Finished

Not done yet

Added Then Removed

~~Changed~~

//Comment

1. Finish programming all features
   1. Remove two button octaves change to a single separate new button
   2. ~~Filter functions that could be accessed by pressing another new button~~
      1. Filter function should be attached to the play back button instead and a corresponding pot value.
         1. Implement more filters
   3. ~~The new fifth button should be a playback speed picker that again depends on the pot value~~
      1. Playback speed decided by pot as playback is happening, no button needed
   4. ~~Same with rest button, the rest time (quarter, half, full…) would be based off pot position.~~
      1. Same with octave changer button so you don’t have to cycle through it one by one
   5. delete button would delete at speed based on pot position
   6. Fix ram usage (example, don’t use float for note values just use char and see how it sounds)
2. Parts
   1. Figure out what speaker (small piezo speaker?), potentiometer form, and microcontroller (Atmel with 8+ pins and 1+ KB of ram), etc. to buy
3. Power
   1. Find optimal way to power it (maybe for prototype just used usb power, but maybe later 2 AA batteries? (chips can run on lower then 5V, but have lower clock speed))
4. PCB
   1. Create custom PCB design with SMD components and figure out how to get it made
5. Case
   1. 3D print casing to hold everything
6. Economics

……

\*Extras

* Have prototype tested by small children or mentally challenged adults (Derek) to see if they like it