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Digital Percussion and Entertainment System

Our project will be to implement a digital percussion system. Using analog touch-pad inputs and an array of digitally stored percussion sounds we will synthesize a drum-kit. Additionally there will be a video and audio interface for creating user defined audio input as well as for playing a video game where the user must drum along to pre-defined beats.

There are three main modules to this design. There will be an audio module, a game module, and a processing module. The audio module will handle outputting and inputting the audio from the drum kit. The game module will handle outputting the video of the game and taking inputs from the processing module. The processing module will take inputs from the physical drum kit and audio module to determine audio and video output.