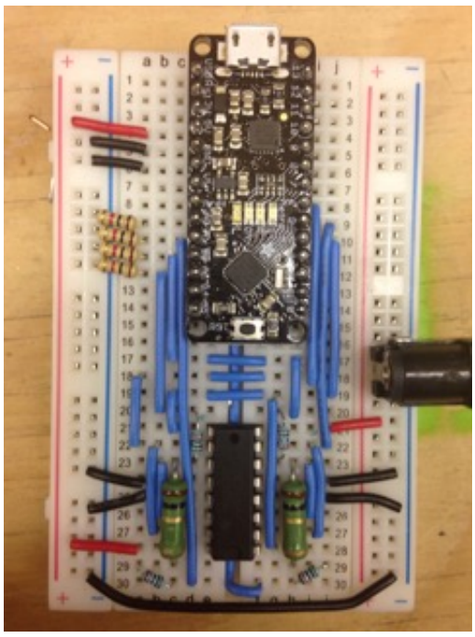
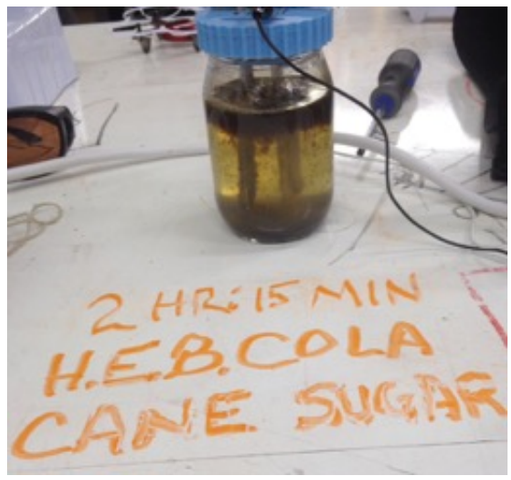
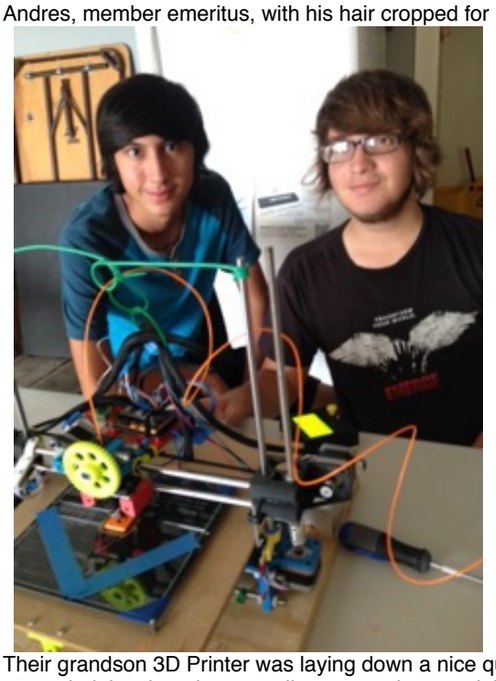
From: **Don Smeller** donsmeller@earthlink.net
Subject: Saturday at 10BitWorks
Date: September 13, 2015 at 8:04 AM
To: 10BitWorks 10BitWorks@gmail.com
Bcc: Don Smeller donsmeller@earthlink.net

Last week, Ryan gave me a new toy, an EC-4 Sep'15 Elequa alpha-prototype kit. There are only 8 of these beauties in the world. It boasts the neatest breadboard ever (kudos to Les), software, alligator clips, 24V wall wart, 1 Mason jar, 1- 3D printed lid, 2 aluminum electrodes, and 1 genuine wooden stick.
When you get a new toy, the question is: What will this sucker do? Right now, that question translates to: What fluids are susceptible to the electro-coagulation process?
I've tried Diet Coke (see movie loop) from a dispenser, Coke Zero from a can, and the cane sugar version of H.E.B. Cola, from 10Bit's vending machine. All get a Y in the Susceptible Y/N column.
It is "trub"bling that no one has volunteered to serve on a double blind taste test panel.





Saturday, 10Bit welcomed the 2015-2016 school-year edition of the Burbank High School's crack Robotics Club.
Jonathan (on the left) is their new president. He's with Anthony. Not shown: Isaiah, Jay, Victor, Gabrielle, Richard, Jackie, Andres, member emeritus, with his hair cropped for ROTC at UTSA.

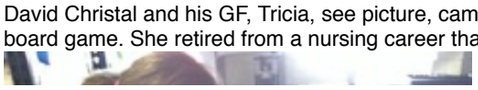


Their grandson 3D Printer was laying down a nice quality test block: 25mm x 20mm with an 8mm hole. It got to 1/3 of its planned 15mm height when the controller sneezed out a winking blinking shuddering symptom and the print stopped. That decided it. The time has come to deal with the birds' nest of wires.

Jonathan asked me to teach SketchUp to him and his group. I said yes but it shall include anyone else who is interested. So. Hear ye, Hear ye.

Beginners SketchUp Class
10BitWorks
September 19, 3:-5: PM.
Tuition: Free
No need to sign up. Just show up.
BYO laptop and mouse.
Teacher: Don Smeller

David Christal and his GF, Tricia, see picture, came in with a piece of blue acrylic and a mission to make a stack of "doors" for a board game. She retired from a nursing career that included conducting clinical trials of allergy medicines.



Eddie and Sacha pawed through piles of 10Bit junk looking for . . . what? Sacha and Mary scored a motor. Eddie found a monitor. Hackers-R-Us.

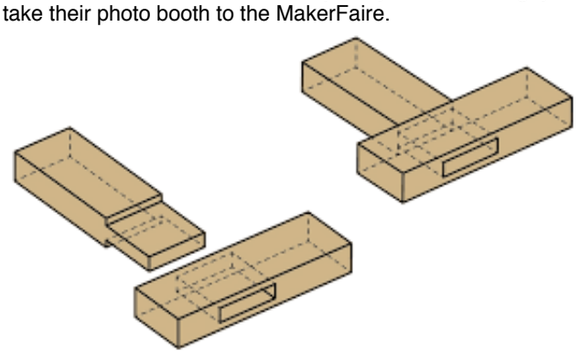
Eddie and I woke up Les with a FaceTime call and picked his brain regards the Processing developer environment. Where do they hide the libraries? Eddie and Ryan huddled, thick as thieves, conjuring whistles and bells for future versions of Elequa's monitoring software. Elapsed time, for sure.

John and GF Yvonne, challenged his quadcopter with a payload (see video). You will recognize the payload as being a pair of 3D test blocks. One of the blocks is "as printed", one has been vapor polished. We weighed them and compared the weight to the theoretical value ala gcode.ws.

Theoretical: 4.5 grams.
As printed: 4.6 grams.
Vapor Polished: 6.2 grams

Do NOT put that factoid in your pipe and smoke it. The sequestered acetone might explode.
Here is another factoid. The price of a kilogram of ABS filament varies but it's in the ballpark of $40/Kg. Thus a gram costs. 4 cents. Right?
You with me so far? A test block, costs 4.5 x 4 = 18 cents.

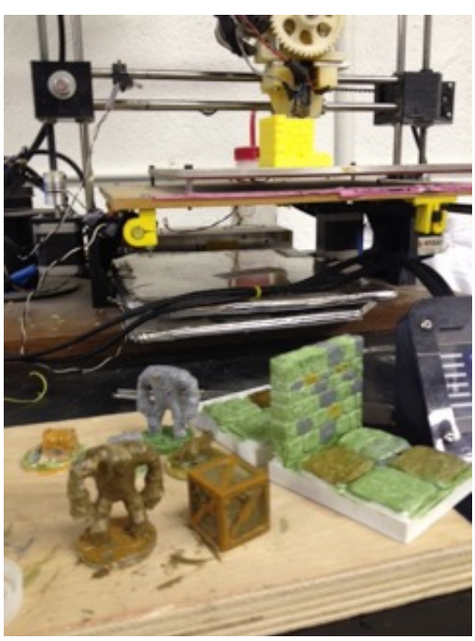
Kevin chiseled mortise and tenon joinery details. The guy is a woodcrafter from another century. Sue and Kevin volunteered to take their photo booth to the MakerFaire.



The Gallardo family came in, Mayte, Manuel, Cristian. They are looking for help with an invention. They want to fast dry a tennis court.

James printed a mask for a new guy, Dan, then gave him the nickel tour. Tricia and Shawn, another new guy, joined the tour. Shawn does IT for his day job. At night, he pesters the neighborhood cats with Arduino based motion sensors and automated squirt guns.

Greg kept both grandpa and the MakerBot running all day. He's making and painting DND pieces.



Including Les on FaceTime, the headcount was 28.

Don S

This report and all previous ones are archived on my Pi Server.