
Assignment 2a Beverage Container Sketch and Parametric Logic

Due: October 1

Pick a beverage type from the list below and then **three** different configurations from columns 2 and 3 (e.g. Biker in Ankorage, Blind in Tokyo, and Child in Dubai) or, preferably, some locations and demographics of your own choosing.

(1) Beverage Type	(2) Demographic	(3) Location
Water	Biker	San Francisco
Tea	Elderly	Tokyo
Beer	Child	Dubai
Wine	Blind	Ankorage

Sketch out what you think would make a good beverage container for each of the three configurations that you have chosen. What are the key design drivers / goals for each case? Come up with at least 5 geometric parameters that respond to the goals / drivers that you have identified above and sketch them. Describe the relationship between the goals / drivers and the geometric parameters using the Parametric Logic Diagrams explained in class (presentation slides posted on the Wiki) or use a method of your own choosing.

Assignment 2b Building a Parametric Beverage Container Model

Due: October 6

Take the parametrization for the beverage container which you have come up with in Assignment 2a and implement it in parametric CAD modeling software.

Some suggestions:

- Start simple (2-D first, then 3-D)
- Think about the relationship between the parameters and how that might affect the order in which you build your model
- Identify an appropriate range for the chosen parameters
- Test each parameter to make sure it drives the model as expected before adding additional features
- More instructions during class...

Deliverables:

- 3-D CAD model which can achieve the three chosen configurations by manipulating parameters
- Presentation to the class including:
 - Description of design drivers / goals
 - Explanation of how the parameterization you have chosen responds to the drivers / goals
 - Screen shots of the model in the three chosen configurations + two unexpected configurations
 - Lessons learned