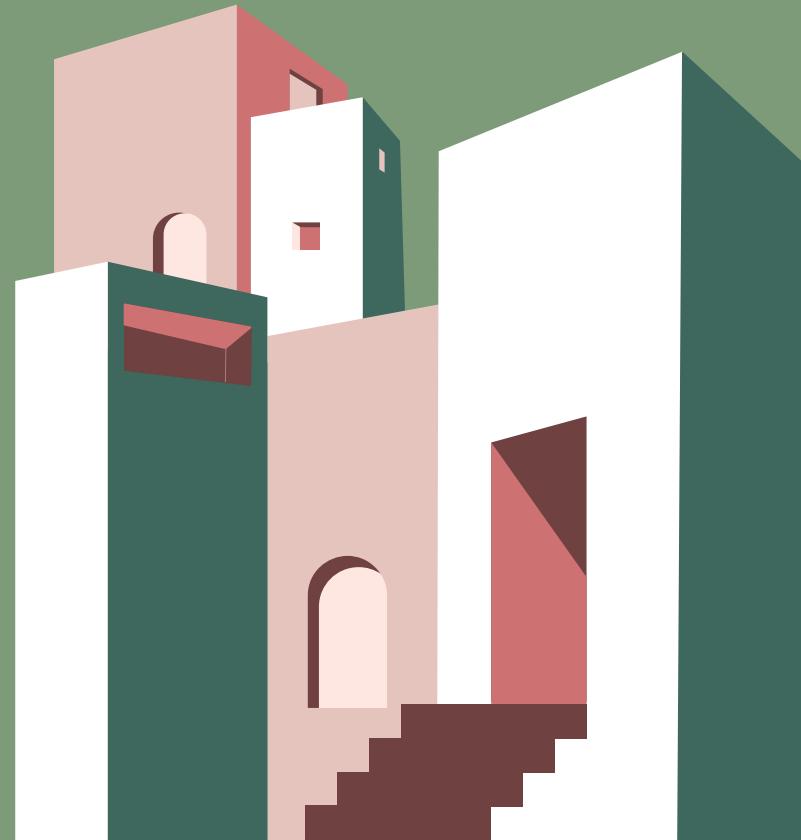


SPATIA

A student's dive into architecture.
Yaksh



“FORM EVER FOLLOWS FUNCTION,” LOUIS SULLIVAN



PERSONAL CONNECTION

- I have always been passionate about designing and related activities
- I am amazed and impressed by unique buildings and spaces
- I am planning to make a career in architecture going forward
- Sketching is one of my hobbies and I really enjoy problem solving and designing new things
- Inspired by the book Office Headquarters Vol.1 and 2

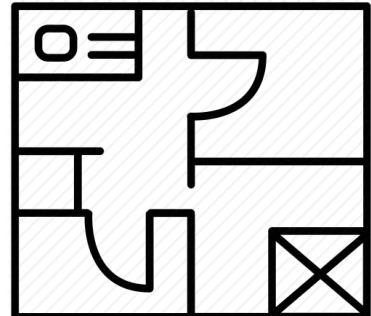
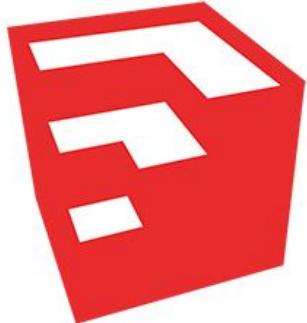


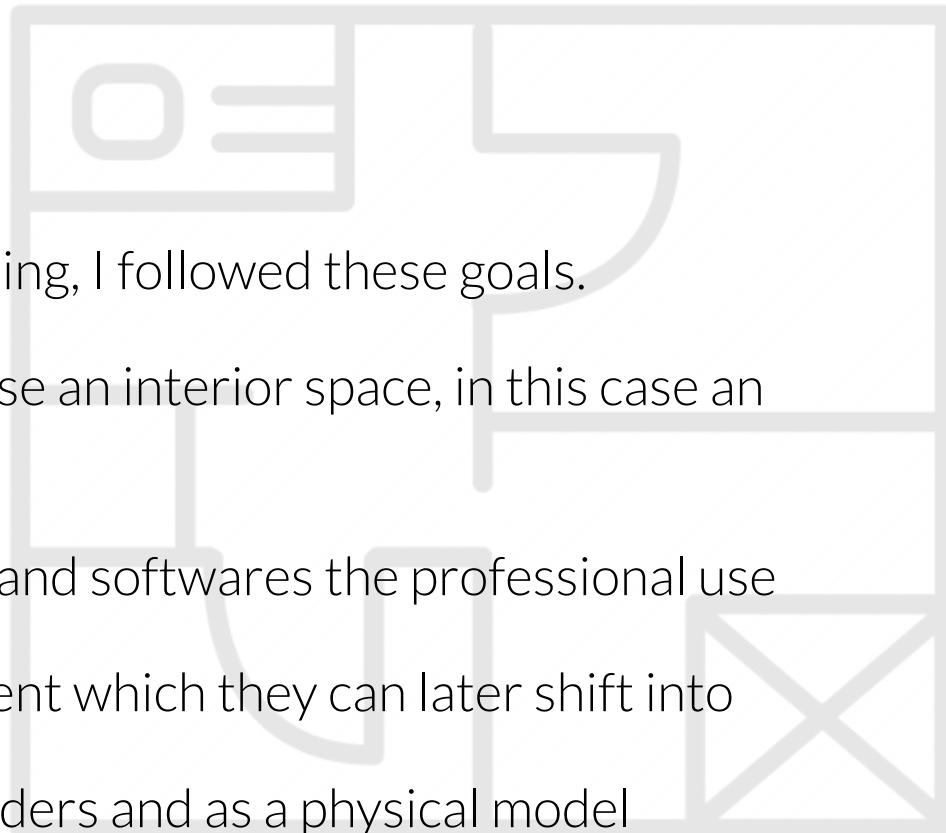
Figure 1.a, drawing that I made in MYP year 4, outside school



PRIOR KNOWLEDGE

- Knew some basics of sketchup
- Knew some idea of how to design an interior space
- Knew how to use project management softwares like notion
- That's basically it!





After a lot of planning and understanding, I followed these goals.

- To learn how to design and visualise an interior space, in this case an apartment.
- To learn to use professional tools and softwares the professional use
- To design an apartment for my client which they can later shift into
- To visualise its design, both as renders and as a physical model



GLOBAL CONTEXT

Scientific and technical innovation

- Exploration “systems, models, methods; products, processes and solutions”,
- Here I explore my client’s habits and systems to design the best space that they can live in
- Here I apply my own product design and mathematical models to bring solutions to this problems
- I understand my scientific ideas and implement them in the design.

SUCCESS CRITERIA

- Design, client's requirements
- Design, options provided
- Image, resolution of renders
- Image, quality of renders
- Image, details mentioned
- Image, setting and environment
- Model, make/quality
- Model, things included
- Model, material

A photograph of a winding asphalt road through a mountainous landscape. The road curves from the bottom right towards the center of the frame, disappearing into a valley. The surrounding hills are covered in dense green vegetation. The lighting suggests either sunrise or sunset, with a bright, overexposed area in the upper left and long shadows cast by the hills on the right.

JOURNEY

PLANNED TIMELINE

Spatia, Student's dive into architecture

Yaksh Patel

Project Start: 9/1/2021							Today is: 2/2/2022							
Display Week: 4							Display Day: 10/4/21							
9/20/2021							9/27/2021							
20 21 22 23 24 25 26 27 28 29														
TASK	TODO	CHANGES	STATUS	PART OF SUCCESS CRITERIA			START	END	M	T	W	F	S	SMTW
Planning				9/1/21	44	10/14/2021								
Thinking & Planning The Learning Goal		✓		9/1/2021	6	9/6/2021								
Planning The Product Goal		✓		9/7/2021	6	9/12/2021								
Taking Notes For Report		✓		9/13/2021	2	9/14/2021								
Planning Success Criteria		✓		9/15/2021	14	9/28/2021								
Planning Timeline Of Personal Project		✓		9/29/2021	10	10/8/2021								
Compiling Evidences & Notes		✓		10/9/2021	6	10/14/2021								
Learning				10/15/21	34	11/15/2021								
Learning Sketching and Collecting Evidence		✓		10/15/2021	3	10/17/2021								
Learning CAD and Collecting Evidence		✓		10/18/2021	2	10/19/2021								
Learning Sketchup and Collecting Evidence		✓		10/20/2021	1	10/20/2021								
Learning 3DSMAX/Escape (rendering) and Collecting Evidence		✓		10/20/2021	4	10/23/2021								
Taking and Documenting Notes for report		✓		10/24/2021	1	10/24/2021								
Observing Sites and Collecting Evidence		✓		10/25/2021	7	10/31/2021								
Interpreting Sites and Collecting Evidence		✓		11/1/2021	2	11/2/2021								
Analysing Sites and Collecting Evidence		✓		11/3/2021	4	11/6/2021								
Understanding Sites and Collecting Evidence		✓		11/7/2021	2	11/8/2021								
Taking and Documenting Notes for report		✓		11/8/2021	1	11/9/2021								
Learning Material Selection and Collecting Evidence		✓		11/9/2021	4	11/12/2021								
Searching Material Selection and Collecting Evidence		✓		11/13/2021	2	11/14/2021								
Taking and Documenting Notes for report		✓		11/15/2021	1	11/15/2021								
Implementation (Images)				11/16/21	26	12/11/2021								
Making Initial Concept Sketches	-starting with basic ide	✓		Design-Clien's Requirements	11/16/2021	3	11/18/2021							
Refining concepts and drafting floor plans	-converting unorganis	✓		Design-Clien's Requirements+Options	11/19/2021	3	11/21/2021							
Drafting other options of floor plans	-making other options	✓		Design-Clien's Requirements+Options	11/22/2021	4	11/25/2021							
Making the CAD drawings	-converting final choi	✓		Image Making	11/26/2021	3	11/28/2021							
Deriving 3D model from CAD	-Importing plans from	✓		Image Making	11/29/2021	2	11/30/2021							
Finishing the 3D model	-adding furniture to 3d	✓		Image Making	12/1/2021	1	12/1/2021							
Selcing the tiles for the design	Delayed because unfamiliar to the software, hence some more practice was needed	✓		Image Making	12/2/2021	4	12/5/2021							
Bookmatching tiles and		✓		Image Making	12/6/2021	3	12/8/2021							
Rendering Trial Scenes	-setting the camera an	✓		Image-Resolution+Quality	12/9/2021	1	12/9/2021							
Perfecting & Rendering Scenes	-rendering with differ	✓		Image-Resolution+Quality+Environment	12/10/2021	1	12/10/2021							
Publishing scenes	-finally collecting all th	✓		Image-Resolution+Quality+Environment	12/11/2021	1	12/11/2021							
Implementation (Model)				12/12/21	18	12/29/2021								
Making a bill of materials needed		✓		Model-Material	12/12/2021	1	12/12/2021							
Getting everything listed in the bill of materials		✓		Model-Material	12/13/2021	2	12/14/2021							
Deciding scale for model		✓		Model-Quality+Details	12/15/2021	1	12/15/2021							
Cutting master hardboard and making base for model		✓		Model Making	12/16/2021	1	12/16/2021							
Cutting master pvc board into smaller chunks of height of model		✓		Model Making	12/17/2021	1	12/17/2021							
Cutting walls out of cut pvc boards	Delayed by 2-3 days as injured for some time	✓		Model Making	12/18/2021	1	12/18/2021							
Cutting glasses out of plastic sheets		✓		Model Making	12/19/2021	1	12/19/2021							
Gluing pieces of walls and start to make the model		✓		Model Making	12/20/2021	4	12/23/2021							
Make the model, giving finishing to the model		✓		Model-Quality	12/24/2021	3	12/26/2021							
Adding other details like marble, furniture, glass, etc.		✓		Model-Details	12/27/2021	2	12/28/2021							
preparing the final model		✓		Model-Details+Quality	12/29/2021	1	12/29/2021							
Documentation				12/29/21	17	1/16/2022								



SITE VISITS





SITE VISITS & PART OF INTERNSHIP



INTERNSHIP



INTERNSHIP CERTIFICATE

To whom it may concern,

This is certifying that **Mr.YAKSH HITEN PATEL**, a student of 10th Grade , Fountainhead School, Surat, Gujarat, he complete his **Internship** program of 1 month (**15-10-2021 to 15-11-2021**) at Mindscape Design.

During this period, he has worked on Residential project.

His responsibilities include :

- Prepare layout drawings using AutoCAD software.
- Prepare presentation 3d model using SKETCH-UP software.
- Prepare realistic 3d render using ENSCAPE, Lumion and 3ds max.
- Explore alternate design approaches as directed.
- Work to achieve project goals and milestones.
- General understanding of bylaws, Building systems & components.

During his tenure, we found that he is punctual, hardworking and keen to learn new things. he is a good as team member.

We wish his every success in his life and career.

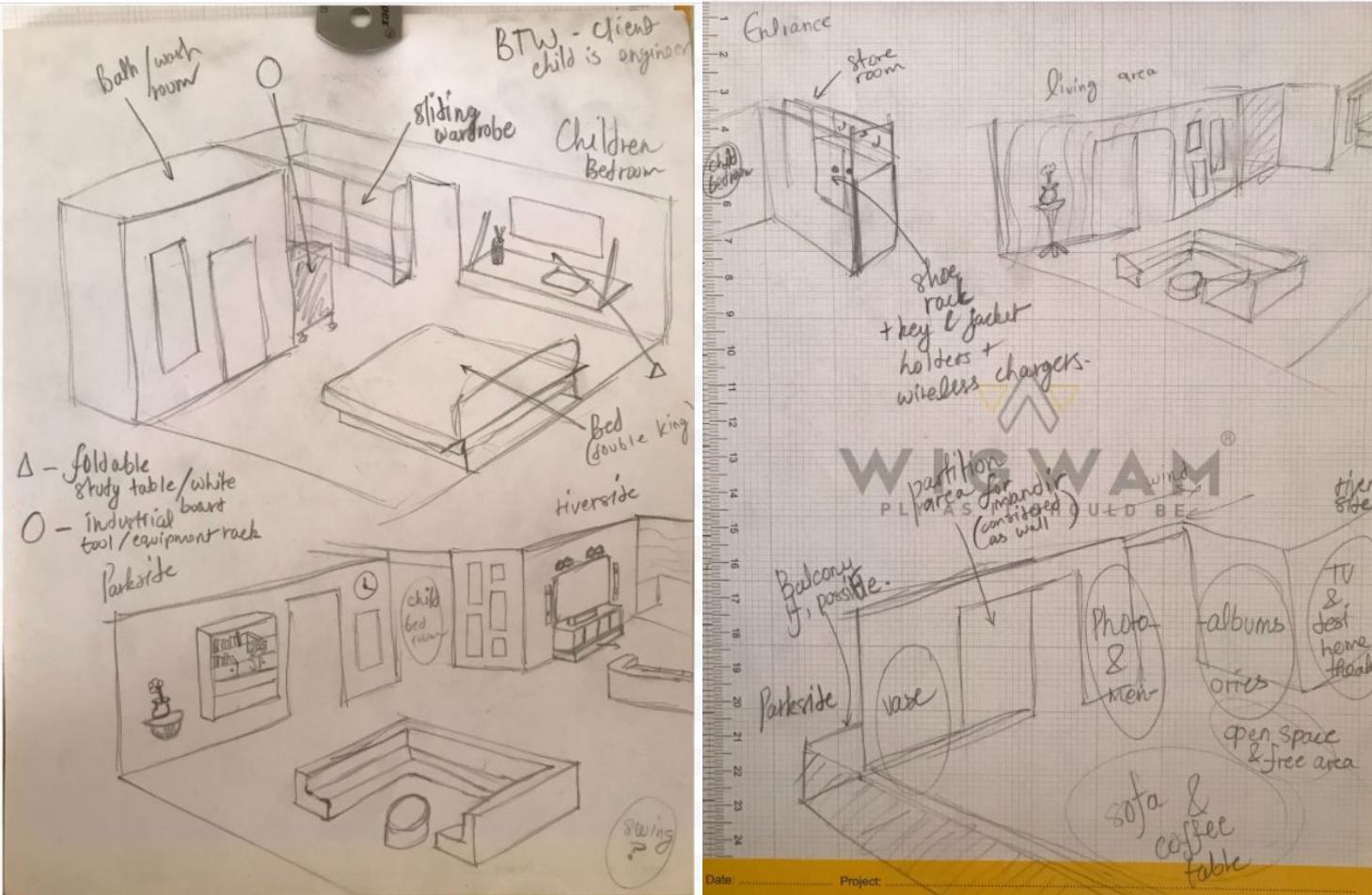
Trainee :
MAULIK GOR
Sr.Interior Designer

MINDSCAPE DESIGN
3rd Floor Evoq,
Opp Narmad Library,
Ghad Dod Road, Surat.



Figure 5.b, Internship certificate at the firm I was an intern at

CONCEPTUALISING



DRAFTING AND PLANNING

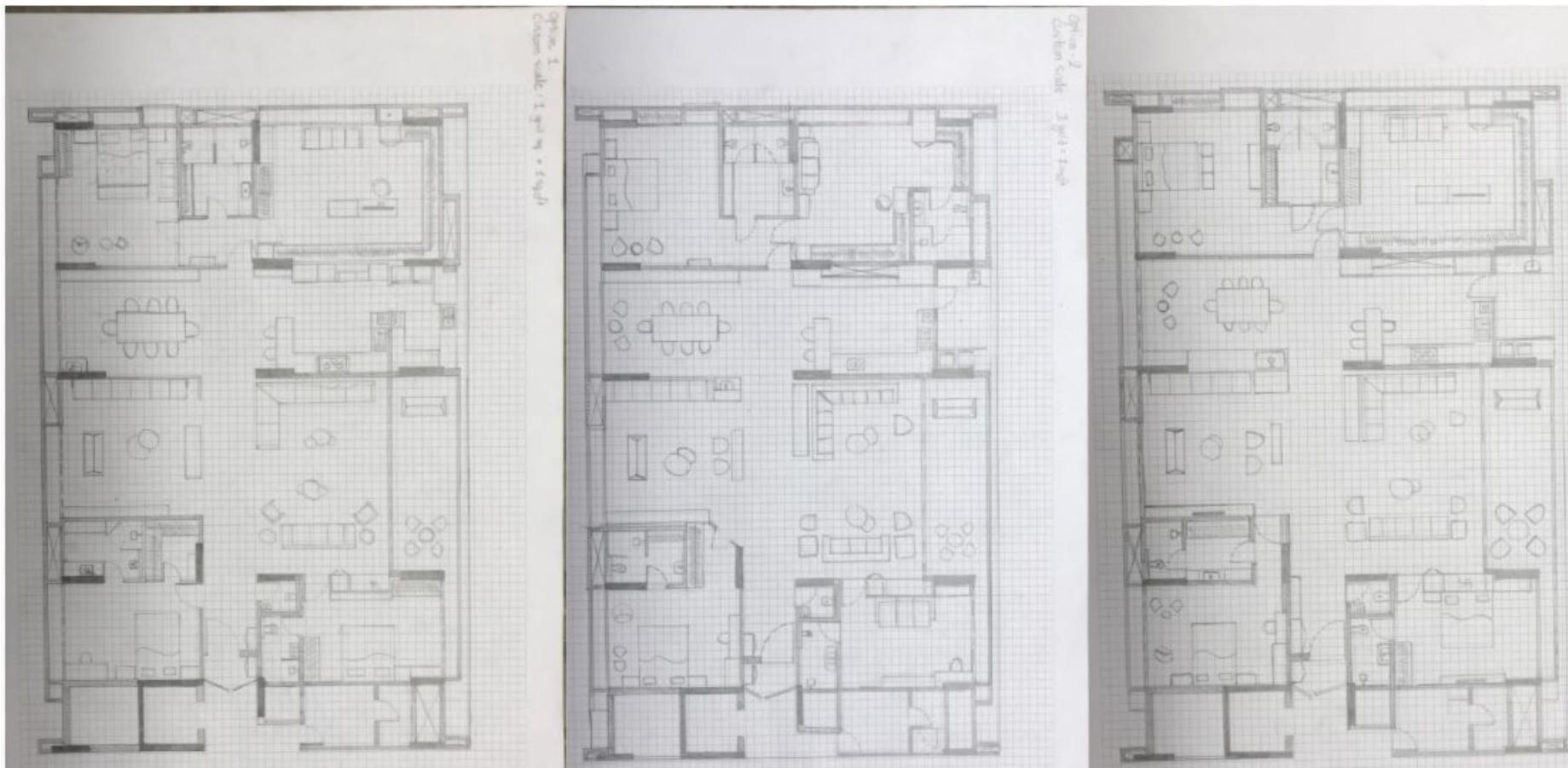
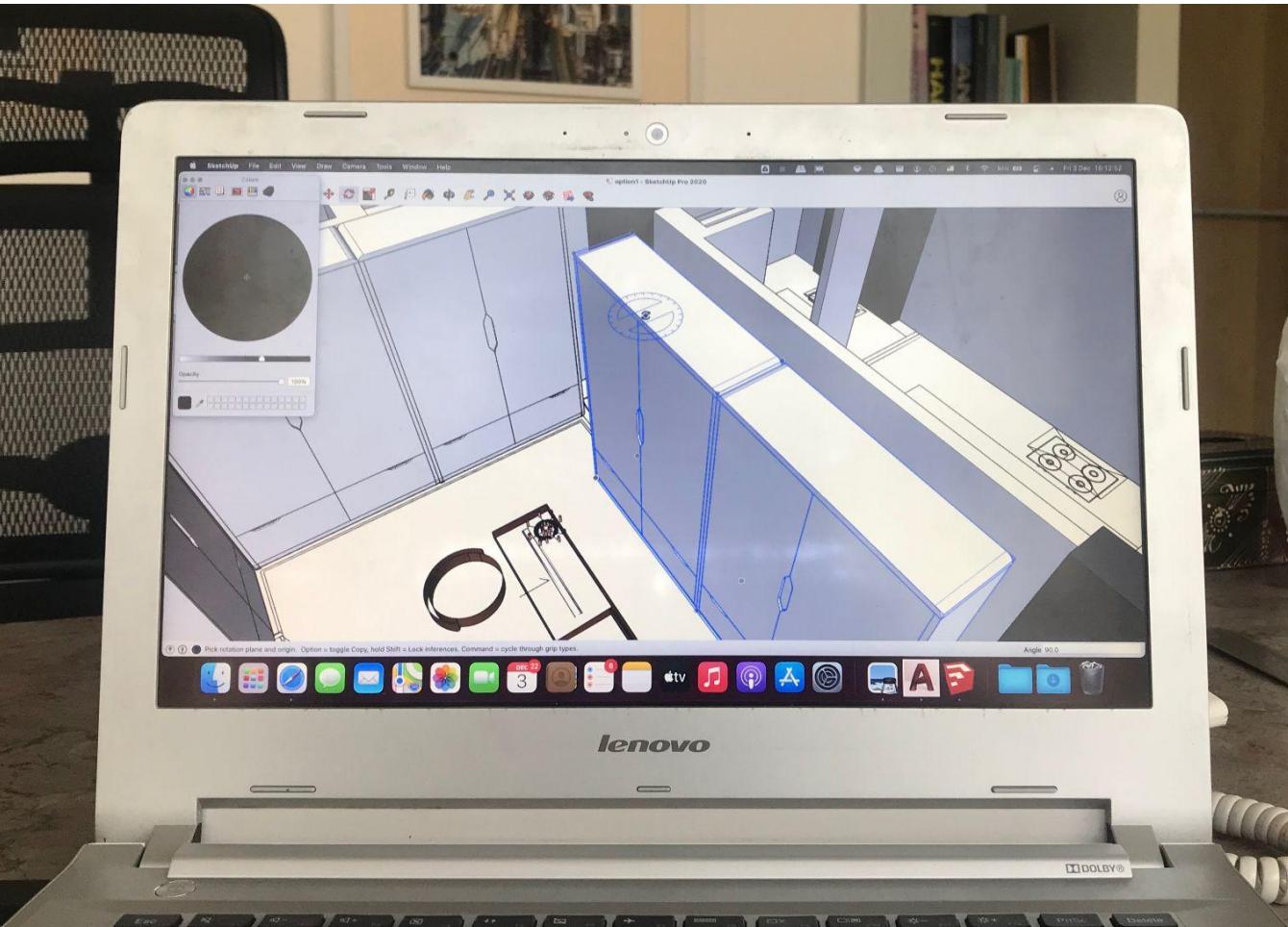
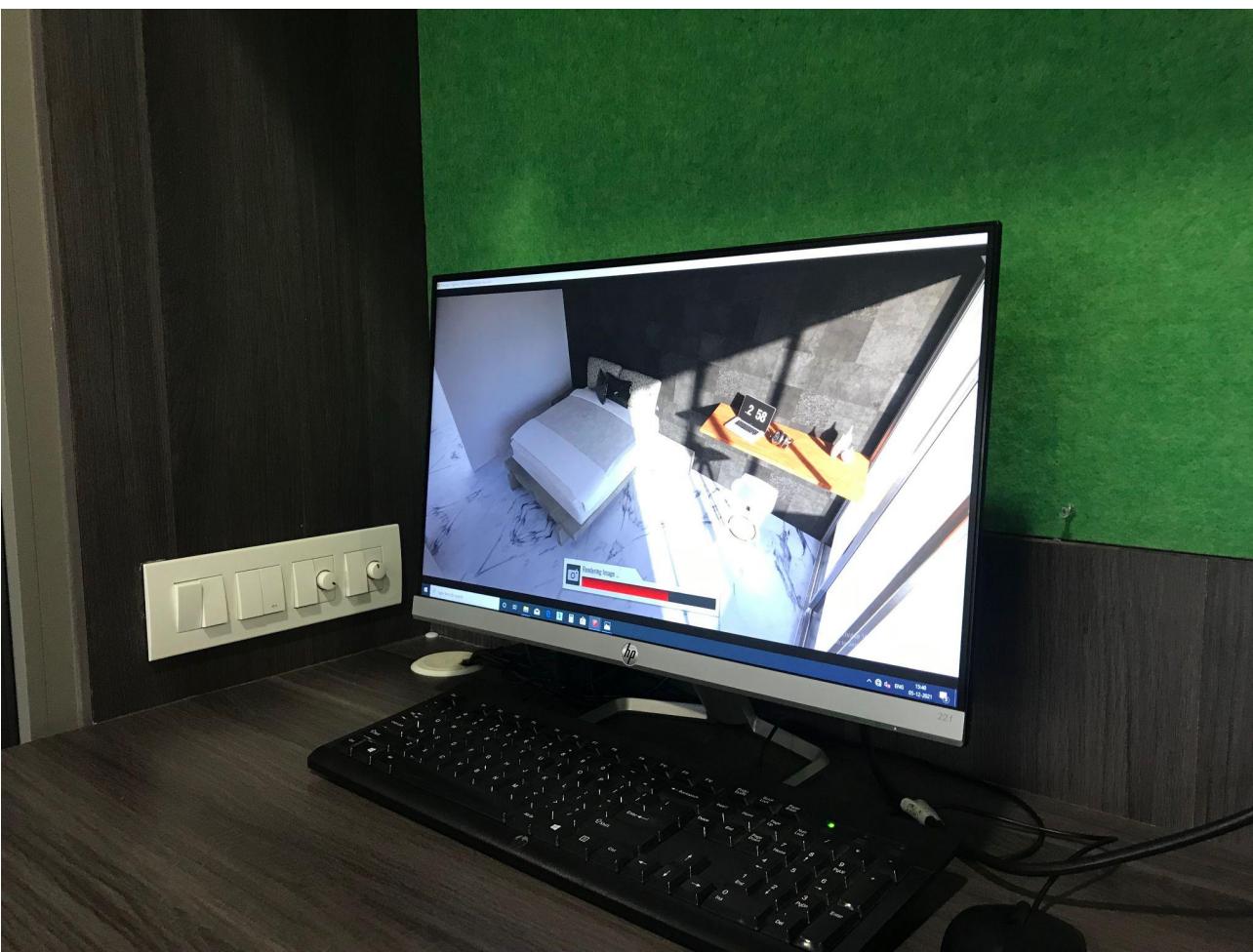


Figure 8.a, all 3 floor plans

MODEL MAKING (CAD)



RENDERING

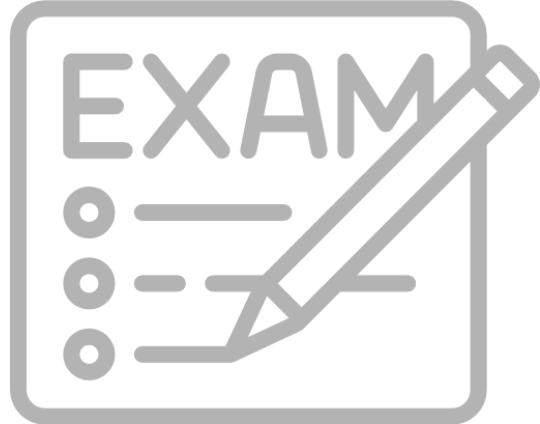


MODEL MAKING (PHYSICAL)



CHANGES IN THE TIMELINE

- Term 1 examinations
- I was unwell for sometime in december
- Diwali vacation

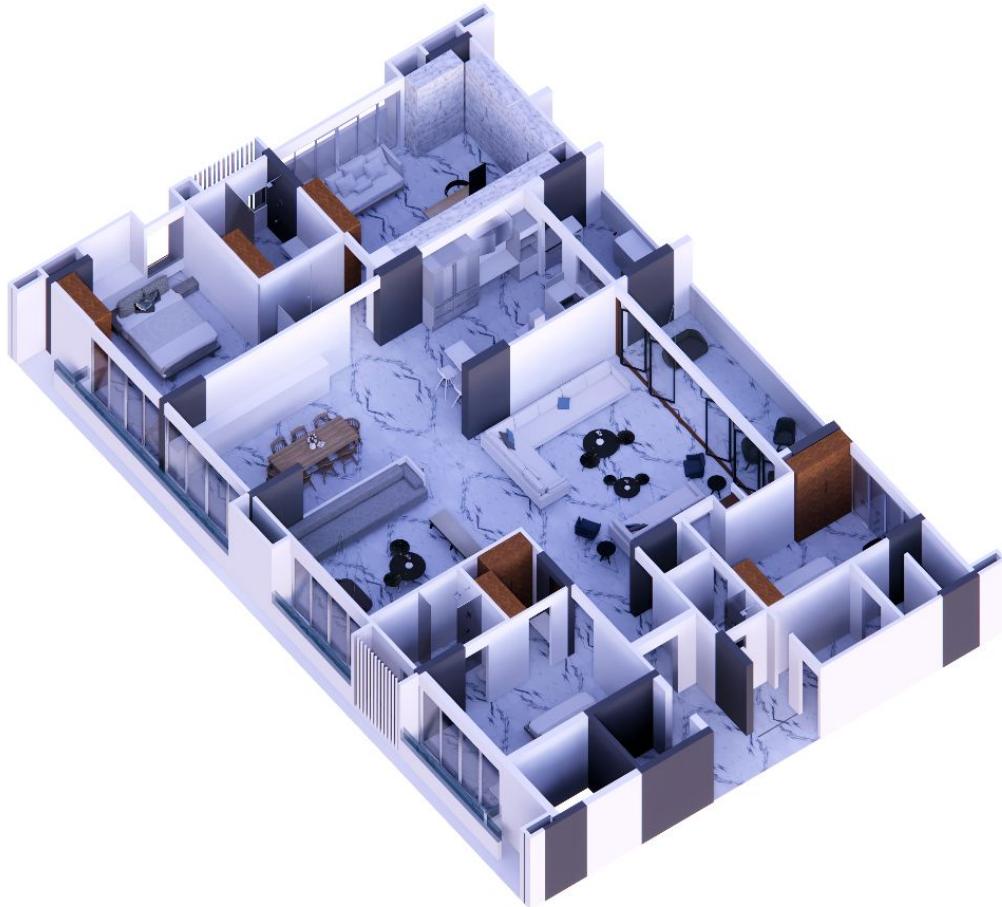


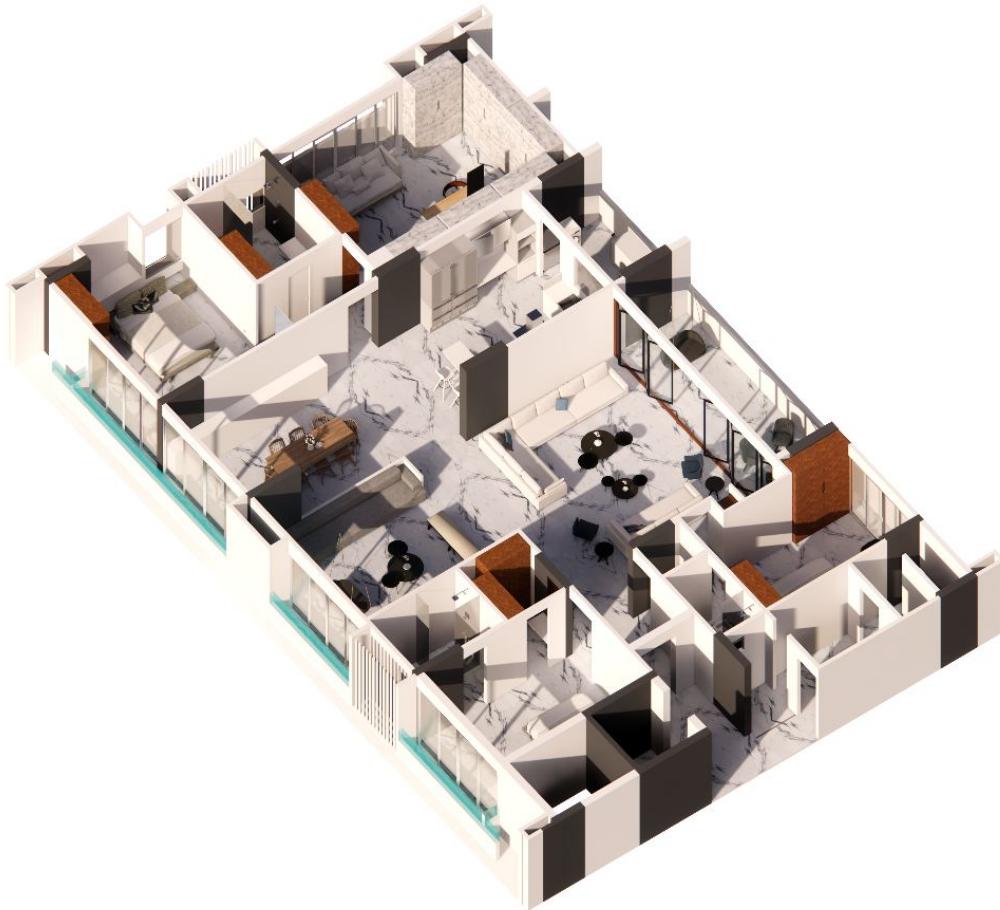
A photograph of the Royal Ontario Museum's exterior. The building features a complex, angular glass and steel structure that resembles a large pyramid or a collection of shards. The glass panels reflect the surrounding environment, and the steel framework creates a sense of depth and perspective. The sky above is clear and blue.

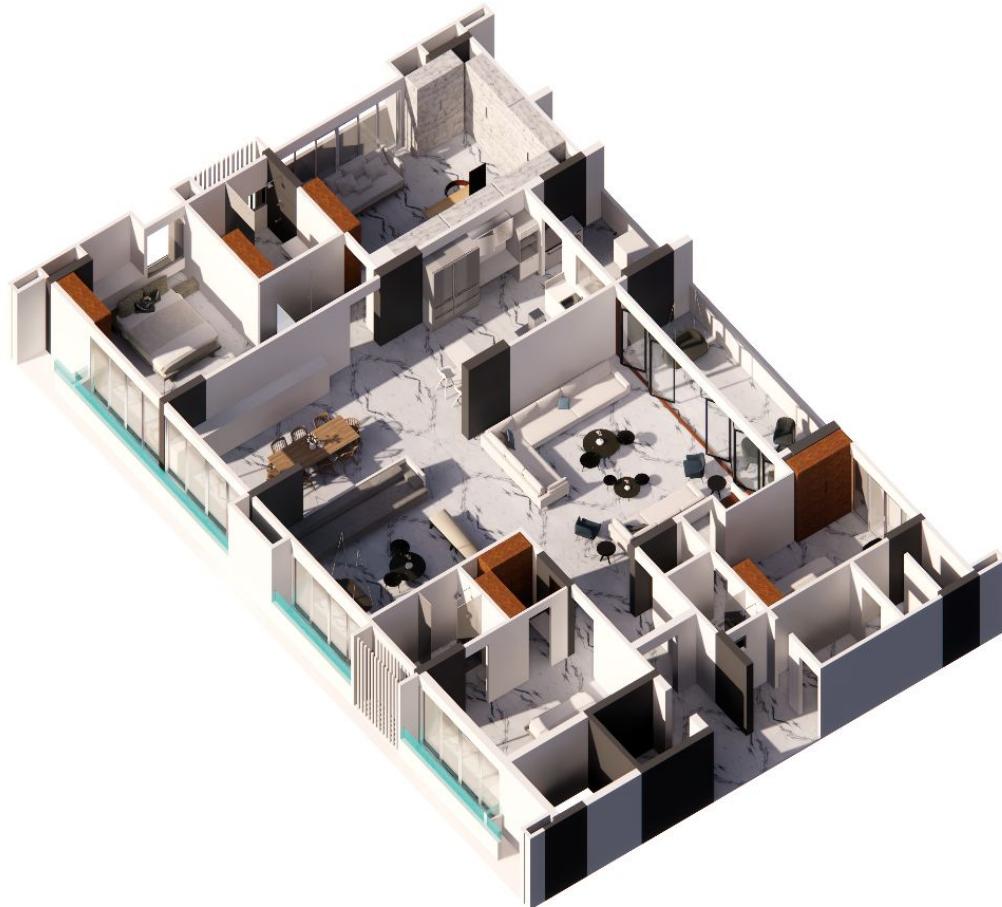
MY PRODUCTS

Renders of the design













Physical Model

YAKSH
GRADE
QUINTE

75
N
E
S
W
SW
SE

CLIENT NAME : HITEN PATEL
ADDRESS : D-801 PARK ARENA, PAL, SURAT.

YAKSH H. PATEL
GRADE : 10TH
QUINTESSENCE



SCALE - 1:75



CLIENT NAME : HITEN PATEL
ADDRESS : D-801 PARK ARENA, PAL, SURAT.

NOW WHAT?

- Client is really impressed by the design
- They are saying that they would consider this design when Site work commences
- This means that the design would be implemented in real life.

A man in a light-colored shirt and dark pants stands next to a light blue car, possibly a Toyota Hilux, in a dusty, outdoor setting. The car's front left wheel and headlight are visible. The background is a blurred green field.

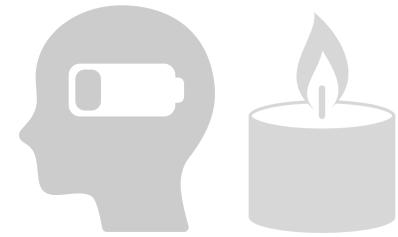
CHALLENGES AND THEIR SOLUTIONS

FELT LIKE TIME WAS NOT ON MY SIDE



I order to manage my time, blocked out some slots to just work on pp and other subjects on my calendar.

FELT BURNED OUT SOMETIMES



I remembered to take some breaks to hit the gym and some open roads with my cycle. I tried to give myself time to prepare and relax from the project to gain some inspiration for the design.



TECHNICAL GLITCHES AND RELATED PROBLEM

A lot of times, the project was unable to load due to the sheer size of the model. There were some technical issues and glitches, which hindered the flowy way of designing.

I gave myself some time to relearn and practice my soft skills. Combined with the breaks I took, it recharged me to keep working on the project.

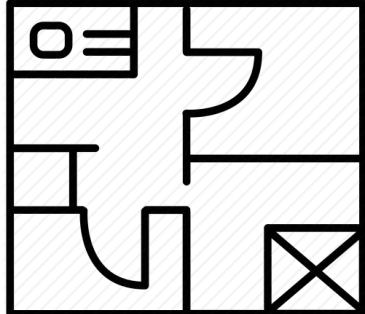
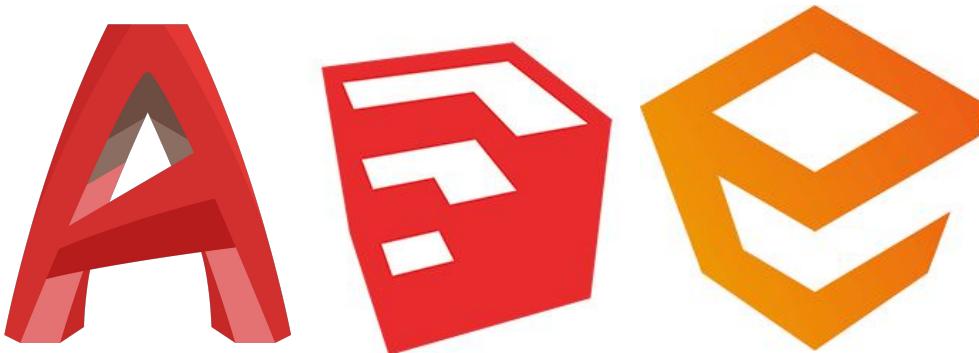
MY LAPTOP, NOT THE SPECS YOU WOULD RENDER ON

My laptop is way under powered, which limits its capacity to take bigger projects and render images with high enough resolution for my project requirements.

My kind contacts at the designing firm where I did my internship at gave me opportunities to render on their rendering machine.



TOOLS USED AND SKILLS ACQUIRED



CREDITS

Britannica

MSD, designing firm

