Our project uses a Quadtree data structure to hold "Entity" C++ objects in the game. We use a central timer to keep a game tick speed of around 8 miliseconds. During every tick of the game, we sample the ADCs and GPIO, update every entities' position, check for collisions, and create/destroy objects based on the game rules. We communicate by UART to the ESP8266, though nothing but test code is written; there is no functionality for the wireless capabilities of our device. There are two other timers used for outputting sound. One is for controlling the SSI output to the DAC, and the other for controlling what note is played.