VR Lab for Enhanced Learning

Lightning Presentation

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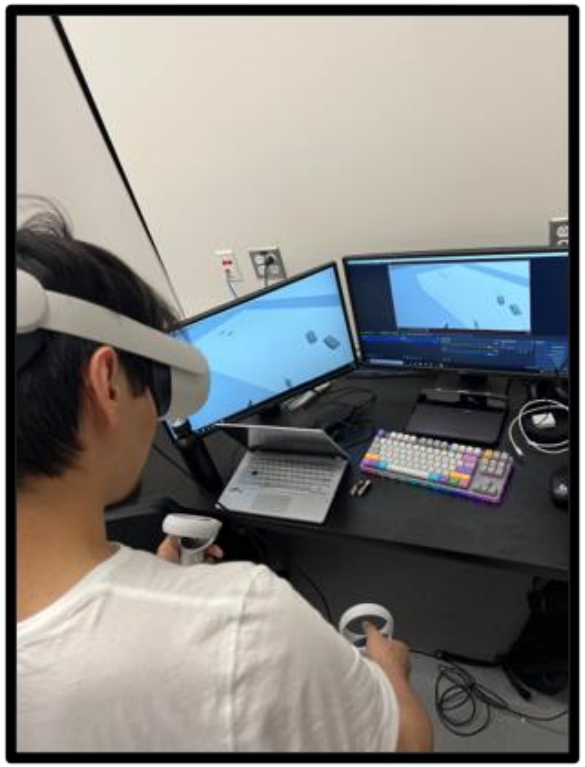
Introduction & Problem Statement

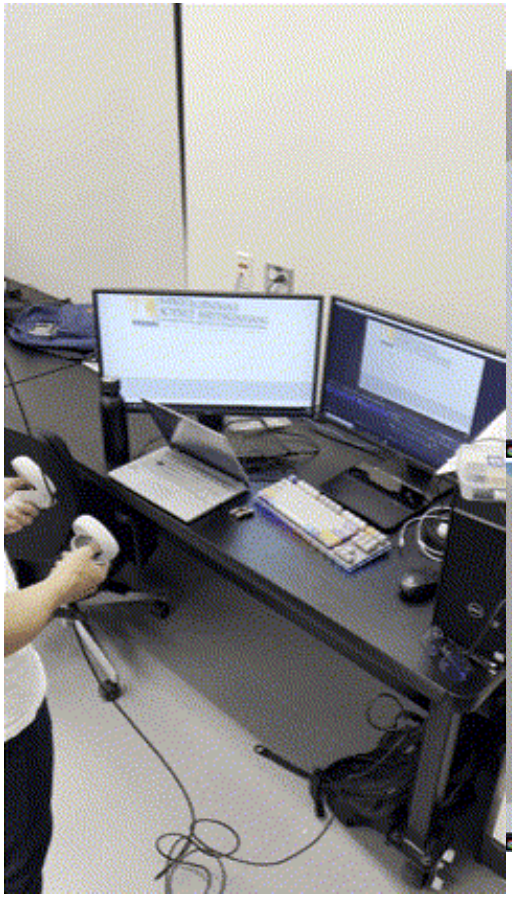
- Everyone has different learning styles and introducing additional options will likely enhance student engagement.

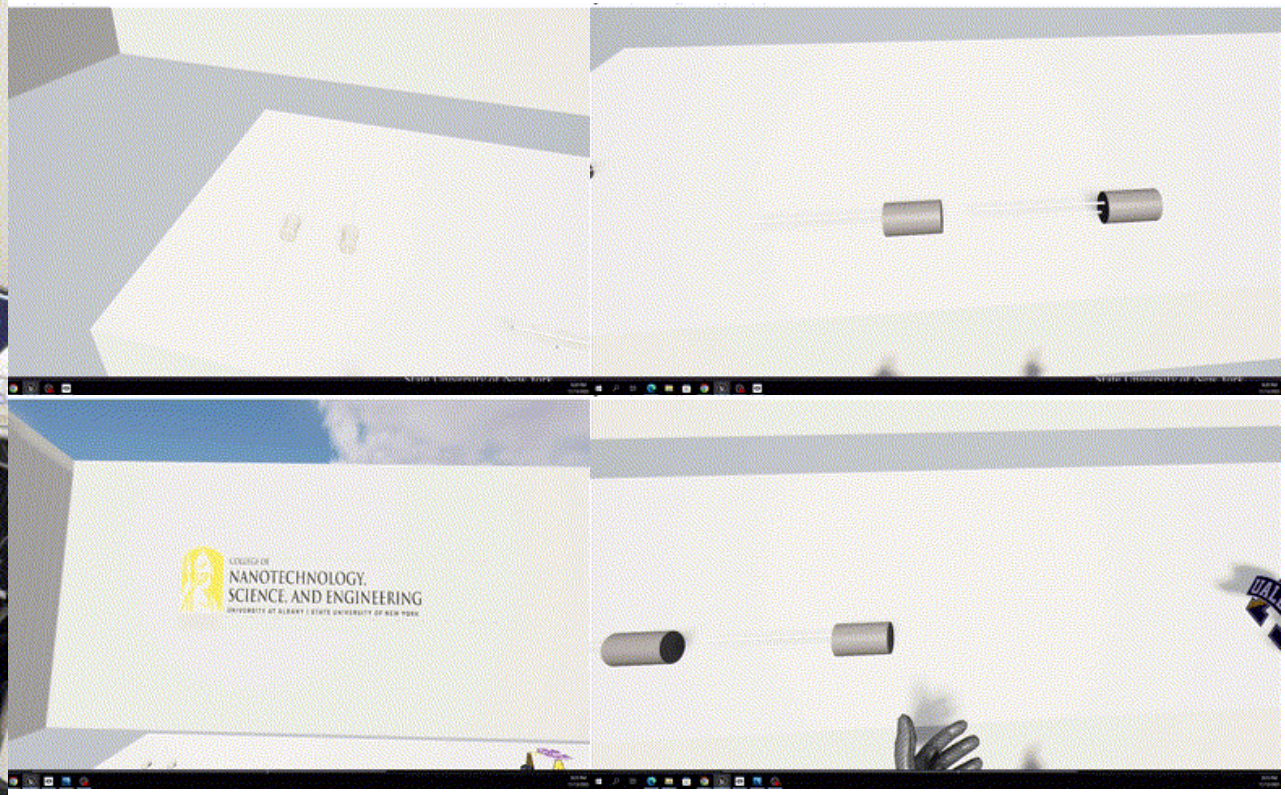


Background and Context

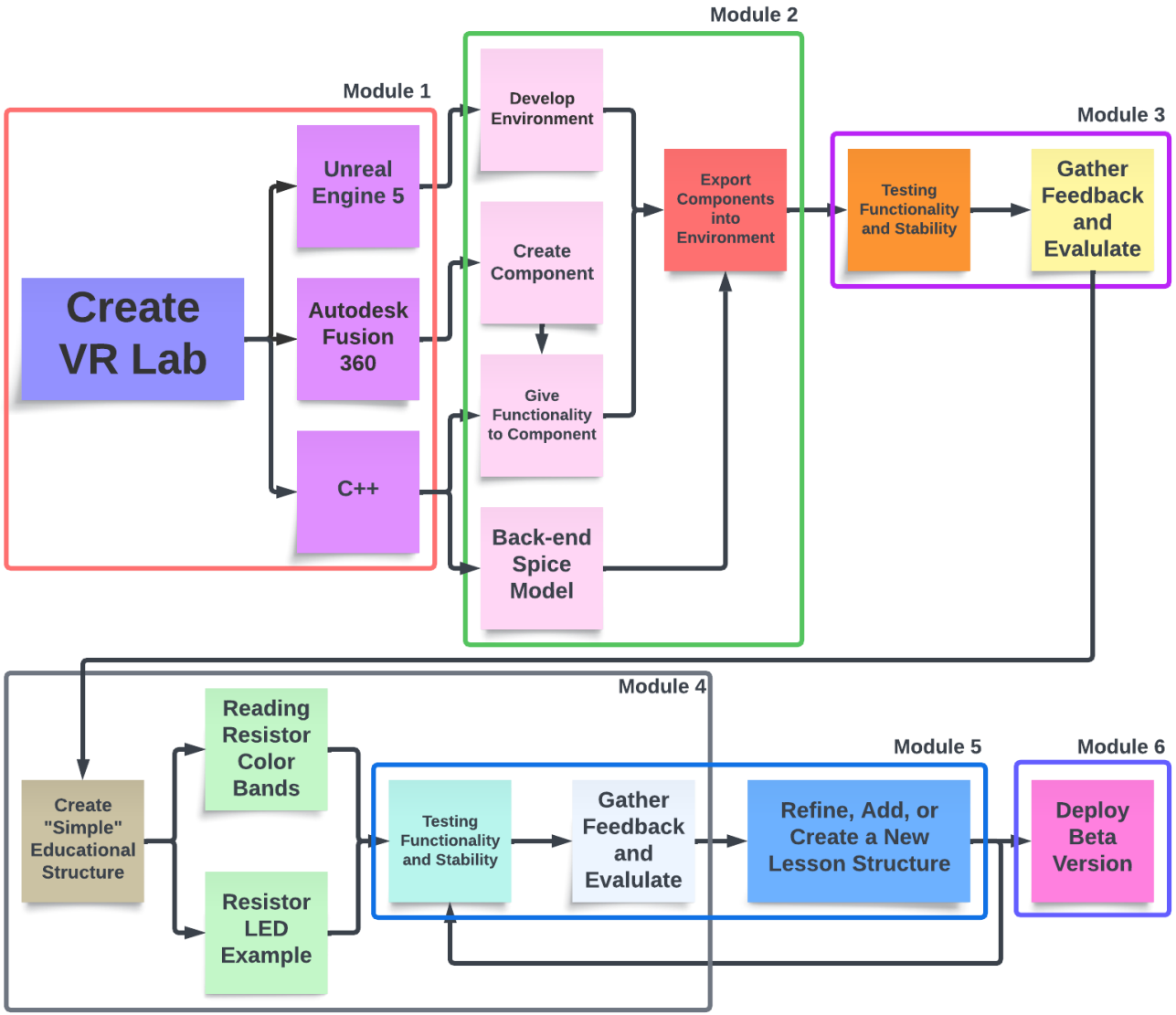
- Hands-on (virtual) learning
- Evolving landscape of education and technological advancements
- Works effectively in other STEM fields

System Demonstration





Goals for the Fall & Spring Semester



Design (Unreal Engine 5)

Design (Visual Prototype)

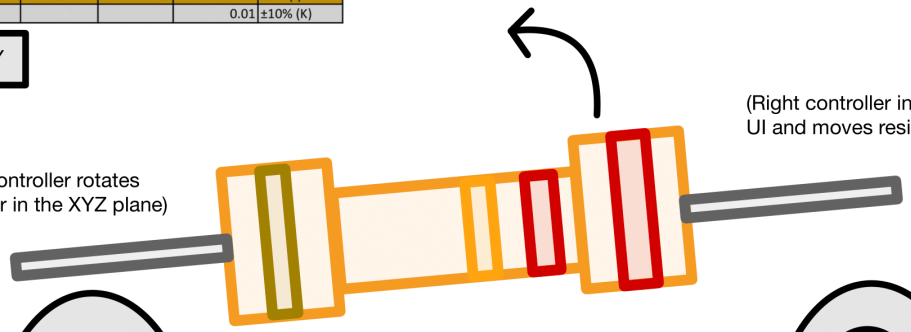
COLOR	1ST BAND	2ND BAND	3RD BAND	MULTIPLIER	TOLERANCE
Black	0	0	0	1Ω	
Brown	1	1	1	10Ω	±1% (F)
Red	2	2	2	100Ω	±2% (G)
Orange	3	3	3	1kΩ	
Yellow	4	4	4	10kΩ	
Green	5	5	5	100kΩ	±0.5% (D)
Blue	6	6	6	1MΩ	±0.25% (C)
Violet	7	7	7	10MΩ	±0.10% (B)
Grey	8	8	8	100MΩ	±0.05%
White	9	9	9	1GΩ	
Gold				0.1	±5% (J)
Silver				0.01	±10% (K)

RESISTOR VALUE:

HIDE KEY

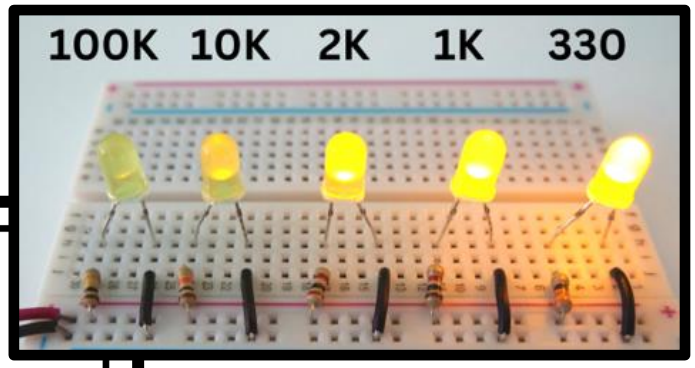
(Left controller rotates resistor in the XYZ plane)

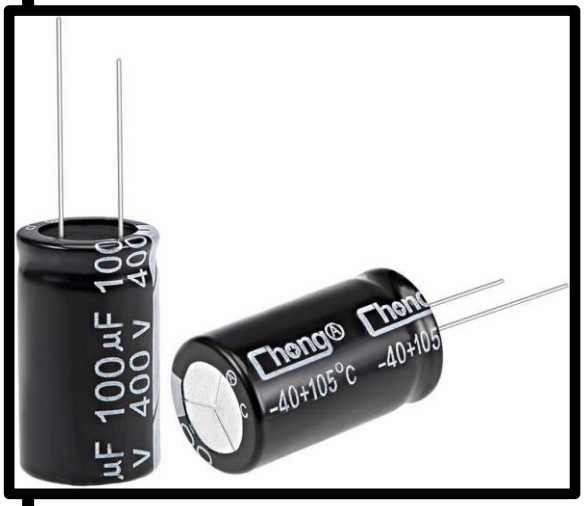
(Right controller interacts with UI and moves resistor around)



LEFT CONTROLLER

RIGHT CONTROLLER





Thank You!