I was interested in a vending machine as a mechanism for  
exploring interaction. My original plan was to design a machine that would  
require collaboration to vend something, but there aren’t enough Arduino pins  
for the number of buttons I wanted and I didn’t have time to get an I/O  
extender. So this vending machine became two things: a caricature of how we as technologists get so caught up in making things cool and flashy that we forget to design them for people, and an exploration of how our perceived value of things changes as it gets more inconvenient and difficult to obtain them. Does the satisfaction of beating the machine outweigh the pleasure of getting the candy? As I observed people interact with the machine, it opened the doors to other possible questions: if the machine was some kind of test, how do people feel when they pass or fail that test? As with other human-centered design problems I’ve studied, when people use technology incorrectly, they start to blame themselves and their own intelligence. In a group setting where some people figure it out and some don’t, what kind of power struggle is created as technology is made accessible only to the “intelligent”? My professor remarked that it was kind of a Marxist machine – I’m not quite sure how I feel about that one.  
  
  
Designed in a week, coded and built in 2 days. Changes I’d  
make if I had more time: some kind of diffuser for the score lights at the  
top, greater gamification of the experience (maybe some “game over” sounds if the lock sequence is messed up), more fine tuning of the code since detecting the sequence of button presses was a pain without callbacks and event-driven programming. This felt more like a prototype - definitely going to explore other interactions I can create.  
  
  
Credit where credit is due: I was inspired by photos of Ryan’s  
amazing “Venduino” over at <http://www.retrobuiltgames.com/the-build-page/arduino-vending-machine/>  
  
  
UW DXARTS Mechatronic Art II. April 2017.