

ITP 308: Homework 2

Due: February 3, 2021 11:59pm

Setup

In this homework you will create a water bottle design. There are many different kinds of water bottles out there, and their design is based on their functional requirements. Some are made of plastic for weight reduction. Others are made of stainless steel for durability. Others are dual-layered for insulating heat/cold.

You must first choose your functional requirements and then choose your design and material selection based on those functional requirements.

Requirements

Your water bottle design should be focused on the main body of the water bottle (not the cap or any accessories). It should be able to hold at least 8 fluid oz. of water, and should not weigh more than 3lbs for portability. Your job is to design a water bottle that meets these requirements. It should also have a way for a lid to be attached to keep the water from spilling out.

Deliverables

You must submit:

1. Your model. It should be a SolidWorks part file with a single solid body. All sketches must be fully-defined. You may not use the "Fix" relationship at any point. Name your model: **waterbottle.SLDPRT**
2. A Word document describing the functional requirements that you have imposed on your model. Name your file **FR_Waterbottle.DOCX**

Compress BOTH files into a single zipped file named: **username_hw2.zip** and submit to Blackboard.

Grading

Description	Points
Part is designed to hold at least 8 fluid oz.	5
Part weighs at most 3 lbs	10
Part meets functional requirements	10
Total	25

*Note: Points will be deducted for incorrect submissions, using "Fix" relationships, under-defined sketches, and multi-body part files.