

IOT Data Processor

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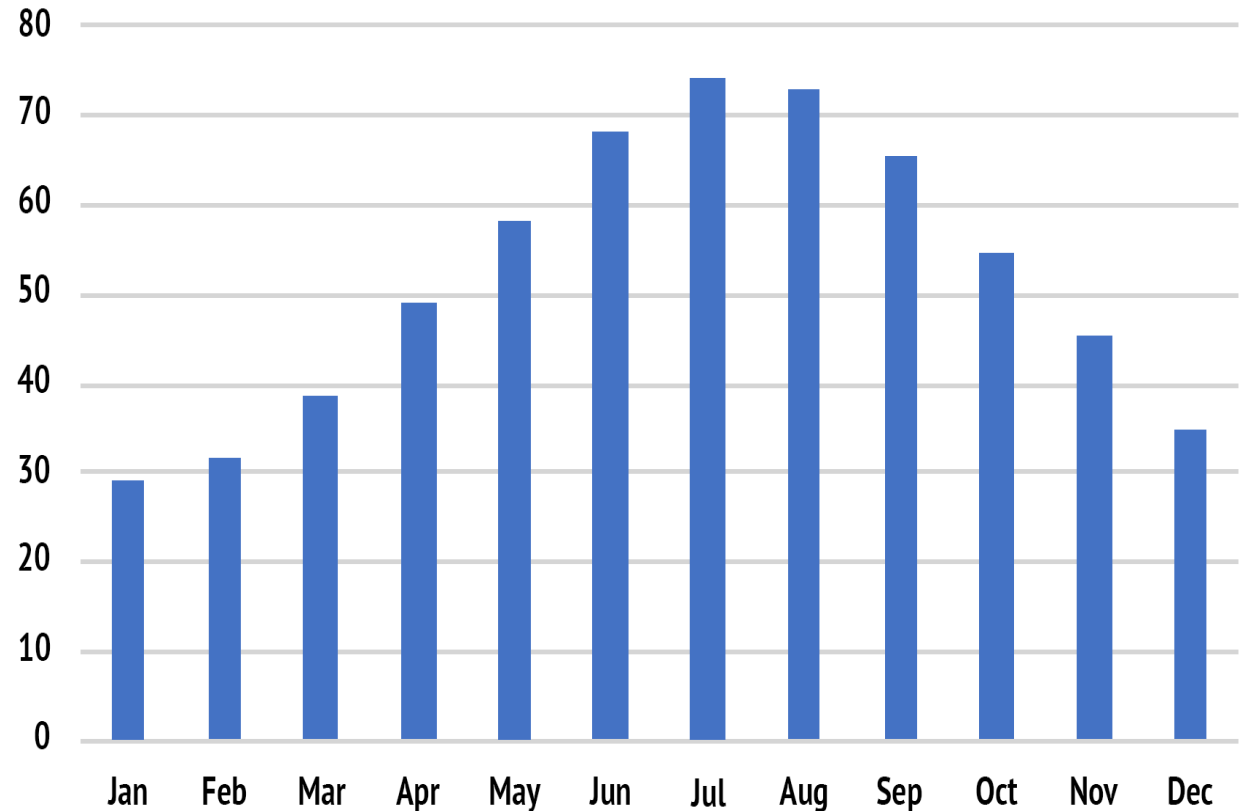
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Introduction of IOT Data Processor

- To record events, observations or measurements Systematically.
- To measure and store environmental data.
- Records data in relation to the location.
- User can find average temperature and pollution.

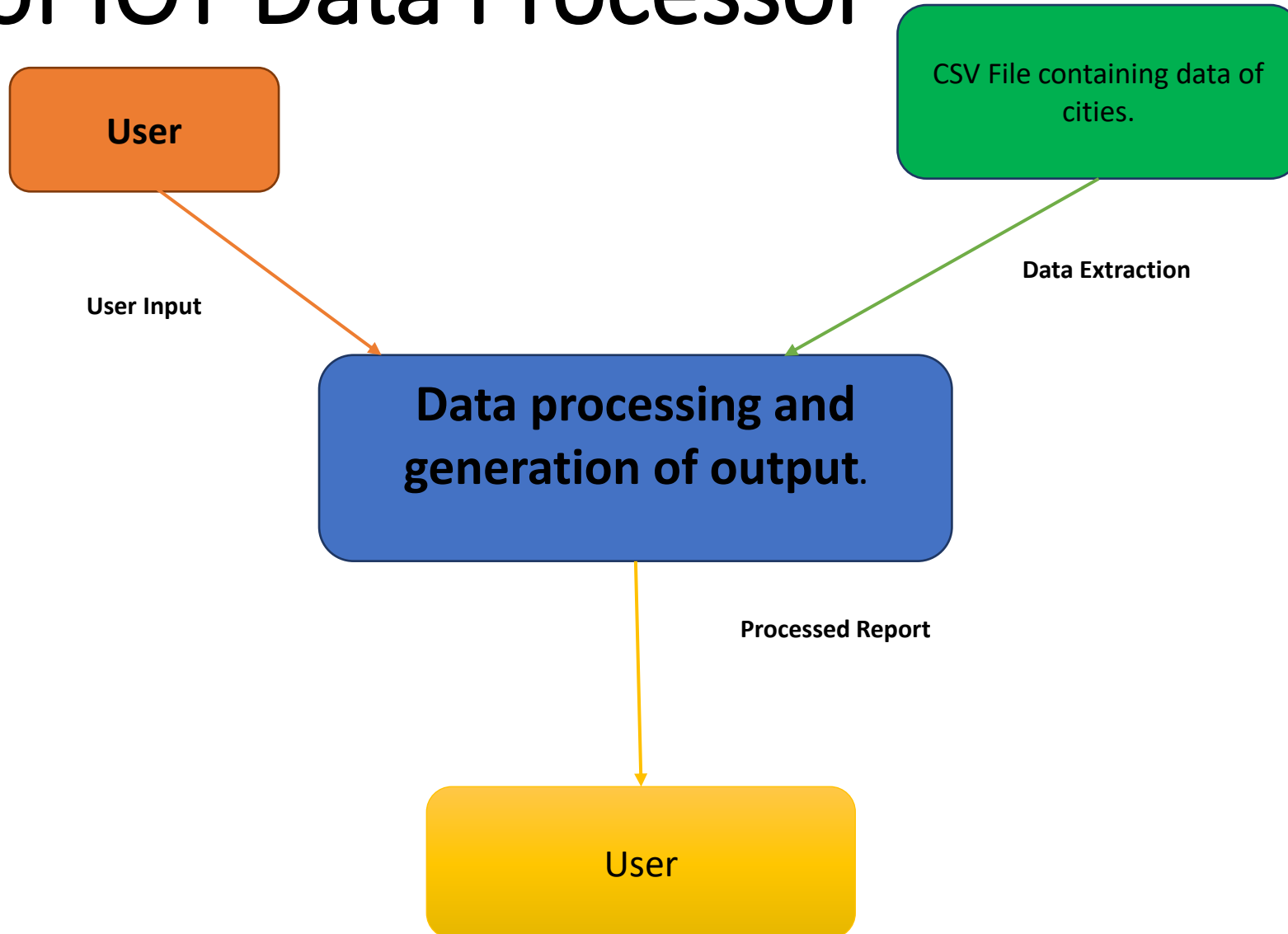


Purpose of IOT Data Processor

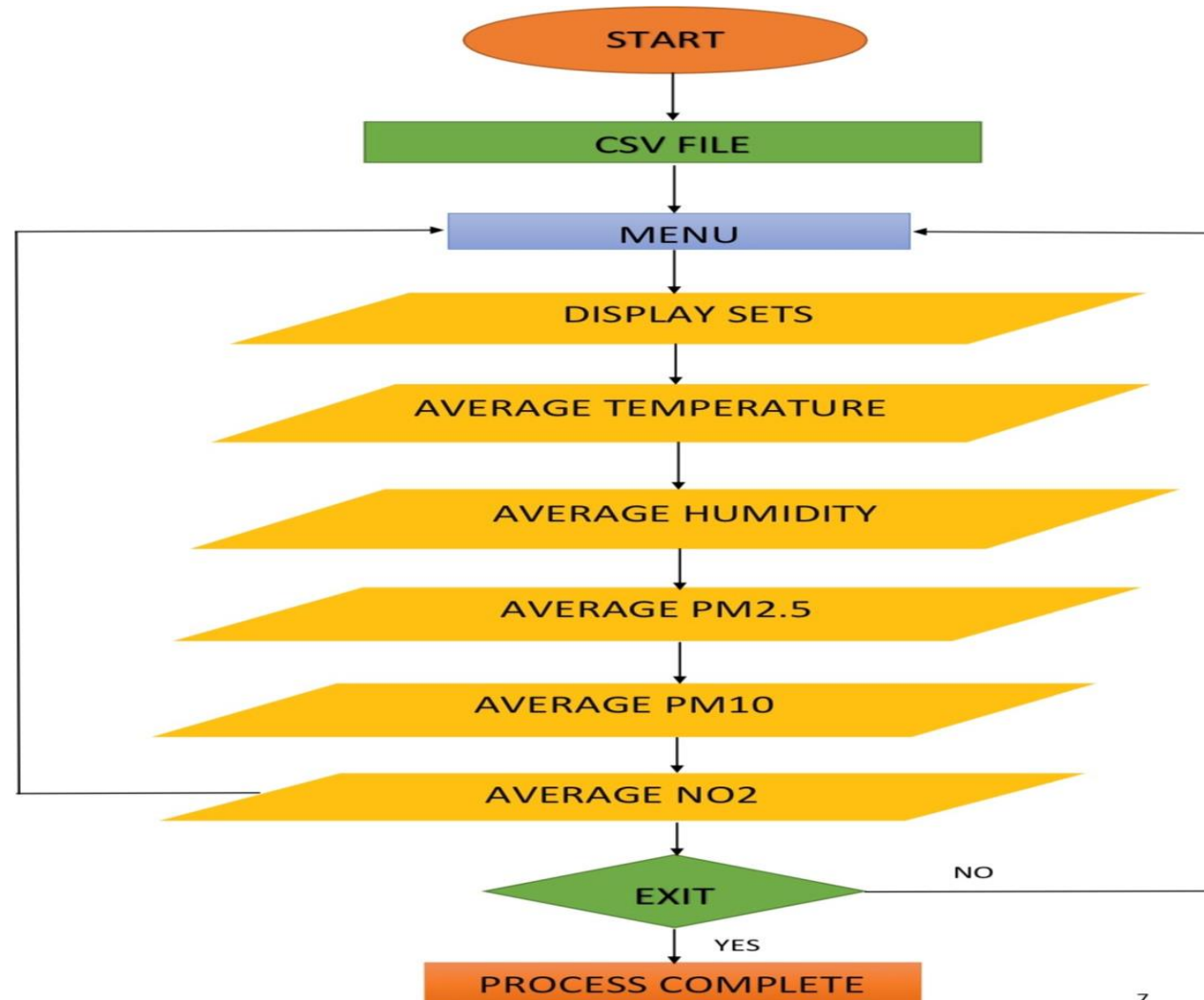
- To show data files.
- Graphical report of a parameter changes in a city over a year.
- The user can also find the pollution level
- Allows to save data in form of Csv file
- You can create and configure files.

	A	B	C	D	E	F	G	
	City	AreaCode	Date	Temperat	Humidity	PM2.5	PM10	NO2
2	Delhi	11	01-01-2021	19	43	184.76	337.93	53.64
3	Delhi	11	02-01-2021	21	47	177.86	334.63	53.12
4	Delhi	11	03-01-2021	20	48	176.12	345.99	54.92
5	Delhi	11	04-01-2021	15	42	182.1	335.43	53.24
6	Delhi	11	05-01-2021	24	46	176.54	351.02	55.72
7	Delhi	11	06-01-2021	21	46	184.75	351.39	55.78
8	Delhi	11	07-01-2021	16	43	184.94	335.62	53.27
9	Delhi	11	08-01-2021	25	50	176.64	348.06	55.25
10	Delhi	11	09-01-2021	16	46	183.19	351.44	55.78
11	Delhi	11	10-01-2021	23	44	184.97	346.64	55.02
12	Delhi	11	11-01-2021	18	41	182.44	346.2	54.95
13	Delhi	11	12-01-2021	23	42	182.21	336.76	53.45
14	Delhi	11	13-01-2021	19	46	177.24	336.22	53.37
15	Delhi	11	14-01-2021	24	43	176.96	345.82	54.89
16	Delhi	11	15-01-2021	15	49	182.01	342.02	54.29
17	Delhi	11	16-01-2021	21	49	180.01	344.81	54.73
18	Delhi	11	17-01-2021	22	49	181.48	344.47	54.68
19	Delhi	11	18-01-2021	15	42	181.3	342.68	54.39
20	Delhi	11	19-01-2021	18	42	180.36	338.68	53.76
21	Delhi	11	20-01-2021	21	42	178.25	335.71	53.29
22	Delhi	11	21-01-2021	23	48	176.69	338.45	53.72
23	Delhi	11	22-01-2021	18	42	178.13	344.17	54.63
24	Delhi	11	23-01-2021	19	49	181.14	335.81	53.3
25	Delhi	11	24-01-2021	20	46	176.74	339.13	53.8
	Delhi	11	25-01-2021	19	49	178.49	339.49	53.8
	Delhi	11	26-01-2021	23	47	178.68	346.69	53.8

DFD of IOT Data Processor



Flow of program of IOT Data Processor



Requirements of IOT Data Processor

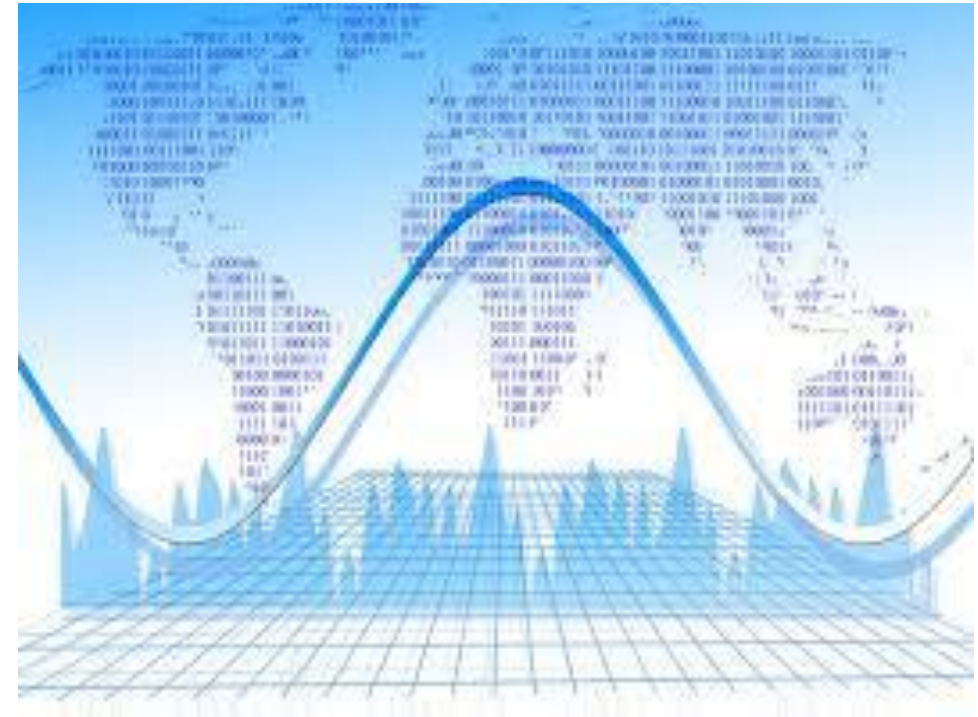
- Language : C
- Tools: Make, Valgrind, Ctags.
- Compiler: GCC (GNU Compiler Collection)
- Operating system: Ubuntu Environment.

Many Linux tools for C Programming



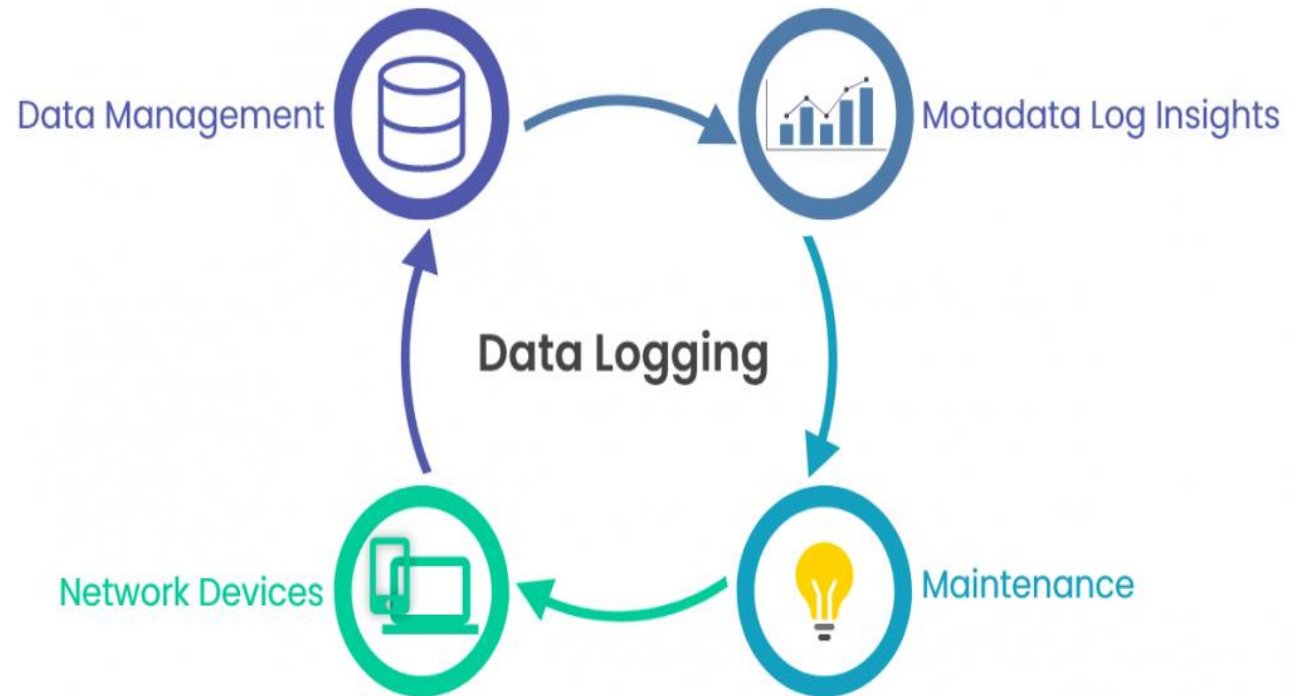
Advantages of IOT Data Processor

- Higher efficiency and accuracy.
- Versatile data acquisition.
- Easy data analysis.
- Reliable technology.



Applications of IOT Data Processor

- Environmental monitoring
- Industrial health and safety
- Energy efficiency management
- Farming
- Urban planning



Conclusion of IOT Data Processor

- Improved data driven decision making.
- Considered by Meteorological department and local authorities.
- Easy to use and user friendly.
- Reliable and great future advancements.

```
*****
1. Displays the Dataset.
2. Displays the monthly average Temperature.
3. Displays the monthly average Humidity
4. Displays the monthly average PM 2.5
5. Displays the monthly average PM 10
6. Displays the monthly average NO2
7. Exit the system.
*****
Enter a valid choice [1-7]: 6

Month-wise comparision of NO2
Month 1 -> 53.89
Month 2 -> 41.18
Month 3 -> 23.31
Month 4 -> 20.90
Month 5 -> 13.69
Month 6 -> 13.19
Month 7 -> 9.19
Month 8 -> 9.29
Month 9 -> 9.57
Month 10 -> 21.97
Month 11 -> 64.92
Month 12 -> 54.18

*****
* Welcome to Data Logger Processing System
*****
1. Displays the Dataset.
2. Displays the monthly average Temperature.
3. Displays the monthly average Humidity
4. Displays the monthly average PM 2.5
5. Displays the monthly average PM 10
6. Displays the monthly average NO2
7. Exit the system.
*****
Enter a valid choice [1-7]: |
```

Thank You!