Spring 5-7-2024

BESPOKE MOON

Austin White

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THE NEXT HIGH-TECH COMPONENT-BASED SYSTEM

BY AUSTIN WHITE

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THE NEXT HIGH-TECH COMPONENT-BASED SYSTEM

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AUSTIN WHITE

APPROVAL OF THESIS RESEARCH PROJECT BOOK IS PRESENTED TO:

JEFFREY COLLINS

AND TO THE
FACULTY OF ARCHITECTURE
COLLEGE OF ARCHITECTURE AND CONSTRUCTION

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

BACHELOR OF ARCHITECTURE

KENNESAW STATE UNIVERSITY, MARIETTA, GEORGIA

MAY 9, 2024

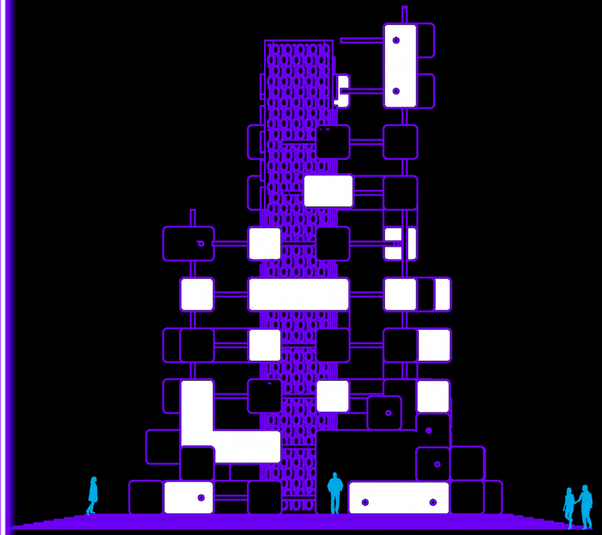
ACKNOWLEDGEMENTS AND DEDICATIONS

THIS THESIS RESEARCH, BESPOKE MOON, INSPIRES ARCHITECTS AND DESIGNERS TO IMMERSE THEMSELVES BACK INTO DESIGN AS THEY WERE BORN AND TAUGHT TO DO. I ENCOURAGE ANYONE WHO READS THIS BOOK, OR ANYONE CURRENTLY COMPLETING ARCHITECTURE SCHOOL, NOT TO LIMIT THEIR CREATIVITY AND TO PUSH THEMSELVES TO THEIR LIMITS. ARCHITECTURE SCHOOL IS MORE THAN JUST A PROJECT; IT IS A WAY TO LEARN TO BECOME MORE CREATIVE, DISCIPLINED, AND PASSIONATE, GAINING LIFE LESSONS AND SKILLS THAT WILL HELP THROUGHOUT LIFE. I ALWAYS SAY, "WHEN SOMETHING HAS MY NAME ON IT, I WILL DO MY ABSOLUTE BEST TO MAKE IT PERFECT." I ENCOURAGE OTHERS TO DO THE SAME!

I WANT TO THANK MY FAMILY, FRIENDS, AND PROFESSORS FOR THEIR UTMOST SUPPORT THROUGHOUT MY ACADEMIC CAREER AND THIS THESIS RESEARCH AT KENNESAW STATE UNIVERSITY. MOREOVER, I WANT TO THANK JEFFREY COLLINS FOR ASSISTING ME AND ALLOWING ME TO BUILD SOMETHING I AM PASSIONATE ABOUT AND PLAN TO PURSUE BEYOND ACADEMIA.

BESPOKE MOON IS A NOSTALGIC TERM FOR ME BECAUSE IT WAS A NAME I KNEW WOULD FIT MY HIGH-TECH, COMPONENT-BASED THESIS CONCEPT. HOWEVER, IT WAS ALSO MY GAMER TAG WHEN I WAS GROWING UP. IF YOU'RE INTERESTED IN BESPOKE MOON OR CURIOUS ABOUT ITS FUTURE DIRECTION, VISIT OUR WEBSITE AND SOCIAL MEDIA PAGES.

IN LOVING MEMORY
ANNETTE ADAMS
JUNE 23RD, 1949 - MARCH 15TH, 2024
WHOSE UNWAVERING LOVE AND GUIDANCE CONTINUE TO SHAPE MY JOURNEY.



WELCOME TO BESPOKE MOON!

THE NEXT HIGH-TECH, COMPONENT-BASED SYSTEM THAT ALLOWS ARCHITECTS AND DESIGNERS TO FULLY IMMERSE THEMSELVES IN DESIGN ONCE AGAIN.

DESIGNERS GROW UP NURTURING A PASSION FOR DESIGN, THEN TO EVENTUALLY ATTEND SCHOOL TO HONE THEIR SKILLS. HOWEVER, BRINGING THESE DESIGNS TO LIFE IN THE BUILT ENVIRONMENT INVOLVES A LOT OF TEDIOUS WORK AND TIME TO ENSURE SAFETY, STRUCTURAL INTEGRITY, AND COMPLIANCE WITH CODES. WITH THAT IN MIND, I AIM TO TRANSFORM OUR TRADITIONAL PROCESSES.

BESPOKE MOON'S COMPONENT-BASED SYSTEM UTILIZES 3D-PRINTED, PREFABRICATED STEEL COMPONENTS THAT LOCK, SEAL, STACK, AND INTERLOCK IN A UNIQUE WAY, ALLOWING THEM TO CONNECT WITH ONE ANOTHER AND INCORPORATE STRUCTURE. THESE CONNECTIONS ENABLE THE COMPONENTS TO WITHSTAND ALL WEATHER AND CLIMATE CONDITIONS, AND POTENTIALLY, IN THE FUTURE, EVEN AN EXTRATERRESTRIAL ENVIRONMENT, REFLECTING AN INDUSTRIAL OUTER-SPACE AESTHETIC.

THIS HIGH-TECH COMPONENT SYSTEM IS POWERED BY BESPOKE MOON'S NEW AI, WHICH ASSISTS IN GENERATING THESE COMPONENTS, ALLOWING ARCHITECTS AND DESIGNERS TO FOCUS SOLELY ON DESIGN. MOREOVER, THE COMPONENTS GENERATED FROM OTHER DESIGNS PROVIDE AN OPPORTUNITY TO CREATE A LIBRARY OF BESPOKE MOON COMPONENTS. THIS ENABLES REUSE IN VARIOUS WAYS IN NEW DESIGNS ACROSS A VARIETY OF SCALES. THE ULTIMATE GOAL OF THIS HIGH-TECH, COMPONENT-BASED SYSTEM IS TO ALLOW ARCHITECTS AND DESIGNERS TO DIVE BACK INTO DESIGN, AS THEY WERE TAUGHT AND BORN TO DO, BY INTEGRATING ARTIFICIAL INTELLIGENCE TO REVOLUTIONIZE CONVENTIONAL CONSTRUCTION AND DESIGN PROCESSES IN MODERN ARCHITECTURE.

HIGH-TECH

OFF-SITE CONSTRUCTION

EASY ON-SITE ASSEMBLY

SLICING PROCESS

AUTO-GENERATED

EFFICIENCT & EFFECTIVE

BM COMPUTER PROGRAM

EFFICIENT TRANSPORTATION

EFFICIENT DISASSEMBLY

AI INTEGRATION

UNLIMITED LIBRARY

BESPOKE MOON

LOCK-IN AND STACKING SYSTEM

MADE FOR ALL CLIMATE AND WEATHER CONDITIONS

PROMOTES MONUMENTAL AND FUNCTIONAL DESIGNS

PROMOTES THE AVERAGE PERSON TO JOIN THE PROCESS

COMPONENT ASPECTS

CUSTOM-MADE DESIGN

3D PRINTED STEEL STRUCTURE

STACKABLE AND MOVEABLE

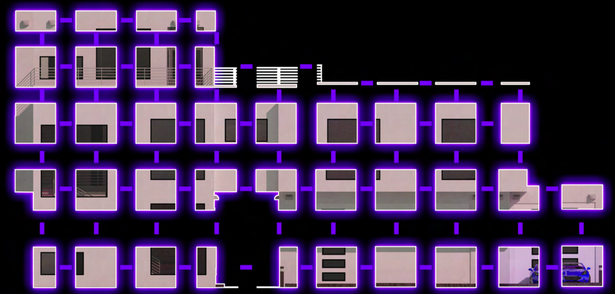
MADE FOR ALL DESIGN AESTHETICS

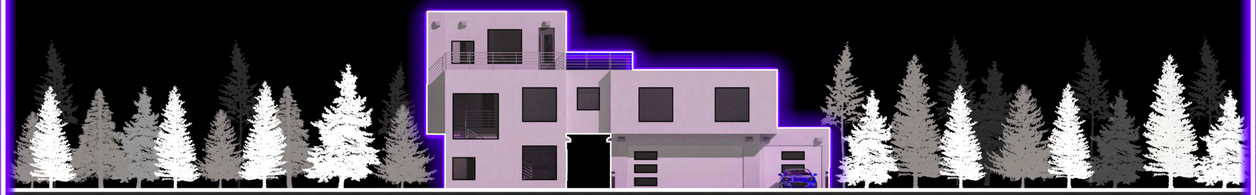
IMMERSES ARCHITECTS AND DESIGNERS BACK INTO DESIGN

COMPONENT-BASED

CONCEPTUALIZING A COMPONENT SYSTEM: A DIAGRAM PROCESS

STEP 1: TO BEGIN CONCEPTUALIZING THE IDEA OF COMPONENTS, DISASSEMBLE A DESIGN INTO A SERIES OF "COMPONENTS".

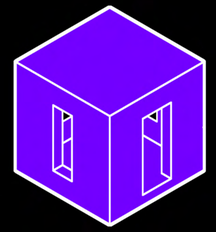




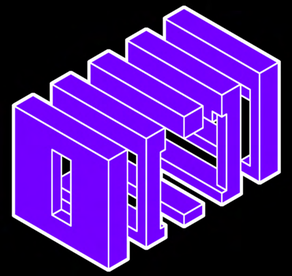
ZOYAMA HOUSE
A DESIGN BY AUSTIN WHITE

SMALL STRUCTURE

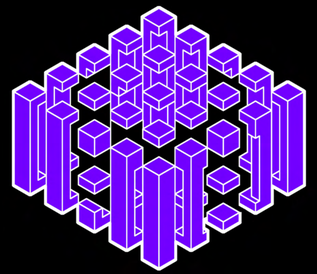
STEP 2: DESIGN A SIMPLISTIC STRUCTURE AND EXPLODE IT INTO COMPONENTS.



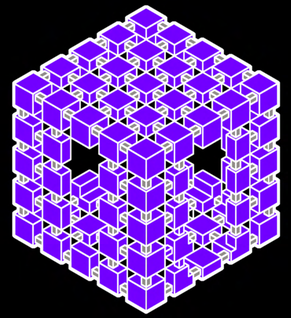
1:SMALL STRUCTURE DESIGN



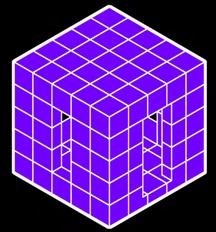
2:SPLIT INTO FIVE COMPONENTS



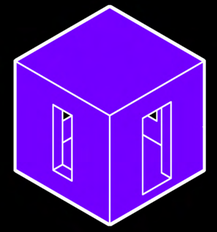
3:SPLIT INTO TWENTY-FIVE COMPONENTS



4:EXPLODED INTO EIGHTY-SIX COMPONENTS USING A 1FT X 1FT X 1FT GRID SYSTEM



5:COMPONENTS PIECED BACK TOGETHER



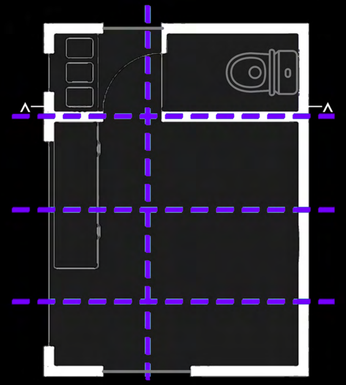
6:STRUCTURE'S FINAL FORM WITH COMPONENTS

DEVELOPING A GRID SYSTEM: AN EXPLORATION OF THE DIOGENE HOUSE

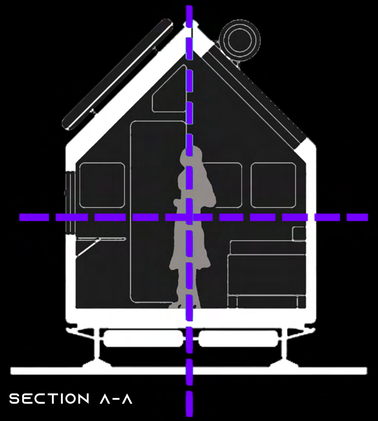
A DESIGN BY RENZO PIANO

STEP 3: EXPLORE THE DIOGENE HOUSE TO UNDERSTAND ITS PRINCIPLES OF EFFICIENT MODULAR DESIGN ALONGSIDE ITS INDUSTRIAL AND SLEEK AESTHETIC, TO AID IN THE DEVELOPMENT OF A COMPONENT SYSTEM WITHIN AN ESTABLISHED STRUCTURE. AFTER THIS ANALYSIS, THE NEXT PHASE INVOLVES DELVING INTO THE INTEGRATION OF THE COMPONENT CONCEPT THROUGH GRID SYSTEMS WITHIN THIS SMALL HOUSE.

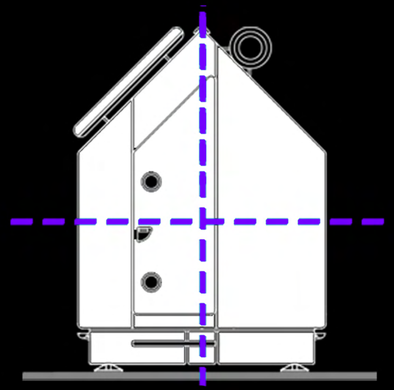
STEP 4: DIAGRAM THE DIOGENE HOUSE INTO SECTIONS.



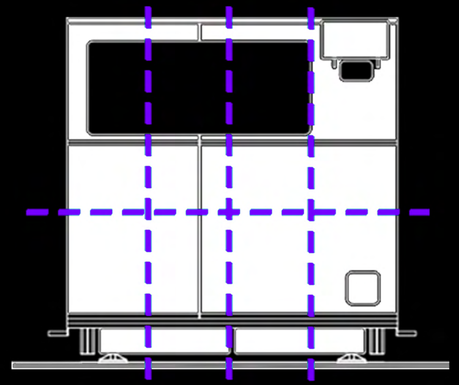
FLOOR PLAN



SECTION A-A



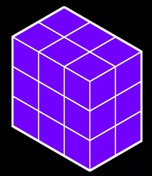
FRONT ELEVATION



RIGHT ELEVATION

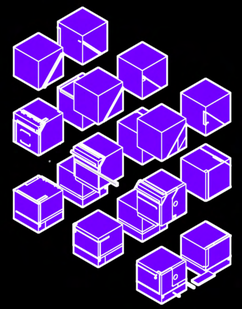
STEP 5: EXPLORE A 4FT GRID COMPONENT SYSTEM.

1:DIOGENE HOUSE

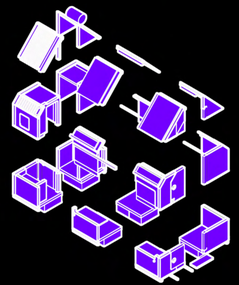


2:4FT X 4FT X 4FT GRID SYSTEM

3:GRID SYSTEM APPLICATION



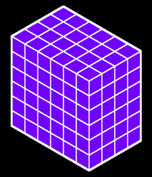
4:EXPLODED APPLICATION



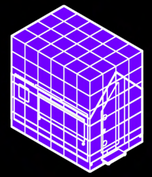
5:EXPLODED 4FT X 4FT X 4FT COMPONENT SYSTEM

STEP 6: EXPLORE A 2FT GRID COMPONENT SYSTEM

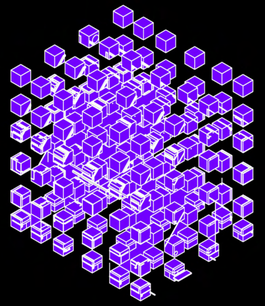
1:DIOGENE HOUSE



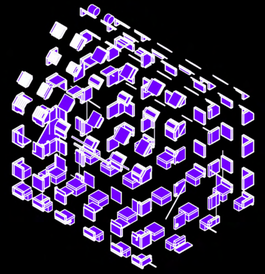
2:2FT X 2FT X 2FT GRID SYSTEM



3:GRID SYSTEM APPLICATION



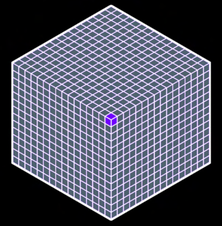
4:EXPLODED APPLICATION



5:EXPLODED 2FT X 2FT X 2FT COMPONENT SYSTEM

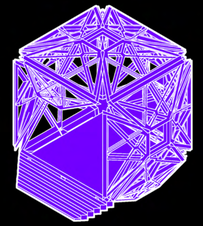
DEFINING A GRID SYSTEM: AN APPLICATION TO OTHER'S DESIGNS

STEP 7: DEFINE THE GRID SYSTEM TO BE APPLIED TO ALL DESIGNS WITHIN THE BESPOKE MOON COMPUTER PROGRAM. THIS GRID SYSTEM WILL THEN BE UTILIZED TO REFINE THE MAIN COMPONENT AND ITS PROPERTIES.

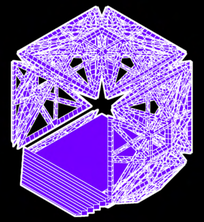


1FT X 1FT X 1FT GRID SYSTEM

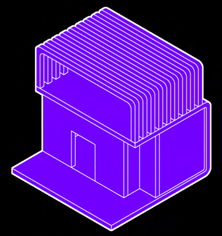
1FT X 1FT X 1FT GRID COMPONENT



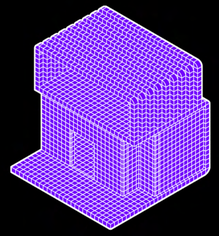
1:TITLE: PANDORA
DESIGNER: JESUS SANCHEZ
ENVISIONED TO BE A PAVILION



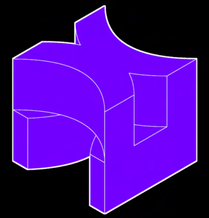
1FT X 1FT X 1FT GRID SYSTEM APPLIED



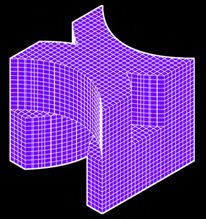
2:TITLE: SIP & SAVOR
DESIGNER: MICHELLE GUZMAN
ENVISIONED TO BE A CAFE SHOP



1FT X 1FT X 1FT GRID SYSTEM APPLIED



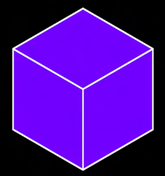
3:TITLE: THE X
DESIGNER: JUAN-ANGEL GUTIERREZ
ENVISIONED TO BE A HOUSE



1FT X 1FT X 1FT GRID SYSTEM APPLIED

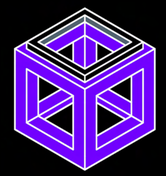
PERFECTING THE COMPONENT

STEP 8: AFTER CONCEPTUALIZING WHAT A COMPONENT COULD BE FROM THE GRID SYSTEM EXPLORATION, THE NEXT STEP IS TO PERFECT IT. MAKE THE COMPONENT BE REALISTIC BY PREPARING IT FOR FABRICATION AND THEN TO BE USED TO ASSEMBLE.

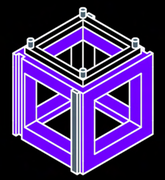


1:1FT X 1FT X 1FT
GRID COMPONENT

2:CREATING THE
FRAME

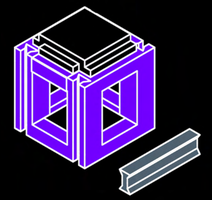


3:DEFINING THE
FRAME

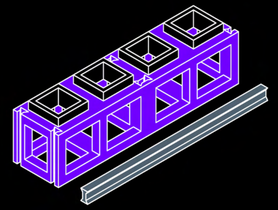


4:CREATING THE
CONNECTIONS

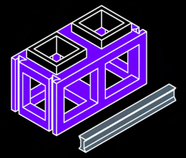
5:DEFINING THE
CONNECTIONS



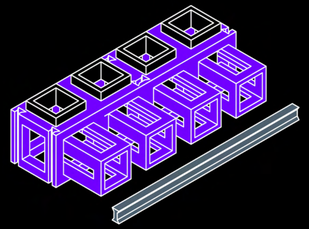
6:SEPARATING VERTICAL
CONNECTIONS



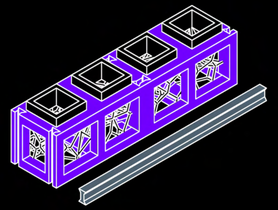
7:PERFECTING THE FIRST MAIN
COMPONENT
1FT X 4FT X 1FT



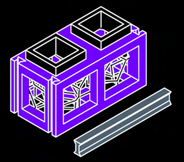
8:PERFECTING THE
SECOND MAIN
COMPONENT
1FT X 2FT X 1FT



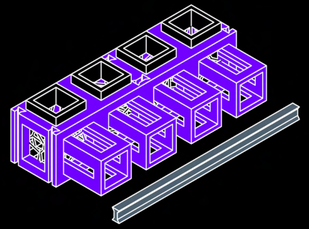
9:PERFECTING THE FINAL FLOOR AND
ROOF COMPONENT
2FT X 4FT X 1FT



10:ADDING STRUCTURAL
VORONOI TO THE FIRST
COMPONENT FOR REQUIRED
DESIGNS
1FT X 4FT X 1FT



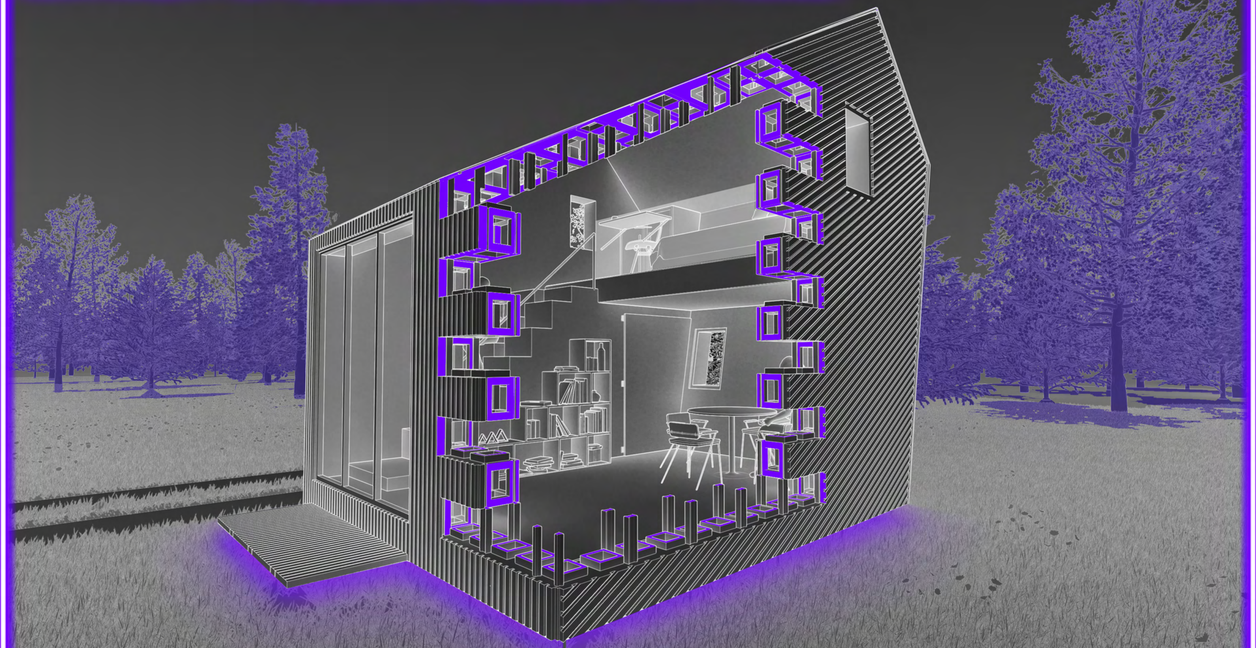
11:ADDING STRUCTURAL
VORONOI TO THE
SECOND COMPONENT
FOR REQUIRED
DESIGNS
1FT X 2FT X 1FT



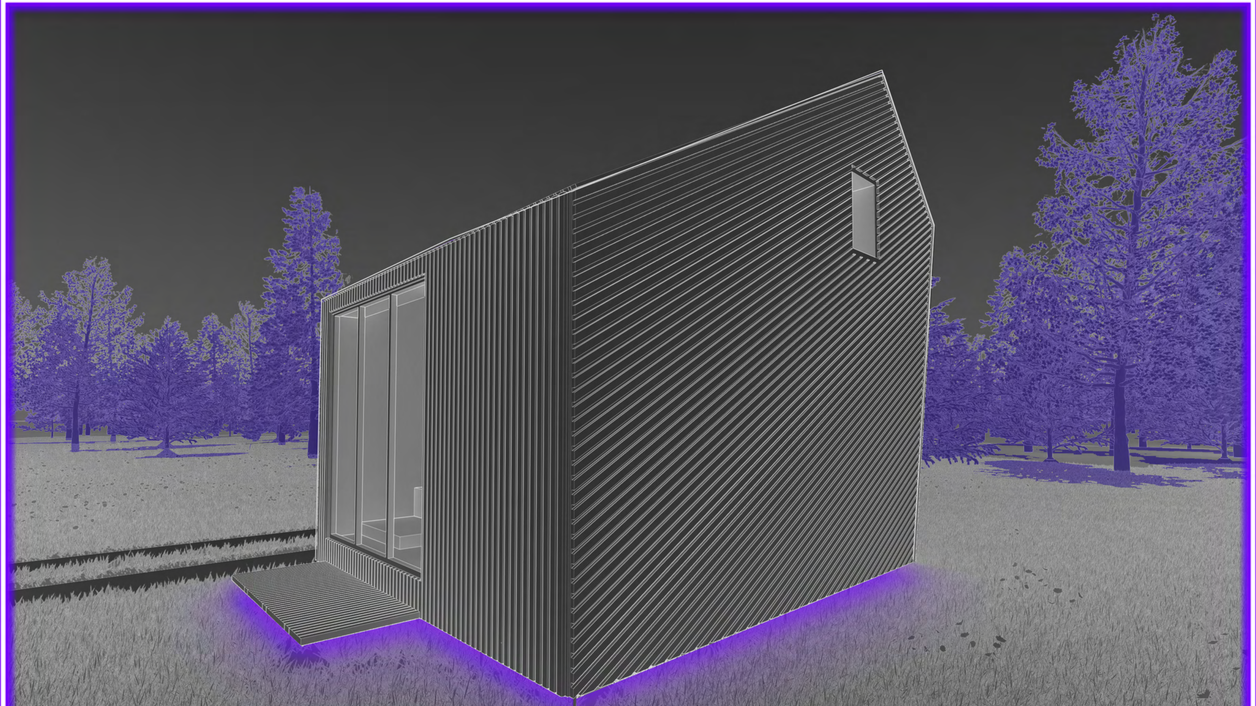
12:ADDING STRUCTURAL VORONOI TO THE
FLOOR AND ROOF COMPONENT FOR
REQUIRED DESIGNS
2FT X 4FT X 1FT

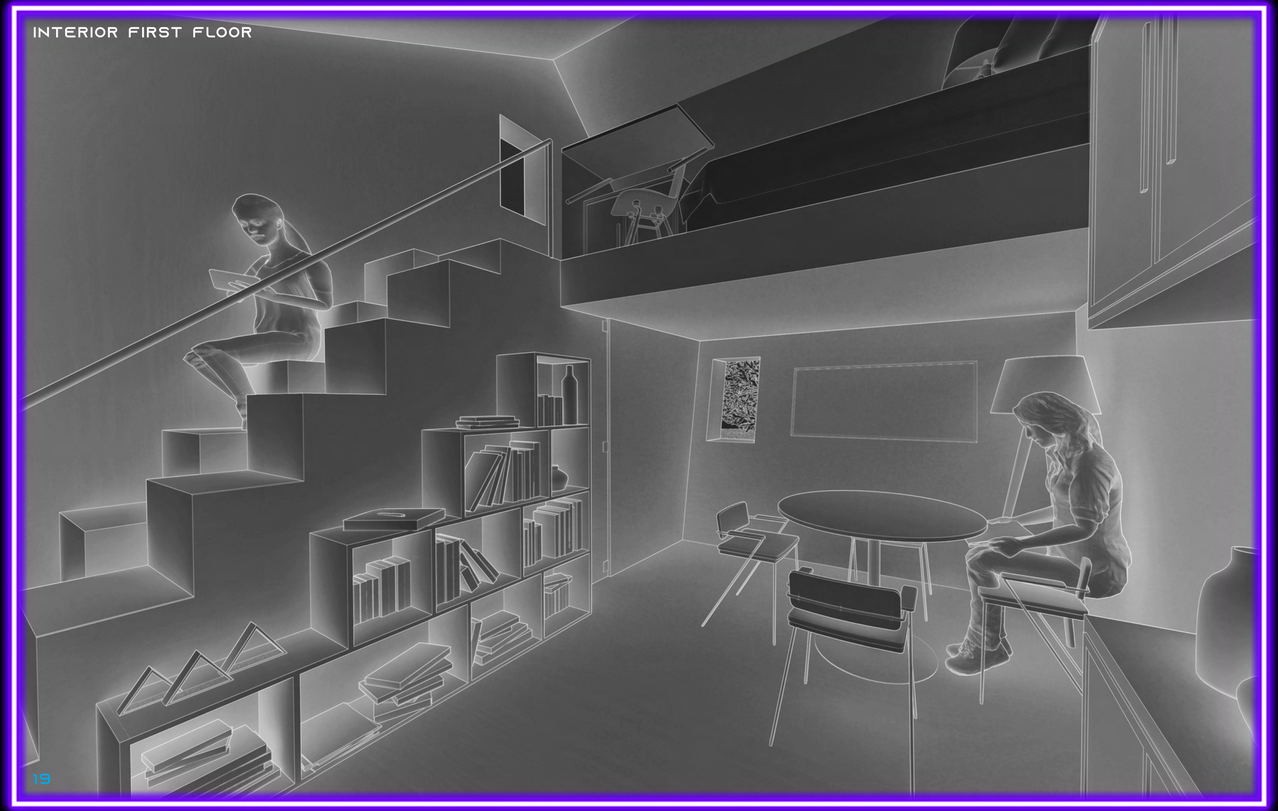
COMPONENT APPLICATION: CIRCULAR TINY HOUSE

A DESIGN BY COBURG UNIVERSITY STUDENTS



STEP 9: THIS PHASE INVOLVES IMPLEMENTING THE PERFECTED COMPONENTS WITHIN THE CIRCULAR TINY HOUSE, THEREBY DEMONSTRATING THAT THE COMPONENT SYSTEM INTEGRATES SEAMLESSLY WITH ITS SYSTEM, PROPERTIES, AND DESIGN.

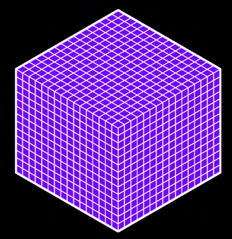



INTERIOR FIRST FLOOR
19

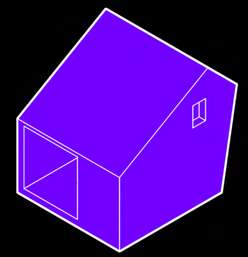

INTERIOR SECOND FLOOR
20

COMPONENT ANALYSIS: ADDING THE COMPONENTS TO THE LIBRARY

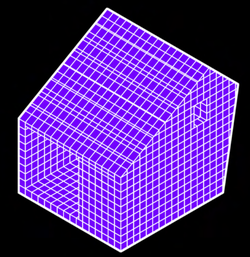
STEP 10: GO THROUGH THE APPLICATION PROCESS. START WITH THE ESTABLISHED GRID SYSTEM, APPLY IT, AND THEN ADD THE MAIN COMPONENT TO THE STRUCTURE. IN THE END, THIS WILL MAKE THE COMPLETE MODEL.



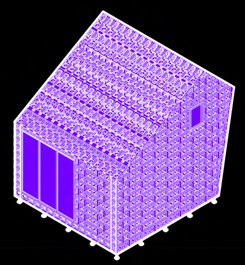
1:1FT X 1FT X 1FT
GRID SYSTEM



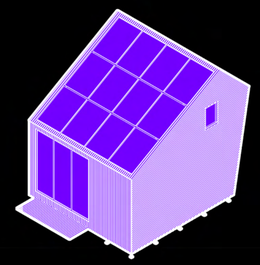
2:CIRCULAR TINY HOUSE
BARE MODEL



3:GRID SYSTEM APPLICATION



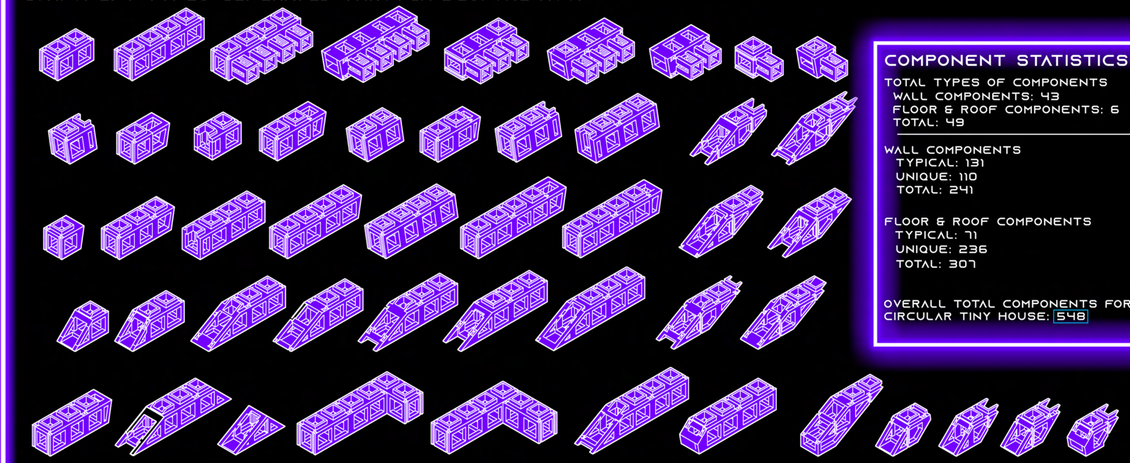
4:COMPONENTS GENERATED &
MADE



5:FINAL CIRCULAR TINY HOUSE
COMPLETE

STEP 11: NOW THAT THE COMPONENTS HAVE BEEN GENERATED FROM THE CIRCULAR TINY HOUSE, THESE NEW COMPONENTS CAN BE ANALYZED AND CATEGORIZED. ONCE CATEGORIZED, THEY WILL BE ADDED TO BESPOKE MOON'S UNLIMITED LIBRARY OF COMPONENTS FOR ANYONE TO USE.

COMPONENT TYPES GENERATED THROUGH BESPOKE MOON



COMPONENT STATISTICS

TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 43
- FLOOR & ROOF COMPONENTS: 6
- TOTAL: 49

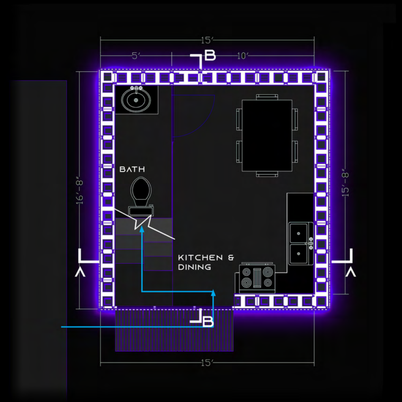
WALL COMPONENTS
- TYPICAL: 131
- UNIQUE: 110
- TOTAL: 241

FLOOR & ROOF COMPONENTS
- TYPICAL: 71
- UNIQUE: 236
- TOTAL: 307

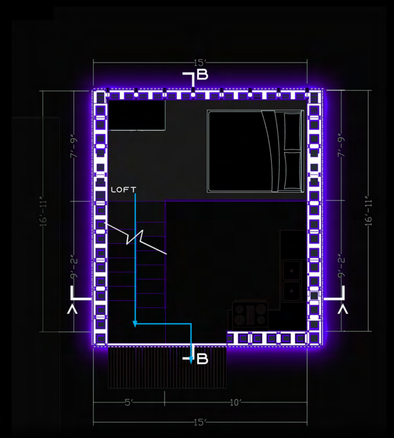
OVERALL TOTAL COMPONENTS FOR THE CIRCULAR TINY HOUSE: 548

COMPONENT APPLICATION: CIRCULAR TINY HOUSE

A DESIGN BY COBURG UNIVERSITY STUDENTS



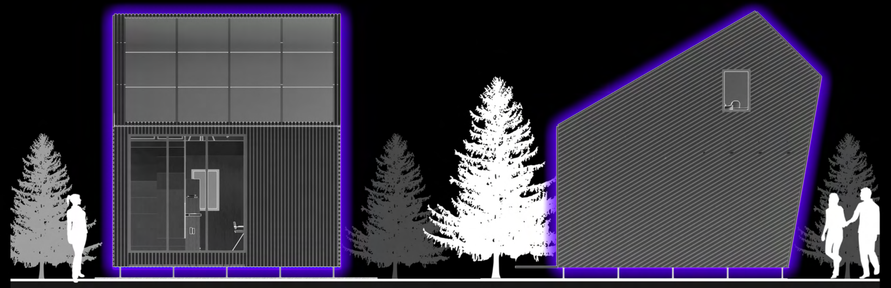
LEVEL 1



LEVEL 2

SECTION A-A

SECTION B-B



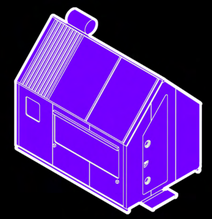
FRONT ELEVATION

RIGHT ELEVATION

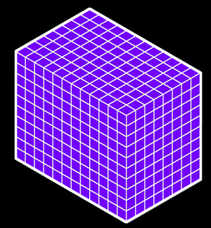
EXPANDING WHAT A COMPONENT COULD BE: THE DIOGENE HOUSE

A DESIGN BY RENZO PIANO

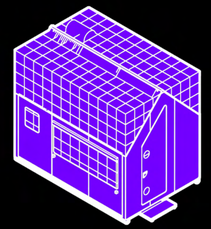
STEP 12: AS AN ARTIFICIAL INTELLIGENCE SYSTEM IS INTEGRATED INTO BESPOKE MOON TO GENERATE COMPONENTS FOR VARIOUS DESIGNS, PERHAPS THE TYPICAL MAIN COMPONENT AND ITS PROPERTIES DOES NOT MEET THE NEEDS FOR A DESIGN'S STRUCTURE. HERE, REVISITING THE DIOGENE TO PERFECT THE COMPONENT IN A NEW SYSTEM THAT WHEN NEEDED FOR FUTURE DESIGNS, AI WILL DEVELOP THIS INTERTWINED LIKE SYSTEM WITHIN BUT AT THE SAME TIME FOLLOWING THE PROPERTIES OF THE MAIN COMPONENT.



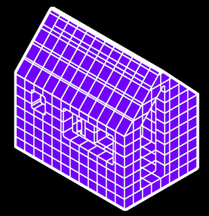
1:DIOGENE HOUSE



2:1FT X 1FT X 1FT GRID SYSTEM

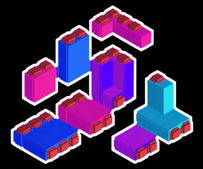


3:GRID SYSTEM APPLICATION



4:COMPONENT SYSTEM INTEGRATED

5:FINAL INTERTWINED COMPONENT SYSTEM



6:EXPLODED SET OF THE INTERTWINED COMPONENT SYSTEM

TESTING THE THEORY: AN EXPERIMENT WITH OTHERS

STEP 13: ALLOW OTHER DESIGNERS TO MAKE AN ABSTRACT FORM BASED ON THE COMPONENTS GIVEN TO THEM. THESE DESIGNERS WERE TOLD, THERE IS NO RIGHT OR WRONG BUT MAKE A FORM THAT THEY FEEL INSPIRED TO CREATE.

THE PROCESS BEGAN FROM SUBMITTING THE DIOGENE HOUSE INTO THE BESPOKE MOON PROGRAM THAT THEN GENERATED THESE COMPONENTS THROUGH THE AI SYSTEM. THESE COMPONENTS WERE THEN GIVEN TO FIRST YEAR STUDENTS TO SEE WHAT THEY WOULD BE INSPIRED TO MAKE WITH THE COMPONENTS. THE RESULTS FROM THIS RESEARCH ALLOWED FOR COMPONENTS TO BE USED TO INSPIRE AND CREATE DESIGN AT ITS CURRENT SCALE BUT ALSO INSPIRE DESIGNS ACROSS OTHER SCALES.

MEET THE DESIGNERS!

1:DESIGNER: JACK TRAUGH
1ST YEAR ARCHITECTURE STUDENT

2:DESIGNER: ASHLEY GENTLES
1ST YEAR ARCHITECTURE STUDENT

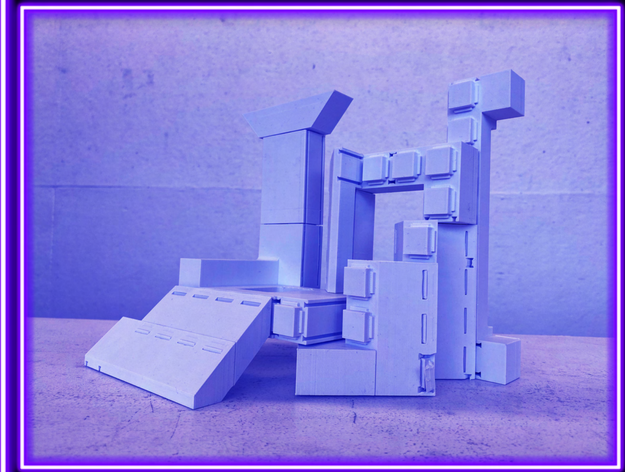
3:DESIGNER: PATRICK BEIRNE
1ST YEAR ARCHITECTURE STUDENT

4:DESIGNER: ASMA NADIR
1ST YEAR ARCHITECTURE STUDENT

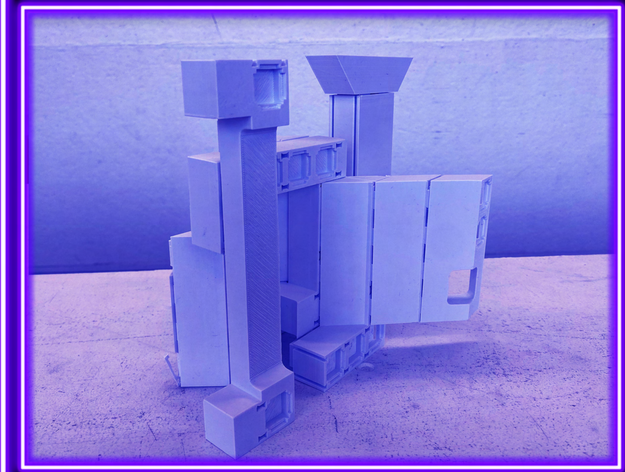
5:DESIGNER: AMY CRUZ
1ST YEAR ARCHITECTURE STUDENT

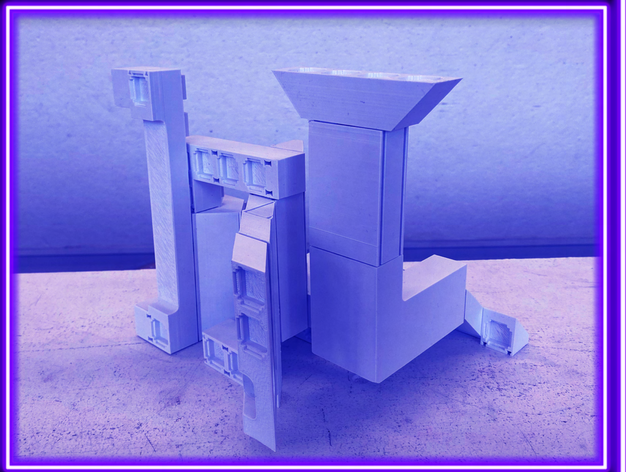
A VISION TO REALITY: THE DIOGENE HOUSE COMPONENTS

STEP 14A: AFTER DETERMINING THAT COMPONENTS FROM SOMEONE ELSE'S DESIGN CAN INSPIRE OR CREATE A NEW DESIGN, THIS STEP ARTICULATES THE VISION AND ENHANCES THE IDEATION PROCESS BY TAKING THE MODELS MADE BY THE DESIGNERS AND PROVIDE A RENDER AND AN AI-ASSISTED VISUAL TO PORTRAY THE VISION.



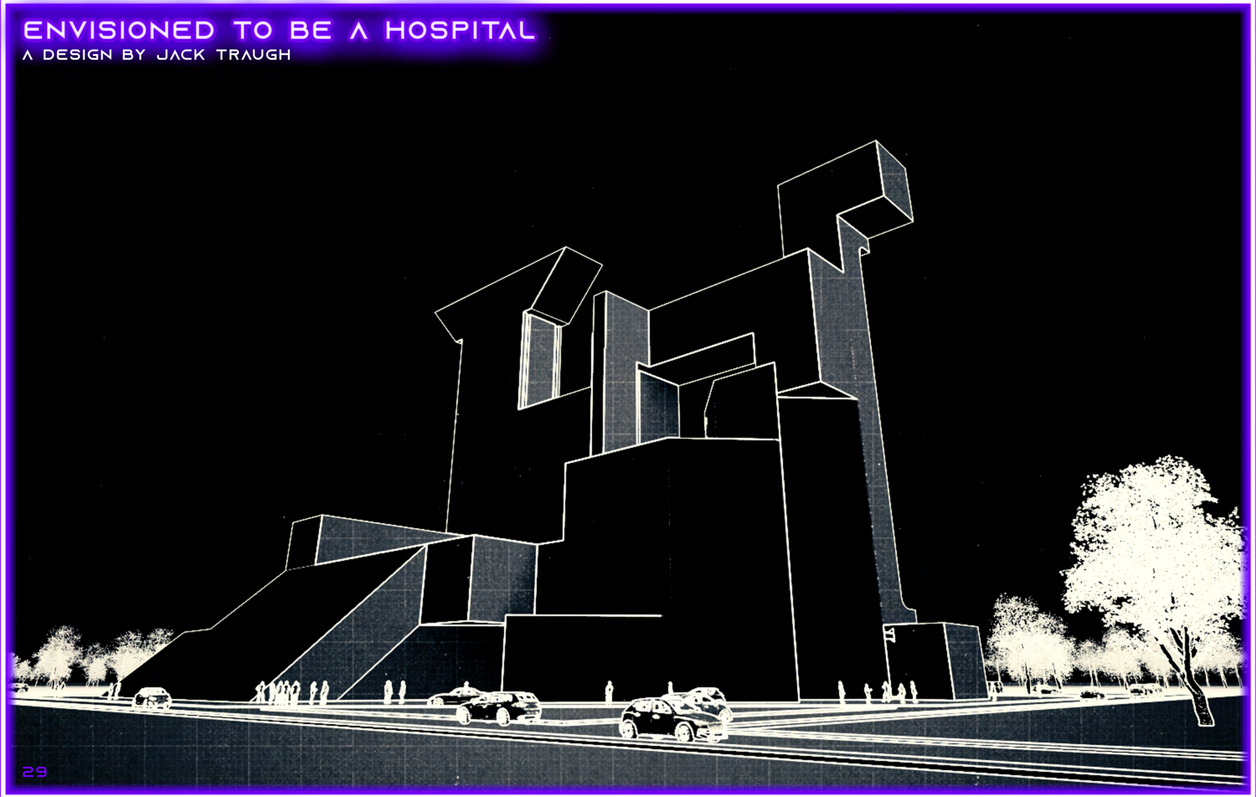
1:ENVISIONED TO BE A HOSPITAL
DESIGNER: JACK TRAUGH

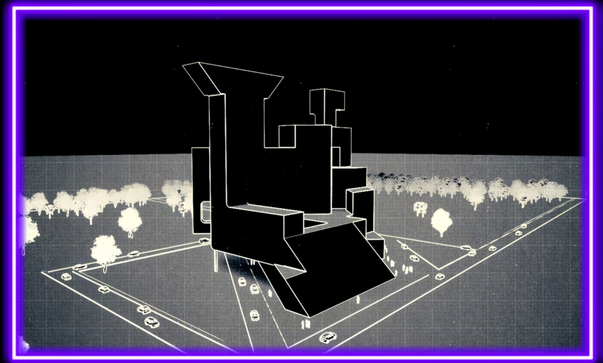


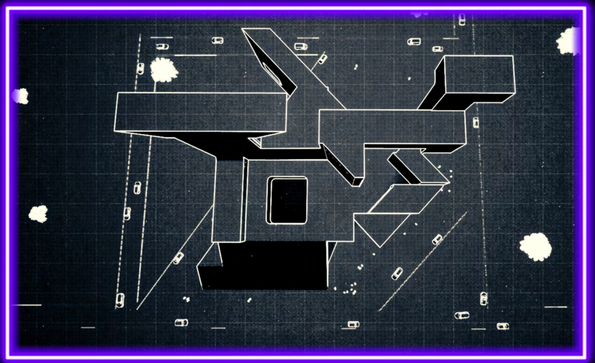


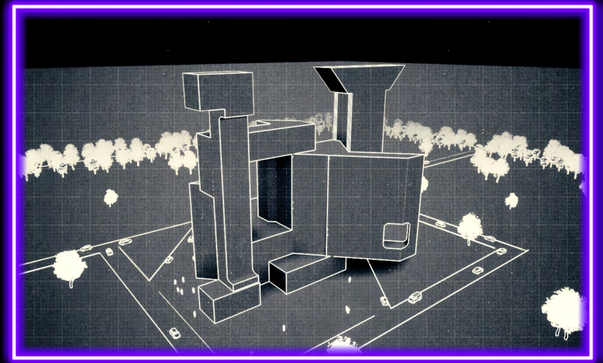
ENVISIONED TO BE A HOSPITAL

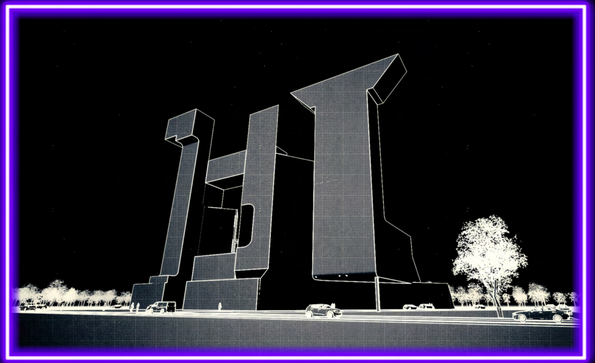
A DESIGN BY JACK TRAUGH









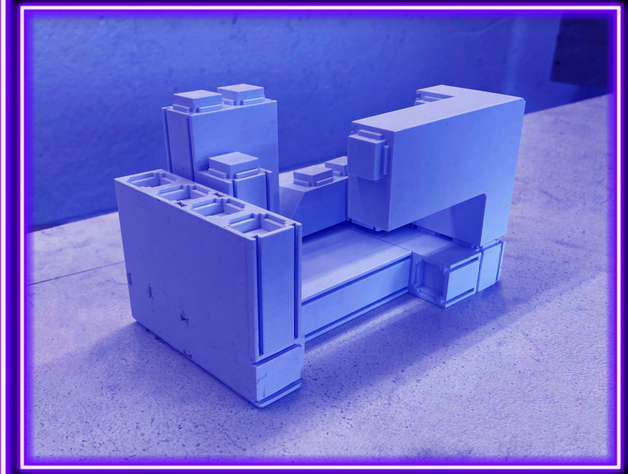


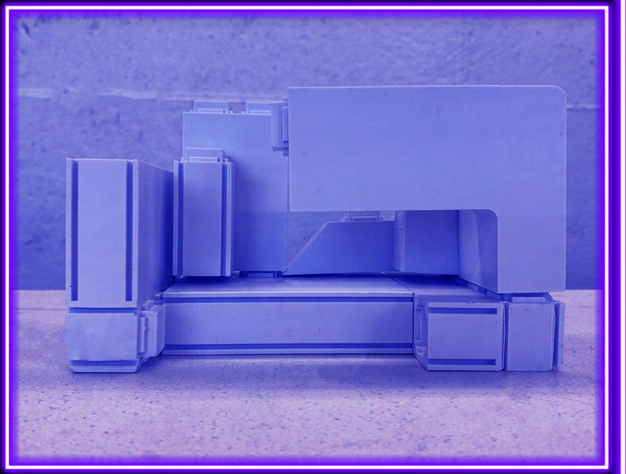
ENVISIONED TO BE A HOSPITAL

A DESIGN BY JACK TRAUGH

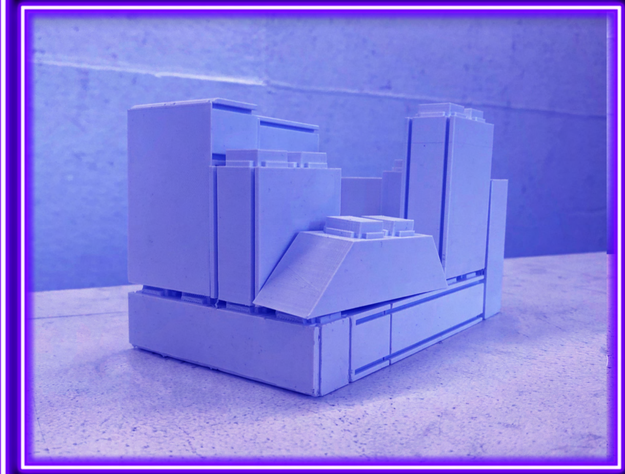
A VISION TO REALITY: THE DIOGENE HOUSE COMPONENTS

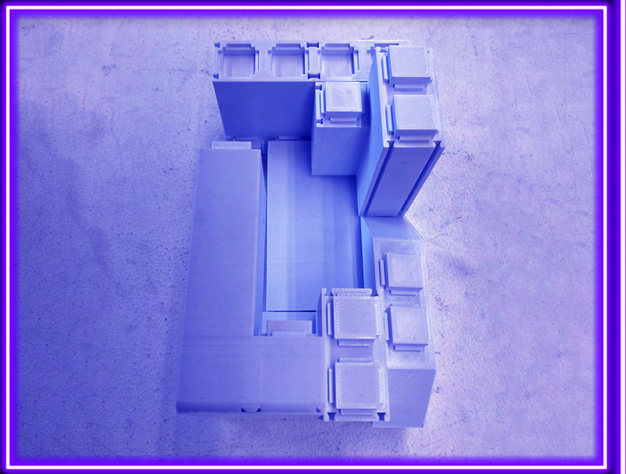
STEP 14B: AFTER DETERMINING THAT COMPONENTS FROM SOMEONE ELSE'S DESIGN CAN INSPIRE OR CREATE A NEW DESIGN, THIS STEP ARTICULATES THE VISION AND ENHANCES THE IDEATION PROCESS BY TAKING THE MODELS MADE BY THE DESIGNERS AND PROVIDE A RENDER AND AN AI-ASSISTED VISUAL TO PORTRAY THE VISION.





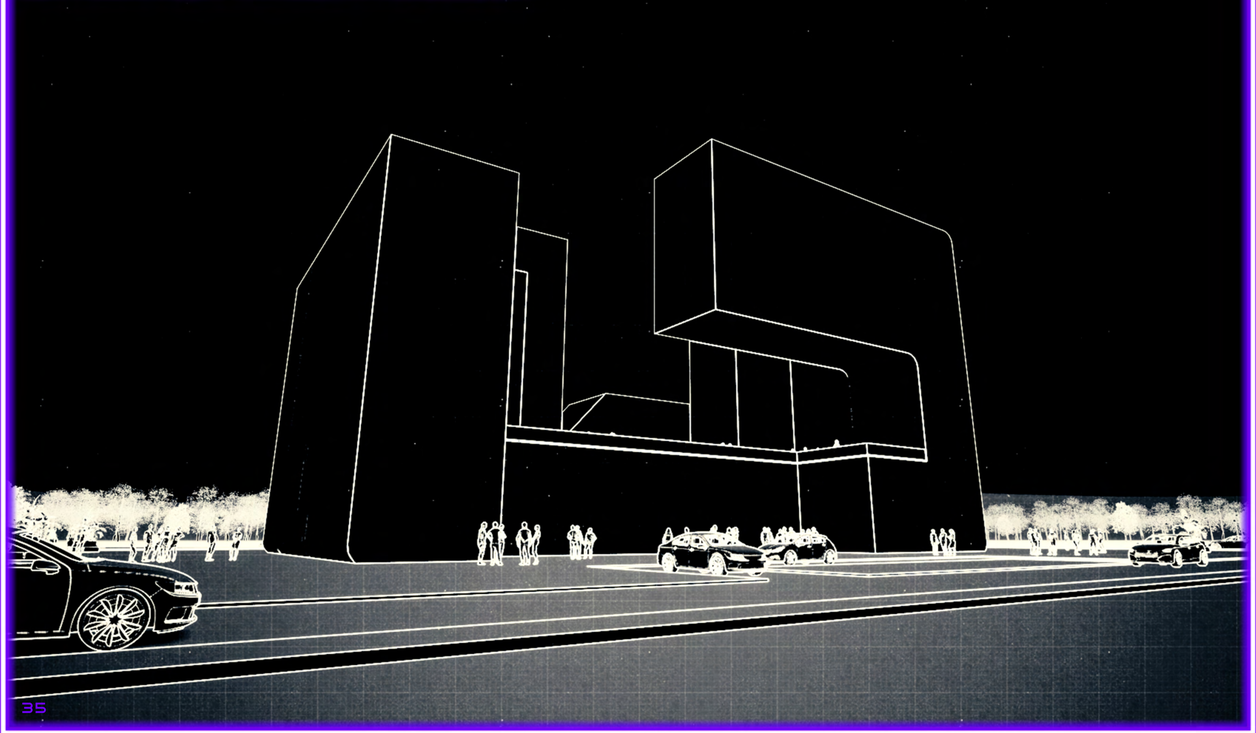
2:ENVISIONED TO BE A GALLERY
DESIGNER: ASHLEY GENTLES

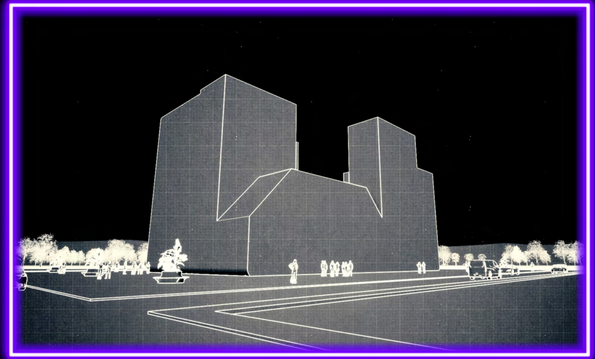


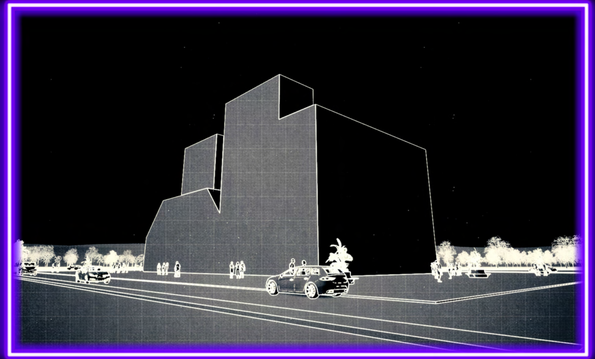


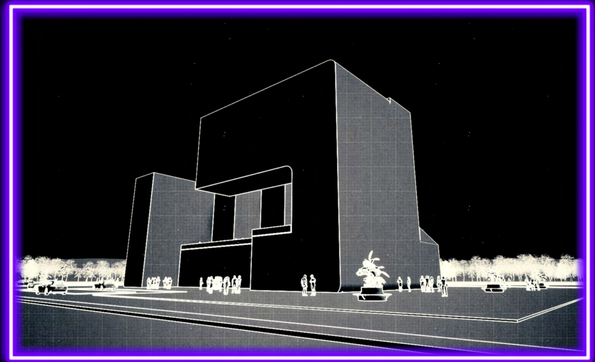
ENVISIONED TO BE A GALLERY

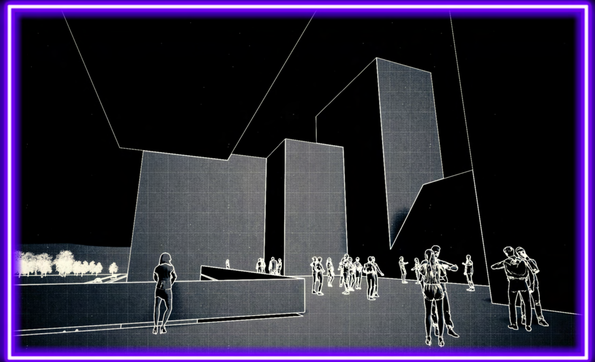
A DESIGN BY ASHLEY GENTLES









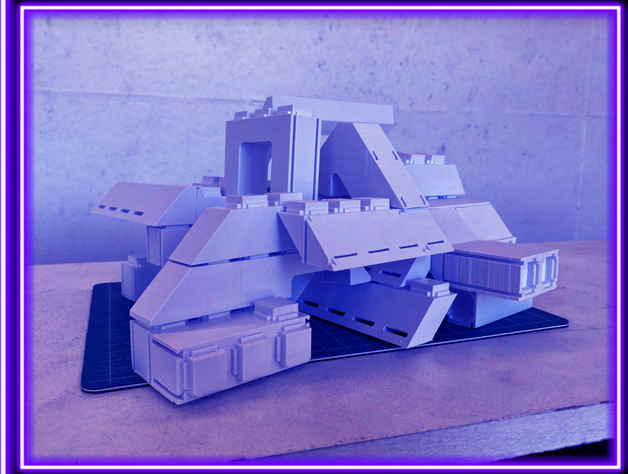


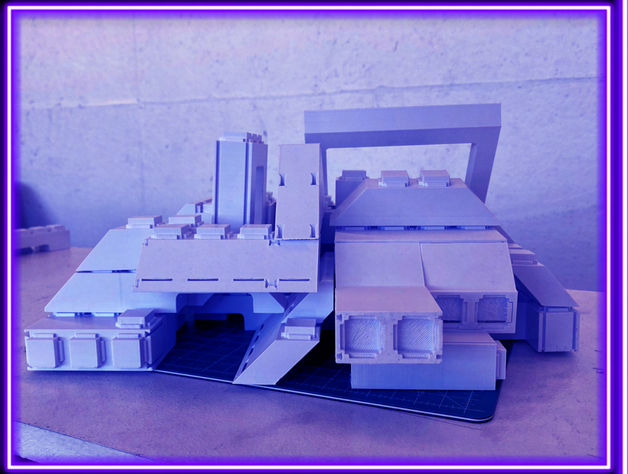
ENVISIONED TO BE A GALLERY

A DESIGN BY ASHLEY GENTLES

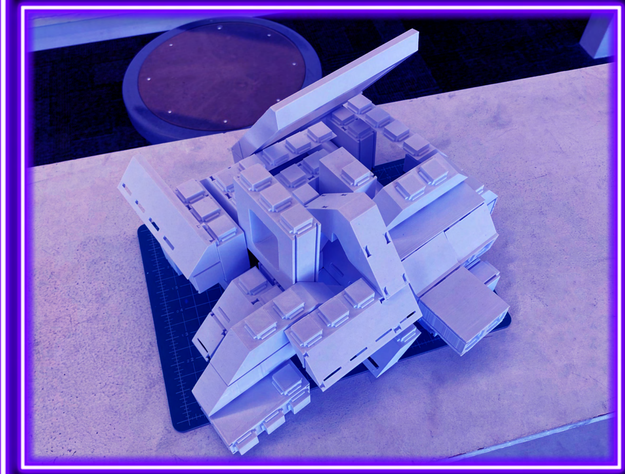
A VISION TO REALITY: THE DIOGENE HOUSE COMPONENTS

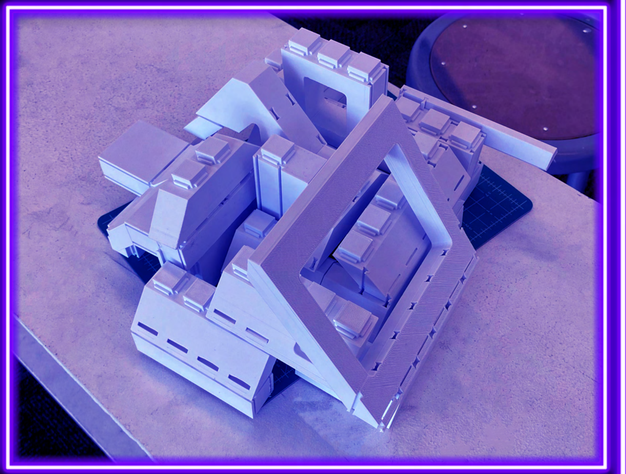
STEP 14C: AFTER DETERMINING THAT COMPONENTS FROM SOMEONE ELSE'S DESIGN CAN INSPIRE OR CREATE A NEW DESIGN, THIS STEP ARTICULATES THE VISION AND ENHANCES THE IDEATION PROCESS BY TAKING THE MODELS MADE BY THE DESIGNERS AND PROVIDE A RENDER AND AN AI-ASSISTED VISUAL TO PORTRAY THE VISION.





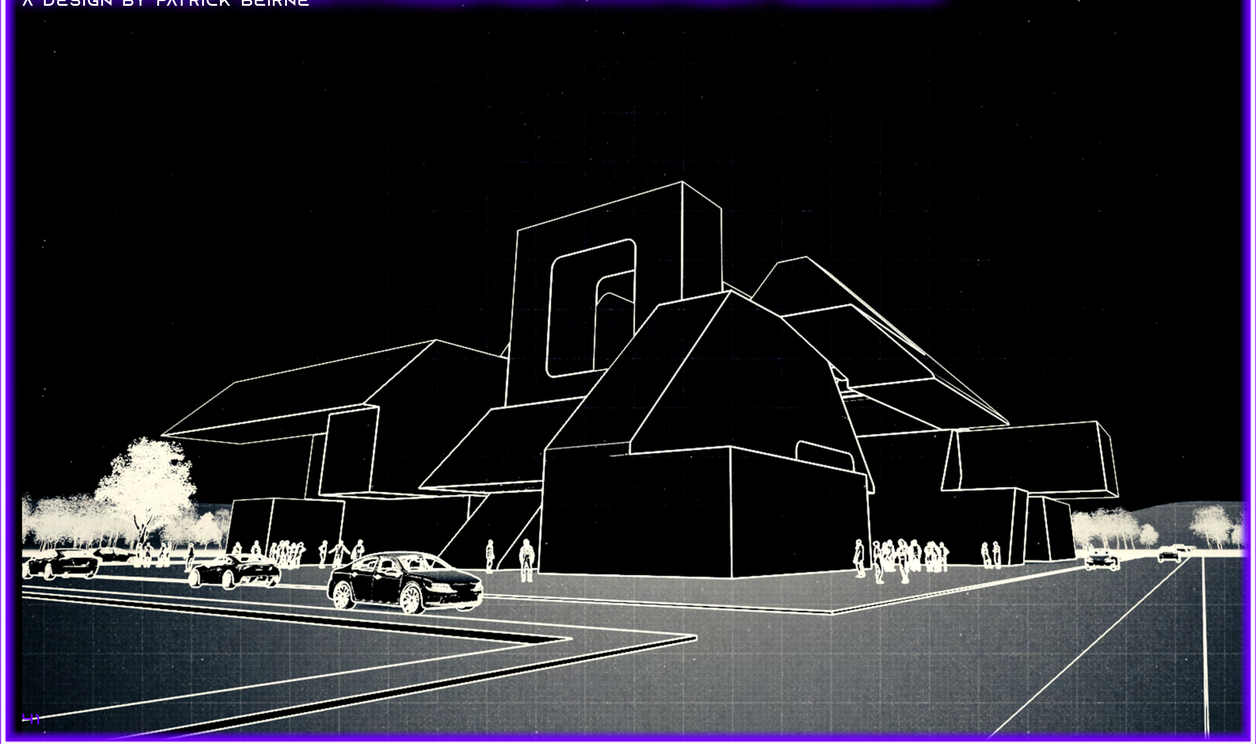
3:ENVISIONED TO BE A MIXED-USE APARTMENT BUILDING
DESIGNER: PATRICK BEIRNE

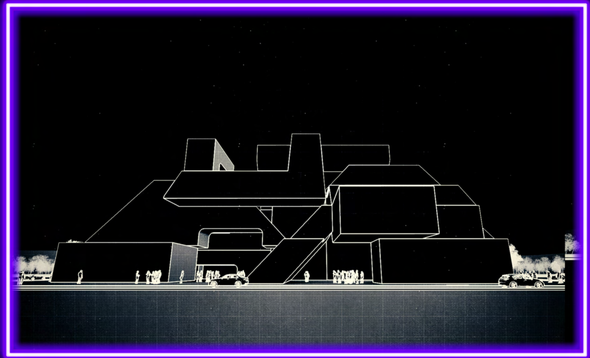


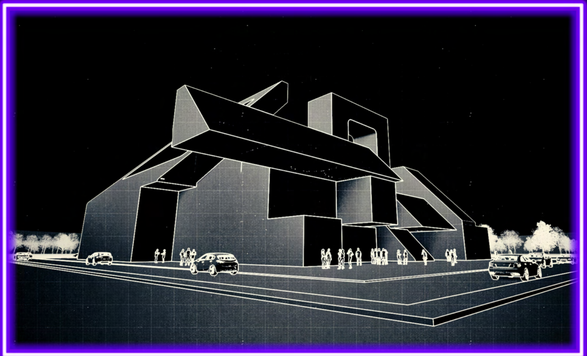


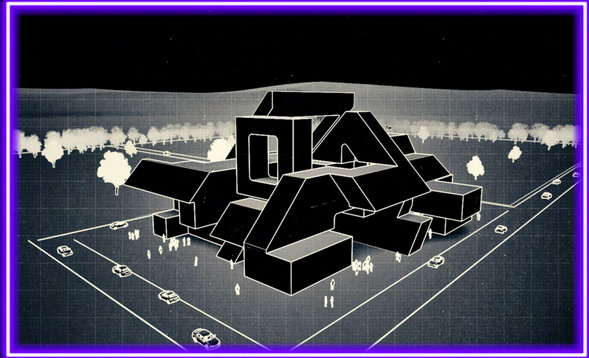
ENVISIONED TO BE A MIXED-USE APARTMENT BUILDING

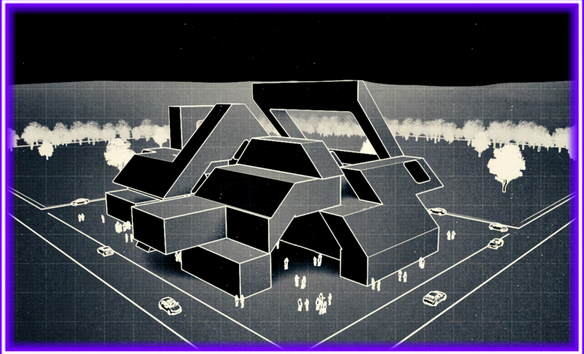
A DESIGN BY PATRICK BEIRNE









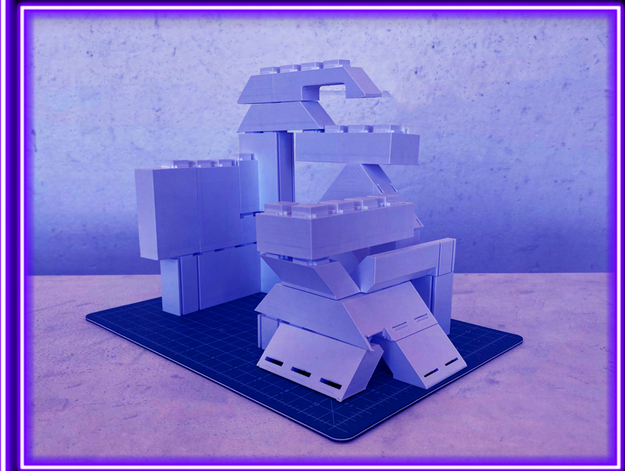


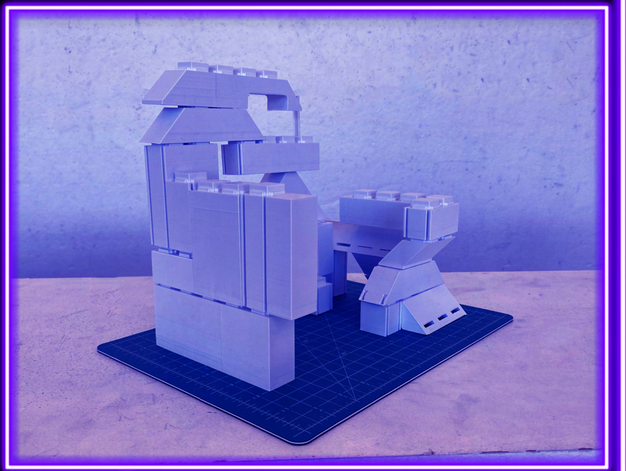
ENVISIONED TO BE A MIXED-USE APARTMENT BUILDING

A DESIGN BY PATRICK BEIRNE

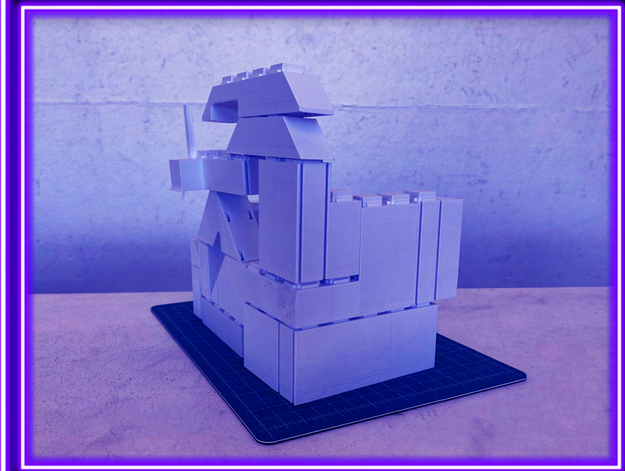
A VISION TO REALITY: THE DIOGENE HOUSE COMPONENTS

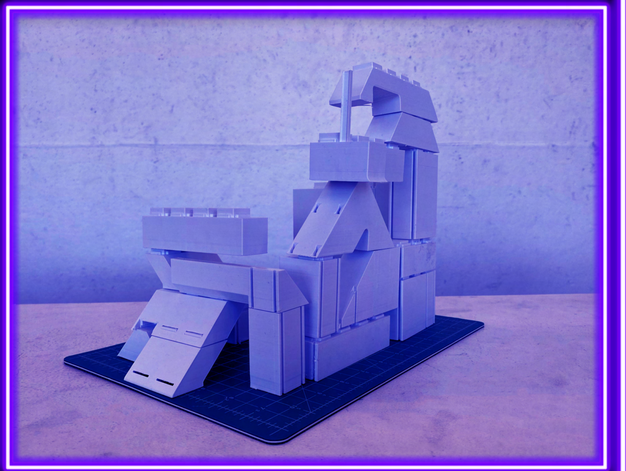
STEP 14D: AFTER DETERMINING THAT COMPONENTS FROM SOMEONE ELSE'S DESIGN CAN INSPIRE OR CREATE A NEW DESIGN, THIS STEP ARTICULATES THE VISION AND ENHANCES THE IDEATION PROCESS BY TAKING THE MODELS MADE BY THE DESIGNERS AND PROVIDE A RENDER AND AN AI-ASSISTED VISUAL TO PORTRAY THE VISION.





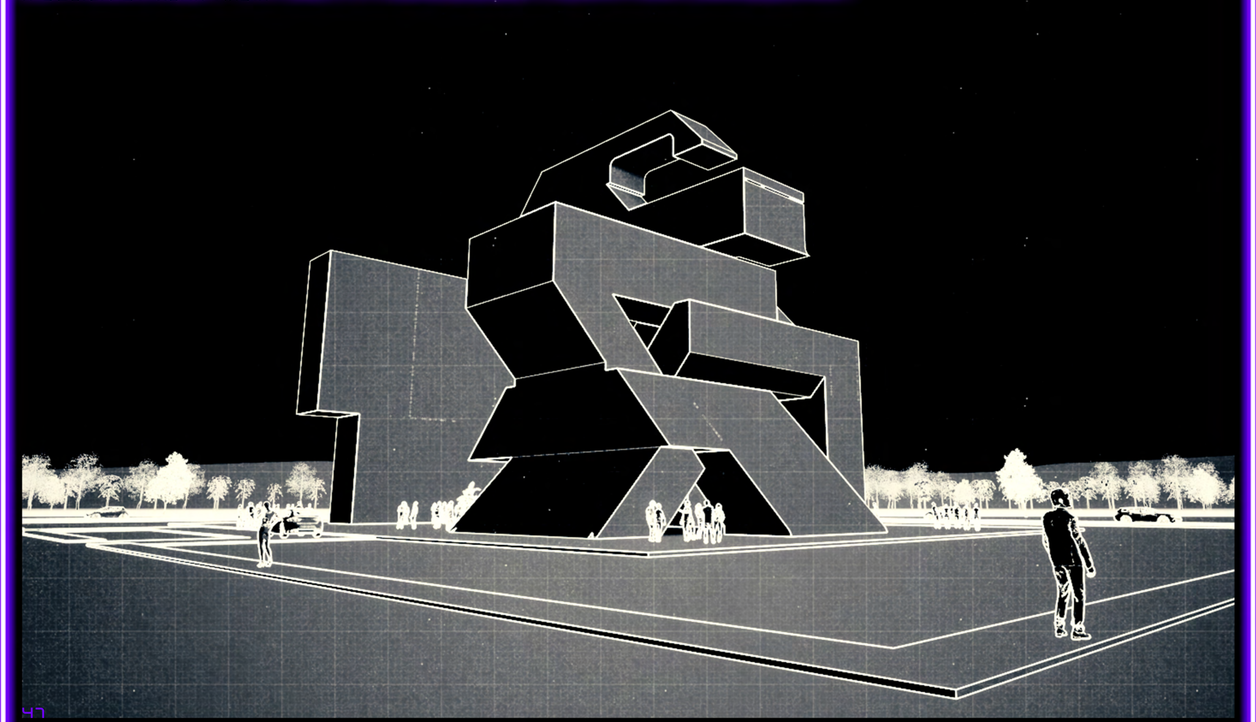
4:ENVISIONED TO BE A COLLEGE CAMPUS BUILDING
DESIGNER: ASMA NADIR

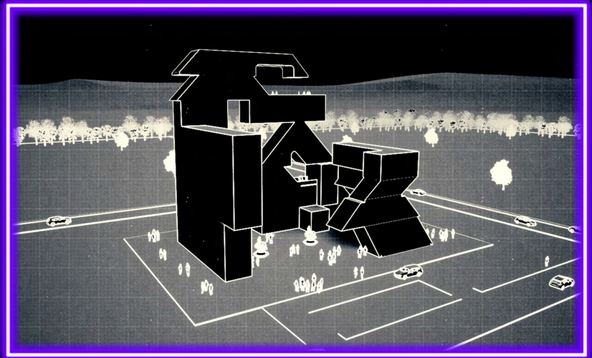


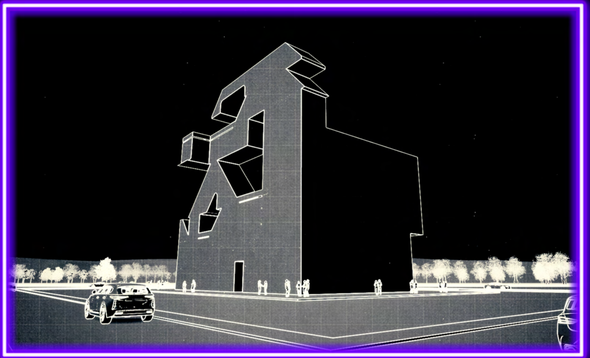


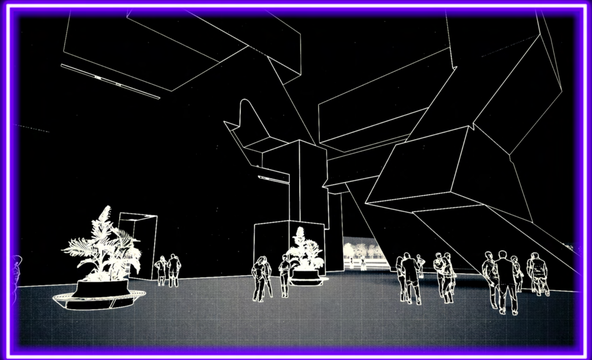
ENVISIONED TO BE A COLLEGE CAMPUS BUILDING

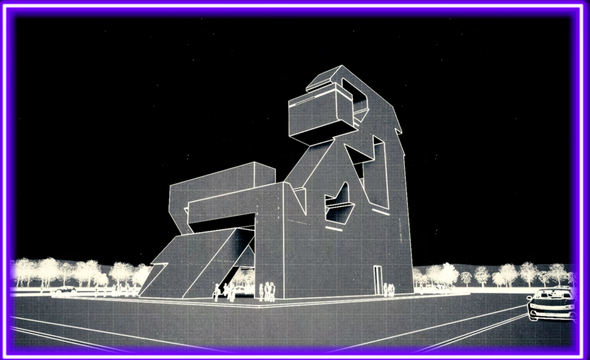
A DESIGN BY ASMA NADIR





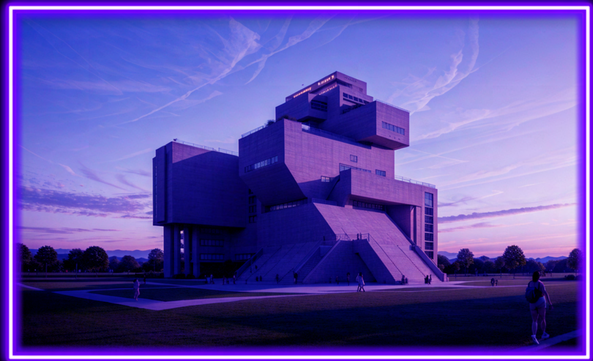


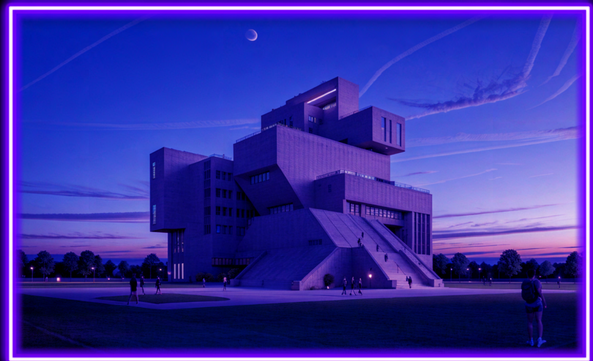




ENVISIONED TO BE A COLLEGE CAMPUS BUILDING

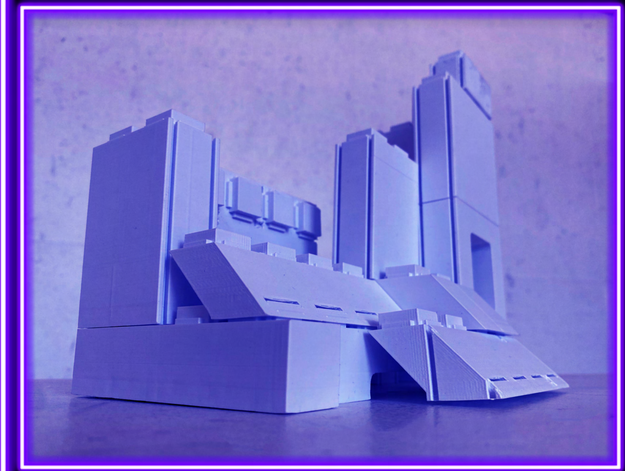
A DESIGN BY ASMA NADIR

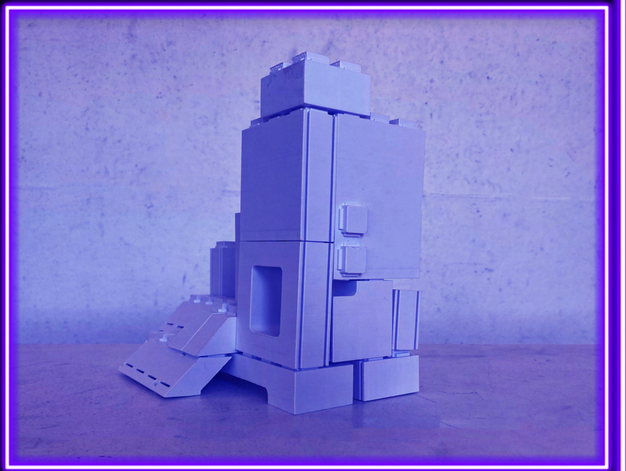




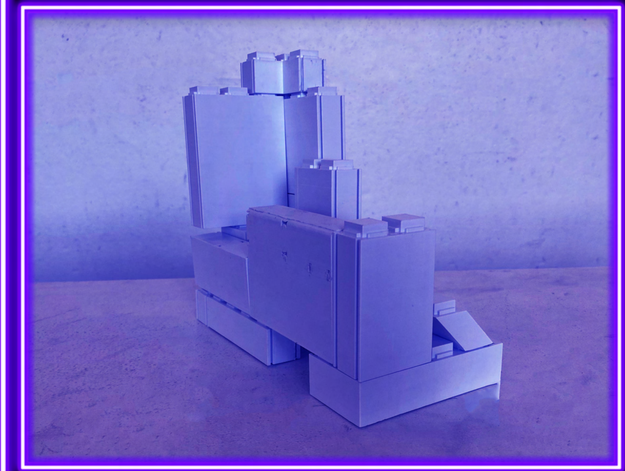
A VISION TO REALITY: THE DIOGENE HOUSE COMPONENTS

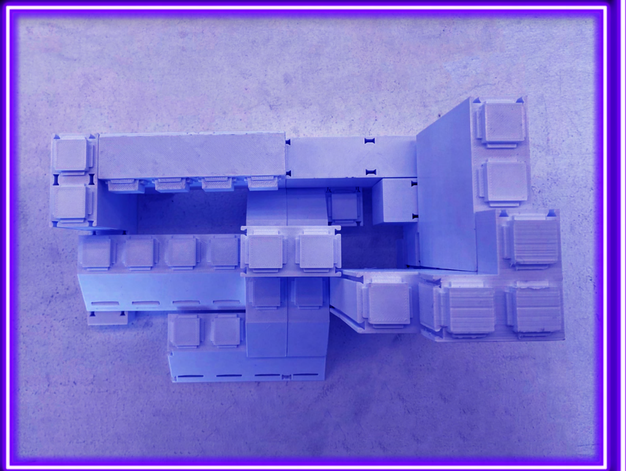
STEP 14E: AFTER DETERMINING THAT COMPONENTS FROM SOMEONE ELSE'S DESIGN CAN INSPIRE OR CREATE A NEW DESIGN, THIS STEP ARTICULATES THE VISION AND ENHANCES THE IDEATION PROCESS BY TAKING THE MODELS MADE BY THE DESIGNERS AND PROVIDE A RENDER AND AN AI-ASSISTED VISUAL TO PORTRAY THE VISION.





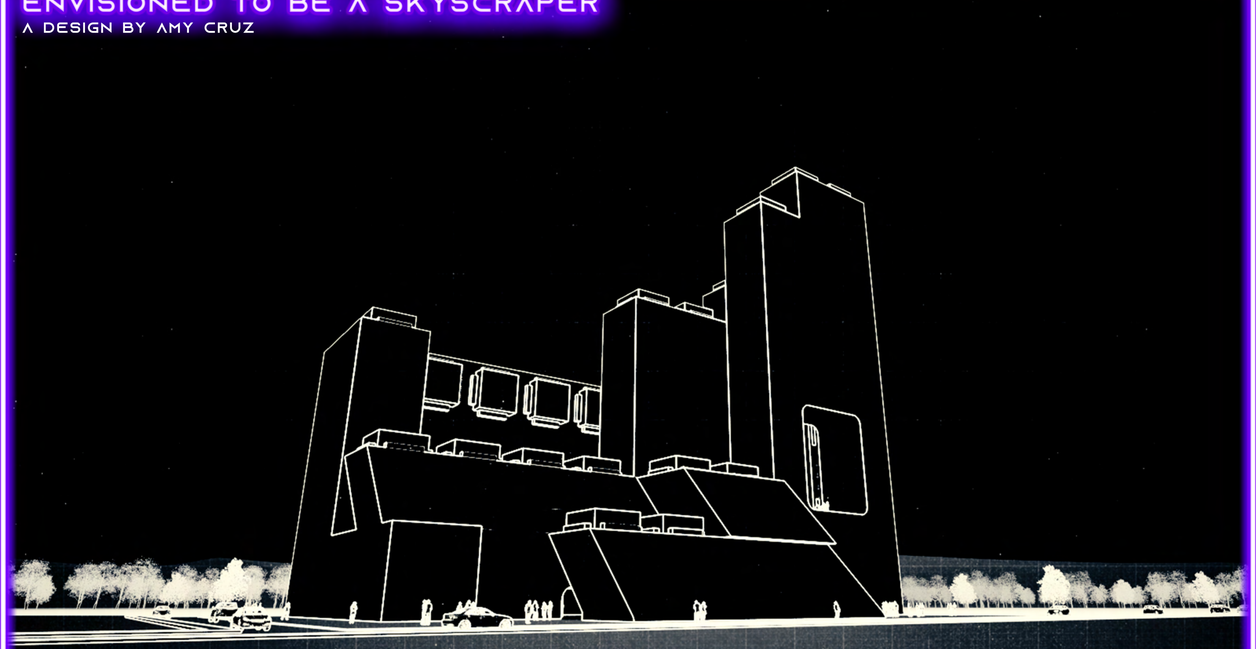
5:ENVISIONED TO BE SKYSCRAPER AND A PLAYGROUND
DESIGNER: AMY CRUZ

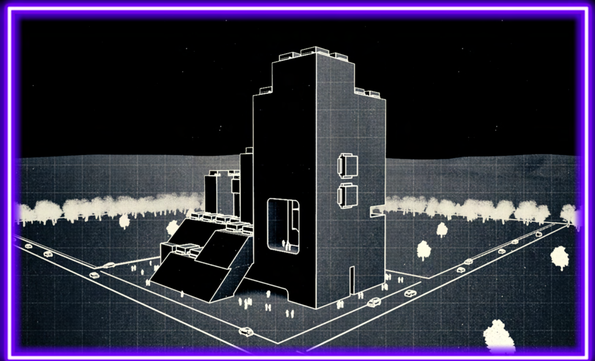


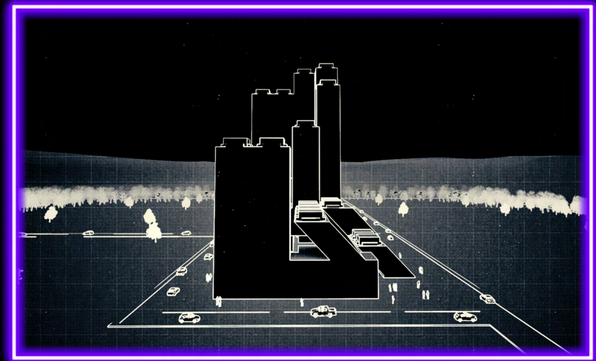


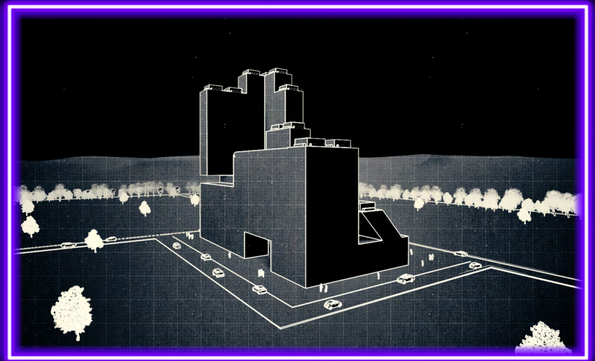
ENVISIONED TO BE A SKYSCRAPER

A DESIGN BY AMY CRUZ







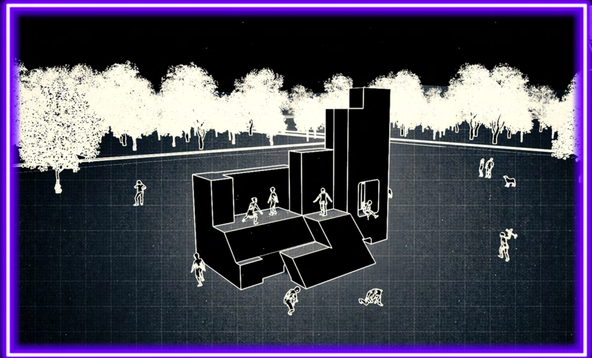


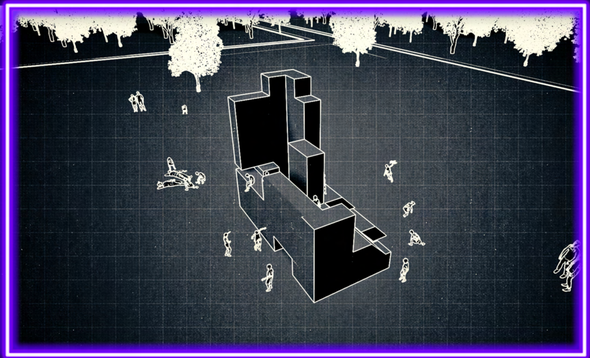
ENVISIONED TO BE A SKYSCRAPER

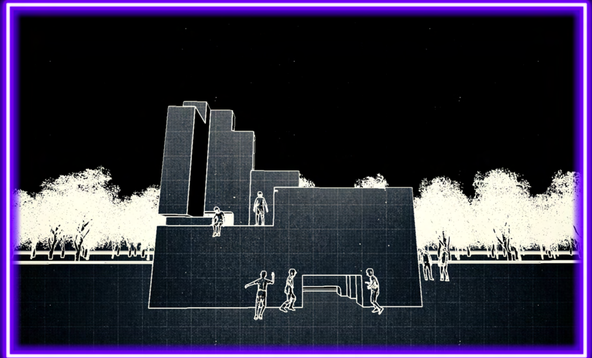
A DESIGN BY AMY CRUZ

ENVISIONED TO BE A PLAYGROUND

A DESIGN BY AMY CRUZ







ENVISIONED TO BE A PLAYGROUND

A DESIGN BY AMY CRUZ

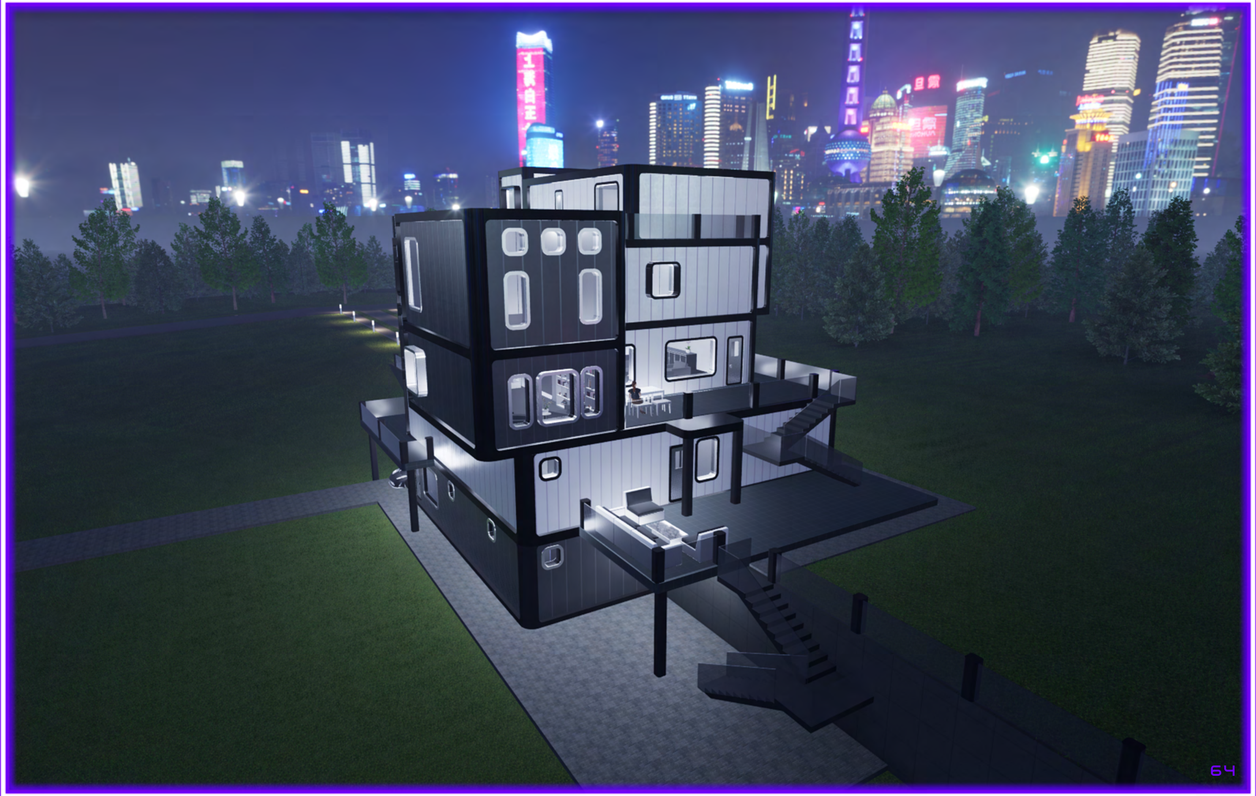
6815

A DESIGN BY AUSTIN WHITE

STEP 15: AT THIS POINT, THE COMPONENT SYSTEM HAS BEEN PERFECTED, APPLIED, AND TESTED ACROSS VARIOUS DOMAINS. THE NEXT STEP WAS TO CREATE A DESIGN WITH A FUTURISTIC, INDUSTRIAL, SLEEK, AND EXTRATERRESTRIAL AESTHETIC. THIS DESIGN WAS ACHIEVED BY GENERATING COMPONENTS WITHIN THE DESIGN THROUGH THE BESPOKE MOON PROGRAM WHICH THEN WAS ADDED THE LIBRARY OF COMPONENTS. FROM THIS PROCESS, HOUSE 6815 WAS FORMED.

6815

HOUSE 6815 IS A FIVE-STORY, FOUR-BEDROOM RESIDENCE WITH 3-1/2 BATHROOMS, LOCATED ON THE OUTSKIRTS OF THE CITY. THIS HOME FEATURES LIVING SPACES, FLEX SPACES, RESEARCH ROOMS, A TWO-CAR GARAGE, AN ICE BATH AND SAUNA ROOM, A KITCHEN, AN INDOOR GARDEN, A ROOFTOP TERRACE, AND A STUDIO APARTMENT ON THE GROUND LEVEL. THIS INNOVATIVE AND FUTURISTIC HOUSE IS CONSTRUCTED USING THE NEW BESPOKE MOON COMPONENT SYSTEM, NOW A STANDARD IN MODERN CONSTRUCTION WORLDWIDE.



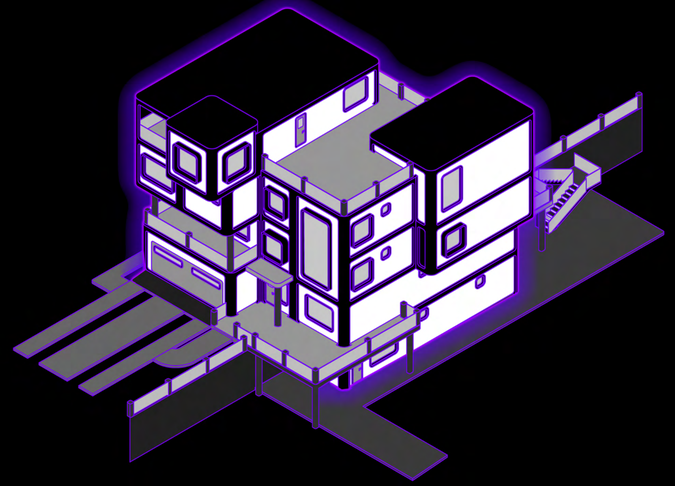
FOYER AND CORRIDOR

GARAGE

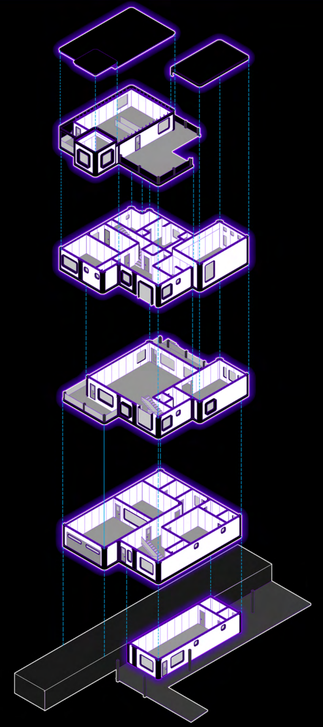
OFFICE/FLEX SPACE

LEVEL 3 CORRIDOR

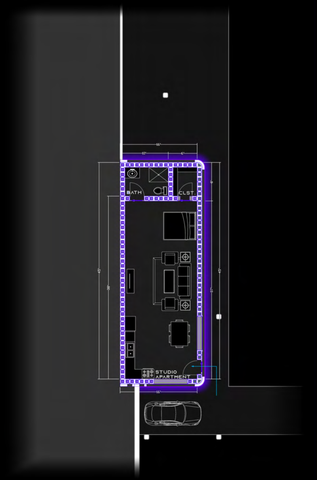
PERSPECTIVE SECTION



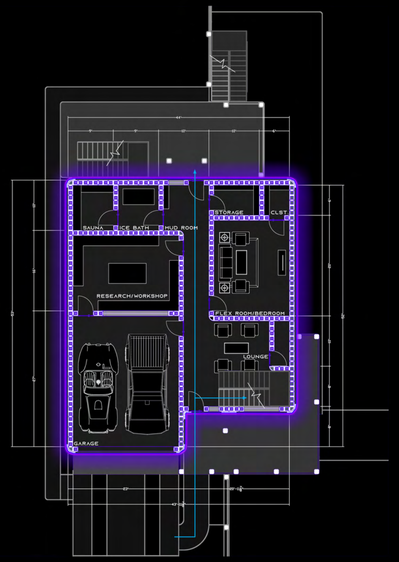
FULL AXON



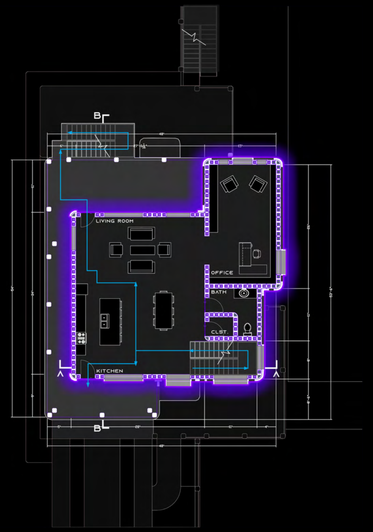
EXPLODED AXON



GROUND LEVEL



LEVEL 1



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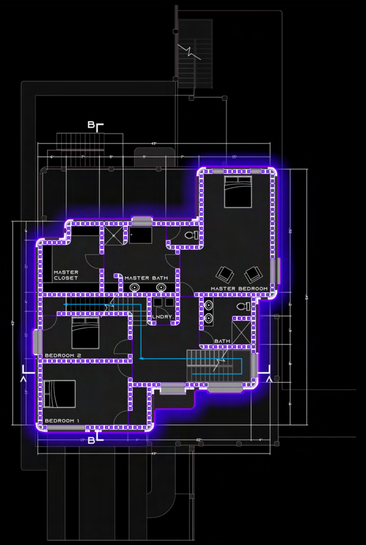
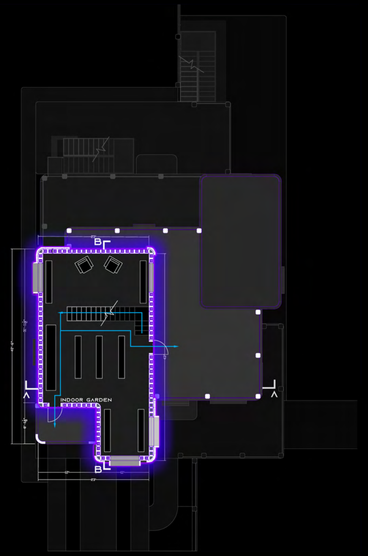


LEVEL 3



LEVEL 4

SECTION A-A

SECTION B-B

REAR ELEVATION

LEFT ELEVATION

FRONT ELEVATION

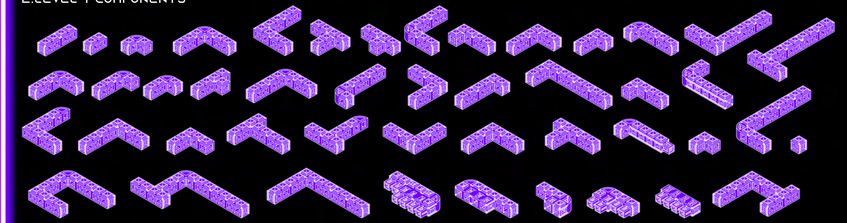
RIGHT ELEVATION

COMPONENT ANALYSIS: ADDING THE COMPONENTS TO THE LIBRARY

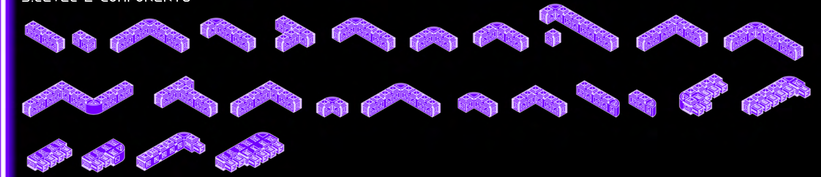
STEP 16: NOW THAT THE COMPONENTS HAVE BEEN GENERATED FROM THE 6815 HOUSE, WE CAN ANALYZE AND CATEGORIZE THESE NEW COMPONENTS. ONCE CATEGORIZED, THEY WILL BE ADDED TO BESPOKE MOON'S UNLIMITED LIBRARY OF COMPONENTS.

1:GROUND LEVEL COMPONENTS

2:LEVEL 1 COMPONENTS



3:LEVEL 2 COMPONENTS



COMPONENT STATISTICS

1:GROUND LEVEL COMPONENTS

TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 20
- FLOOR & ROOF COMPONENTS: 4
- TOTAL: 24

WALL COMPONENTS
- TYPICAL: 213
- UNIQUE: 78
- TOTAL: 291

FLOOR & ROOF COMPONENTS
- TYPICAL: 199
- UNIQUE: 3
- TOTAL: 202

OVERALL TOTAL FOR GROUND LEVEL: 493

2:LEVEL 1 COMPONENTS

TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 41
- FLOOR & ROOF COMPONENTS: 5
- TOTAL: 46

WALL COMPONENTS
- TYPICAL: 445
- UNIQUE: 365
- TOTAL: 810

FLOOR & ROOF COMPONENTS
- TYPICAL: 580
- UNIQUE: 4
- TOTAL: 584

OVERALL TOTAL FOR LEVEL 1: 1,394

3:LEVEL 2 COMPONENTS

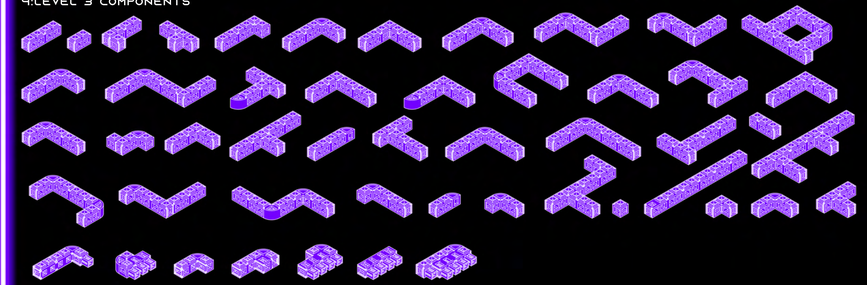
TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 21
- FLOOR & ROOF COMPONENTS: 6
- TOTAL: 27

WALL COMPONENTS
- TYPICAL: 345
- UNIQUE: 136
- TOTAL: 481

FLOOR & ROOF COMPONENTS
- TYPICAL: 560
- UNIQUE: 6
- TOTAL: 566

OVERALL TOTAL FOR LEVEL 2: 1,047

4:LEVEL 3 COMPONENTS



5:LEVEL 4 COMPONENTS

COMPONENT STATISTICS

4:LEVEL 3 COMPONENTS

TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 43
- FLOOR & ROOF COMPONENTS: 7
- TOTAL: 50

WALL COMPONENTS
- TYPICAL: 442
- UNIQUE: 453
- TOTAL: 895

FLOOR & ROOF COMPONENTS
- TYPICAL: 508
- UNIQUE: 8
- TOTAL: 516

OVERALL TOTAL FOR LEVEL 3: 1,411

5:LEVEL 4 COMPONENTS

TOTAL TYPES OF COMPONENTS
- WALL COMPONENTS: 11
- FLOOR & ROOF COMPONENTS: 15
- TOTAL: 26

WALL COMPONENTS
- TYPICAL: 188
- UNIQUE: 76
- TOTAL: 264

FLOOR & ROOF COMPONENTS
- TYPICAL: 853
- UNIQUE: 21
- TOTAL: 874

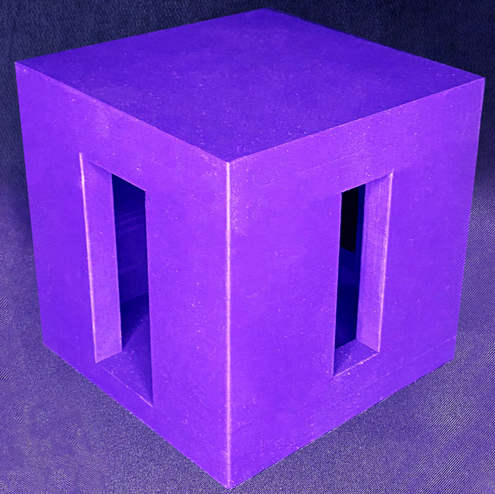
OVERALL TOTAL FOR LEVEL 4: 1,138

OVERALL TOTAL OF COMPONENTS WITHIN THE HOUSE 6815: 5,483

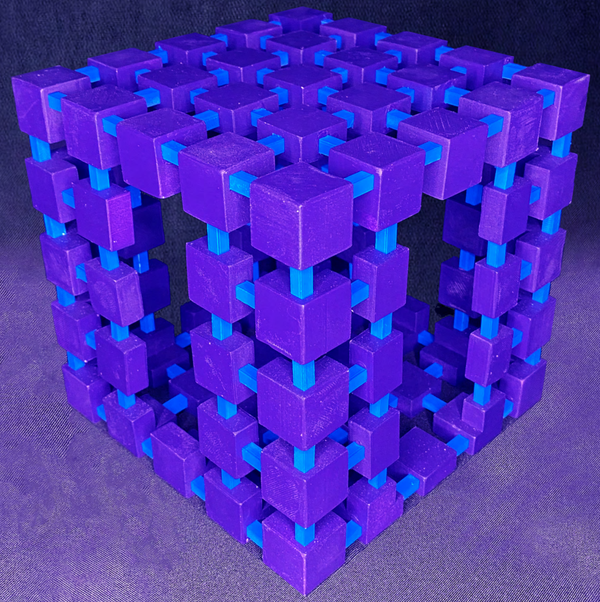
A MODEL STORY

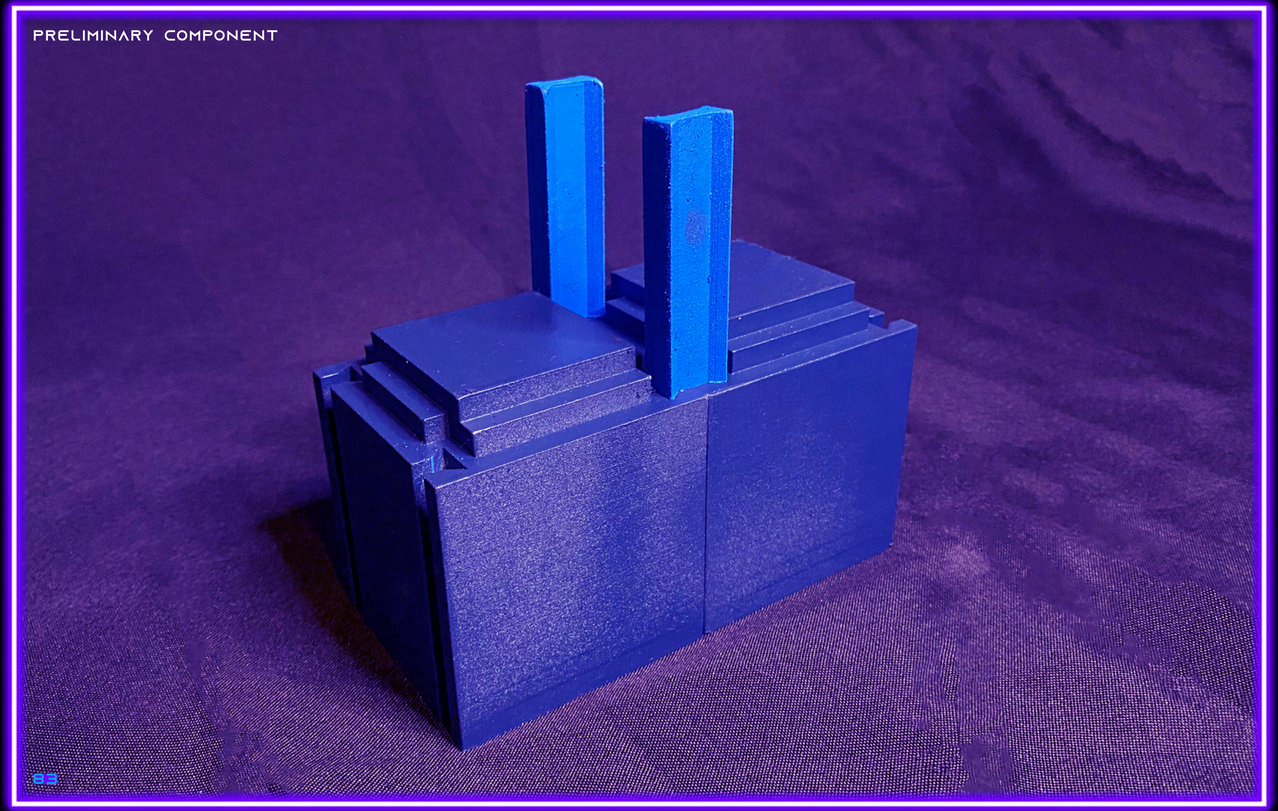
CONCEPTUAL BESPOKE MOON SCULPTURE

SMALL STRUCTURE

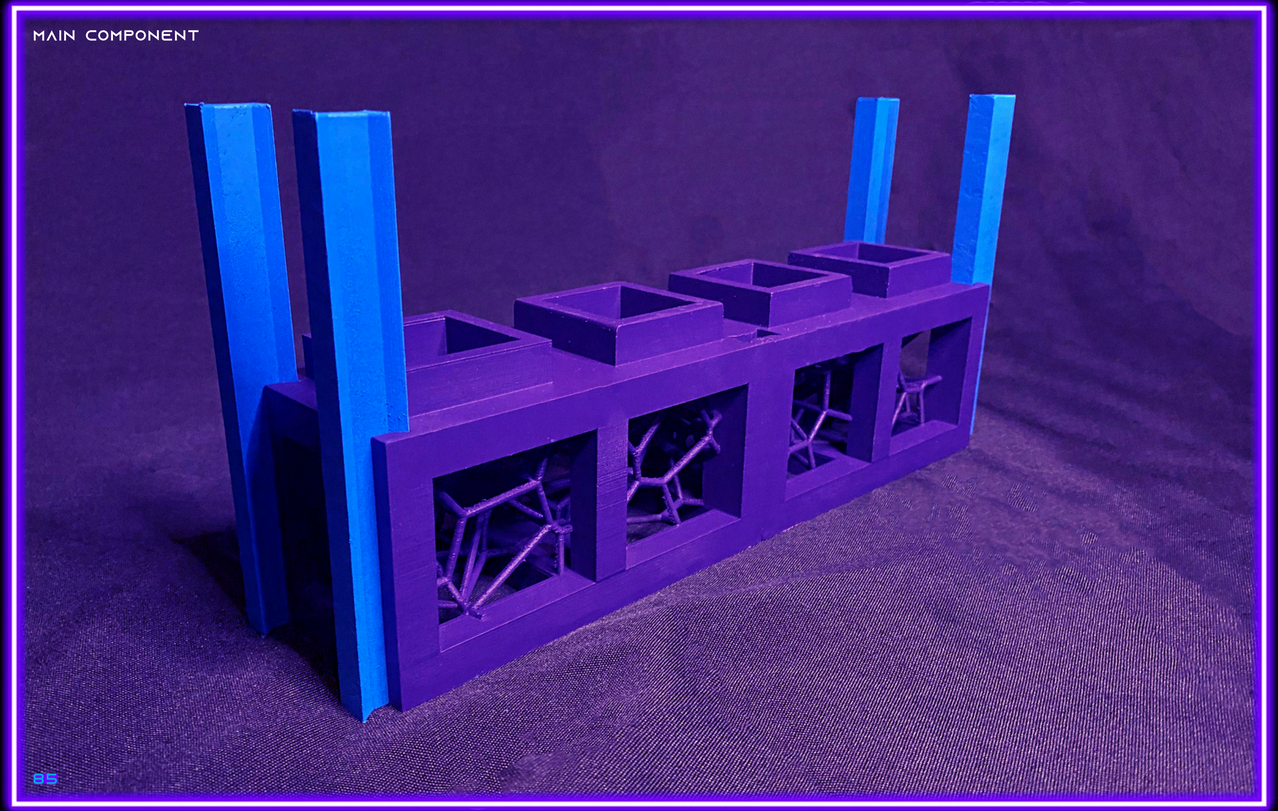


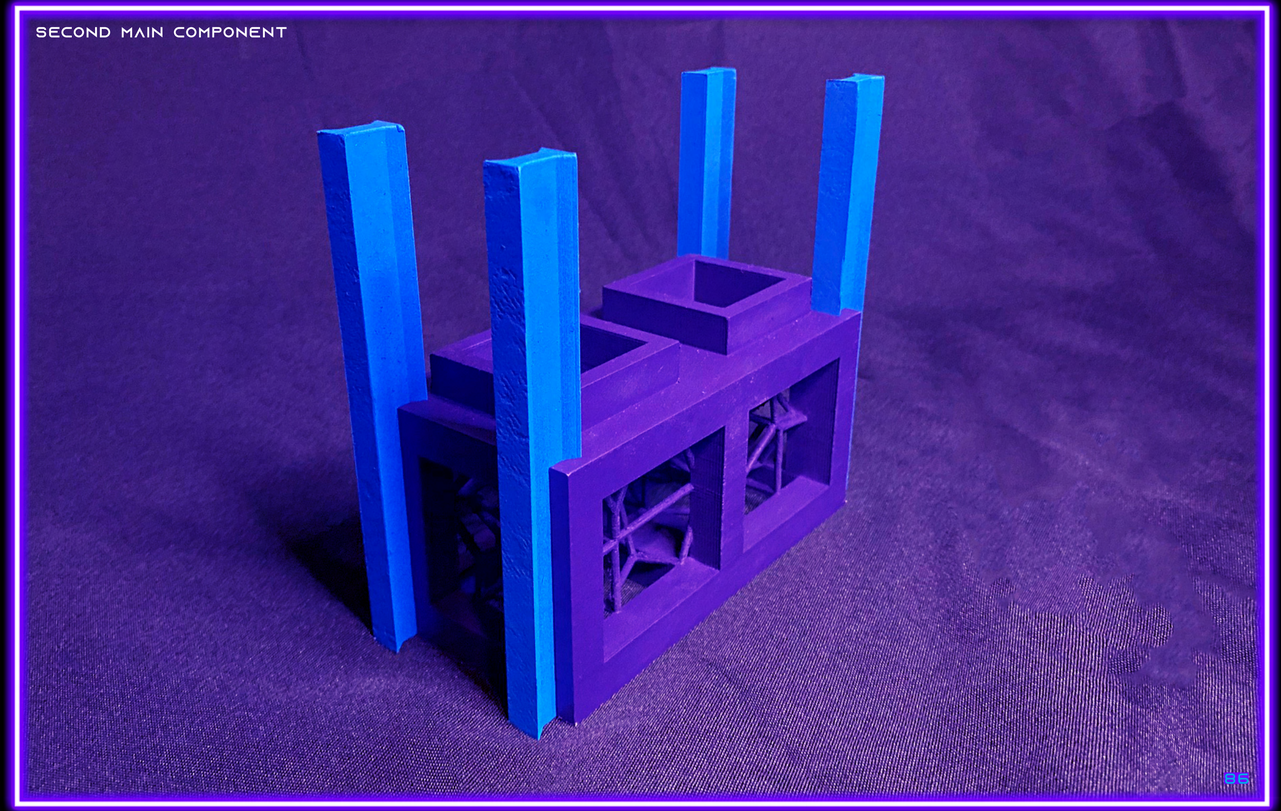
EXPLODED SMALL STRUCTURE




PRELIMINARY COMPONENT
03


VORONOI APPLICATION ANALYSIS
04


MAIN COMPONENT
85


SECOND MAIN COMPONENT
86

A PRECEDENT INSPIRATION

THIS COLLAGE SHOWCASES THE AESTHETICS AND CHARACTERISTICS OF MODERN AND POPULAR GAMES THAT HAVE PROVIDED THE INITIAL INSPIRATION FOR WHAT BESPOKE MOON COULD BECOME.

AN AI INSPIRATION

THE INCEPTION OF BESPOKE MOON WAS MOTIVATED BY THE DESIRE TO INFUSE OUR BUILT ENVIRONMENT WITH A FUTURISTIC, INDUSTRIAL, SLEEK, AND EXTRATERRESTRIAL AESTHETIC, REMINISCENT OF SOMETHING ONE MIGHT ENCOUNTER IN OUTER SPACE. GIVEN THE SCARCITY OF MODERN PRECEDENTS THAT EMBODY THE AESTHETIC BESPOKE MOON ASPIRES TO ACHIEVE, ARTIFICIAL INTELLIGENCE PLAYS A PIVOTAL ROLE IN VISUALIZING THIS VISION. THESE IDEAS AND IMAGES THEN RAISE THE QUESTION OF HOW THEY WILL BE CONSTRUCTED. THIS IS THE PUSH BEHIND BESPOKE MOON'S DEVELOPMENT OF A COMPONENT-BASED SYSTEM, AIMED AT BRINGING SUCH DESIGNS ALIVE BUT BY DOING SO BY MOVING AWAY FROM CONVENTIONAL CONSTRUCTION METHODS.

AI IMAGES GENERATED BY AUSTIN WHITE

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"AI IS INEVITABLE TO BE INTEGRATED INTO ARCHITECTURE. AS ARCHITECTS AND DESIGNERS, WE CAN WORRY ABOUT ITS POTENTIAL IN OUR PROFESSIONS, HOWEVER, LET US EMBRACE THIS NEW ERA AND USE IT IN A WAY THAT CAN FULLY IMMERSE OURSELVES BACK INTO DESIGN AS WE WERE TAUGHT AND BORN TO DO."

-AUSTIN WHITE

"GIVING UP IS NOT AN OPTION."

-AUSTIN WHITE

PLEASE NOTE THAT THE WORK PRESENTED IN THIS THESIS IS DISTINCT FROM ANY PROJECTS I MAY BUILD OR PURSUE BEYOND ACADEMIA. ANY SIMILARITIES ARE COINCIDENTAL, AND THIS THESIS DOES NOT DIRECTLY REPRESENT FUTURE COMMERCIAL OR PROFESSIONAL WORK.

THE NAME BESPOKE MOON IS INTENDED FOR FUTURE COMMERCIAL USE. PLEASE BE ADVISED THAT AUSTIN WHITE INTENDS TO PROTECT THE NAME AND ITS ASSOCIATED BRAND IDENTITY. UNAUTHORIZED USE FOR COMMERCIAL OR OTHER PURPOSES IS NOT PERMITTED.

BESPOKE MOON BY AUSTIN WHITE