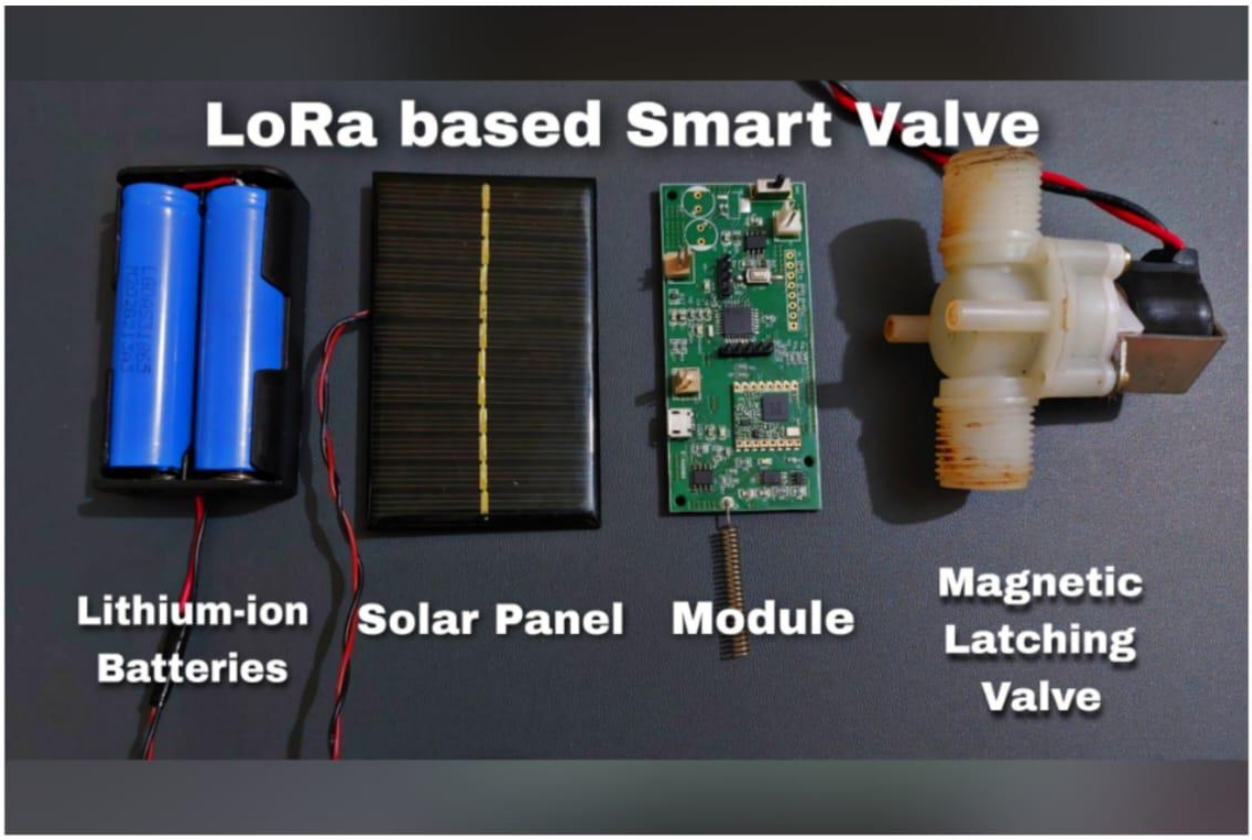
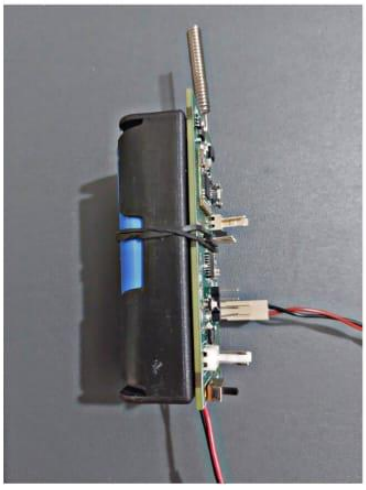
SOMAIYA VIDYAVIHAR UNIVERSITY
K J Somaiya College Of Engineering

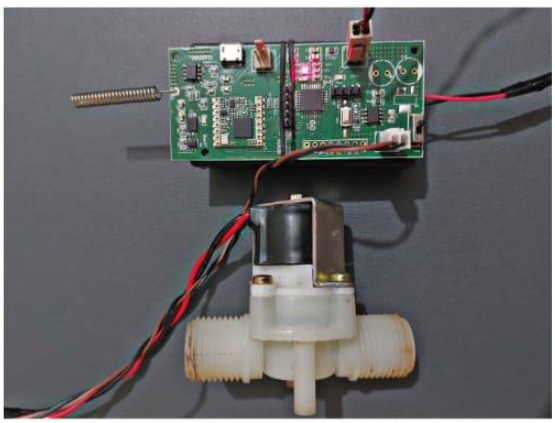
Somaiya TRUST

★ LoRa base Smart Valve ★

Project by (Product): Deepak Tukaram Hadkar

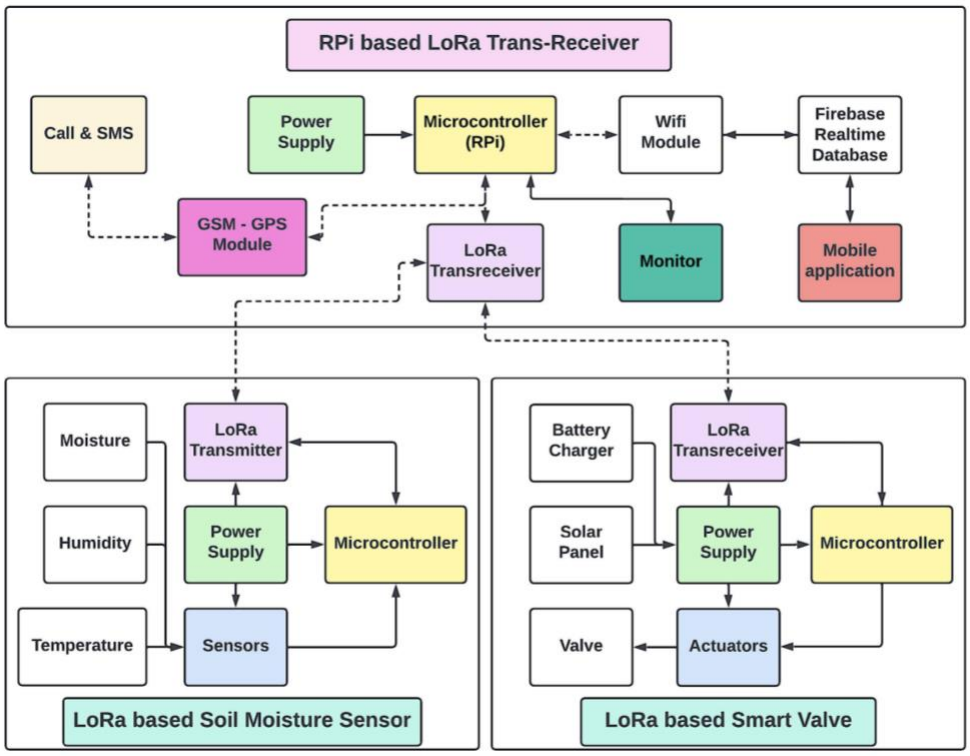




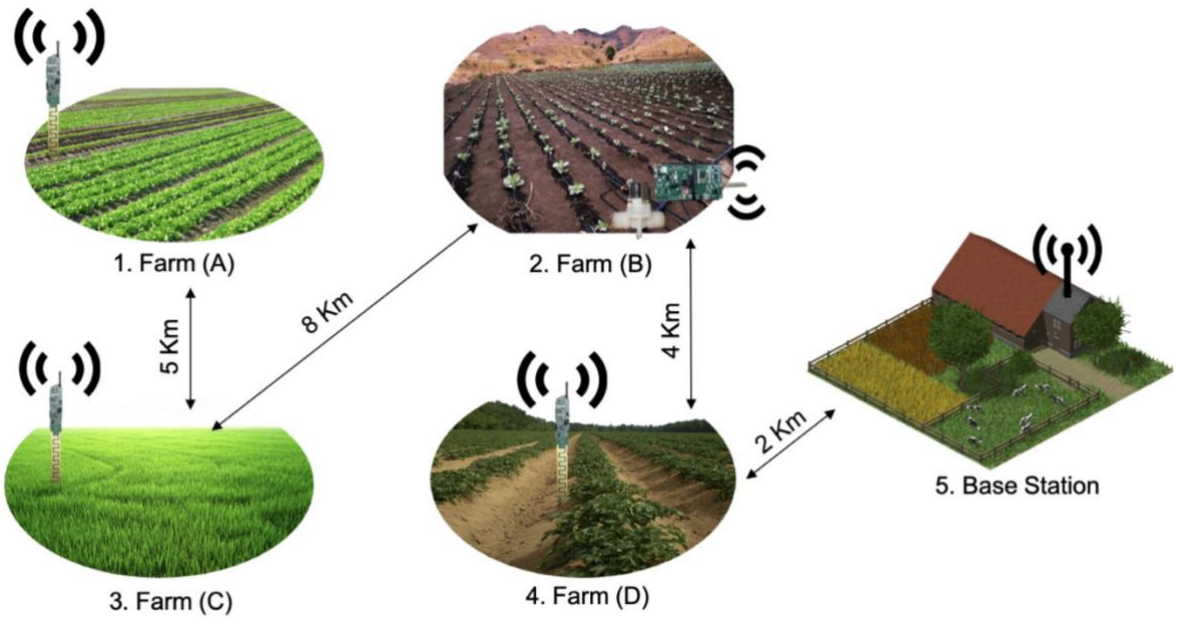


Credits- @Team Efarm_KJSCE

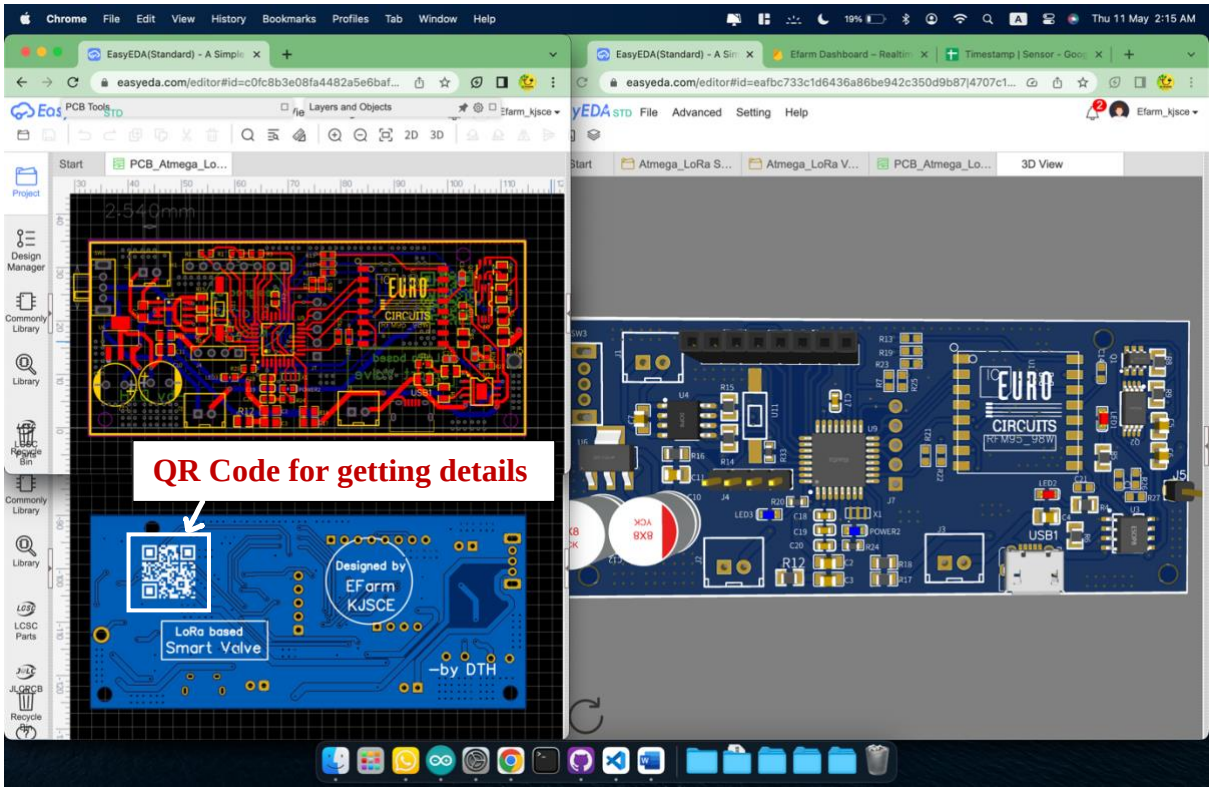
1. Block Diagram of the entire system :



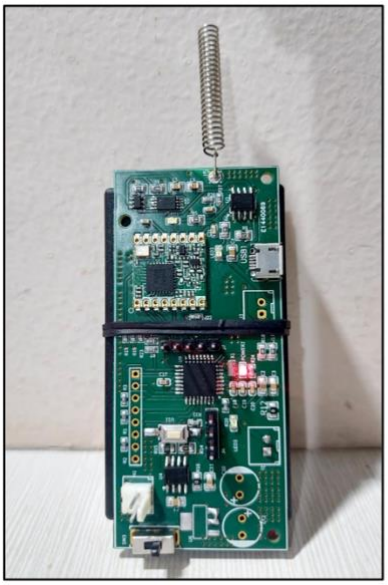
2. Conceptual Model :

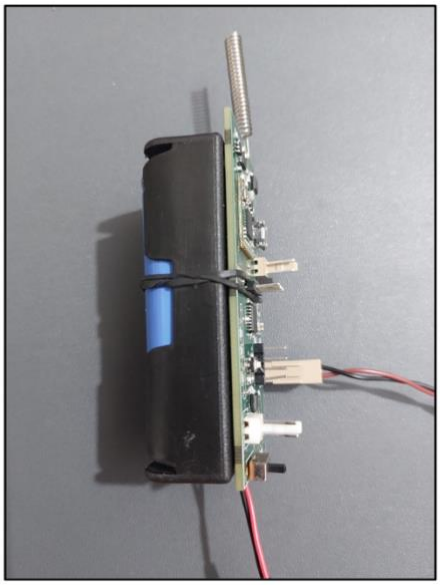


3. Designing PCB for the Smart Valve:



4. Ready PCB with all the components onboard:





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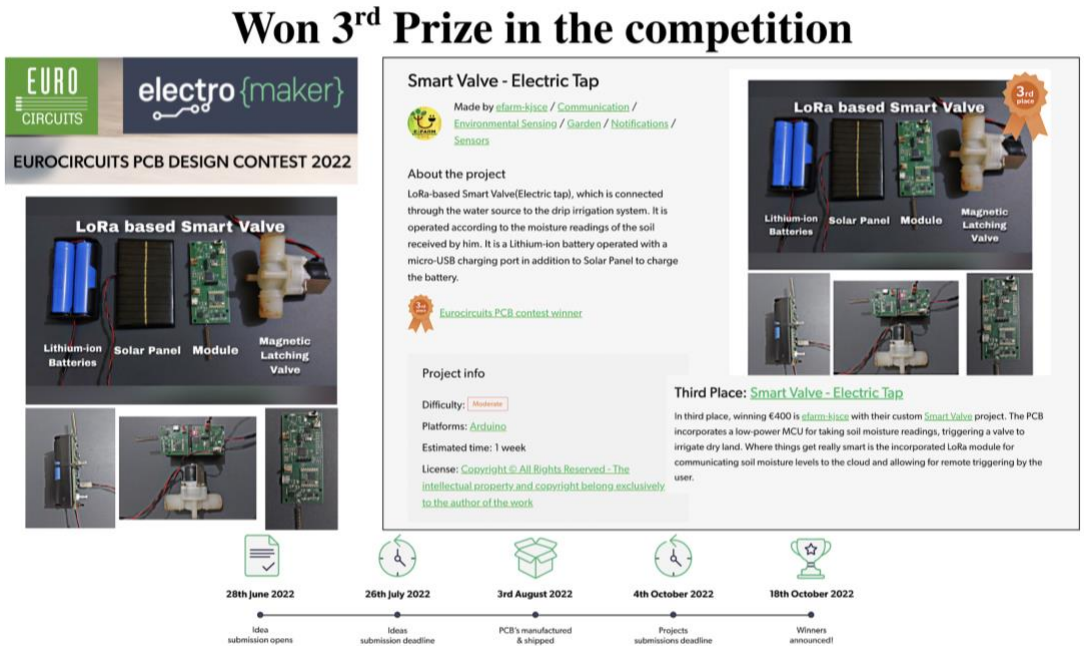
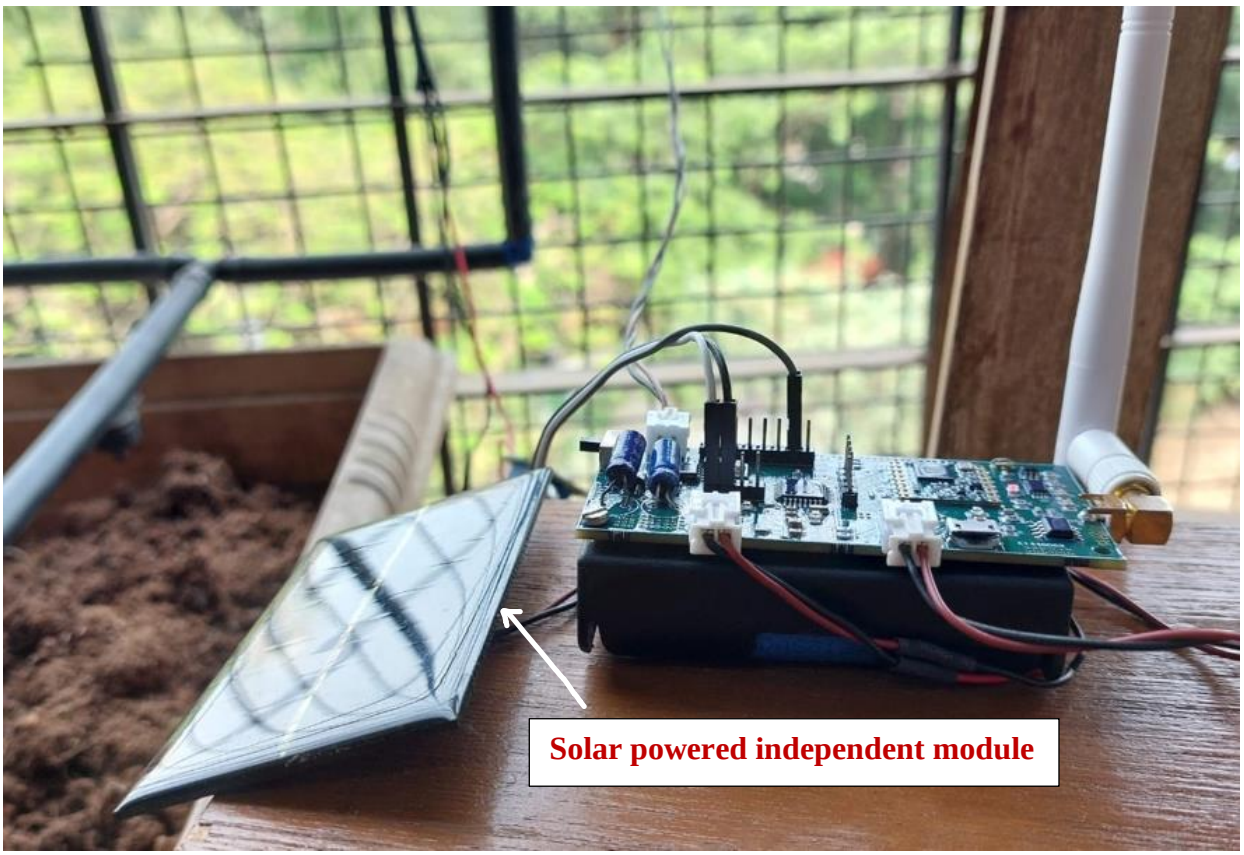
5. Prize received:



6. Implemented in Drip based Vertical Farming model (Prototype) :



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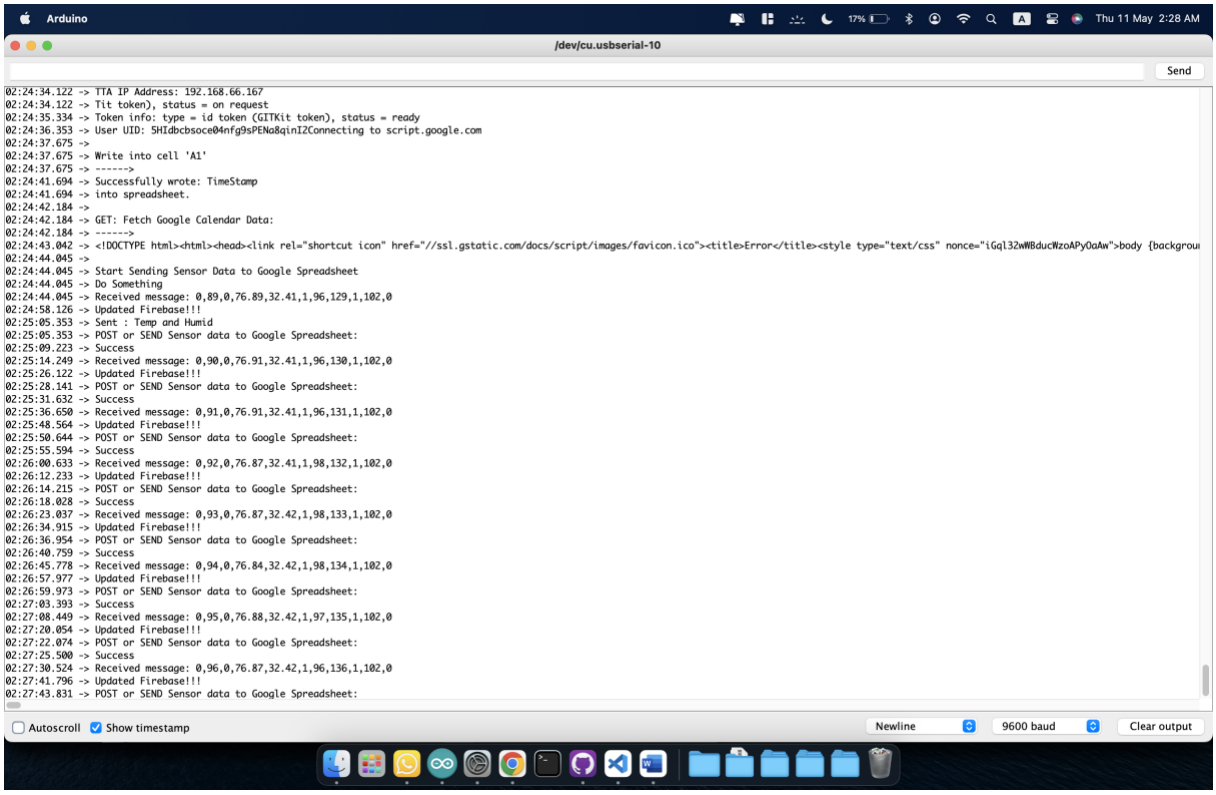
7. Implemented in Drip based Vertical Farming model (Prototype) :

8. Output (Serial Monitor) :



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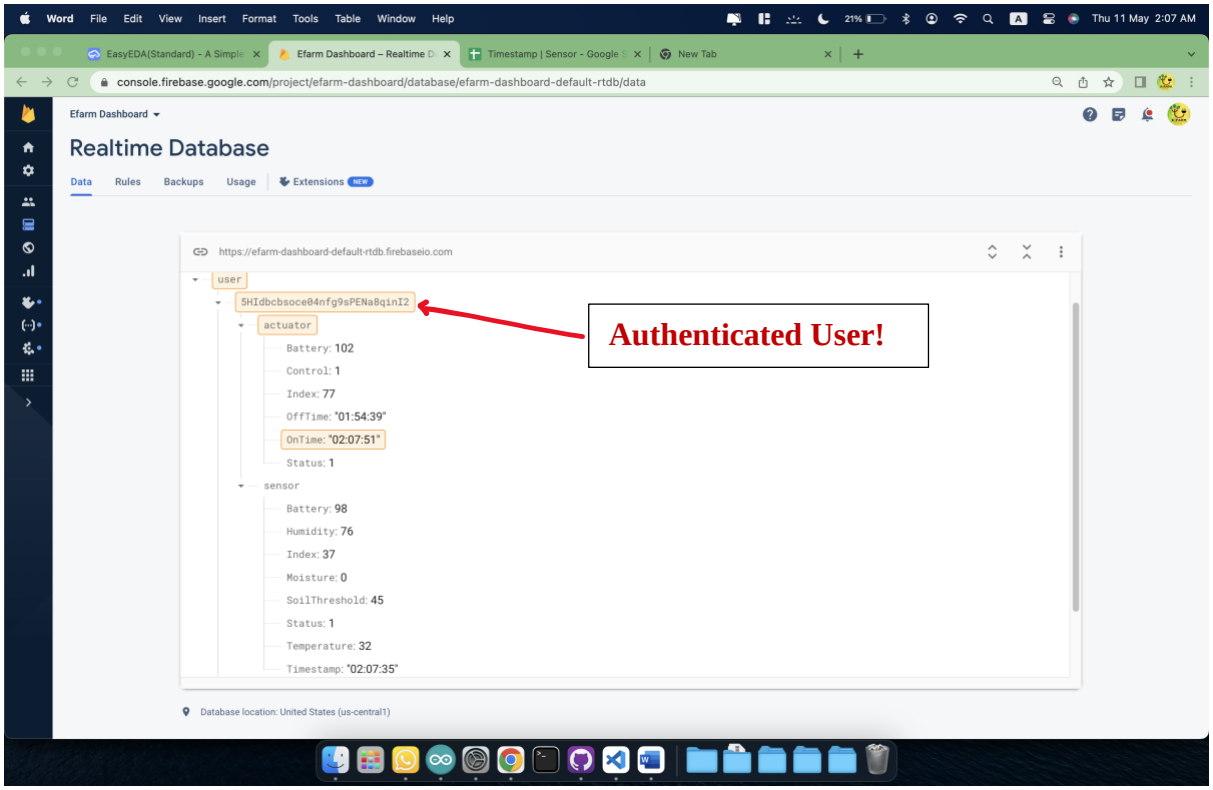
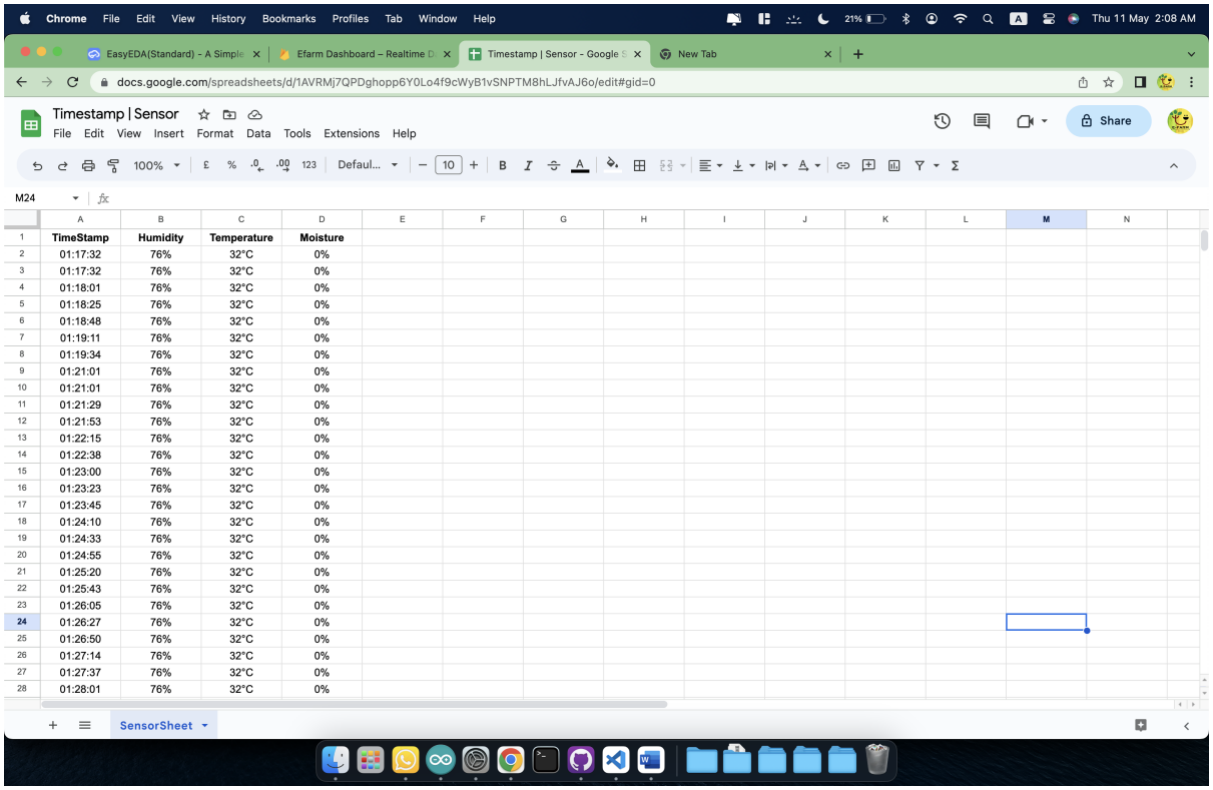
9. Output (Realtime Firebase Database) :



10. Output (Google Sheets) – Realtime Data Logging:



TimeStamp	Humidity	Temperature	Moisture
01:17:32	76%	32°C	0%
01:17:32	76%	32°C	0%
01:18:01	76%	32°C	0%
01:18:25	76%	32°C	0%
01:18:48	76%	32°C	0%
01:19:11	76%	32°C	0%
01:19:34	76%	32°C	0%
01:21:01	76%	32°C	0%
01:21:01	76%	32°C	0%
01:21:29	76%	32°C	0%
01:21:53	76%	32°C	0%
01:22:15	76%	32°C	0%
01:22:38	76%	32°C	0%
01:23:00	76%	32°C	0%
01:23:23	76%	32°C	0%
01:23:45	76%	32°C	0%
01:24:10	76%	32°C	0%
01:24:33	76%	32°C	0%
01:24:55	76%	32°C	0%
01:25:20	76%	32°C	0%
01:25:43	76%	32°C	0%
01:26:05	76%	32°C	0%
01:26:27	76%	32°C	0%
01:26:50	76%	32°C	0%
01:27:14	76%	32°C	0%
01:27:37	76%	32°C	0%
01:28:01	76%	32°C	0%

11. Output (Web Application) :