Members
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Title
Theremin Pitch Game

Project Idea
The idea of the project is to create a theremin that changes LED lights depending on the pitches that are played. The project will use one Arduino to create the theremin, another Arduino to change the LED lights in response to certain pitches, and a third Arduino which runs a game. There would be a number of pre-recorded songs that one would try to play the theremin, and this third Arduino keeps track of how off pitch they are and gives them a score at the end. Communication mechanisms that our project will use are a microphone to record pitches so that the second Arduino can know what color to change the LEDs to and the third Arduino can identify the pitch. Inputs would be proximity sensors to create the theremin and the microphone that records pitches. Outputs would be the pitches from the theremin, the changing LED lights, and the running game on a screen. This project involves some original work because it combines the LED lights with a theremin to create a multi-sensory experience, as well as incorporates a game into playing the theremin.