

**Lab4: Proposal for**

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Our project involves the use of two Arduinos, one as the interface and the other as the player. The interface runs a game similar to the dinosaur game that plays on the chrome 404 page on the LCD and is controlled by a button that will cause the dinosaur to jump. The player will play the game via a servo that presses the interface's button. The servo will actuate when the photoresistor connected to the player Arduino senses an obstacle.

There are also some additional features that could be added if time allows. One is a buzzer connected to the interface that will buzz on a game over screen, which the player will pick up using a sound sensor and reset the game. Another additional feature that could be added is a jump counter on the player that keeps track of how many times the servo has pressed the button to make the dinosaur jump.

The hardware requirements for this project include two Arduino Mega boards, a photoresistor, button, a servo motor, breadboards, LCD display and connecting wires. In case of fast project achievements, we can add speakers for playing Game Over sounds. One step further, we can use a sounds sensor to reset the game.

Image below summarizes our proposal. The process starts clockwise.

