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CSCI 215 – Website Programming  
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### **Milestone 1: Final Project Descriptions**

- **Purpose of Project:**

The purpose of this project will be to create a webpage that will display essentially a calculator, but it will contain functions that will consist of the basics of Newtonian Physics. Essentially, the page will display a bevy of functions that will have to do with various formulas that are used in physics (velocity, acceleration, momentum-type formulas) and, if possible, make some kind of attractive interface with a visual representation (if possible!).

- **Intended Audience:**

The audience for this project will be people that are maybe taking a physics course and are wanting to learn something, or possibly have trouble envisioning the formulas.

- **This Project will Address:**

The problem that is inherent in any mathematics class: that most students cannot take math and apply it to the real world. For myself this was a problem until I took physics and realized how exactly one can apply math to the real world. As a result, it makes a dry subject instantly more interesting.

- **User Interactions:**

I would like to see the project interact with the user by changing the HTML presented when using various formulas, and can possibly use algebra to give the user the desired variable's value when none is presented. The page will give the user the opportunity to pick from various formulas from the different areas of Newtonian physics.

- **Similar sites:**

<http://calculatoredge.com>

<http://www.astro.wisc.edu/~dolan/constants/calc.html>

- **External Resources:**

I am not exactly sure what I need here, I just have an idea that I think would be useful and I would like to make it interesting enough that math becomes accessible.