The following is an example of the design portfolio that you need to submit as one of the deliverables of the design project.

The portfolio only contains designs that pertain to a marble lifter that I developed. The design portfolio that you submit should contain designs for the entire marble run.

The portfolio example contains four sections because I found it convenient to group some parts into smaller assemblies (subassemblies) which were in turn combined into the final assembly.

You are not required to use subassemblies - but you might find that it makes the process easier.

Marble Run Design Portfolio

- Individual Part Drawings – 12
- Subassembly Drawings – 5
- Assembly Drawing – 1
- Arduino Control Code

Submitted by:
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Marble Run Design Portfolio

Subassembly Drawings – 5
Marble Run Design Portfolio
Assembly Drawing – 1
Place your Arduino code on this page.

/*
   Controlling a servo position using a potentiometer (variable resistor)
   by Michal Rinott <http://people.interaction-wea.it/m.rinott>

   modified on 8 Nov 2013
   by Scott Fitzgerald
*/

#include <Servo.h>

Servo myservo;  // create servo object to control a servo

int potpin = 0;  // analog pin used to connect the potentiometer
int val;        // variable to read the value from the analog pin

void setup() {  
    myservo.attach(9);  // attaches the servo on pin 9 to the servo object
}

void loop() {  
    val = analogRead(potpin);  // reads the value of the potentiometer (value between 0 and 1023)
    val = map(val, 0, 1023, 0, 180);  // scale it to use it with the servo (value between 0 and 180)
    myservo.write(val);  // sets the servo position according to the scaled value
    delay(15);  // waits for the servo to get there
}