### DESIGN&PITCH CHALLENGE

# POLLUTION SOLUTION: TECHNICAL BRIEF

Now that you have analyzed a problem, proposed and refined a solution, and developed a pitch for your idea, you will create a technical brief describing your product and the process you used to find a solution.

PART 1. Briefly describe your solution and how it decreases the negative impact of single-use plastics on the environment.

PART 2. Describe the mathematics, science, and engineering you researched to design your product. Include links to websites or other resources you used.

PART 3. Describe the decisions you made to choose your design and the challenges you had to overcome.

PART 4. How did developing your Key Business Proposition and related Business Models Type affect your process?

PART 5. Your final solution probably looked different from your original idea. Describe the process for how you developed your idea from start to finish.





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#### PART 6. How well do you think your solution will work under real-world conditions?

Just a little	Somewhat	Fairly Well	Almost Completely

Explain your reasoning.

PART 7. Fully describe your Pollution Solution based on the questions below.

- 1. What liquid consumer product did you choose to repackage?
  - Describe the liquid product you chose to repackage and sell as part of your business.
  - b. Explain why you chose this item.
- 2. How will you package your liquid product?
  - Include a 3D sketch of your container and include all dimensions with correct units.
  - Describe the volume of liquid your container will hold. Use calculations to justify your answer.
  - c. Explain how you decided on the size and shape of your packaging.
- 3. How will you ship your product?
  - a. Include a 3D sketch of the shipping container you will use to ship your product.
    Include all dimensions with correct units.
  - b. Show how you will safely package your product in the shipping container.
  - Describe how much of your product can be shipped in each shipping container.
     Use calculations and include dimensions to justify your answer.
- 4. How will your product help the environment?
  - a. Describe the materials used to make the container.
  - b. Describe how your company will get the materials needed to make the container.
  - Explain why using these materials will make your liquid container better for the environment than plastic.



