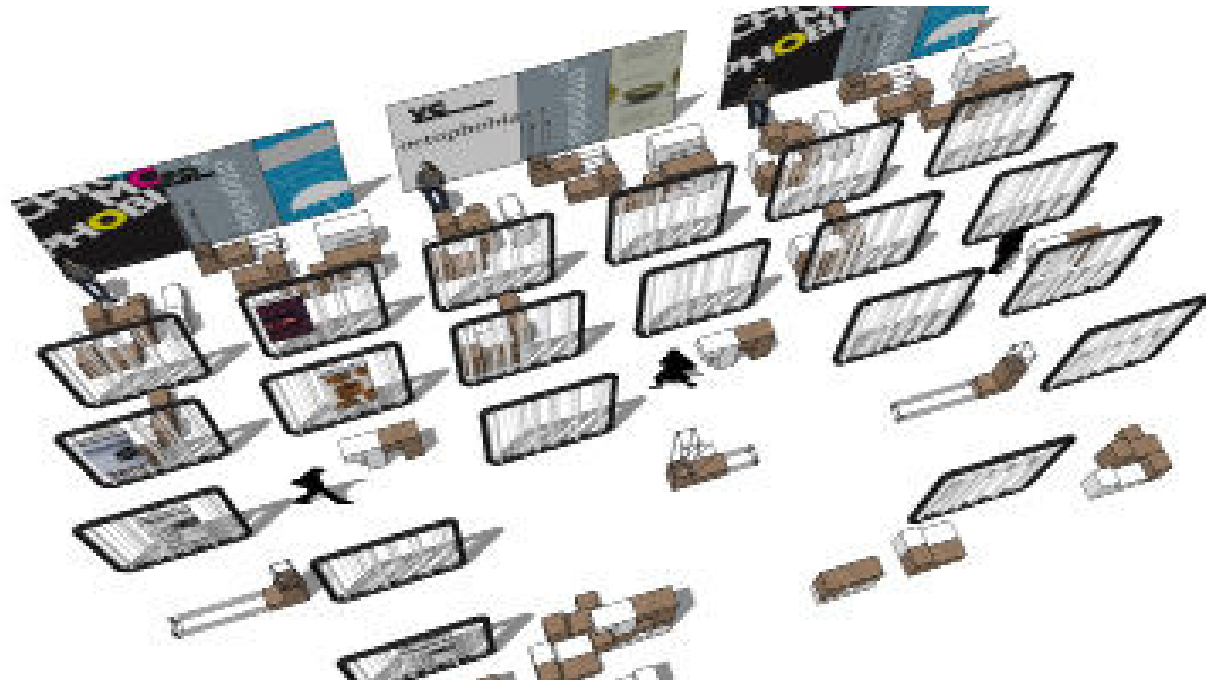
A set of frames that could capture live landscapes struck my mind after this. The idea has already been tried in architecture by master architects. Here the same could be achieved with a couple of temporary frame. Then came the material. The budget and other constraints when put together the feasible material was PVC. The idea was to have big frame made out of pvc and certain members in between representing

gradation and order, the people who pass through them will be seen as frame with live humans from a distance. The frame were also colour coded based on departments. The design also could incorporate light and wiring. The panel will be slide in though the pipes. The design also gave way to a couple of other ideas. One of which is also shown here. A parametric design based units slide in to these frame

could create interesting forms. Later the frame will be blacked out leaving only these parametric forms hanging in air.



It's a design college exhibition and everybody who is exhibiting their work is a designer. So why not give everybody a set of 8-10 modular units, and ask them to arrange it in whichever manner they want and thus making every display unit unique in its own way. Some of the unit can become a pedestal, some of it could be used for sitting. In some of it panel could be attached on one face of a module. So in this design uniqueness and individual expression could be achieved from modular units. But the idea of putting display text was discarded later on because of obvious readability and visual issues. It could be very well used for sitting and pedestal clubbed with other panel design.



These are the various options which were worked out by clubbing the modular units with set of frames and other panel. But later on everything was ruled out because of the cluttering of elements. The frames were clogged up and the impact of it was losing.



These are the various options which were worked out by clubbing the modular units with set of frames and other panel. But later on everything was ruled out because of the cluttering of elements. The frames were clogged up and the impact of it was losing.

13.3 Mock up models



This is a mock up model of the frames explained earlier. The budget for the frame was 1000 rupees, which could represent the work of two people. The material used to make this frame is pvc pipes with I bow joints. It can be easily assembled and dismantled. The thinner pipes could be painted and bring out the vibrancies of a college exhibition and color coded for different disciplines in IDC. Model though had some stability and structural issues.



This is a mock up model of the modular units and some different combinations from it. The material used is cardboard sheets. It was well accepted by the batch and everyone is excited about the idea. An idea which gives them freedom and individual expressions. This will also involve visitors to make few new combinations by themselves.

13.4 Analysis

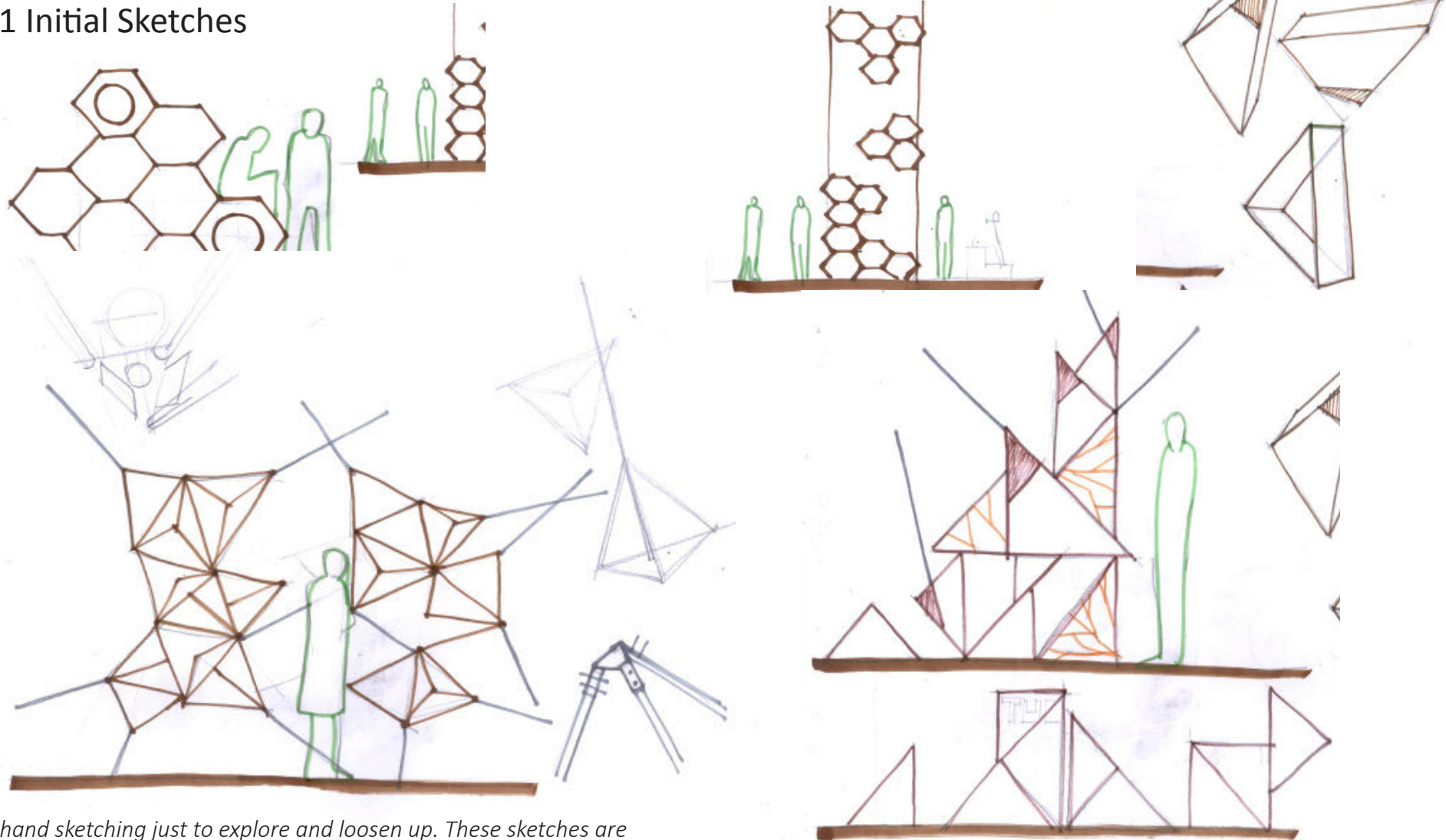
Review is scheduled again with the DDS team. Here are the points from the discussion:

- Designs with pvc was ruled out, because people found pvc pipe to exhibit a very cheap look and they had their doubts regarding the stability and strength of the panel supports.
- The suggestion to work out with paper craft and origami was insisted upon.
- Designs were not found representing deconstructivism in a correct manner.
- Suggestions were given to make it look familiar with DDS existing branding and visual works.

This coupled with certain other insights demanded a complete rethinking and the project output was not finalized. Based on all the points discussed and some detail consideration in to all that, the next set of ideas were developed for PHASE III. Since everybody insisted on origami and paper craft oriented designs, explorations for the new set started with paper mock up models rather than sketching.

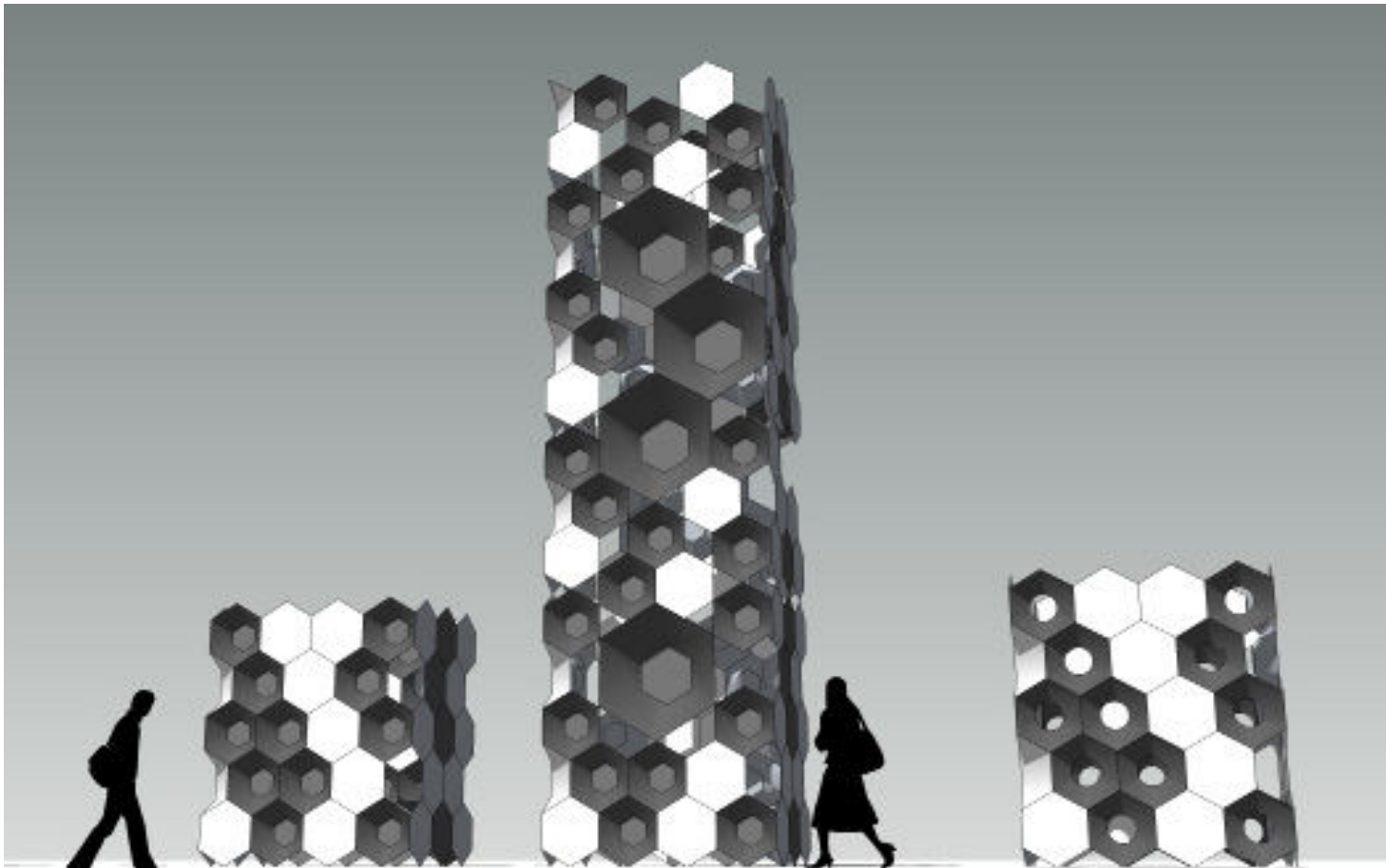
14. Ideations: phase III

14.1 Initial Sketches

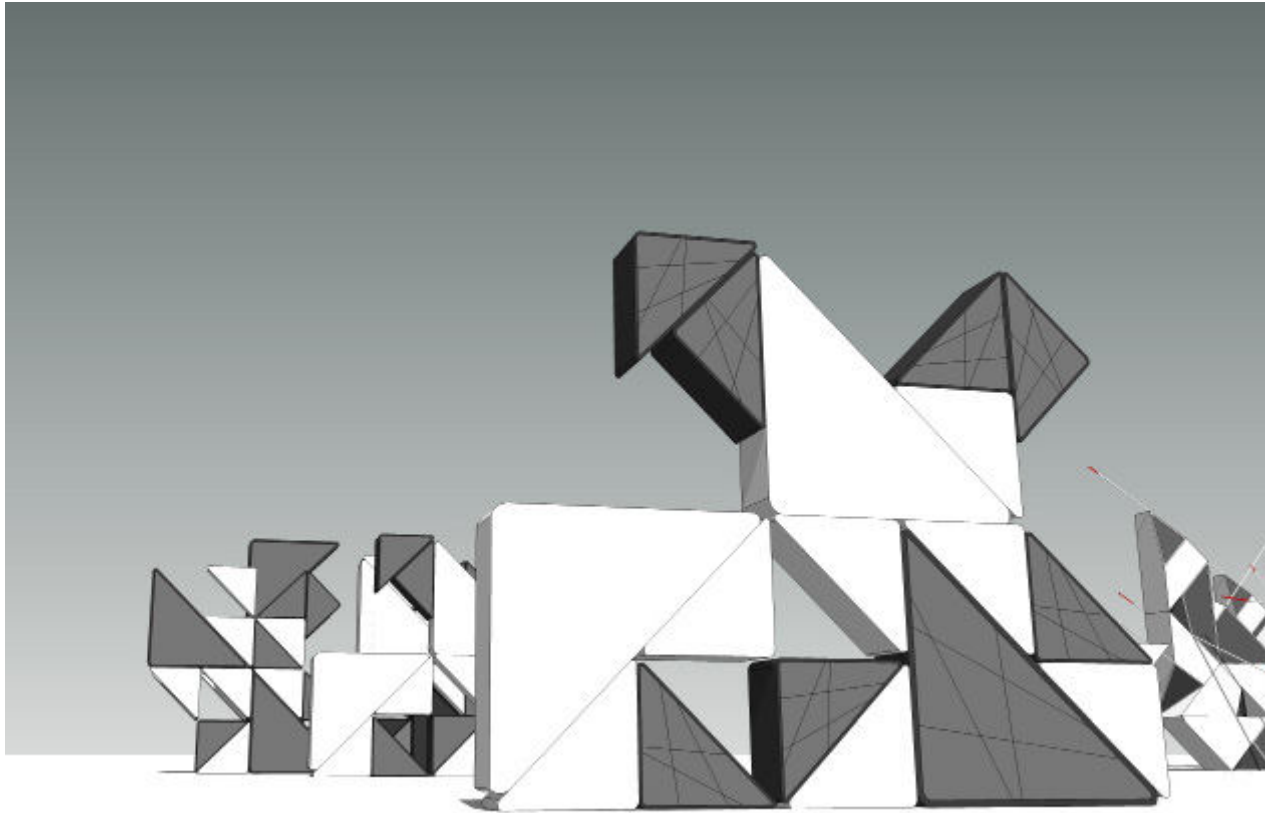


Free hand sketching just to explore and loosen up. These sketches are detailed out in the pages ahead.

14.2 Iterations

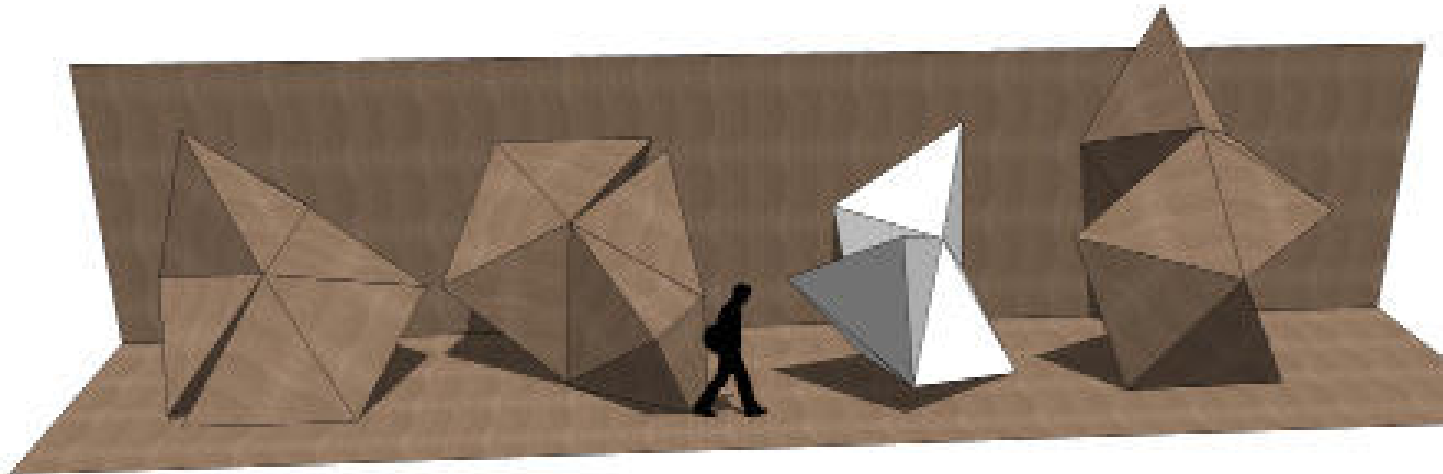
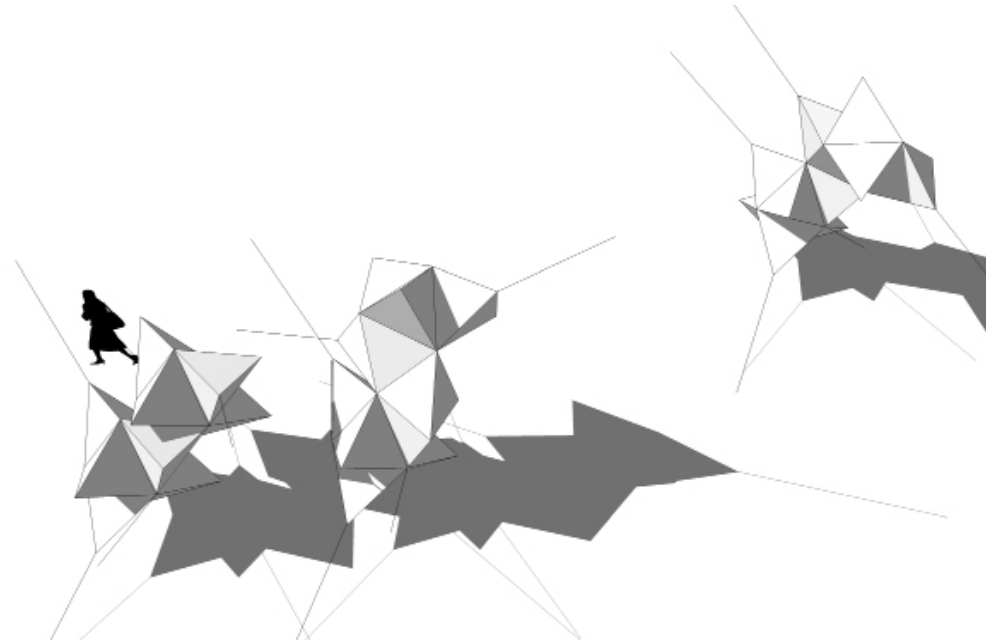
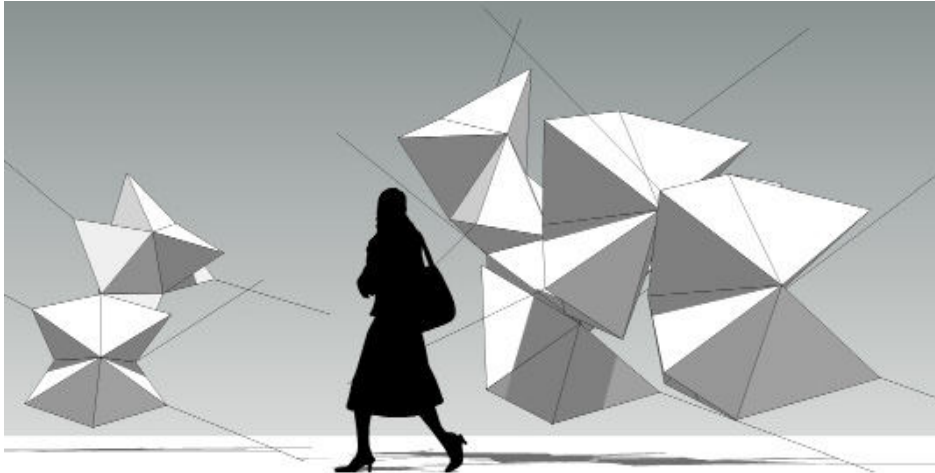


This design is based on the idea that if the same unit or design used for exhibition or panels could be configured for installation too. The idea started off with finding a unit that could be modularly repeated to form the whole structure but still could create uniqueness and variations. This would also help in easy transportation, mantling and dismantling too. The design also needed to consider the requirements from interaction design students to incorporate breathing light or interactive responses. This in turn demanded for a certain degree of transparency to create the required effect. These constraints result the design shown here.



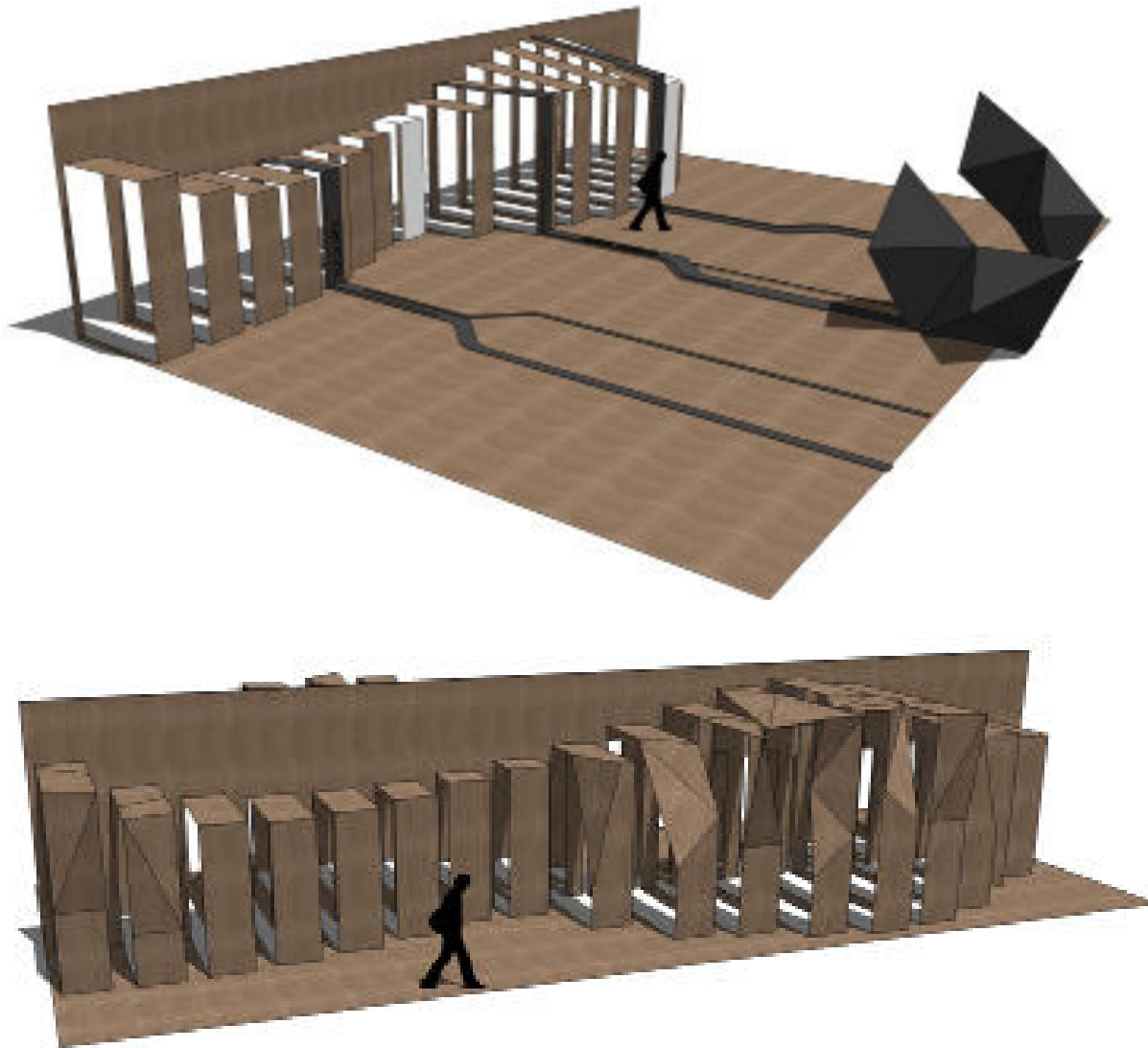
Here is another modular design with countless possibilities. The design can also be configured in to number of things and it can even has pedestals and seating. The design also offer ample and uncluttered space for panel displays.

14.3 Concept 1



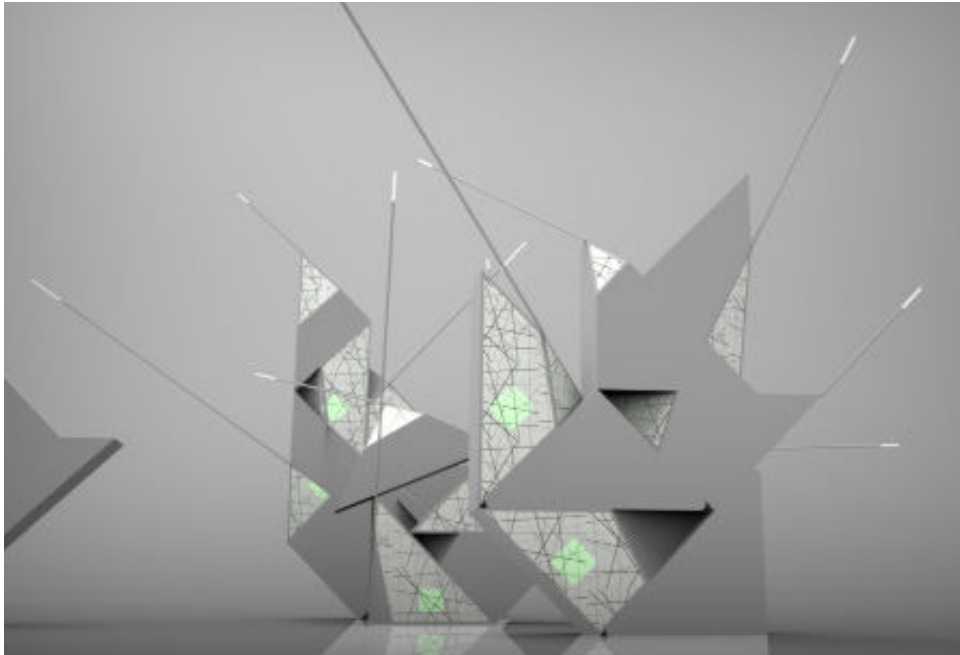
This design is based on a modular structure with great potential of endless combinations. The design follows a language of sharp and crispy angles. Panels could be arranged at different angles, thus questioning the conventional reading eyelevel display for text. It has a free play of design. Seating and pedestal can be configured upon. It also matches with the language of DDS logo 2014.

14.4 Concept 2



Transportation of the model from place to demanded a design that could be collapsed completely or partially, this led to the idea of using a pop-out approach in the design. As per this, the design was supposed to be made out of paper of some sort, preferably corrugated sheets. This led to the design shown here. The maximum paper size available is also considered here as a constraint. The design could be laid flat completely while transporting and could be erected by anyone. This gives amazing flexibility too. The design could hence work in the concept. But considering the rain and moisture of the particular time of the month, the design could develop troubles too.

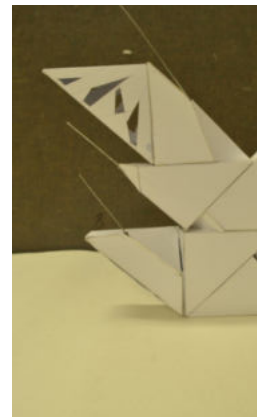
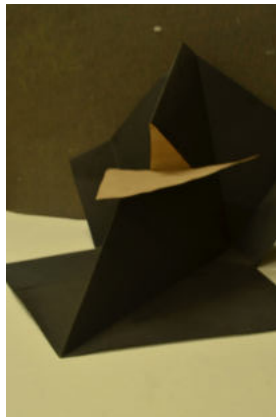
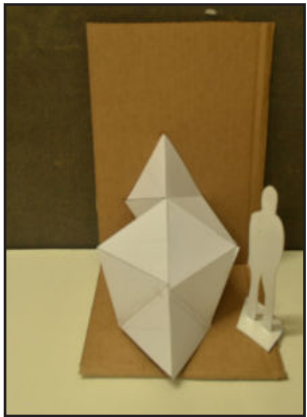
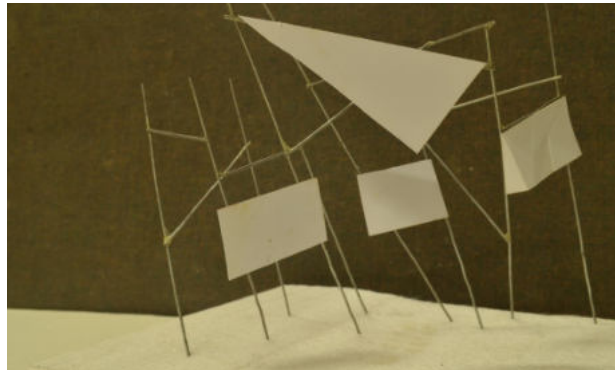
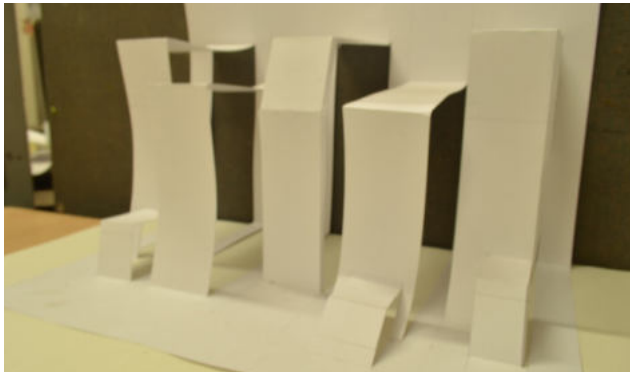
14.5 Concept 3



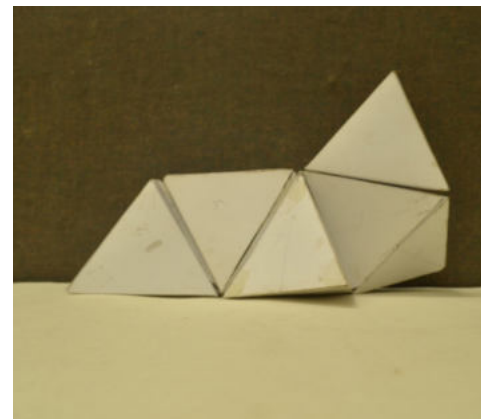
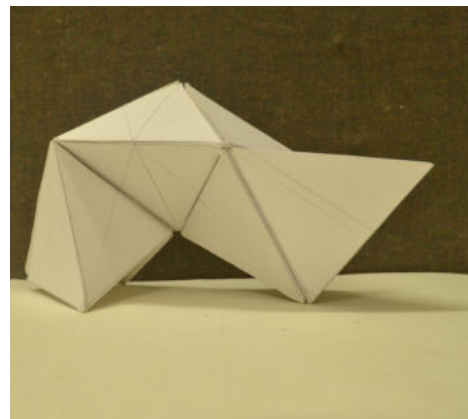
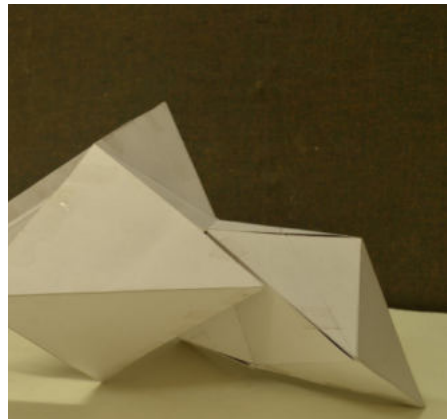
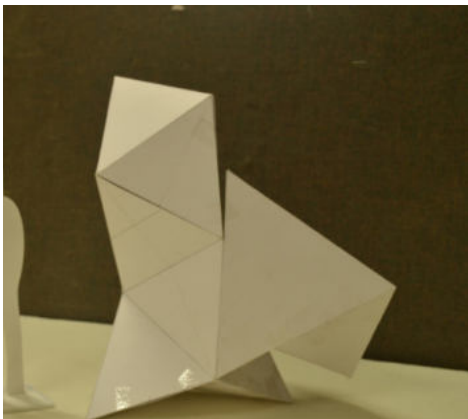
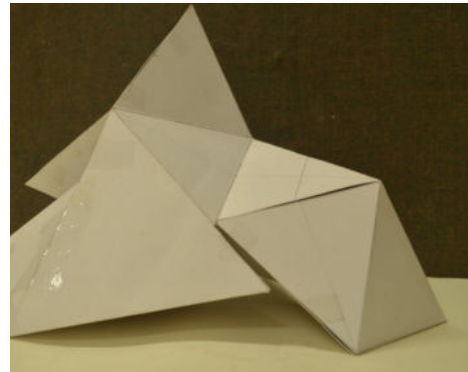
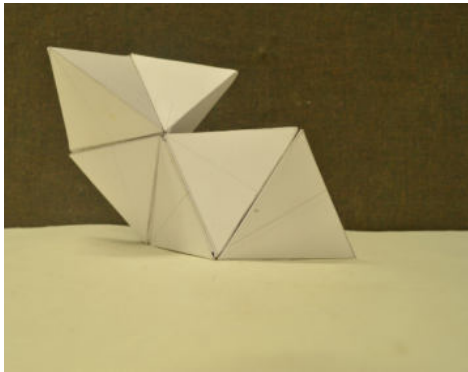
Shown here is another modular design with countless possibilities. The design also takes in to account the interaction students brief and accommodates transparency. The pipe like thing coming out of it has light mounted at the tip to make it feels as if these line

defining the forms are extending to infinity, taking the influences from Libenskind's museum design. The design can also be configured in to number of things and it can even has pedestals and seating. The design also offer ample and uncluttered space for panel displays.

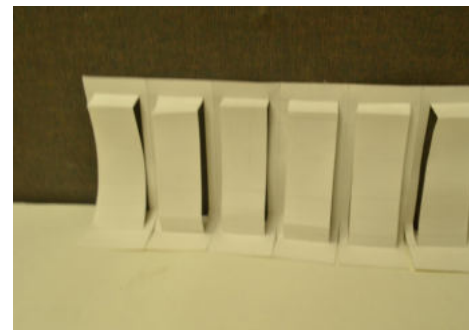
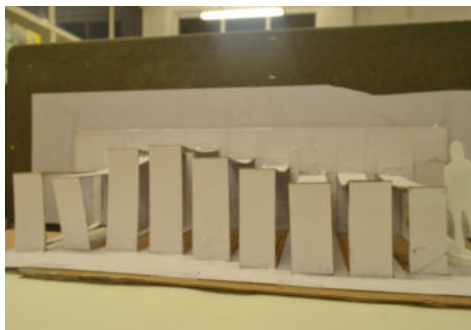
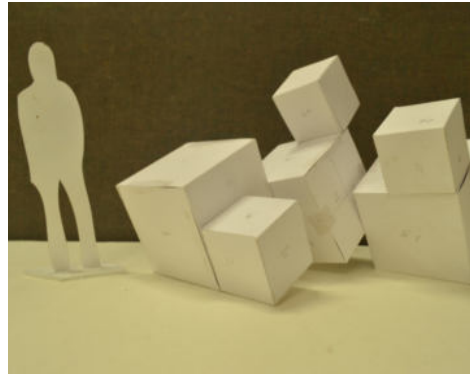
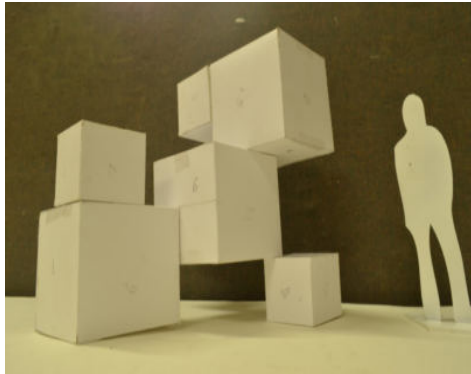
14.6 Mock up models



Different variations through paper models were explored and worked upon. Simple paper folding/ origami technique were used initially. After that variations were made keeping in mind modular units. Those units could also be lay flat and can be made out of a single paper.



Mock up models of tetrahedrons were explored and it could give endless varieties. The same model can be kept at different angles and the outcomes entirely different.



Modular units of cubes were formed and different panel variations were worked upon by combining it in different pattern. This can also be lay flat and can be made out of a single piece of paper. Other options which were worked upon was pop out paper cutting.

14.6 Analysis

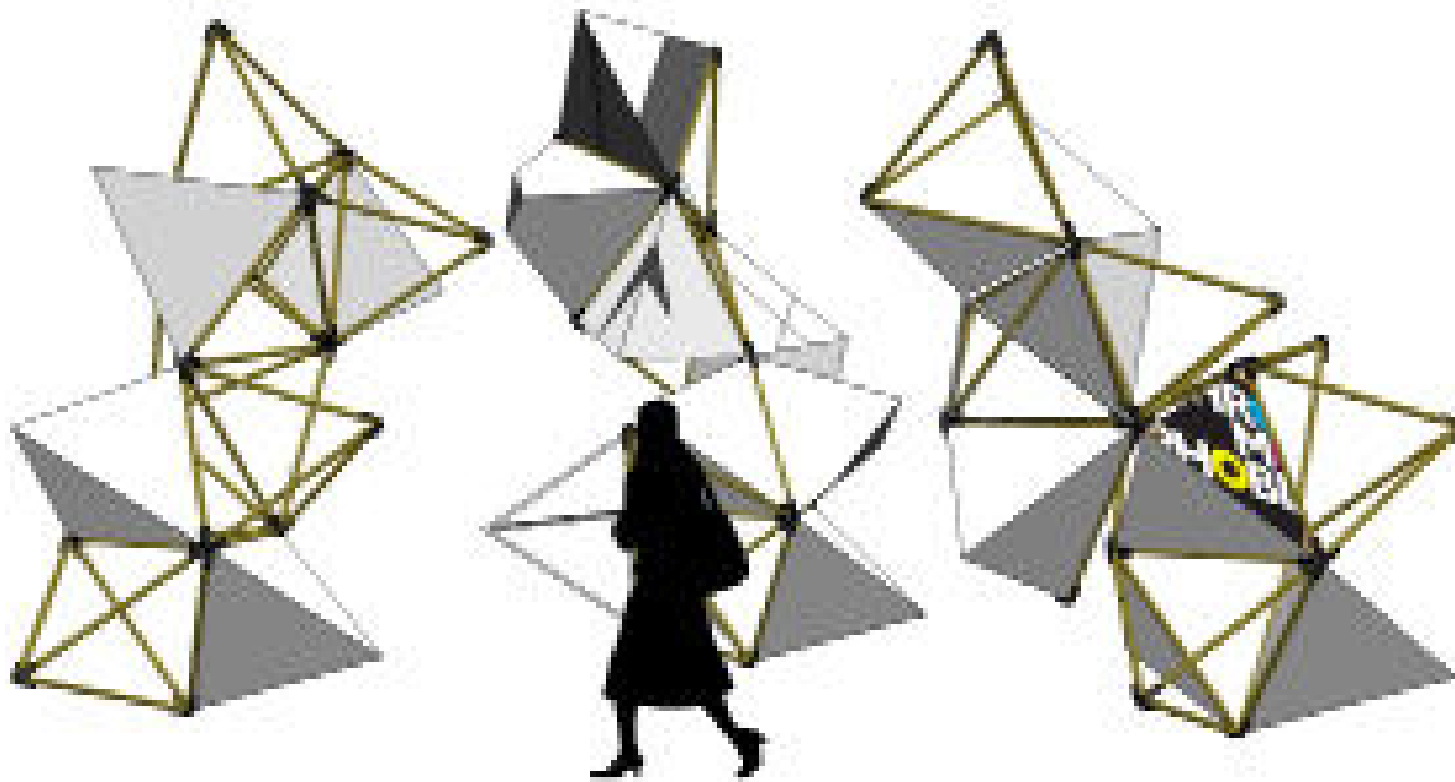
When the review happened with DDS team, tetrahedron design were finalised upon keeping in mind the easy assembly and dismantling, play of form, easy transportation, visuals and readability issues. After finalizing the basic panel structure, zoning of VMCC was done driven by the constraints and requirements put up by the DDS team.

After that comes the issue of manufacturing panel support with desired effects. Firstly the plan was to make it with cardboard sheets, but then there was difficulty in getting the right thickness and appropriate dimensions in it.

Moreover DDS happens during rainy season and there is possibility that damage might happen while transporting cardboard sheets from VMCC to Nehru Centre. So in the meantime alternative solution for it was worked upon. Then an idea of making, just the outer framework struck. There were three options for the material which are PVC

pipes, aluminium extrusions and bamboo. While making a prototype in bamboo there were issues with the joining of multiple rods together, which was worked upon. Bamboo was prone to crack while drilling. PVC pipes were not strong enough and many people had an issue with the aesthetics of PVC, that's why aluminium material was finalized upon as it has better aesthetic and strength.

15. Final Design



The design has a play of form. It is inspired by the design language of Daniel Libeskind works. There are endless compositions which are possible by rearranging these tetrahedrons. Same composition when kept differently could look totally different. Data for p1, p2 and p3 could come on any three faces of the composition, it could flow from one phase to another. Moreover if one wants to put additional work there is enough space for it, it allows the freedom to add on. It has the transparency and opacity of DDS logo and the vibrancies of a college exhibition.



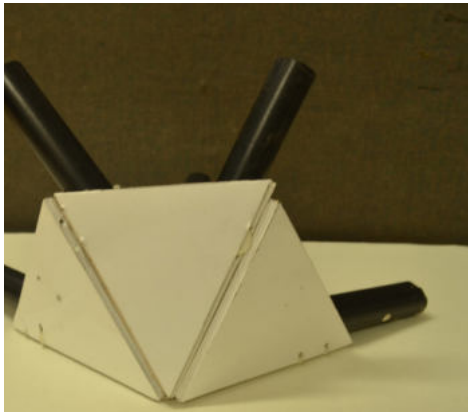
Alternative of the same in cubic structure. It seems to be more appropriate for Visual communication, interaction design and animation people.

15.1 Mock up models



Image shows an actual size mock up model of the final concept with the blown up joinery detail. Form of the model changes entirely when the orientation is changed.

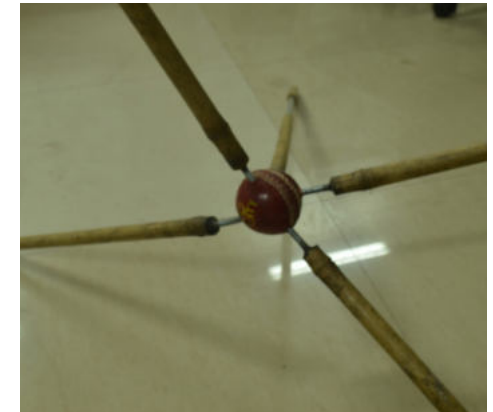
15.2 Joinery Details



Pipes joinery can be worked out by concealing it in a small aluminum tetrahedron cap. As shown in the figure multiple caps be fit neatly in any number.



In order to figure out fastest n cheapest joinery to join tetrahedron vertices together, it can be interlocked by small metal rings.



joinery with the help of a rubber ball



By using small acrylic fitting as shown in the figure tetrahedron vertices can be joined together.

15.2 Joinery Details



These are another set of joinery which were worked upon, but there were issues with the stability of the structure, so the idea to use these joinery was dropped.



15.3. Finalised Joinery Details



metal sheet cut in the desired shape.



Fixture to bend it at 60 degree angle



tightening the metal sheet between the fixture



bending it at the required angle with the help of a hammer.

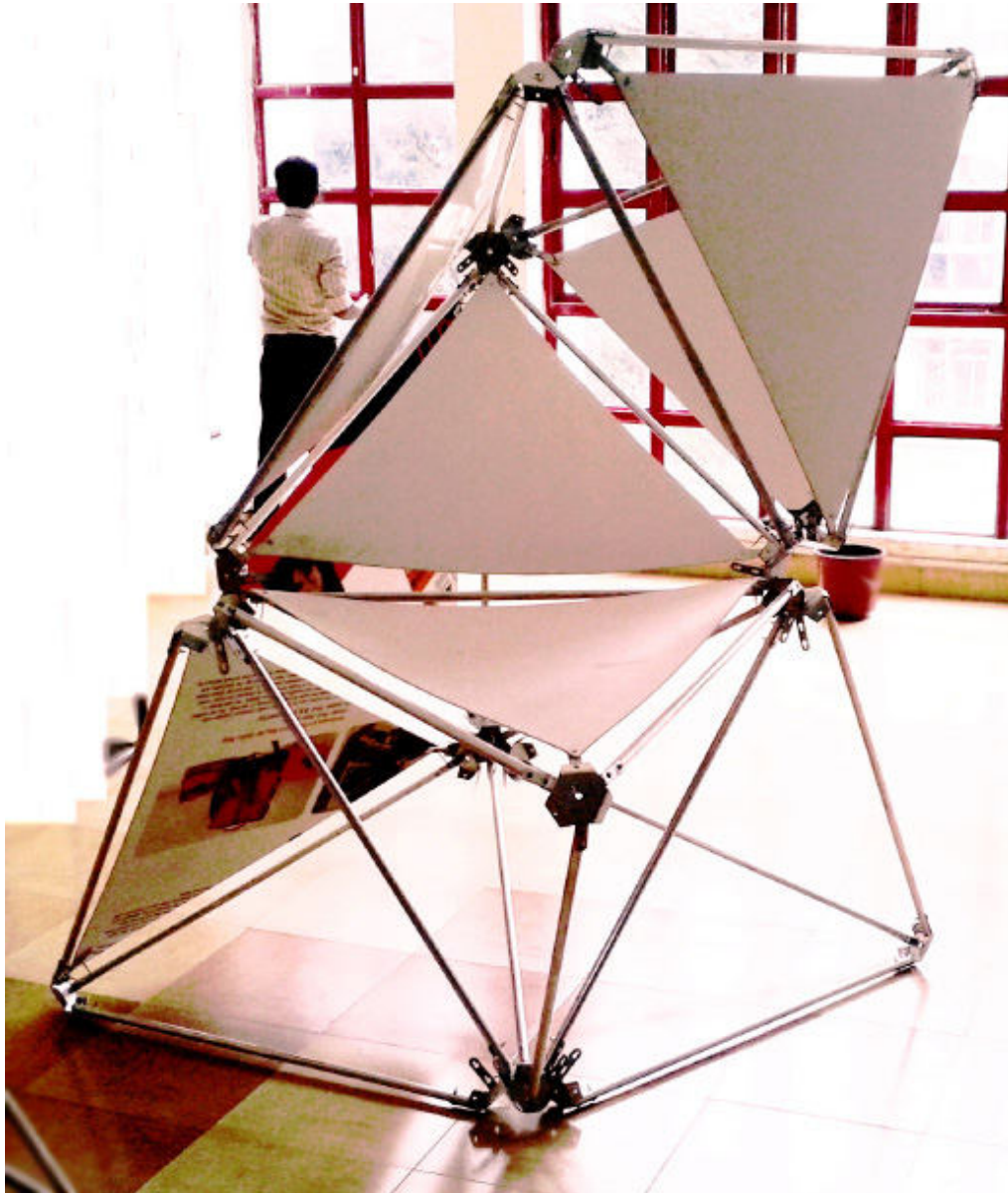


bending it at the required angle with the help of a hammer.

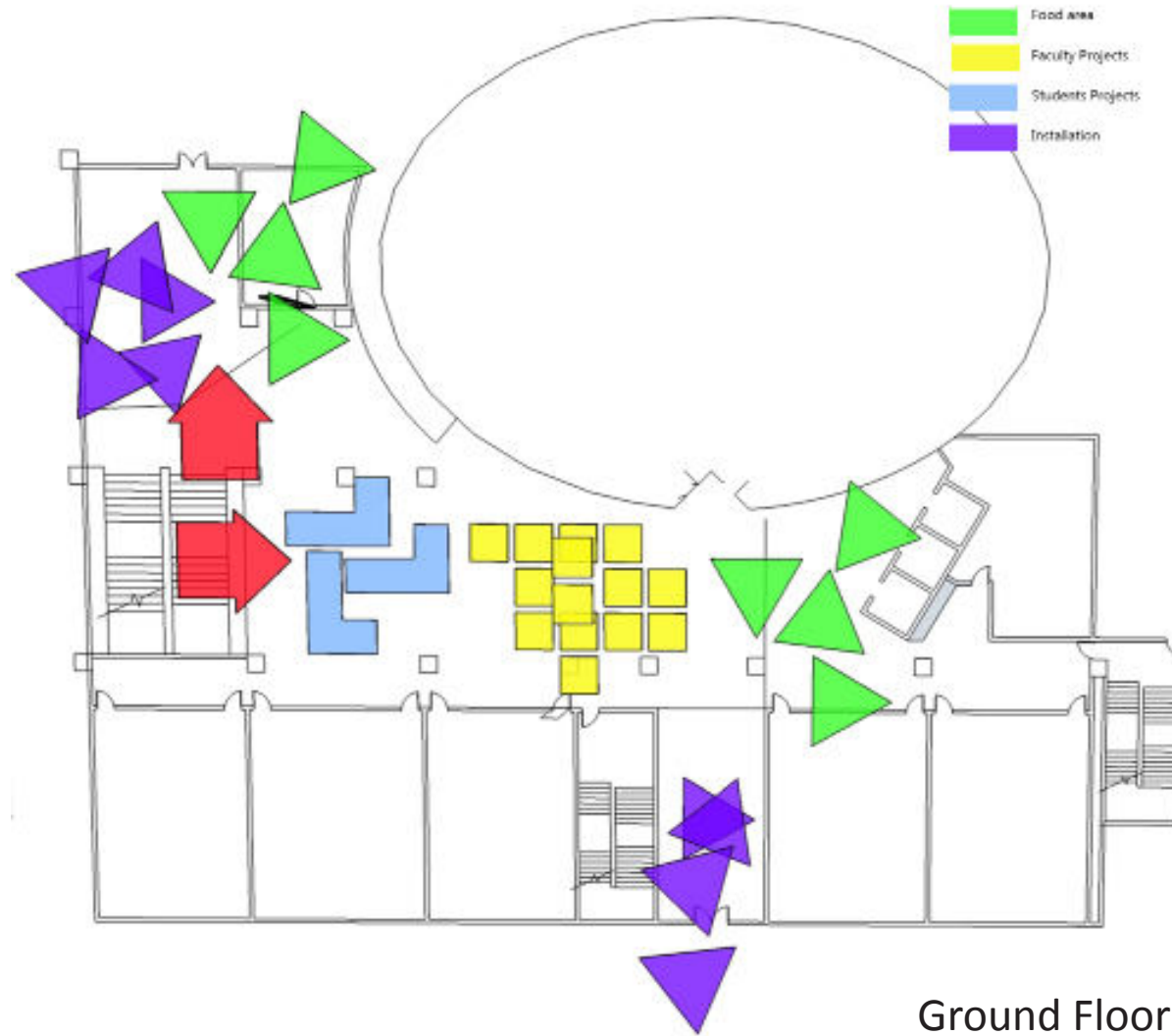


ready to use joint

15.4. Final Model



The final concept has been derived keeping in mind that it should be able to break the notion of typical panel and stand idea, rather it integrates panels with exhibition space design. It is based on the ideas of deconstructivism and uses the same design language of DDS logo 2014. It has the transparency and opacity of DDS logo and the vibrancies of a college exhibition. It can be easily assembled, dismantled and transported well.



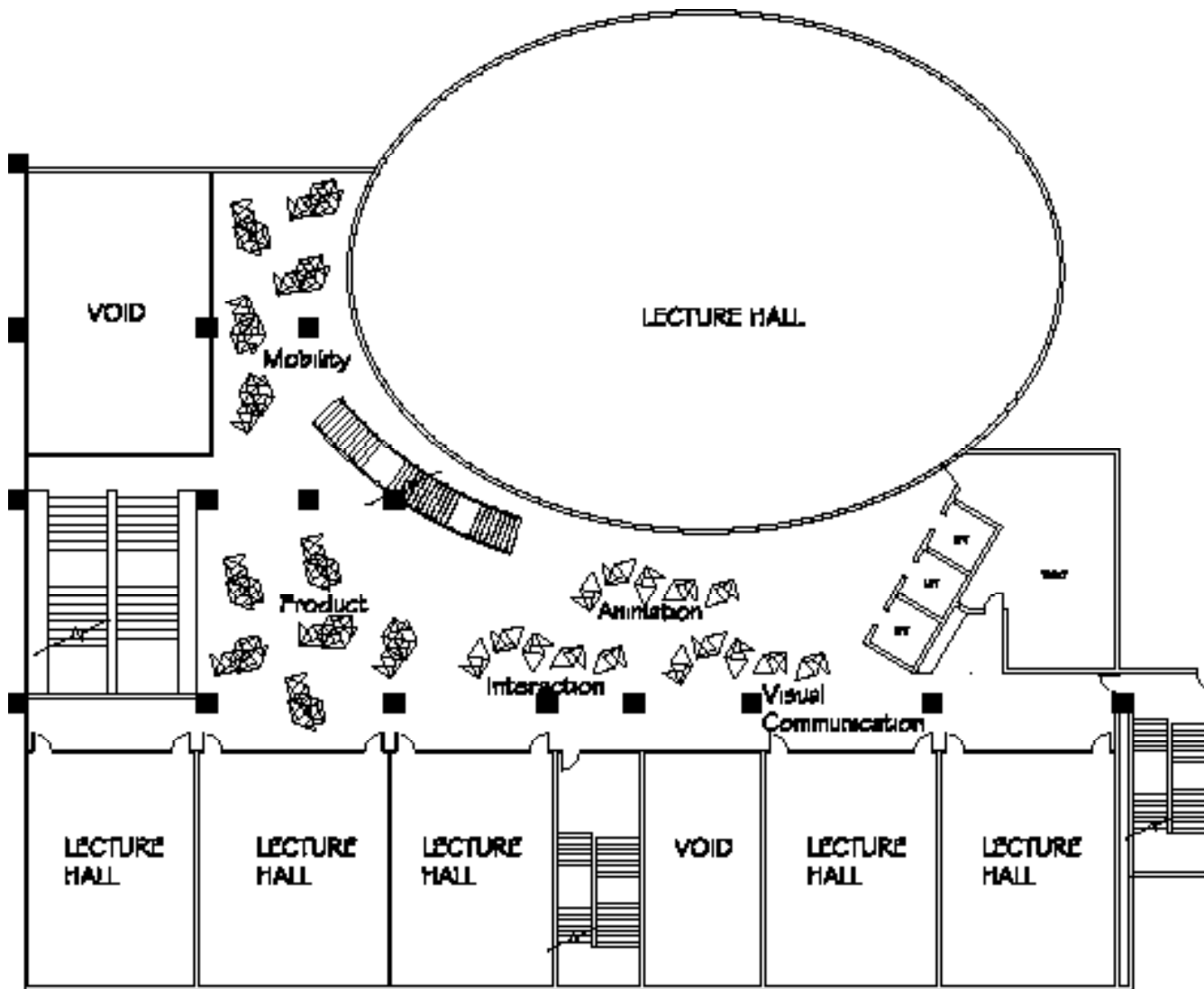
Zoning was done keeping in mind the easy accessibility/ performance of various activities which are going to happen in the VMCC area during three days event of DDS. Space allocations for various task/ display are as following:

- Each discipline
- IDC highlight projects
- Ph.D. projects and faculty projects
- Food arrangements
- Reception area
- Art installations



First Floor

First floor is reserved for the display of passing out batch, so that there remains a continuity of display and it is undisturbed by rest of the activities. Art installations are near the entrance and near the staircase, which sort of directs the movement from ground to first floor.



First Floor