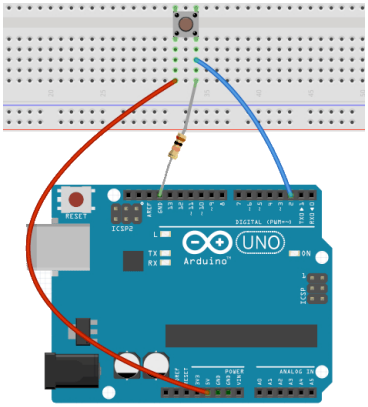
```
int btn = 2;

void setup() {
    Serial.begin(9600);
    pinMode(btn, INPUT);
}

void loop() {
    int btnState = digitalRead(btn);
    if(btnState == HIGH){
        Serial.println("1");
    } else Serial.println("0");
    delay(100);
}
```

Arduino Code

1. serialport



```
var express = require('express');
var app = express();
var http = require('http').Server(app);

app.get('/', function (req, res) {
    res.sendfile('./public/index.html');
});
http.listen(3000);

// Receive Data from Arduino via Serial Port
// and send it to Client via Socket.io
var socketio = require('socket.io')(http);
var spPackage = require("serialport");
var SerialPort = spPackage.SerialPort;
var portname = "/dev/tty.usbmodemfa141";
var sp = new SerialPort(portname, {
    baudrate: 9600,
    parser: spPackage.parsers.readline("\n")
});

sp.open(function () {
    sp.on('data', function (arduinoData) {
        socketio.emit('booleanState',arduinoData);
    });
});
```

Serverseitiger Code (JavaScript)

2. socket.io

```
<html>
<head>
    <script src="/socket.io/socket.io.js"></script>
    <script src="http://code.jquery.com/jquery-1.11.1.js">
    </script>
</head>
<body>
<script>
    var socket = io();
    socket.on('booleanState', function (msg) {
        var received = msg.trim();
        if (received == "1")
            $("body").css("background-color", "green");
        if (received == "0")
            $("body").css("background-color", "red");
    });
</script>
</body>
</html>
```

Clientseitiger Code (HTML)

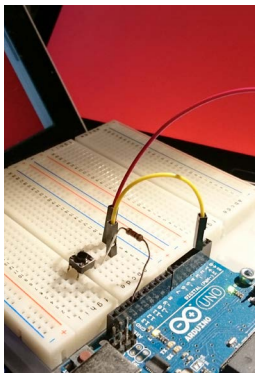
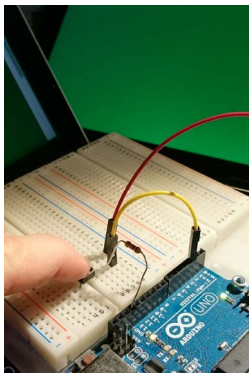
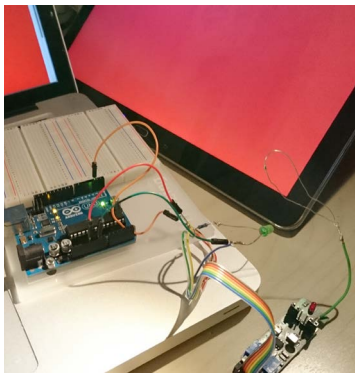
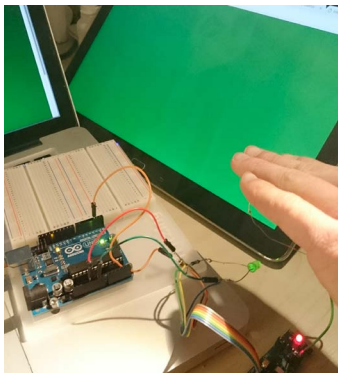





Abb. 12: Weg von einem Arduino Board zu den verbundenen Clients über eine serielle Verbindung über TTL-seriell und USB (*1*) und über einen WebSocket (*2*). Test mit einem Taster (Bilder 1 und 2 v. l.) und mit einem kapazitiven Touchsensor (Bilder 3 und 4 v. l.).