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Soda bottle water rockets - a project students (seem to) like VERONICA ELIASSON, University of California, San Diego — In this talk I will present my experience of developing and leading an undergraduate student project for a junior level Fluid Mechanics course. My goal was to let students participate in a project that would help them to develop and retain a better understanding for several fluid mechanics concepts, while simultaneously being challenged in an interesting and fun way. Thus, students were divided into teams and asked to complete two things: 1) determine using theory mixed with numerical estimates how much water to add to the soda bottle given a maximum amount of allowable pressure for their bottle rocket; and 2) design, build and fly a rocket with the goal of reaching as high of an altitude as possible. I'll also talk about the weekly tasks given to students, the results, and finally share some of the comments and perspectives from the participating students.

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