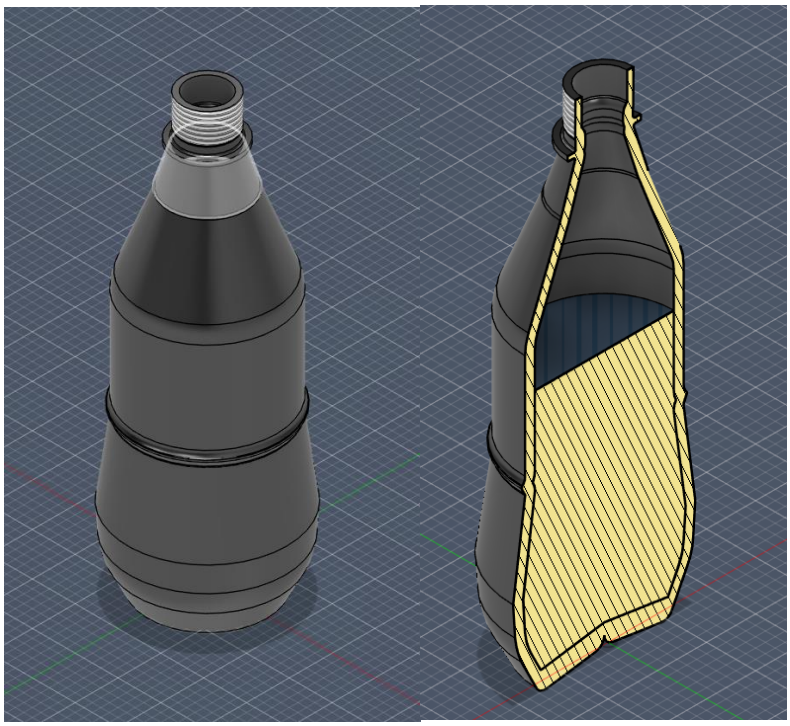
3D Water Bottle Design



Project Overview

This project involves the design and assembly of a personalized multi-part water bottle. The design focuses on utilizing parametric modeling, complex surfacing (Loft), and mechanical joint assembly to create a functional 3D model.

Design Components

The assembly consists of the following key components as seen in the Browser tree:

* Main Bottle Body: A cylindrical base featuring personalized embossed text ("REENA").

* Bottle Neck: Created using a Loft command to transition from the wide body to the threaded neck.

* Bottle Cap: A separate component designed to fit the threaded neck of the bottle.

Key Fusion 360 Features Used

| Feature | Description |

| Loft | Used to create the smooth transition between the main body and the neck. |

| Coil/Threads | Applied to the neck to allow for a functional screw-on cap. |

| Emboss | Used to project the name "REENA" onto the curved surface of the bottle. |

| Joints | A Cylindrical Joint was implemented to allow the cap to rotate and slide along the Y-axis. |

Assembly and Motion

The screenshots demonstrate the Assembly environment:

* Joint Type: Cylindrical 2.

* Motion Study: The "Press <esc> to end animation" prompt indicates a motion study or joint preview is active, simulating the unscrewing action of the cap.

* Component Links: Components like yellow bottle:1 and bottle cap:1 are linked as external references, showing a clean assembly workflow.

Visual Specifications

* Appearance: The bottle features a dark blue/metallic finish, while the cap has a brushed steel/silver appearance.

* Rendering: The model is shown in the Design workspace with visible edges for technical clarity.

Instructions to finish your Word Doc:

* Copy the text above into Word.

* Insert your images: * Place 1000172262.jpg under the "Design Components" section.

* Place 1000172263.jpg under the "Assembly and Motion" section.

* Format: Set the headings to "Heading 1" and "Heading 2" styles in Word for a professional look.