Title: Paper Boats

Engineering Challenge

July 20, 2022

Problem Statement: Write the problem statement in your own words and interpretation. What are you trying to achieve? What is being learned through this challenge?

In our groups, we tried to hold maximum weight for a maximal long period of time on water using only one sheet of paper. I think the purpose of this challenge was to improve the skills of engineering thinking with limited resources in limited period of time.

Materials: List the materials given (if any).

1 sheet of paper.

Approach: Write a description of your plan to achieve the goal of the problem statement. Add drawings/sketches/CADs if possible.

We started thinking about the object which would be put on paper first but couldn't find anything convenient. Then, we switched to thinking about the paper boat design, with which we came up pretty quickly. After this we started wandering in the classroom in search of an object that would fit in the boat and would be too heavy for it.

Solution: What is your solution to the given problem?

We decided to make a classical and boring paper boat. Then we proportionally put 8 quarters in it, 4 in each half. In total, the coins weighed 47 grams.

Analysis: After testing, did it achieve your goal? Either way, what could you have done better? If given more time/materials, what would you do differently?

After testing it on water, we understood that the boat design was not fit for such a challenge. It would have been more efficient ot make a design with

a larger surface area. This way we would have a chance to use a heavier object.

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