

[Email 1](#)

Hi Daniel,

I've thought about some different idea to help you in science and ice come to the idea of one particular program. I'm going to create a program with a list of formulas and constants that you use regularly in the grade 12 science curriculum. You will also be able to calculate answers to those formulas based on values you have for the specific variables. What are your initial thoughts on this Idea?

Response

Hey Craig,

I'm really interested in your plans and I think that a list of all formulas and constants would benefit me greatly keep me updated on your progress.

Daniel

[Email 2 \(After first implementation\)](#)

Hey Daniel,

I've implemented the formula and constant lists and I was wondering if there were any other ideas you have to add functionality to the program?

Craig

Response:

Hey Craig,

Thanks for completing the initial request in such a short period of time. My class has recently started balancing chemical equations and I'd love a function to be added to the program that auto balances an unbalanced chemical equation so that I can check my balancing.

Daniel

[Email 3 \(After final product has been completed\)](#)

Hi Daniel,

I am happy to announce that I have finished the program and I can come to demonstrate and install it for you at your earliest convenience.

[Meeting 1 \(After Design Process\)](#)

Craig: So, Daniel, I drew some basic design ideas for the visual interface and I wanted your feedback on it.

Daniel: Let me see. I like that all the buttons and variable boxes are labeled correctly and that each window has a back button returning to the previous menu. I think that your visual interface design is simplistic and should work just fine for me.

Craig: Ok that's great to now I'll get started on the implementation right away

Meeting 2 (Live demonstration of final product)

Craig: Daniel are you excited to see the final product

Daniel: Most definitely I am super excited to see what you have been able to create.

(After a brief demonstration of all the functions of the program)

Craig: So I'd like to make sure I adequately met the success criteria you set up, the first being that all the formulas could be viewed in a list.

Daniel: The formula list works just great, I can highlight the formula I am currently looking at and the scroll bar on the side is a great help.

Craig: The second criteria was that you would be able to calculate the answer to any formula you selected.

Daniel: The program provides the correct answer for the formulas I've tested and seems to work just fine

Craig: Following was the constant list with all the information regarding the specific constant.

Daniel: All the information I wanted is here including the units and variable for each constant which makes looking for a constant's property much easier for me.

Craig: The next criteria was the ability to filter a list based on a keyword. What are your thoughts on the search bar?

Daniel: The search bar will definitely save me a lot of time when looking for a specific formula. I have great appreciation for you to take the time to implement it.

Craig: The fifth success criteria was the extra feature you asked me to add: the auto balancer.

Daniel: As per my testing the balancer works fine even for complex compounds, which will be a great help for checking my work and studying for tests.

Craig: Lastly you requested an efficient GUI for intuitive transversal through the program

Daniel: The GUI lives up to the design documents you showed me and I had no complaints then or now, it works perfectly. I can thoroughly say that you have done a great job