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EC450 A1

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Project Proposal

Choice #1

Our project is to recreate the Simon Says game on the MSP430 Launchpad. The game starts with the microcontroller playing one ‘note’ that the player has to repeat back. The player will repeat the pattern given by the microcontroller with four buttons. Each button has its own LED light and different pitched sound when pressed. After every correct repeated pattern, the game will add an extra ‘note’ at the end of the existing pattern. If the player plays the wrong pattern, the game is over and starts over again. The feedback in the system is from the player responses with the buttons.

Hardware:

Buttons

LEDs

MSP430 Launchpad

Speaker

Wires

Breadboard

Choice #2

Our project is to recreate the Whack-a-Mole game on the MSP430 Launchpad. The basic idea of the game is to ‘hit’ the moles when they appear in a certain amount of time before they disappear again. Missing too many moles will end the game. In our case, the moles are lit LEDs and the way to hit them is by pressing a button. There will be 4 buttons each connected to an LED. An LED will be randomly lit signaling the appearance of a mole. If the player presses the button fast enough after the LED is lit, then it counts as a hit. As the game progresses, the LEDs light up more frequently and at a faster rate to increase difficulty.

Hardware:

Buttons

LEDs

MSP430 Launchpad

Speaker

Wires

Breadboard

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