

# **Scary Jack in the Box**

## *Halloween 2019 Project Proposal*

**Leonardo Fusser & Youssef El Kattan & Renato Dua Casipe,**  
1839912, 1946995, 1844465

### **ABSTRACT**

*This Proposal paper outlines the work that will be completed for this project..*

Experiment Performed on **30 September 2019**  
Report Submitted on **7 October 2019**

**Department of Computer Engineering Technology**  
*The Profession of Computer Engineering*  
**Andreea Iftimie & Manijeh Khataie**

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## INTRODUCTION

- Halloween is coming up and there is no better feeling than to scare people during this special occasion. This coming Halloween we will create a prototype jack in the box that will scare people when they try to touch it. Jack in the box is a classic horror box that a scary clown pops up when they crank it. Our version of it will be something modernized because it will consist of sensors, servo motors, LED and Arduino that we will program on how it will work.

## OBJECTIVES

- The objective of this is to practice the process of creating a project. To get familiarize of Arduino and the programming of operating steps. To get to know how to use sensors and servo rotary motor and servo positioning motor. Lastly, to practice how to finish any project with limited time.

## MATERIAL NEEDED

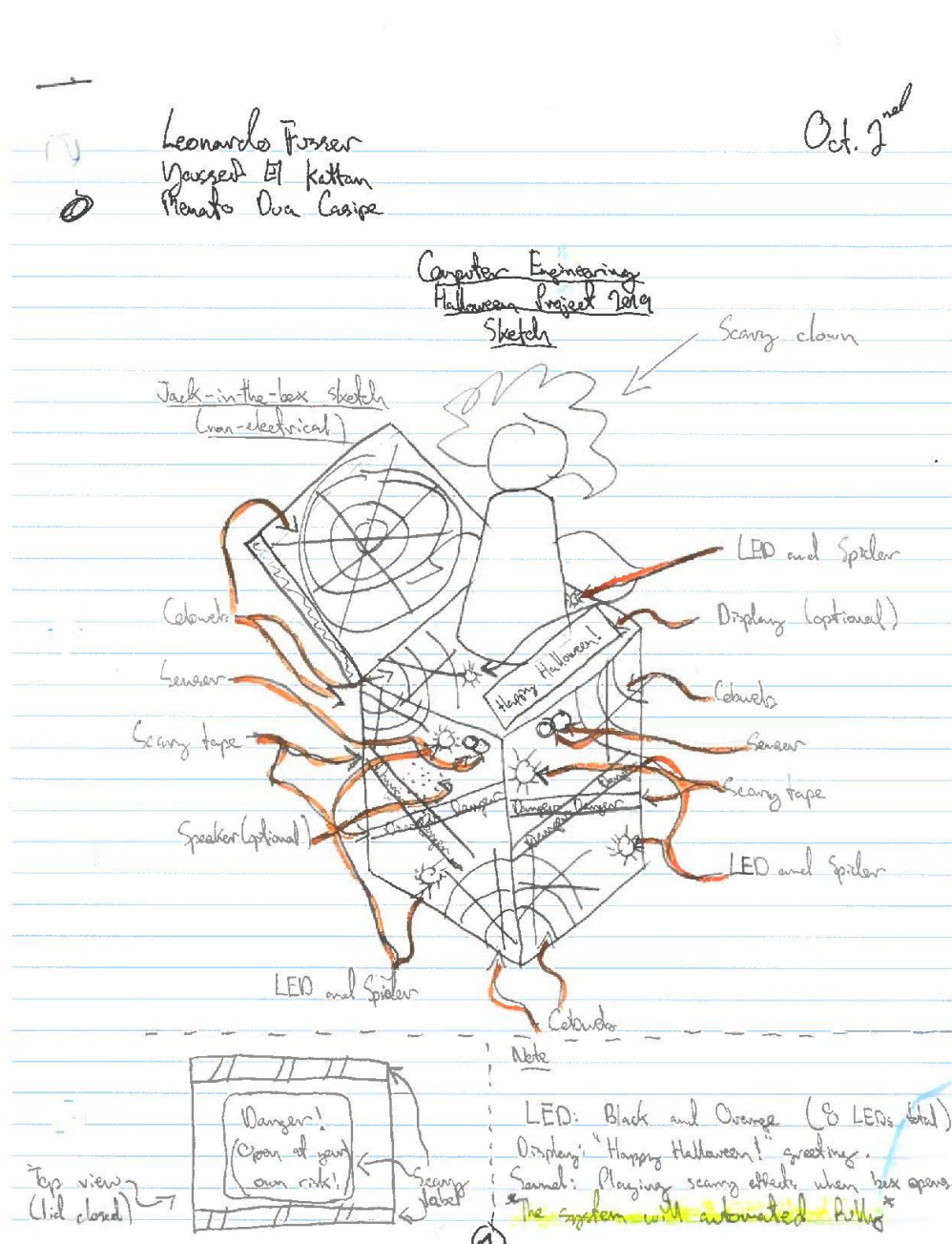
- (1x) DC Servo Motor
- (1x) Arduino HC-SR04 Sensor
- (1x) Character Display LCD [optional]
- (1x) Scary Clown Figure
- (8x) LEDs [3 Red, 3 Yellow & 2 Green]
- (7x) Scary Cobwebss
- (7x) Scary Spiders
- (3x) Scary Labels
- (1x) Speaker and Sound Module for Arduino [optional]
- (1x) Glue Gun
- (1x) Solder Gun and Solder
- (1x) Electronics Breadboard
- (1x) Philips Screw Driver
- Set of Philips Screws
- (1x) Arduino UNO
- (1x) Battery Pack for Arduino
- (1x) Wood or Plastic material to assemble Jack in the Box
- Set of wires (Black, Red, Green...)
- (1x) Black Spray Paint for Box
- (1x) Scary Sound Effects to load onto Sound Module [optional]
- (1x) Computer for programming the Arduino

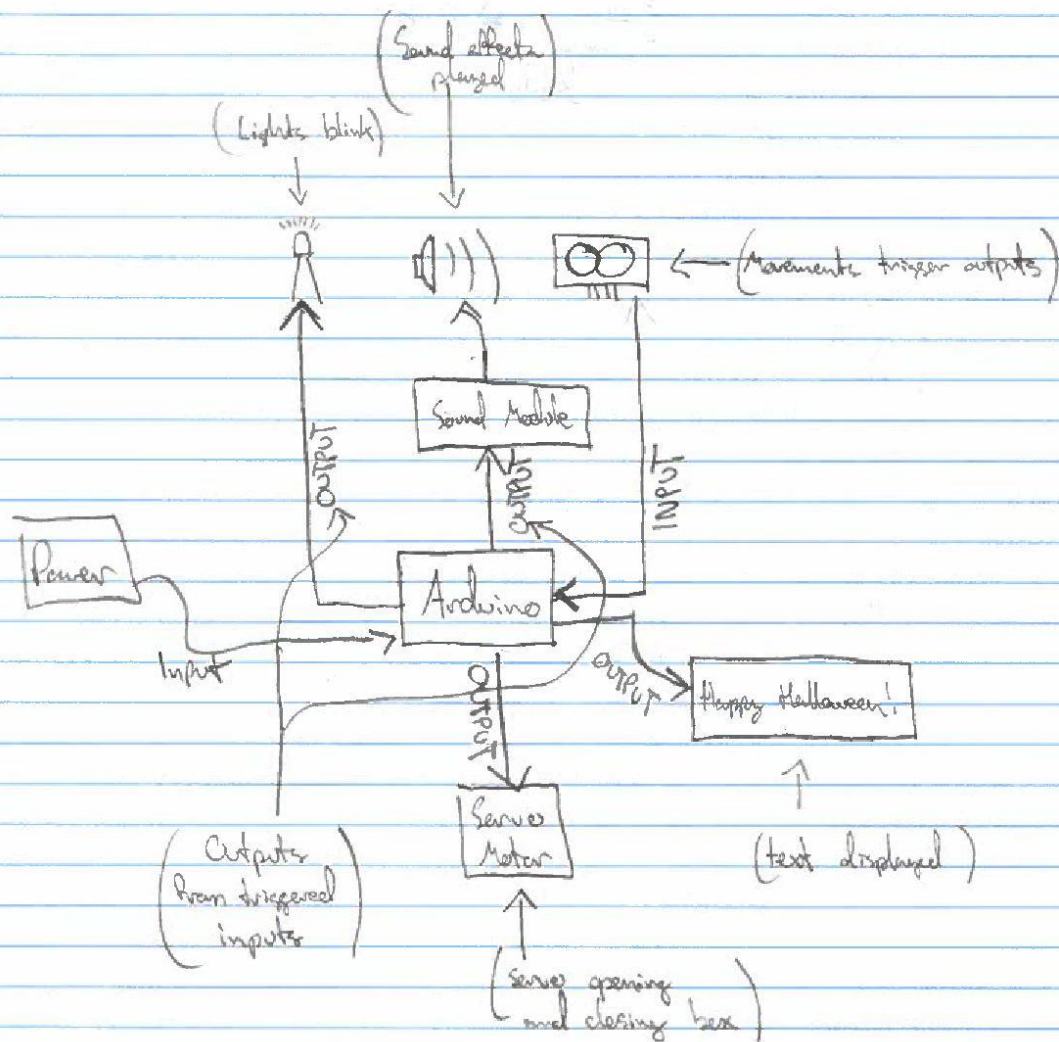
## REFERENCES

*Video that helped Shaped our Sketch for this project*

- [1] <https://www.youtube.com/watch?v=1V170axzMYc>

### *Scary Jack in the Box Sketch*





(2)

Jack-in-the-box sketch  
(serve motor)

