

Piano Keys

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Overview

Our plan is to make a piano using the available buttons on the LPC board. Each button will correspond to a different frequency value. A tone at the sound frequency set to the particular button will be outputted by the piezo buzzer when the button is pressed.

Peripherals

- Piezo buzzer
- Buttons on LPC Board

Software Design

We will have a while loop that waits for interrupts which will wait for each button to be pressed and there will be interrupt handlers for every button. We will have PWM signal with a different tone frequency for every button.

Goals

We will play different tones each corresponding to a button on the LPC board. The tones should continue to be outputted through the buzzer as long as the button continues to be pressed.

Group Responsibilities

Angel will set up the button handlers for each button. Nery will calibrate the pwm for each button. Laxus will set up each pwm.