Project 2 Reflections and Introduction to Module 3

Please seat yourselves in every other row so the NINJAs and instructors can circulate easily among you.

Today's Agenda

Today we'll reflect on Project 2 and kick off the third part of the course, introducing our approach to mechanics and learning the trick of rewriting second-order differential equations as systems of first-order differential equations.

Project 2 Reflection

What things learned from Project 2 do you want to carry with you into Project 3?

Rewriting Second-Order DiffEQs as First-Order DiffEQs

How do we get this to look like a second-order differential equation?

$$RI(t) + L\frac{dI(t)}{dt} + V(0) + \frac{1}{C}\int_0^t I(\tau)d\tau = V(t)$$

How do we rewrite it as a system of first-order differential equations?

Use that system of equations to write a slope function.

Reflection Question

We're about two-thirds of the way through ModSim. Just like we reflected on Project 2 and identified lessons learned to apply to Project 3, what are some other lessons you've learned from your experience in the course that you want to act on in the remaining weeks (e.g., learning strategies, ways you approach the course)?

Next Steps

Before class on Monday, please do the following things:

- ☐ Write your name here: _____
- ☐ By tonight: Scan this worksheet and submit it on Canvas.
- ☐ By Sunday night: Read Chapter 21 and complete the reading quiz. Read and run the Chapter 21 notebook.
- ☐ Meet in the STUDIOS on Monday with your new instructor!