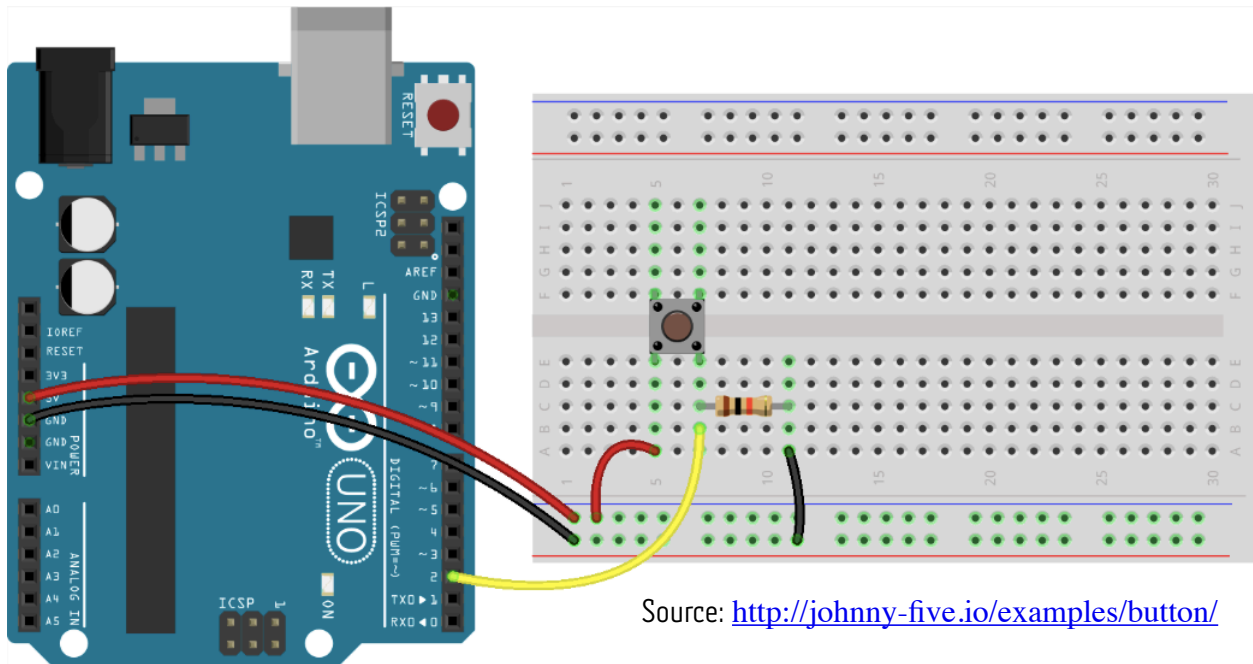


I first began by connecting the Arduino components in order.



Source: <http://johnny-five.io/examples/button/>

Secondly, I used the button code provided on Arduino's website to see how it would work once the button is pressed, only to see that once the button is pressed a light on the Arduino would go off.

```
// constants won't change. They're used here to set pin numbers:
const int buttonPin = 2;    // the number of the pushbutton pin
const int ledPin = 13;      // the number of the LED pin

// variables will change:
int buttonState = 0;        // variable for reading the pushbutton status

void setup() {
  // initialize the LED pin as an output:
  pinMode(ledPin, OUTPUT);
  // initialize the pushbutton pin as an input:
  pinMode(buttonPin, INPUT);
}

void loop() {
  // read the state of the pushbutton value:
  buttonState = digitalRead(buttonPin);

  // check if the pushbutton is pressed. If it is, the buttonState is HIGH:
  if (buttonState == HIGH) {
    // turn LED on:
    digitalWrite(ledPin, HIGH);
  } else {
    // turn LED off:
    digitalWrite(ledPin, LOW);
  }
}
```

Source: <https://create.arduino.cc/example/builtin/02.Digital%5CButton/Button/>

Once I understood how the the button would work, I switched up the button code to standard firmata and added the code provided on Johnny-five's website which basically results in the words "up" and "down" popping up on node every time the button is pressed.

```
Monas-MacBook-Air-3:Final monaitani$ node server.js
1576497634122 Available /dev/tty.usbmodem14201
1576497634142 Connected /dev/tty.usbmodem14201
1576497637984 Repl Initialized
>> down
up
down
up
down
up
down
up
down
up
down
up
down
up
down
up
down
up
down
up
down
up
```

After that, I struggled a lot with connecting the twitter code we have used in our previous classes to node, however after a few tries it began to work and I began tweeting videos relating to one of the few topics I wanted to tweet about.



```

1  var Twit = require('twit')
2  var request = require('request');
3
4  var config = {
5
6      consumer_key: 'igirFZdvoZ4BYFAvVeJlYVKPi',
7      consumer_secret: 'yHTKZ7T1cXA1a7lUBcPjID632f0SEoka2ShjffXjL0oSR0z9xS',
8      access_token: '1188501676573020160-xb0xNnwJuhBhksJIe4kNdigGe43t7i',
9      access_token_secret: 'h9Qx7QGTIcR9UKn0KjcbY8fSxEnJlP9snYx5fXYvsxh0r'
10 }
11
12
13 var tweeter = Twit(config)
14
15 function tweeDIDI(msg){
16
17     var tweet = {
18         status: msg
19     }
20     function tweeted(err,data,response){
21
22         if(err){
23             console.log('error',error)
24         }
25         else {
26             console.log('sending tweet...')
27         }
28     }
29     tweeter.post('statuses/update', tweet, tweeted)
30 }
31 tweeDIDI('https://www.youtube.com/watch?v=8ayX6ZSpBgg')
32
33

```

Lastly, it was time to connect this code to johnny-five:

```

1  console.log('tweeter.js')
2
3  // var five = require("johnny-five")
4  var Twit = require('twit')
5  var request = require('request')
6
7
8  var config = {
9
10     consumer_key: 'igirFZdvoZ4BYFAvVeJlYVKPi',
11     consumer_secret: 'yHTKZ7T1cXA1a7lUBcPjID632f0SEoka2ShjffXjL0oSR0z9xS',
12     access_token: '1188501676573020160-xb0xNnwJuhBhksJIe4kNdigGe43t7i',
13     access_token_secret: 'h9Qx7QGTIcR9UKn0KjcbY8fSxEnJlP9snYx5fXYvsxh0r'
14
15 }
16
17
18 var tweeter = Twit(config)
19
20 function tweeDIDI(msg){
21
22     console.log('trying to send', msg)
23
24     var tweet = {
25
26         status: msg
27

```

```

18 var tweeter = Twit(config)
19
20 function tweeDIDI(msg){
21
22     console.log('trying to send', msg)
23
24     var tweet = {
25
26         status: msg
27
28     }
29
30     function tweeted(err,data,response){
31
32         if(err){
33             console.log('error',err)
34         }
35         else {
36             console.log('sending tweet...')
37         }
38     }
39
40     tweeter.post('statuses/update', tweet, tweeted)
41 }

```

```

45 var five = require("johnny-five"),
46     board, button;
47
48 board = new five.Board();
49
50 board.on("ready", function() {
51
52     // Create a new `button` hardware instance.
53     // This example allows the button module to
54     // create a completely default instance
55     button = new five.Button(2);
56
57     // Inject the `button` hardware into
58     // the Repl instance's context;
59     // allows direct command line access
60     board.repl.inject({
61         button: button
62     });
63
64     // Button Event API
65
66     // "down" the button is pressed
67     button.on("down", function() {
68         console.log("down");
69         tweeDIDI('https://www.youtube.com/watch?v=lIknRGKCKZo')
70     });
71
72     // "hold" the button is pressed for specified time.
73     // defaults to 500ms (1/2 second)
74     // set
75     button.on("hold", function() {
76         console.log("hold");
77         tweeDIDI('https://www.youtube.com/watch?v=beixsgKr93o')
78     });
79
80     // "up" the button is released
81     button.on("up", function() {
82         console.log("up");
83         tweeDIDI('https://www.youtube.com/watch?v=hjKCYYQcBqY')
84     });
85 });

```

However, there were a number of issues with this. Firstly, the duplication error would keep popping up, meaning I had to change the video attached a number of times for the tweet to go through. In order to fix this issue, I added categories with a list of videos, and a random generator to choose which video would go through. Furthermore, I added the date and time, along with a caption the button was pressed.

```
69 button.on("down", function() {
70   console.log("down");
71   let genre = 'Women'
72
73   let videoList = videos[genre]
74   let video = getRandomVideoFromList(videoList) // get one item from list
75   console.log()
76   tweeDIDI(video)
77 });
78
79 // "hold" the button is pressed for specified time.
80 // defaults to 500ms (1/2 second)
81 // set
82 button.on("hold", function() {
83   console.log("hold");
84   let genre = '18'
85
86   let videoList = videos[men] // list
87   let video = getRandomVideoFromList(videoList) // get one item from list
88
89
90   tweeDIDI(video)
91
92 });
93
94 // "up" the button is released
95 button.on("up", function() {
96   console.log("up");
97   let genre = 'Muslim'
98
99   let videoList = videos[genre] // list
100  console.log('video list: ', videoList)
101  let video = getRandomVideoFromList(videoList)
102  console.log('video:', video)
103  // tweeDIDI(video)
104 });
105 });
106
107 function getRandomVideoFromList(list){
108
109   let rnd = Math.floor(Math.random()*list.length) // random number
```

```

109     let rnd = Math.floor(Math.random()*list.length) // random number
110     var video = list[rnd]
111
112     console.log('video:',video)
113
114     return video
115
116 }
117
118
119
120
121 let msgList = [
122     'Men:',
123     '18:',
124     '18:',
125     '18:',
126
127 ]
128
129
130 let videos = {
131
132     'Women': [
133
134         'https://t.co/PHDXbuHAnb?amp=1',
135         'https://www.youtube.com/watch?v=LIknRGKCKZo',
136         'https://www.youtube.com/watch?v=CVdn-2KE2bs'
137
138     ],
139
140
141     '18': ['https://www.youtube.com/watch?v=gj0Rz-uP4Mk',
142         'https://www.youtube.com/watch?v=ZgdufzXvjqw',
143         'https://www.youtube.com/watch?v=RnlvHP1AXPo'
144     ],
145
146
147
148     "Muslim": ['https://www.youtube.com/watch?v=b-Dzm1QgQck',

```

```

148     "Muslim": ['https://www.youtube.com/watch?v=b-Dzm1QgQck',
149         'https://www.youtube.com/watch?v=KURTpn0Nuzs',
150         'https://www.youtube.com/watch?v=KURTpn0Nuzs'
151     ],
152
153
154
155 ]
156
157 }
158

```

After a few tries with this, I realized it was not captioning the correct videos. For instance, I have created a list of 50's music for those under the age of 18 and instead of attaching it to a music video, it was attached to a women's rights video.



**DIDI Banjo-net**

@banjo\_bot

If youre under the age of 18, this is for  
you:[youtube.com/watch?v=llknRG...](https://youtube.com/watch?v=llknRG...) at Sat Dec 21  
2019 12:10:00 GMT+0300 (Arabian Standard Time)



Secrets Of A Suffragette (Women's Rights Documentary) | Tim...  
Enjoying our content? You'll love the Timeline History Channel  
app! Download now: <http://bit.ly/37jAP3b> Check out our new ...  
[youtube.com](https://youtube.com)

12:09 PM · Dec 21, 2019 · [BanjoBanjo](#)

After I finally figured out the issue, the correct tweets with the correct captions were tweeted.



**DIDI Banjo-net** @banjo\_bot · 6s

Live as a women in this day and age:[youtube.com/watch?v=zGhu4i...](https://youtube.com/watch?v=zGhu4i...) at Sat  
Dec 21 2019 13:57:31 GMT+0300 (Arabian Standard Time)



Competent women are getting bypassed by overconfi...  
Our current workplace culture rewards overconfidence.  
Claire Shipman of Good Morning America explains wh...  
[youtube.com](https://youtube.com)



**DIDI Banjo-net** @banjo\_bot · 31s

Why we need feminsim:[youtube.com/watch?v=llknRG...](https://youtube.com/watch?v=llknRG...) at Sat Dec 21 2019  
13:57:03 GMT+0300 (Arabian Standard Time)



Secrets Of A Suffragette (Women's Rights Document...  
Enjoying our content? You'll love the Timeline History  
Channel app! Download now: <http://bit.ly/37jAP3b> ...  
[youtube.com](https://youtube.com)





Here is the final code:

```
1 console.log('tweeter.js')
2
3 // var five = require("johnny-five")
4 var Twit = require('twit')
5 var request = require('request')
6
7
8 var config = {
9
10     consumer_key: 'igirFZdvoZ4BYFAvVeJlYVKPi',
11     consumer_secret: 'yHTKZ7T1cXA1a7LUBcPjID632f0SEoka2ShjffXjL0oSR0z9xS',
12     access_token: '1188501676573020160-xb0xNnwJuhBhksJJe4kNdigGe43t7i',
13     access_token_secret: 'h9Qx7QGTIcR9UKn0KjcbY8fSxEnJLP9snYx5fXYvsxh0r'
14 }
15
16
17 var tweeter = Twit(config)
18
19 function tweeDIDI(link){
20
21     console.log('trying to send', link)
22
23     var msg = getRandomVideoFromList(msgList) + link + ' at ' + (new Date())
24
25     var tweet = {
26
27         status: msg
28     }
29
30
31     function tweeted(err,data,response){
32
33         if(err){
34             console.log('error',err)
35         }
36         else {
37             console.log('sending tweet...')
38         }
39     }
40
41     tweeter.post('statuses/update', tweet, tweeted)
42 }
43
44
45
46
47 var five = require("johnny-five"),
48     board, button;
49
50 board = new five.Board();
51
52 board.on("ready", function() {
53
54     // Create a new 'button' hardware instance.
55     // This example allows the button module to
56     // create a completely default instance
57     button = new five.Button(2);
58
59     // Inject the 'button' hardware into
60     // the Repl instance's context;
61     // allows direct command line access
62     board.repl.inject({
63         button: button
64     });
65
66     // Button Event API
67
68     // "down" the button is pressed
69     button.on("down", function() {
70         console.log("down");
71         let genre = 'Women'
72
73         let videoList = videos[genre]
74         let video = getRandomVideoFromList(videoList) // get one item from list
75         console.log(video)
76         tweeDIDI(video)
77     });
78
79     // "hold" the button is pressed for specified time.
80     // defaults to 500ms (1/2 second)
81     // set
82     button.on("hold", function() {
83         console.log("hold");
84         let genre = 'Muslim'
85
86         let videoList = videos[Muslim] // list
87         let video = getRandomVideoFromList(videoList) // get one item from list
88
89
90         tweeDIDI(video)
91
134
135     let videos = {
136
137         'Women': [
138
139             'https://www.youtube.com/watch?v=e-n829QzZ58',
140             'https://www.youtube.com/watch?v=LIknRGKCKZo',
141             'https://www.youtube.com/watch?v=zGhu4iaBqtk'
142
143         ],
144
145         "Muslim": [ 'https://www.youtube.com/watch?v=gj0Rz-uP4Mk',
146             'https://www.youtube.com/watch?v=ZgdufzXvjgw',
147             'https://www.youtube.com/watch?v=RnlvHP1AXPo'
148
149         ],
150
151         "18": [ 'https://www.youtube.com/watch?v=gj0Rz-uP4Mk',
152             'https://www.youtube.com/watch?v=ZgdufzXvjgw',
153             'https://www.youtube.com/watch?v=RnlvHP1AXPo'
154
155         ],
156
157     }
158
159
160
161
162
163
164
165 }
```



I have created a flow-chart that explains the behavior of Re-cultured, however, for this project I have narrowed down the option to gender and age, specifically the options of men and under 18.

