TEA 17

Assignment No: 11

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Aim: Create a simple web interface for Raspberry-Pi / Beagle board to control the connected LED's remotely through the interface

Theory:

① **WiringPi :-**

- Wiring Pi is a Pin based GPIO access library written in C for the BCM used in the Raspberry Pi It's released no. under the GNU LGPL V3 license and is usable from C, C++ and RT B (BASIC) as well as many other lang with suitable wrappers.

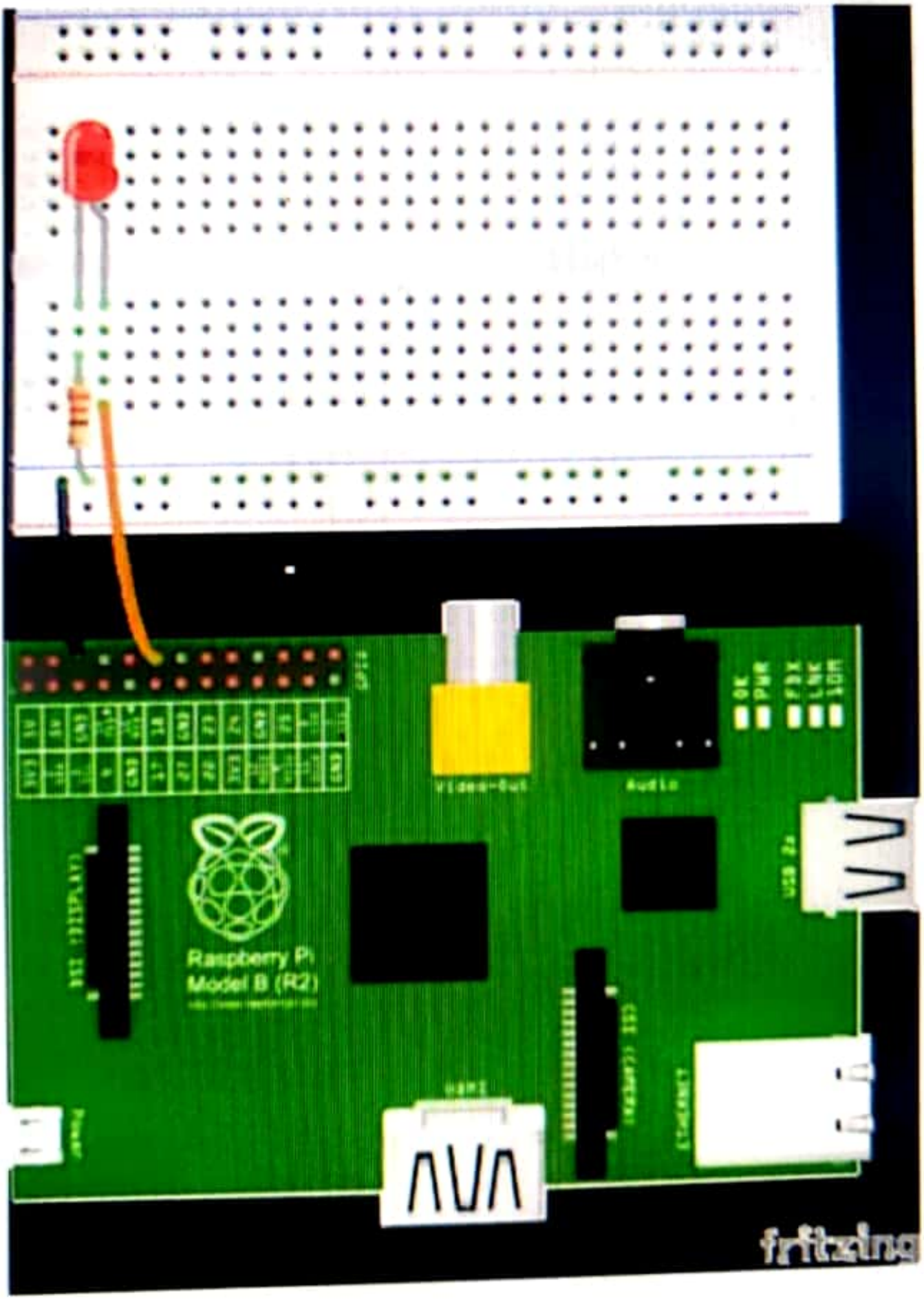
② **Install wiring Pi :-**

- Wiring Pi is not included with Raspbian so to begin you'll need to download and install it
- That means, your Pi will need a connection to the Internet - either via ethernet or wifi
- We can do using get to download the latest version
- ~~We~~ As long or you have git installed these commands should be all you need to download and install wiring Pi

```
                                                    wiringpi
pi@ raspberrypi~ git clone git://git.drogon.net
pi@ raspberrypi~ cd wiringpi  pi@ raspberrypi~
                                wiringpi/wiringpi $./build
```

③ **GPIO Command line utility :-**

Task : Connect the LED GND to Short Pin GPIO to long Pin



Remember : GPIO 18 is pin 1 in wiring Pi
GPIO command line utility

① Glow the LED by val
gpio write 1 1

② Off the LED by.
gpio write 1 0

③ web Interface to LED

1. Create the front pg using HTML which contains two button to put the LED is on or OFF state
2. Control the data i/p from button using PHP

Conclusion :

Thus we have created simple web interface for Raspberry Pi / Beagle board to control the connected LEDS remotely through the interface