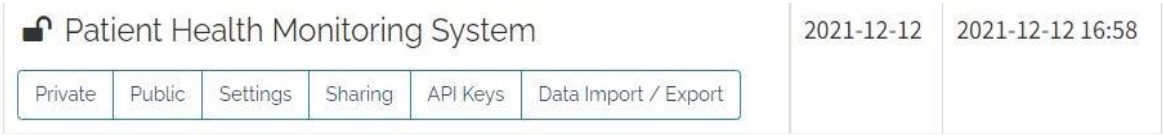
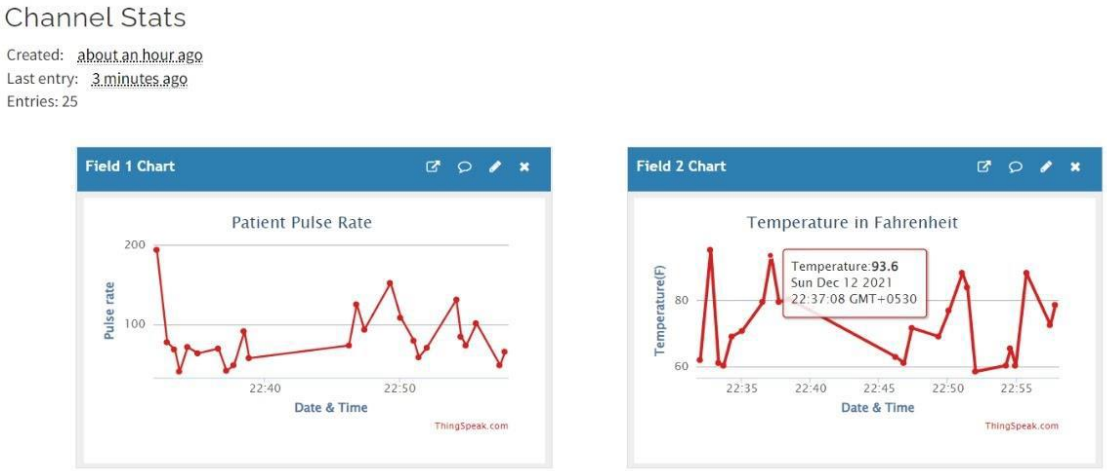
1. Creating of channel for each patient. Each patient will be provided with a unique channel ID, which can be shared and viewed if shared.

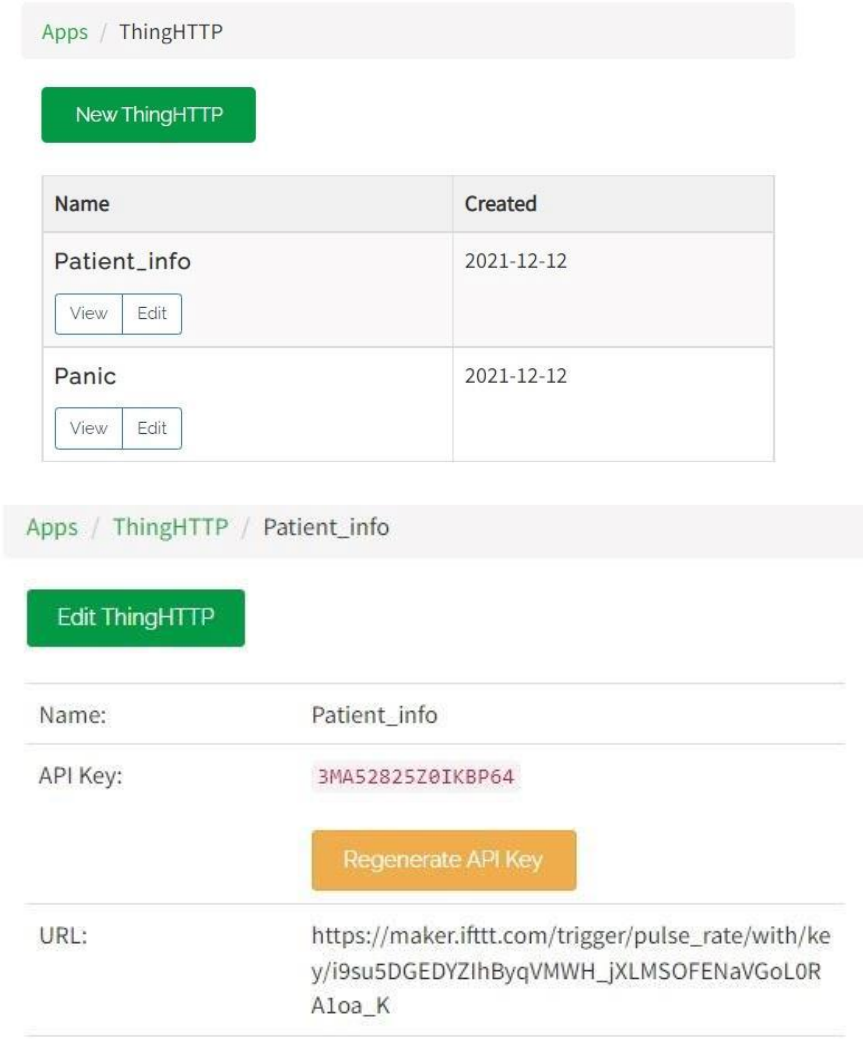


2. Then we need to create subchannel for each of the sensor used, for plotting of data.
   We have named the channel/Patient id as: Patient health monitoring system.



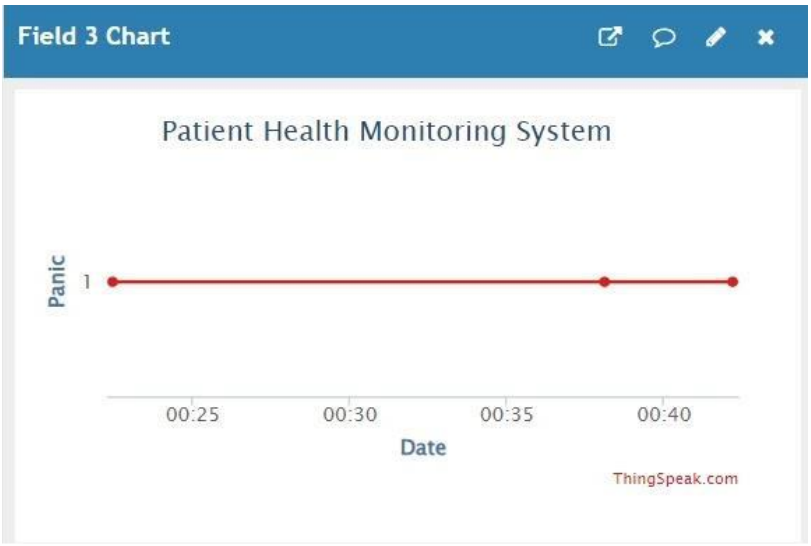
Channel stats as displayed in Thingspeak

3. To create a bridge between ThingSpeak channel and the Arduino, we need to generate an API key

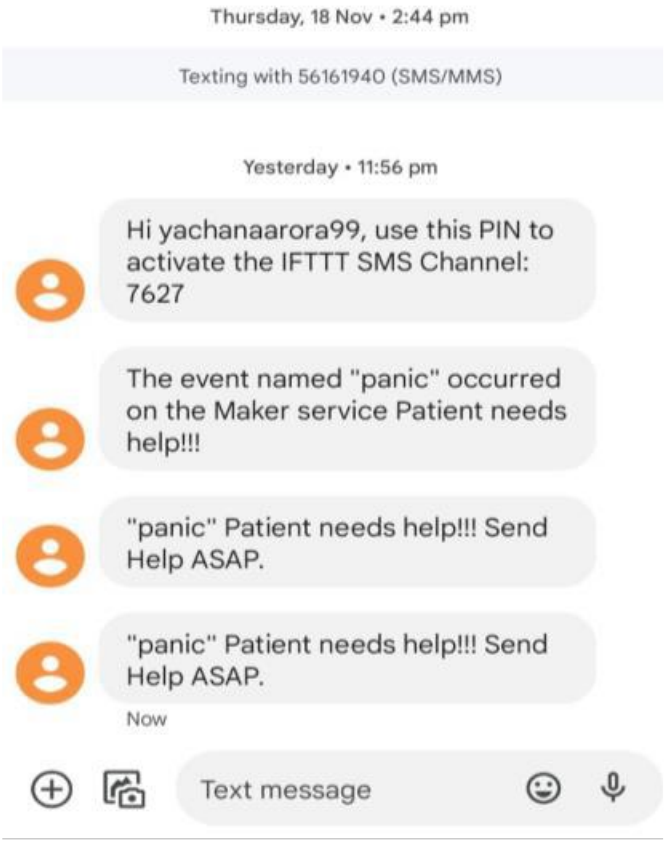


API Key generated

4. A panic button is also provided, which can be used if patient wants to send an alert message.
   Below figure shows 3 panic alerts generated.



Panic button channel, 3 panic generated

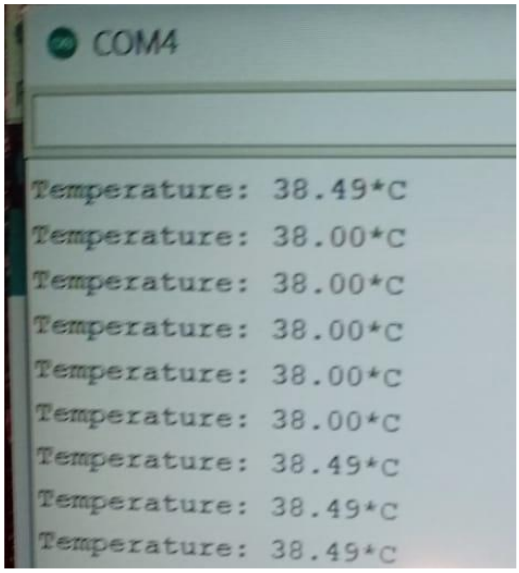


SMS on registered contact

Output of Pulse sensor seen in Serial plotter seen in Arduino IDE

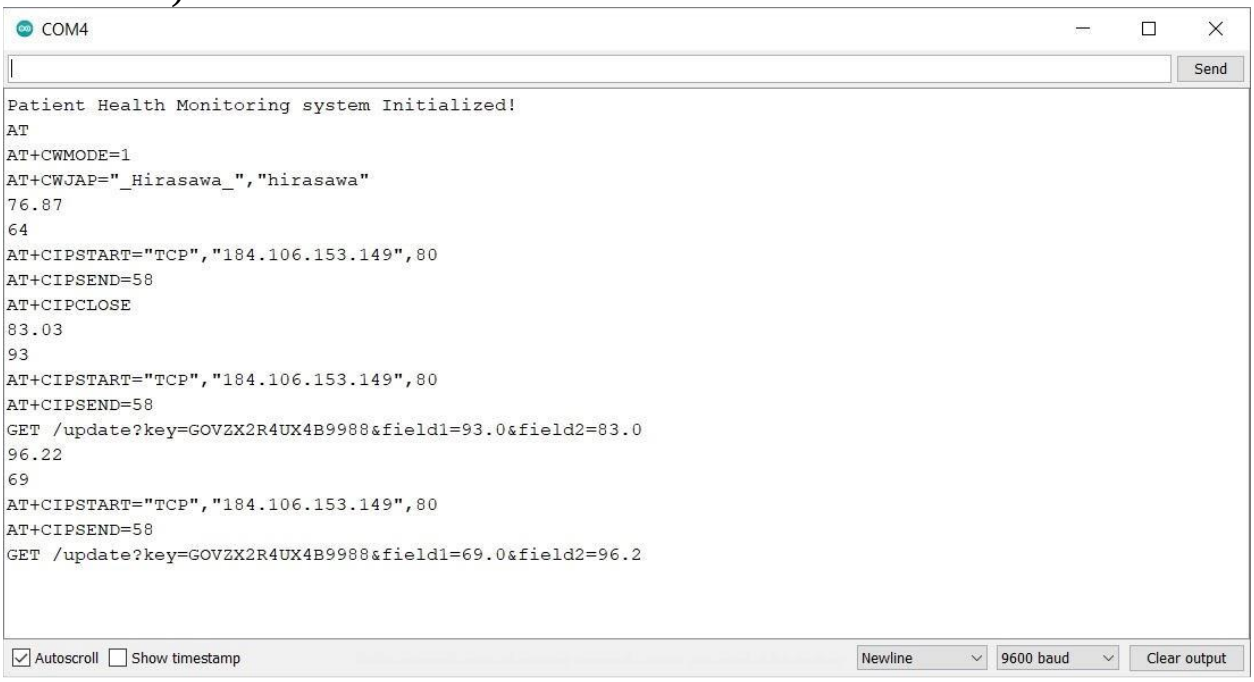
Pulse Sensor Output

Output of temperature sensor in Celsius seen in serial plotter seen in Arduino IDE



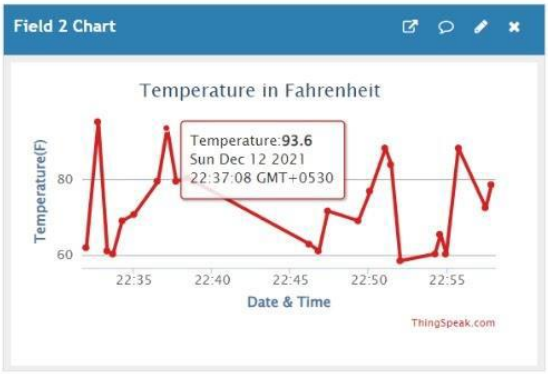
LM35 output

OUTPUT of Pulse Sensor and Temperature Sensor (NUMERICAL VALUES) seen in serial Monitor in Arduino IDE:



Temp. and pulse values shown simultaneously

Continuous graphs as seen on thingspeak portal. One just needs to share the channel ID/Patient_ID to view it. This channel is unique for each channel.



Channel stats as displayed in Thingspeak

Data sheet is updated side by side as the parameters are measured. This data can be stored remotely and can be viewed anytime.

	A	B	C	D	E	F
1	created_at	entry_id	Pulse rate	Temperature	Panic	
2	2021-12-12 17:54:08 UTC	59	233	73.3		
3	2021-12-12 17:55:17 UTC	60	233	62.8		
4	2021-12-12 17:57:37 UTC	62	235	58.4		
5	2021-12-12 17:58:11 UTC	63	237	59.3		
6	2021-12-12 17:59:33 UTC	64	101	61		
7	2021-12-12 18:00:19 UTC	65	153	66.3		
8	2021-12-12 18:48:50 UTC	127	142	61.9		
9	2021-12-12 18:50:22 UTC	128	217	63.7		
10	2021-12-12 18:50:45 UTC	129	182	60.2		
11	2021-12-12 18:51:31 UTC	130	214	60.2		
12	2021-12-12 18:52:29 UTC	131			1	
13	2021-12-12 18:54:53 UTC	132	202	61.9		
14	2021-12-12 18:56:54 UTC	133	149	71.6		
15	2021-12-12 18:57:40 UTC	134	87	83.9		
16	2021-12-12 19:05:33 UTC	142	93	85.7		
17	2021-12-12 19:06:31 UTC	143	93	56.6		
18	2021-12-12 19:06:53 UTC	144	220	74.2		
19	2021-12-12 19:07:15 UTC	145	68	90.9		
20	2021-12-12 19:07:37 UTC	146	172	71.6		
21	2021-12-12 19:08:08 UTC	147			1	
22	2021-12-12 19:08:23 UTC	148	209	71.6		
23	2021-12-12 19:08:45 UTC	149	233	58.4		
24	2021-12-12 19:09:20 UTC	150	199	58.4		
25	2021-12-12 19:09:42 UTC	151	172	86.5		
26	2021-12-12 19:10:28 UTC	152	82	71.6		
27	2021-12-12 19:11:26 UTC	153	181	56.6		
28	2021-12-12 19:12:11 UTC	154			1	
29	2021-12-12 19:12:27 UTC	155	219	63.7		
30	2021-12-12 19:12:49 UTC	156	91	83.9		

Data is stored in google sheets on the drive.