

FACULDADE DE ARQUITETURA
LISBON SCHOOL OF ARCHITECTURE
UNIVERSIDADE DE LISBOA

REPRESENTAÇÃO DIGITAL

MIARQ | 1º Semestre | 2023/2024

Mariana Duque | 2021 | 195 | 2J

Docente | Nuno Alão

ÍNDICE

- Semana 1 – Slide 3 e 4
- Semana 2 – Slide 5 e 6
- Semana 3 – Slide 7 e 8
- Semana 4 – Slide 9
- Semana 5 – Slide 10 e 11
- Semana 6 – Slide 12 e 13
- Semana 7 – Slide 14
- Semana 8 – Slide 15 e 16
- Semana 9 – Slide 17
- Semana 10 – Slide 18
- Semana 11 – Slide 19

SEMANA I

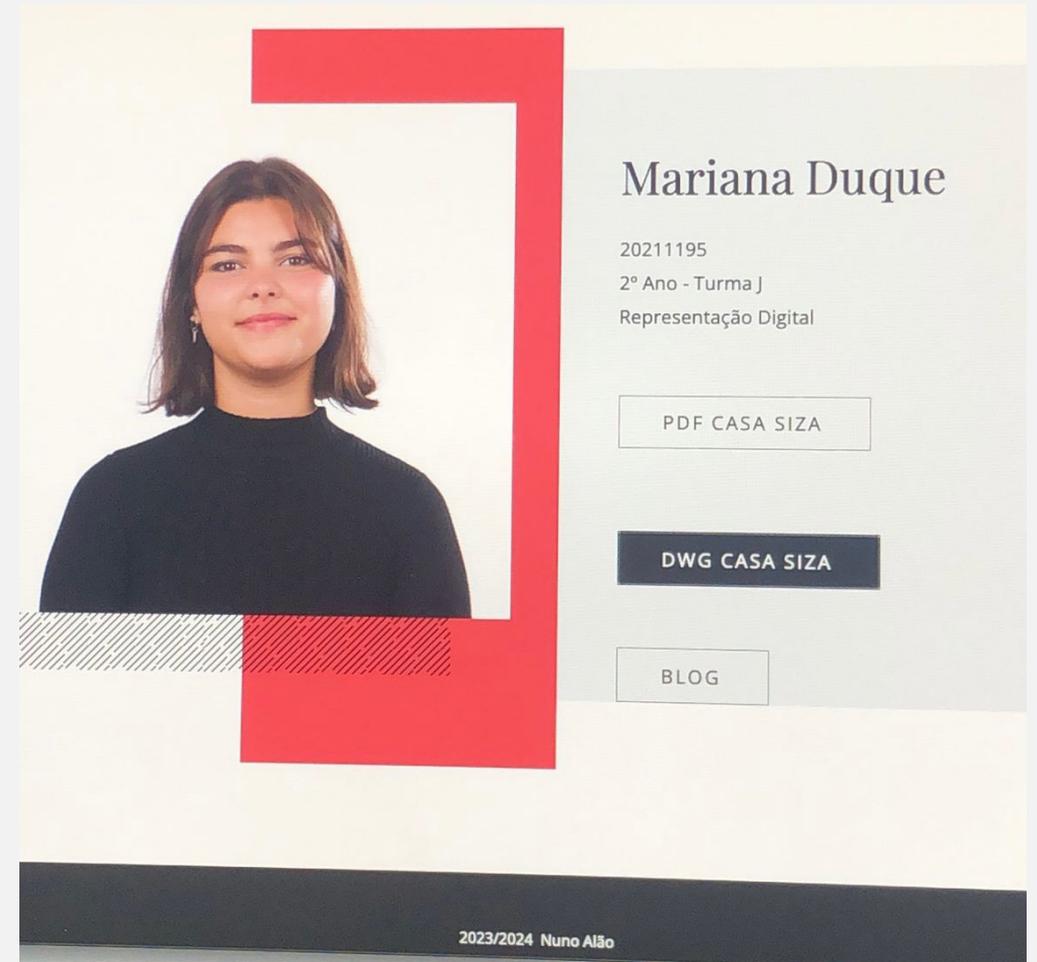
Criação da página de html para uso de entrega dos trabalhos.

PROGRAMAS:

Nicepage – template para o ficheiro html

Sublime – edição do ficheiro html

Filezilla –upload do ficheiro html no servidor da Faul



```
home.css x Home.html
56 <a href="https://www.ra.ulisboa.pt/index.php/pt/" class="
    u-image u-logo u-image-1" data-image-width="632"
    data-image-height="164" title="Faculdade de Arquitetura de
57 Lisboa" target="blank">
    
58 </a>
59 </div></header>
60 <section class="u-clearfix u-section-1" id="carousel_ab24">
61 <div class="u-clearfix u-sheet u-valign-middle-lg
    u-valign-middle-md u-valign-middle-sm u-valign-middle-xl
    u-sheet-1">
62 <div class="u-expanded-width-sm u-expanded-width-xs u-grey-5
    u-shape u-shape-rectangle u-shape-1"></div>
63 <div class="u-palette-2-base u-shape u-shape-rectangle
    u-shape-2"></div>
64 
65 
66 <div class="u-container-style u-group u-shape-rectangle
    u-group-1">
67 <div class="u-container-layout u-valign-middle
    u-container-layout-1">
68 <h2 class="u-custom-font u-font-playfair-display u-text
    u-text-1">Mariana Duque</h2>
69 <p class="u-text u-text-2">20211195<br>2º Ano - Turma J&
    nbsp;<br>Representação Digital
70 </p>
71 <a href="DwgMarianaSiza.pdf" class="
    u-active-palette-5-dark-3 u-border-1
    u-border-active-palette-5-dark-3 u-border-grey-50
    u-border-hover-palette-5-dark-3 u-btn u-button-style
    u-hover-palette-5-dark-3 u-none u-text-active-white
    u-text-body-color u-text-hover-white u-btn-1" target="
    _blank">PDF CASA SIZA</a>
72 </p>
73 <a href="DwgMarianaSiza.dwg" class="
    u-active-palette-5-dark-3 u-border-1
    u-border-active-palette-5-dark-3 u-border-grey-50
    u-border-hover-palette-5-dark-3 u-btn u-button-style
    u-hover-palette-5-dark-3 u-none u-text-active-white
    u-text-body-color u-text-hover-white u-btn-1" target="
    _blank">DWG CASA SIZA</a>
74 </p>
75 <a href="Poliedros_Ex2.dwg" class="
    u-active-palette-5-dark-3 u-border-1
    u-border-active-palette-5-dark-3 u-border-grey-50
    u-border-hover-palette-5-dark-3 u-btn u-button-style
    u-hover-palette-5-dark-3 u-none u-text-active-white
    u-text-body-color u-text-hover-white u-btn-1" target="
    _blank">DWG POLIEDROS</a>
76 </p>
77 <a href="Exercicio2_layout.pdf" class="
    u-active-palette-5-dark-3 u-border-1
```

SEMANA 2

Introdução do programa Autocad.

Instrução de comandos.

Pequeno exercício de pentágonos e retângulos.

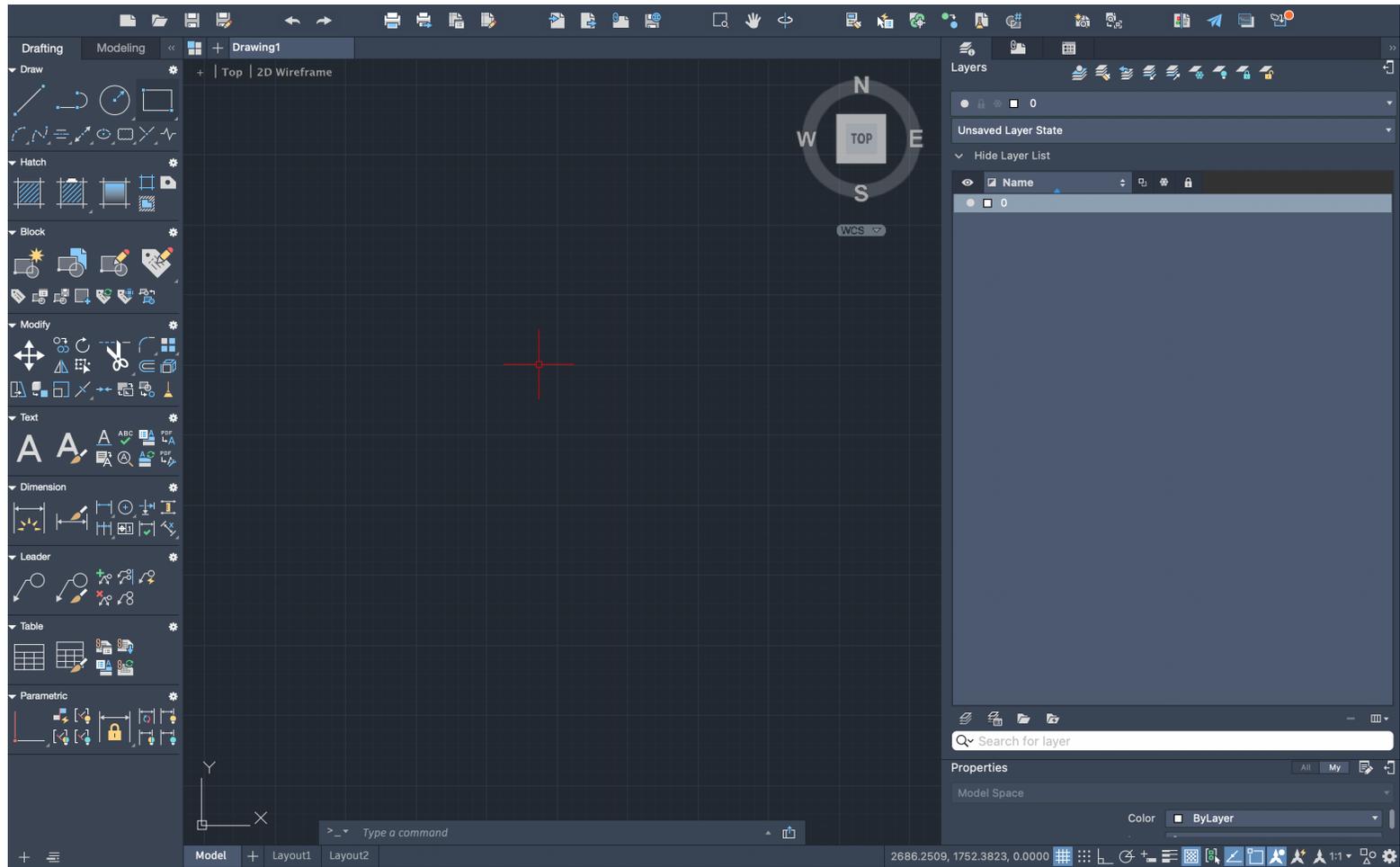
COORDENADAS

COORDENADAS ANSOLUTAS - #DIST-ÂNG (ORIGEM)

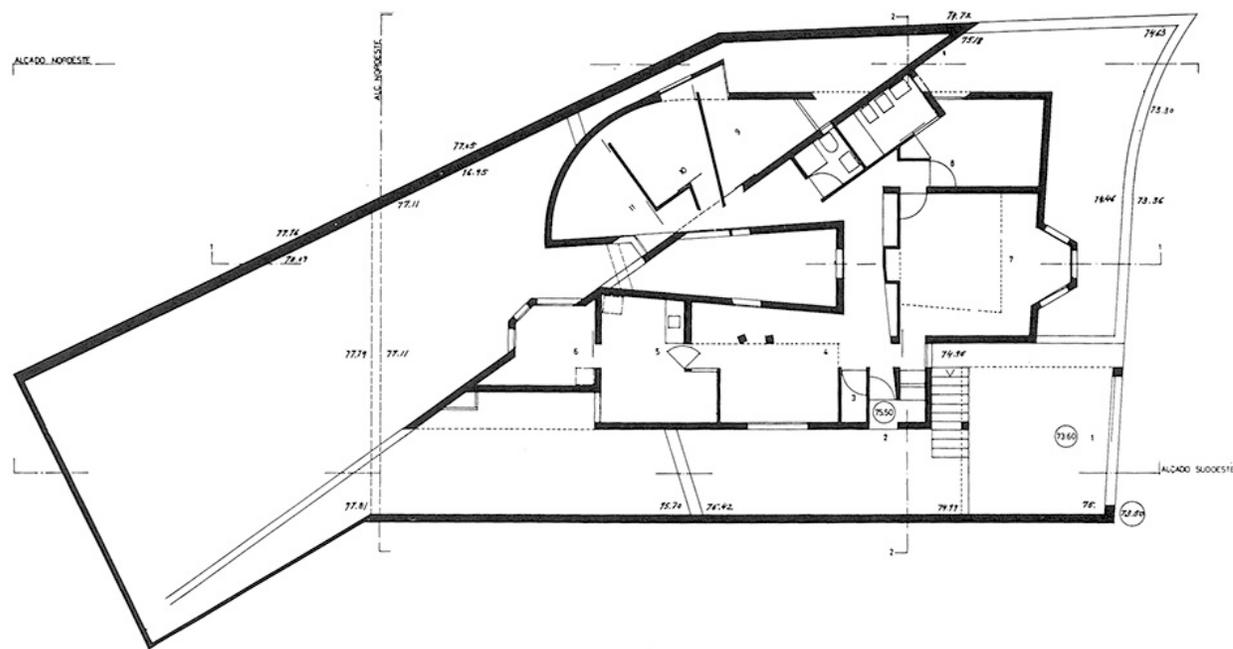
COORDENADAS RELATIVAS - @DIST-ÂNG (ULTIMO PONTO)

COMMANDS ESSENCIAIS

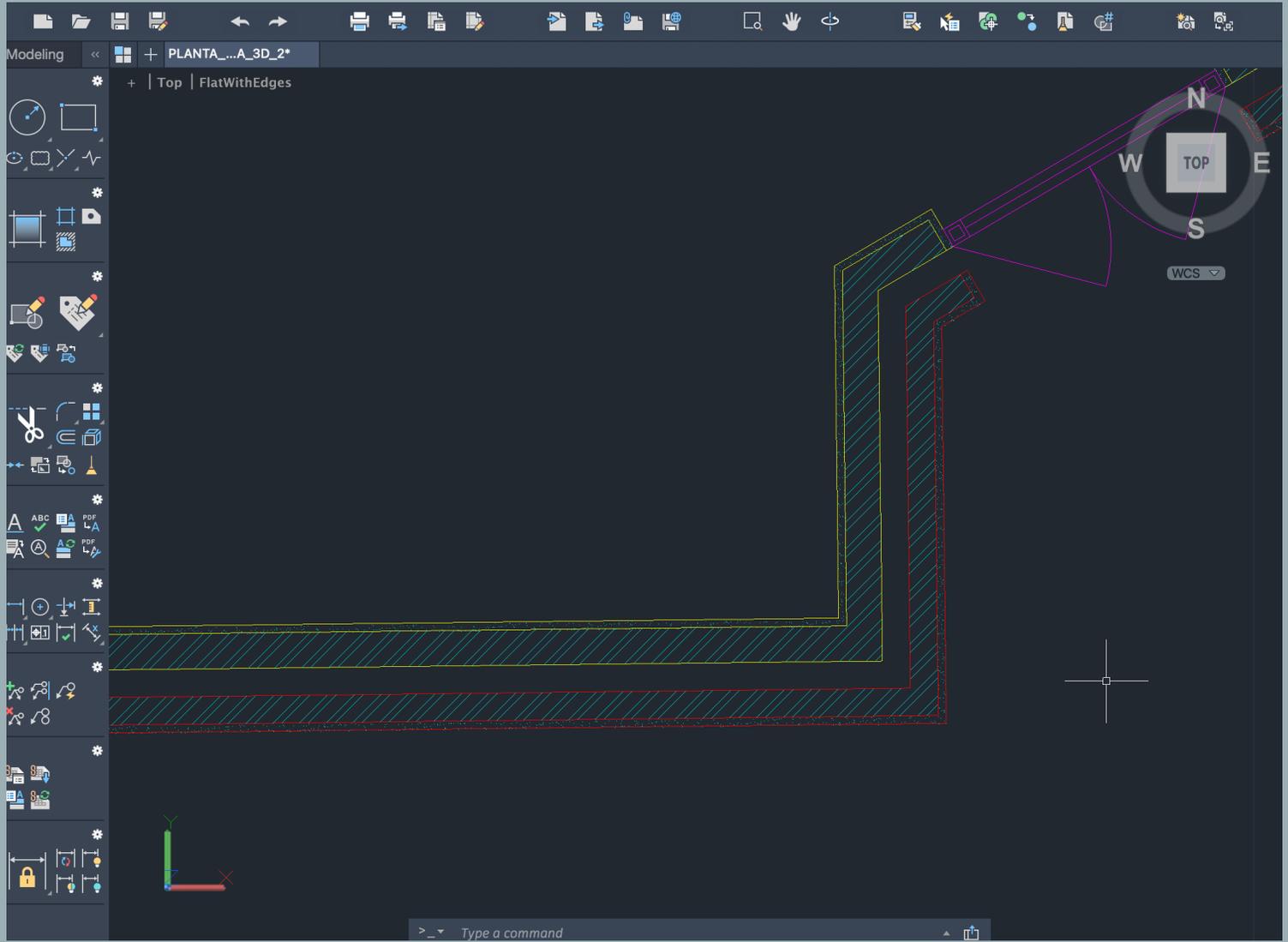
- LINE - **L**
- CIRCLE - **C**
- UNDO - **U**
- CLOSE LINE (MID COMMAND) - **C**
- MOVE - **M**
- ERASE - **E**
- LAYER - **LA**
- OFFSET - **O**
- REDO - **REDO**
- DESELECT - **ESC**
- POLYLINE - **PL**
- TRANSFORMAR POLYLINE - **PEdit**
- DESFAZER POLYLINE - **EXPLODE**
- SPLINE (LINHAS CURVAS) - **SPL**
- TEXT - **DTEXT**
- SCALE - **SC**
- COPY - **CP**
- ORTHOGONAL - **CTRES** / SINAL PERTPENDICULAR
- CRIAR POLIGONOS - **POLYGONE**
- OBJECT SNAP - **OSNAP**
 - **END**
 - **MID**
 - **PERP**
 - **QUAD**
 - **CONT**
 - **INT**
- CHANGE PROPERTIES - **CHPROP**
- DISTÂNCIA ENTRE DOIS PONTOS ? - **DIST**
- LISTA DE ELEMENTOS DE QUALQUER O.G. - **LIST**
- MATCH PROPERTIES - **MATCH**
- ZOOM - **Z**
- ZOOM ALL - **ZENT A ENT**
- ZOOM ENTENTS - **ZENTE ENT**
- TRIM - **TR**
- ORBIT - **ORR**
- MOVER TELA - **PAN**
- ATTACH - **ATTACH**
- ALIGN - **AL**
- PLOT STYLE - **PLOT**
- DIVIDIR BLOCO (ELEMENTOS INTERNET) - **EXPLODE**
- TROCAR DE LADO - **MIRROR + MIDPOINT**
- MUDAR COORDENADAS - **UCS**

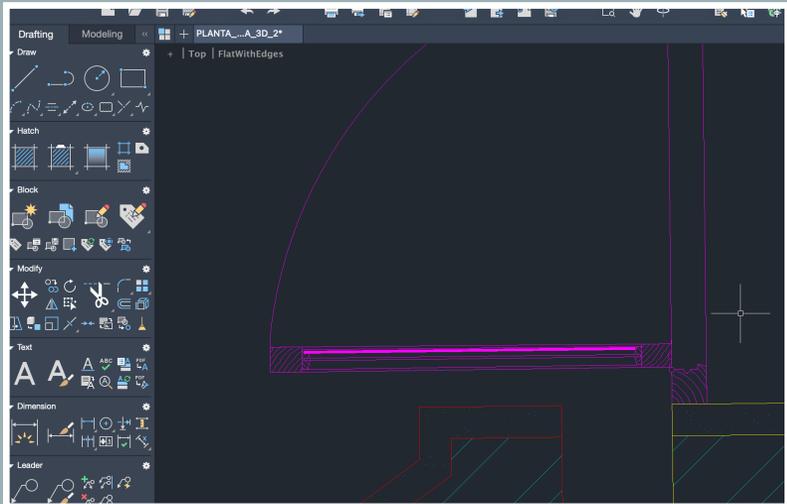
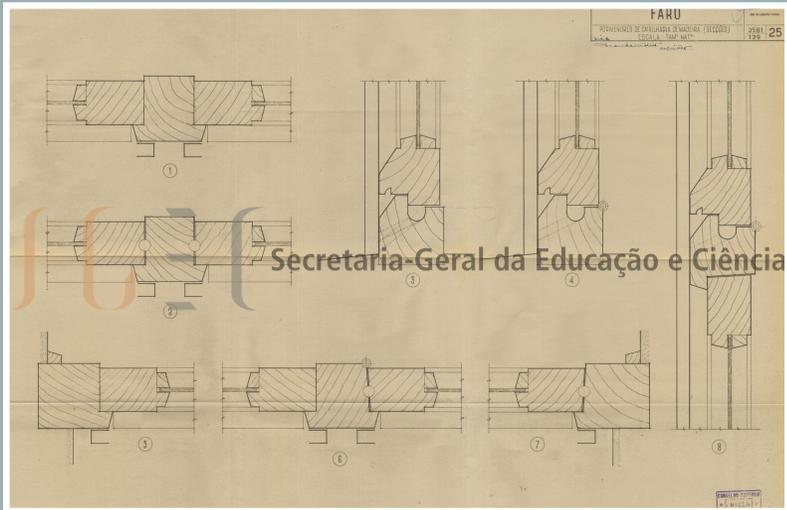


SEMANA 3



- Decalque da casa Carlos António Siza do Siza Vieira à escala 1.100
- Representação de vãos
- Aplicação de hatch



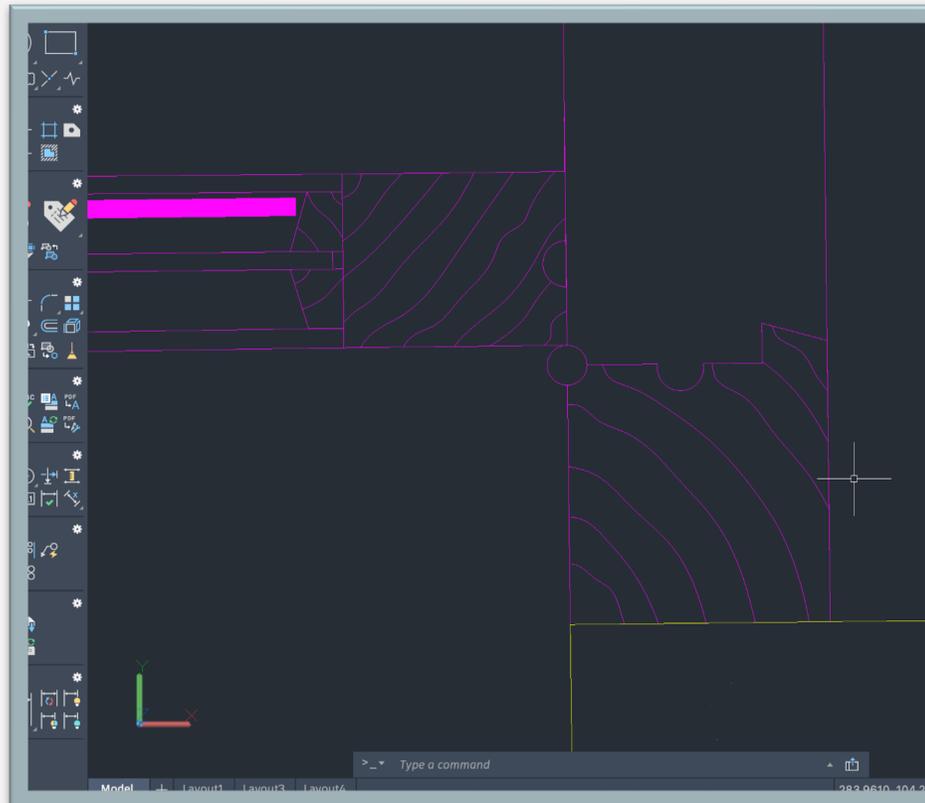


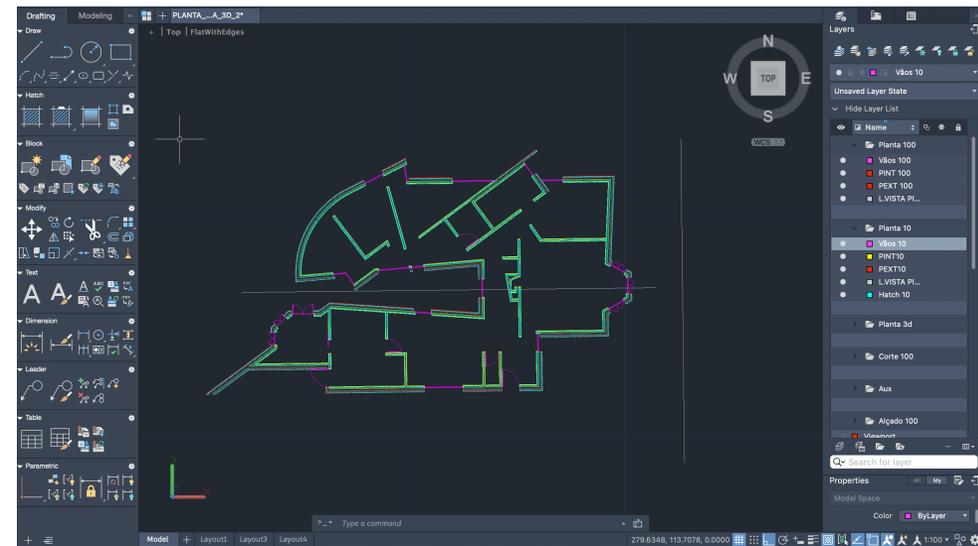
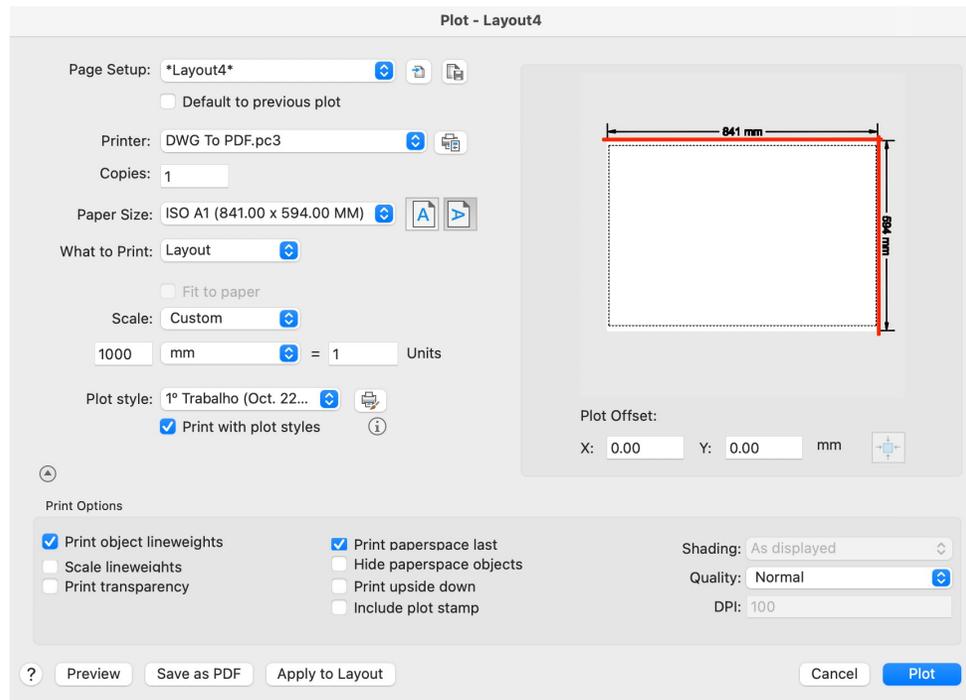
SEMANA 4

- Representação dos caixilhos
- Pormenores de materiais

SEMANA 5

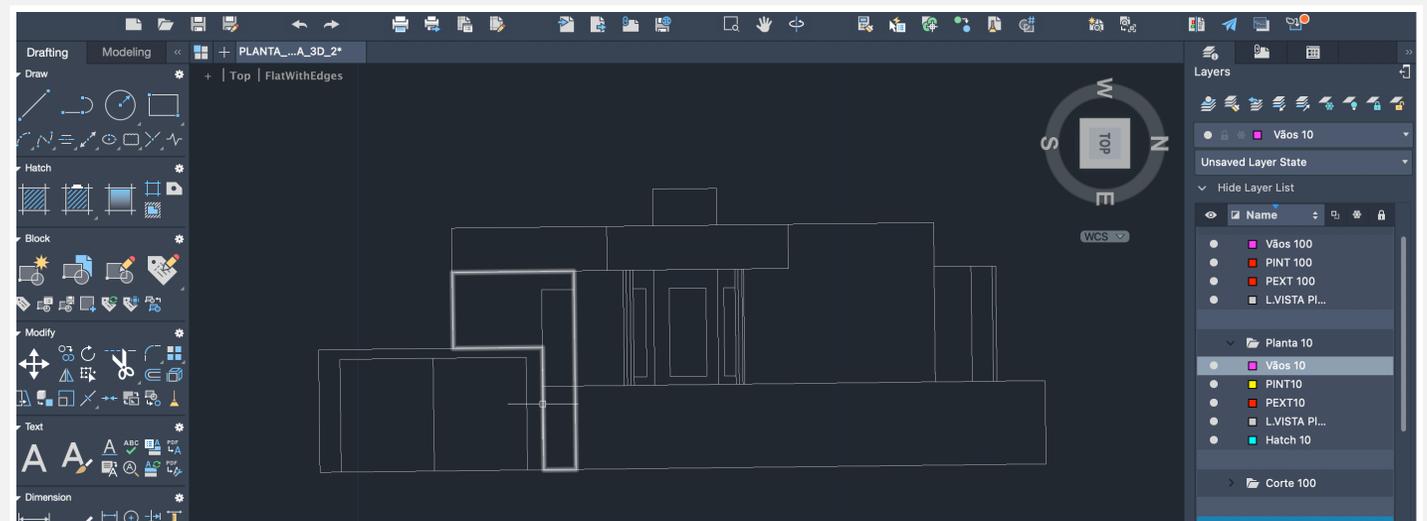
- Pormenor dos caixilhos de madeira
- Finalização do decalque da casa.
- Introdução de Layouts de impressão



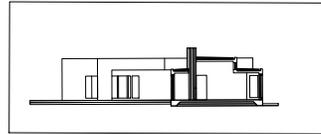


SEMANA 6

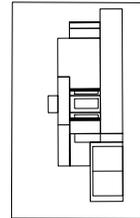
- Cortes e Alçados;
- Detalhe do corte;
- Viewpoints e layout final;



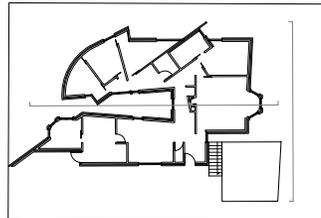
Trabalho 1 - Planta da Casa António Carlos Siza
Representação Digital 2023/2024



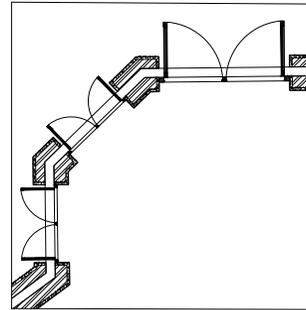
CORTE CC - 1:100



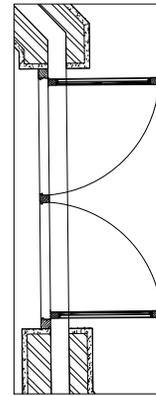
ALÇADO AA - 1:100



PLANTA - 1:100



PLANTA PORMENOR - 1:10



PORMENOR VÃO - 1:5

Mariana Duque - 20211195
MIARQ - 2J

SEMANA 7

Criação de uma parábola

Representação de sólidos

NOVOS COMANDOS 3D:

EXT (extrude) – criar estruturas a partir de formas;

3DROTATE – Rodar em 3D;

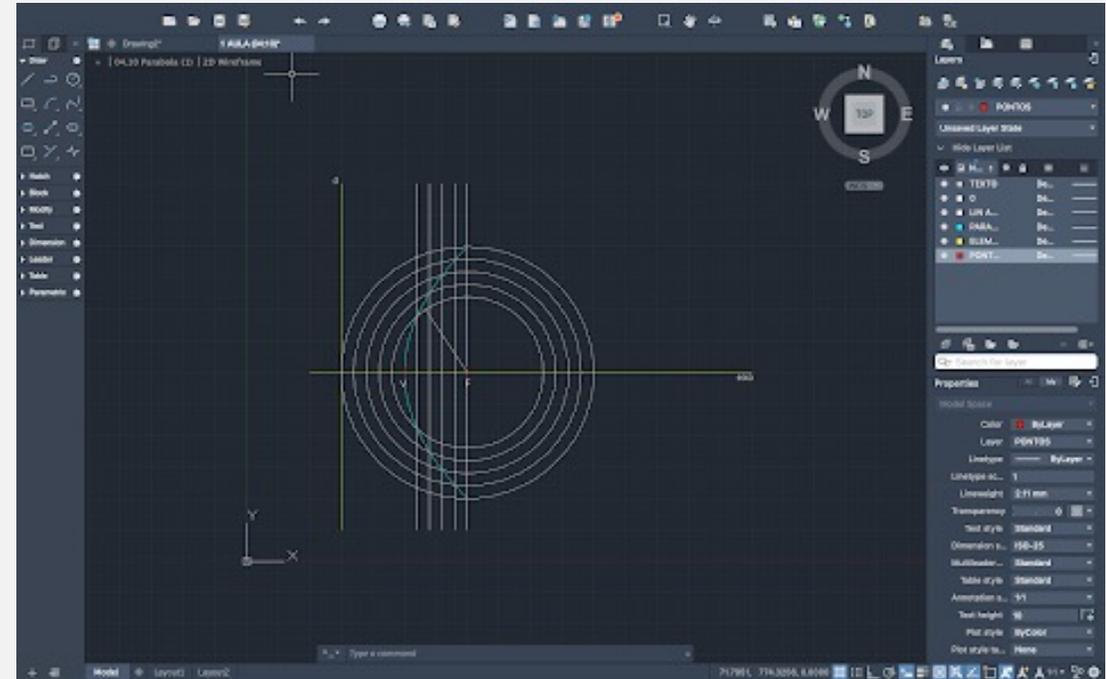
ROTATE3D – definir o eixo e o ângulo de rotação;

VISUALSTYLES – diferentes estilos de visualização de sólidos;

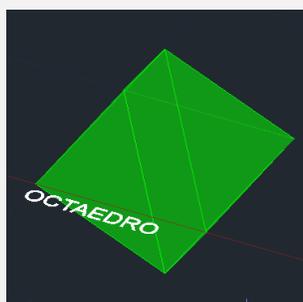
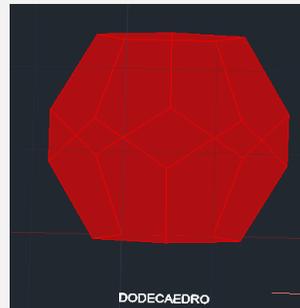
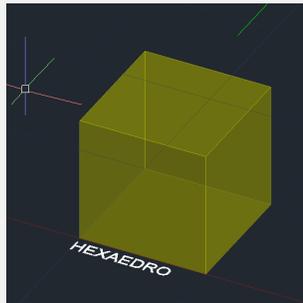
UNI (union) – unir sólidos;

SUBTRACT – subtrair sólidos;

INTERSECT – Intersectar sólidos;



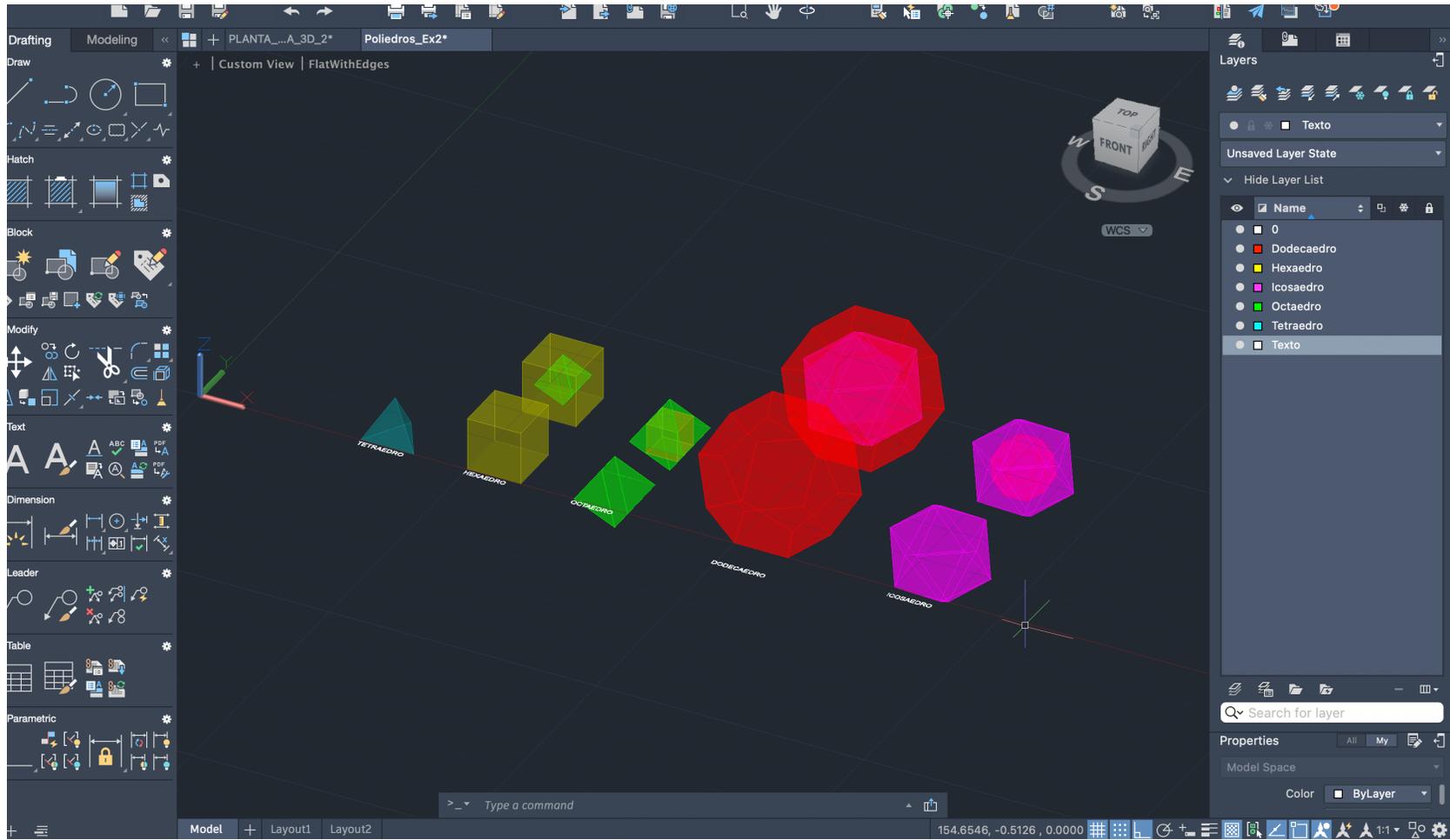
SEMANA 8

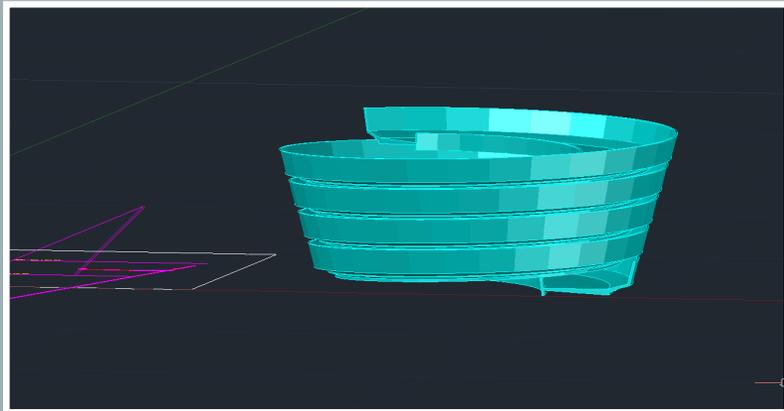
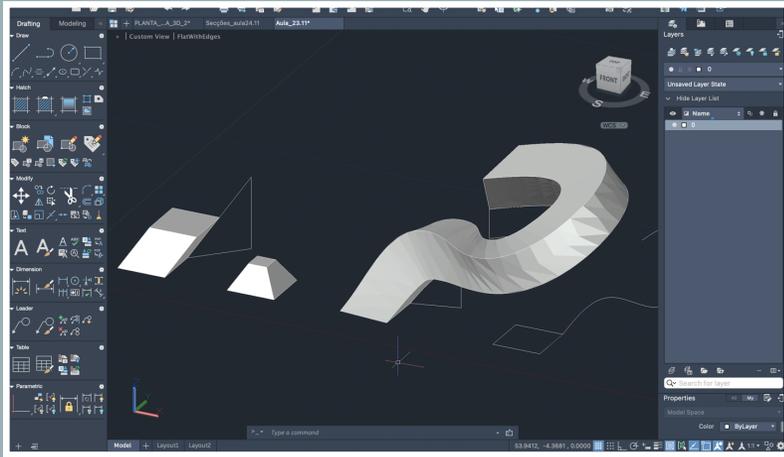


Representar polígonos;

- Tetraedro – 4 bases;
- Octaedro – 8 bases;
- Dodecaedro – 12 bases;
- Icosaedro – 20 bases

Interseção de polígonos



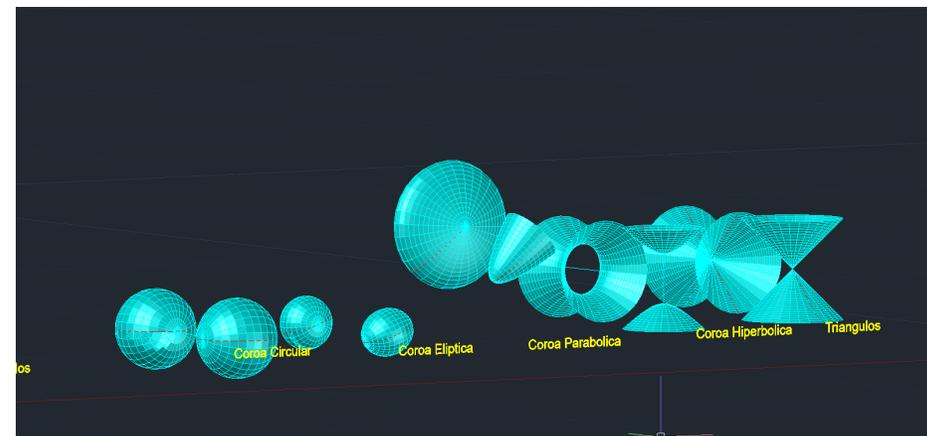
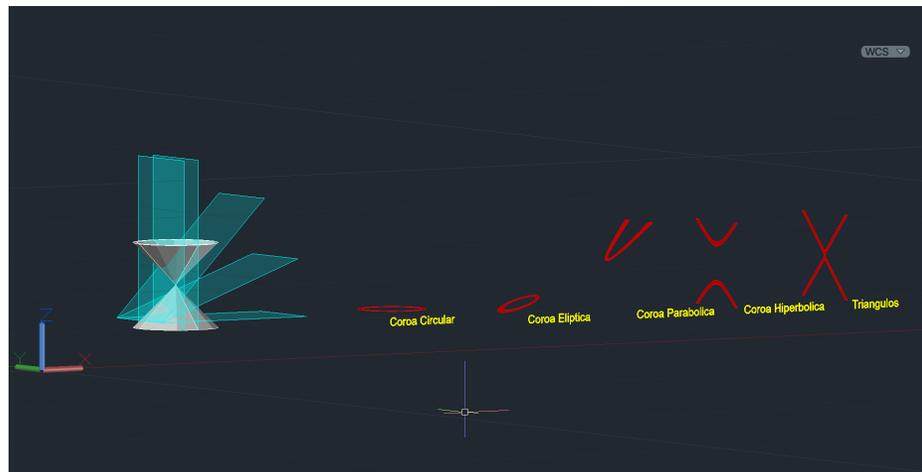


SEMANA 9

- Pequenos exercícios para reconhecimento de 3d em Autocad.
- Sólidos extrude
- Rampa Guggenheim
- Secções do cone

SEMANA 10

Secções do cone



SEMANA 11

Iniciação da utilização do programa 3Ds Max
Elaboração do Exercício da Lamparina de óleo

Lamparina

- Cilindro: Raio - 75mm; Altura – 80mm; 8 segmentos;
- Torus no cilindro: 1º raio – 75mm; 2º raio – 2mm
- Compound objects - boolean – fazer subtract do torus
- Modifier list – taper
- Adicionar dois cilindros para o botão

Chama

- Cilindro
- Modifier list – Stretch até ter chama

Campânula

- Criar linhas e arredondá-las em Modifier list – Selection – Vertex até ter a forma desejada;
- Modelar a forma com Bezier ou Smooth;
- Para obter o objeto ir a Modifier List – Lathe

Mesa

- Criar box 400x1000x-40 (tampo);
- Criar box 40x80x-800 (pernas x4);
- Alinhar;

Chão e Paredes

- Criar box 2000x3000x-100 (chão);
- Criar box 2000x100x2500 e 3000x100x2500 (paredes)