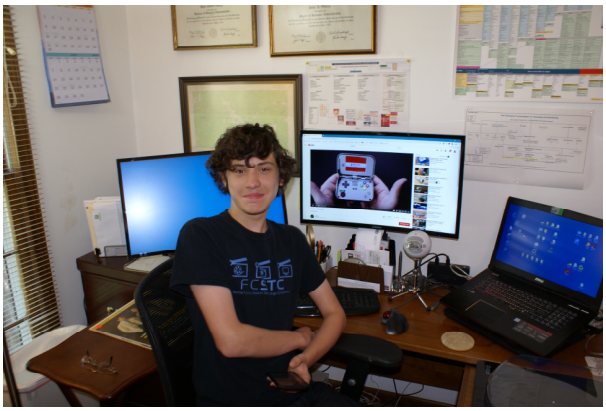
Who Took My Altoids

or

Emulating a Game Boy in an Altoid Tin

Grandson Benjamin (left) got me hooked on Python.

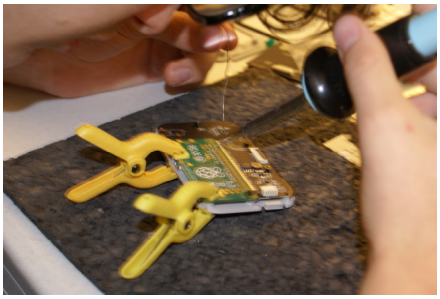
Now Grandson Andrew (right) is luring me into the next logical phase of Raspberry Pi - building or making stuff.



Where Andrew got this idea that he really really wanted to build a small game system in an Altoid Tin I never rally understood. I guess it is kind of like why would somebody want to climb a mountain.

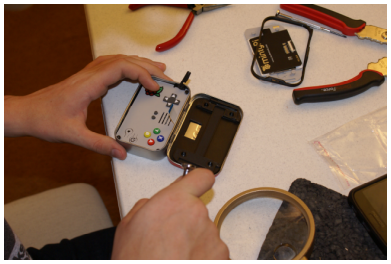
Anyway, like most Grandparents I never feel like I have enough time with my Grandkids so I leveraged my old Weller Soldering iron into getting him to build it at my house and letting me help a little. I say "a little" and that is literally true, Andrew did hands on at least 95% of the work and "brains on" about 99%.

The main hardware parts of the system were a pi zero, the tin, and the minty-Pi game components. All the software is downloaded from the web and no game software is provided. That turns out not to be a problem since it is easily available on the web elsewhere. When we started I was determined this would be a methodical, systematically documented process. What is it they says about plans in the first 5 minutes of battle?

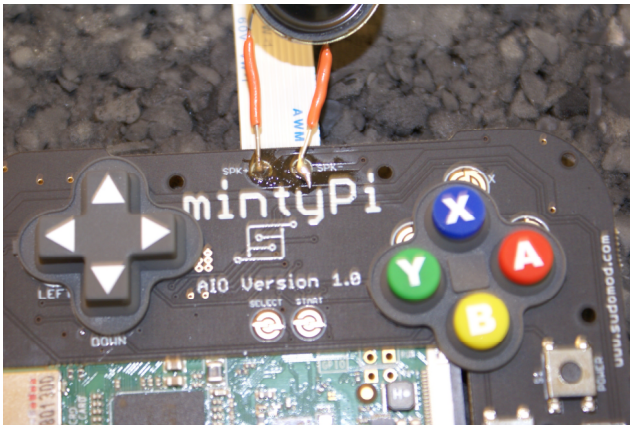


In retrospect, the dicest part of this process was physically cutting the holes in the tin itself. It took a power drill and several different bits, 4 hands, a vice and a Dremel tool. The job we did was not perfect, but it was damned good. This part of the venture was so intense that there was no time, patience, or extra help to take any pictures.

We followed the instructions on the web carefully and only had to improvise 8 or 10 times. There were a couple of manufacturer screw-ups that required some modifications to the main board they sent, but Andrew handled those as if he was an old pro. By the way the little yellow clamps you see were 6 for a buck at the dollar store and worked perfectly for this phase of construction.

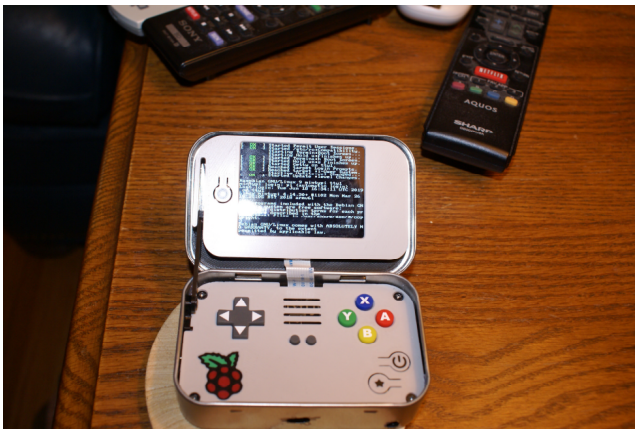


The only disappointment with the hardware we experienced was a failure of one speaker pad. Construction and testing requires soldering on a speaker, testing, then removing the speaker (de-soldering) only to have to reinstall it later. During the de-soldering process one copper pad lifted off and would not reattach.



Since the instructions include interim testing as you progress I never had any doubt that it would eventually work if we could just avoid any major mistakes.

And we did.



And it does!