

Lab 6

[Click here to Register Attendance](https://goo.gl/forms/J9WP2kj83JC1mKYU2)

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| Name |  |
| Date |  |
| Student No |  |
| Student Email |  |

### **REST API Calls from a browser**

1. Connect your Yun to Wifi - and ping & note the IP address
2. In a new browser window, type the IP address of your YUN & login to setup page
3. Click the Configure button & at the bottom of the config page set REST API to **Open**
4. From the Arduino IDE, run the Bridge sketch from File -> Examples -> Bridge
5. Open a browser window and type the following to turn on LED 13: [http://***192.168.1.14***/arduino/digital/13/1](http://192.168.1.14/arduino/digital/13/1)   
   (replace the IP address with your Yun’s IP address)
6. Note whether LED 13 lights up on your Yun and the message in your browser confirming
7. Take a picture of your Yun & browser using your phone and insert here

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1. Now type the the following to turn off LED 13: [http://***192.168.1.14***/arduino/digital/13/1](http://192.168.1.14/arduino/digital/13/1)   
   (replace the IP address with your Yun’s IP address)
2. Once you have confirmed the URLs are working to turn LED 13 on and off, try saving this HMTL file to your PC/Laptop: <https://github.com/marloft/ITSligoIoT/blob/main/LEDON.html>
3. Edit the hyperlinks in the HTML file to use your Yun’s IP address, save changes and open the HTML file in your browser
4. Click the links to see if they turn LED 13 on and off
5. Take a picture of your Yun & browser using your phone and insert here

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### **Blynk App**

1. Download the Blynk App to your phone
2. Create a new Blynk Account in the App
3. In your Arduino IDE, install the Blynk library by going to Sketch -> Include Library -> Manage Libraries, and searching for Blynk
4. Open the Blynk App on your phone and start a new Project and select Arduino Yun as your hardware - you will be emailed an authentication code
5. From File -> Examples -> Blynk -> Boards Wifi -> choose the Arduino Yun sketch
6. Edit to include your authentication code and upload the sketch to your Yun
7. Add a button control to your new Blynk Project
8. For the button control, select output for D13 - Off value = 0, On value = 1
9. Set Mode to Switch
10. Press the Play Button at the top-right of the Blynk app to launch your app
11. Test the button to see if it turns on/off your LED 13
12. Explore other Blynk components and add one more to your app
13. Add screenshots of your Blynk app and your Arduino responses here:

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