Developing a visual programming editor for VPython[1] CODY
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Programing skills are becoming increasingly more important in physics and other
STEM fields. Existing tools for teaching physics and engineering using computational modeling, like VPython, can require students to already have a foundation
of programming, thus narrowing students learning opportunities. Block programming with visual environments like Blockly provides a way to engage learners with
algorithmic thinking without extensive pre-requisite knowledge of keywords, functions, and syntax. It has also been observed to have various benefits for beginning
programmers. We have created a prototype for a visual programing environment
that allows students to create physics simulations utilizing the open source projects
VPython and Blockly. We discuss lessons learned during development and initial
user testing about the challenges of making a visual programming environment for
physics simulations.

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