**Mini Task 2**

**Flow of the project**

**Problem statement:** Something to remind that we had a missed call or a message need. Also, it should look cool and decorative on the desk.

There can be many solutions to this problem, one of the solution could be using a decorative lamp which lights up when we have notification.

So, the problem simplifies to making a lamp which receives signals from the mobile in some way and then light up the LED if we have notifications.

Notification -> IFTTT -> Adafruit -> Node Mcu -> Lamp

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| **Part of the Pipeline** | **Feasibility** | **Advantages** | **Disadvantages** |
| IFTTT | Free to use and install | Solves the problem of communication | IFTTT can occasionally cause some confusion because of the massive amounts of possible ways you can set it up. Tough for beginners |
| Adafruit | Easy to use. Tough for beginners | Works well with board. Decently fast | A lot of setup is required. Could be difficult for beginners. |
| Node Mcu/ Microcontroller | Coding and connections, may get tough for beginners | Many functions and works very well. Very cheap and available. | Coding may get tough for beginners. |
| Lamp | Simple, and easy to make | Can be made as cheap as possible as well as decorative | Designing may take a lot of time. |

**Choosing a Pipeline:**

Lamp – it can be made as cheap and decorative as possible. The design may take a little time, online websites with ready made designs could be used. It could be made the help of cardboards, plastic and coloured paper. Instead a 3D printer could also be used but it will increase the cost of the project.

Adafruit – It is an online service, and is free to use. It gets the signal from the IFTTT app and then sends it to the microcontroller and is very fast. It is a standard library used by most of the makers online. An alternative could be to make our own website which will get a little tricky and too much time consuming. Instead this Adafruit works fine.

IFTTT – this is an app, which finds if there are notifications on the mobile and then sends it to the Adafruit website. Alternative apps could be used here, and almost all are similar in use and not much difference.

Microcontroller – Over here Node MCU comes up to be a best choice. It is quite cheap and ready to use. It is also, a standard microcontroller used by all the makers online. Also, an Arduino could be used here but it is very costly. Almost 10 times Node MCU. Very small but a little slow. Most of our work gets done and with the cheapest price it just seals the deal.

**Prototyping Phase:**

Over here we need to make the circuit, and program the microcontroller. After simulating the circuit on tinkercad or other online services, we can upload the code to the microcontroller and connect the circuit. Finally it would be tested and it needs troubleshooting if required.