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SMART WEARABLE LOCATION DETECTOR FOR CHILDREN BY USING GPS AND GSM

JOEL



INTRODUCTION

- A smart wearable location detector is a device used to track and communicate to the parent of a particular child, in case the child goes beyond the specified range.
- As there are many cases in cities, where children are going missing, here is a smart device that tracks and sends the location to the parent.
- This device can be scaled down in the form of a wristband or miniature wearable and can be put on a child, without getting noticed by the culprit.



PROJECT IDEA

This project involves creating a location detection model aimed at assisting parents in monitoring their children's Location. The model functions by sending an SMS notification to the parent if the child moves beyond a predefined location range set by the parents.

Parents can easily adjust this location range using a software application provided with the module. The primary goal is to help prevent instances where children wander off or are at risk of abduction. By utilizing this technology, parents can maintain peace of mind knowing they have a proactive means of keeping track of their children's safety. This system provides a simple yet effective solution for parents to safeguard their young ones from potential harm or getting lost.

SOME CAPTURES FROM NEWS PAPER

12-year-old traced to I had fled after cheating

Sold 3 Parker pens
for Rs 100 each to
travel to Mysuru, TN

UDBHAVI BALAKRISHNA
& GEETHANJALI G
BENGALURU, DHNS



Parinav

Parinav, the 12-year-old boy reported missing from Whitefield on Sunday, has been located at the Nampally metro station in Hyderabad, police officials confirmed on Wednesday.

Deputy Commissioner of Police (DCP), Whitefield, Shivakumar Gunare informed DH that Parinav's family travelled to Hyderabad on Tuesday night after receiving confirmation about his whereabouts.

"A woman who was working in Bengaluru and was visiting Hyderabad came across social

media posts of the missing boy and spotted him at the station. She promptly flagged it to his family and the police," he said.

Police sources revealed that Parinav sold three Parker pens for Rs 100 each before taking a bus to Mysuru. From Mysuru, he travelled by train to Chennai and then to Hyderabad, all without tickets.

He reportedly fled after being caught cheating in an exam on Sunday, fearing con-

Who is Parinav

Parinav, a class 6 student at Deens Academy in Gunjur, attended tutoring classes at the Allen Institute in Whitefield. CCTV footage captured him at Majestic at 4.39 pm on Sunday wearing a yellow T-shirt, dark trousers, and a backpack.

Dinesh Garg, a software engineer and Parinav's neighbour, told DH that the boy's father Sukesh was supposed to pick him up from the Allen Institute on Sunday.

"By the time he arrived there, around 12.30 pm, he

sequences of his parents being informed about it.

Parinav's mother, who previously posted a video urging his return, shared another vid-

was told already

Garg add The fa from Nel Pradesh, in a villa the Hope Whitefie years.

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ADITI TANDON
TRIBUNE NEWS SERVICE

NEW DELHI, AUGUST 20

There is no trace of minor siblings — Deepak and Anjana — who left their Faridabad residence for tuition 44 days ago.

Their hapless father, Bans Bahadur Loni, has been doing rounds of the local police station for more than a month now, pleading with the authorities to lodge an FIR as mandated in such cases by the Punjab and Haryana High Court recently. Loni has had no luck.

"All I got from the local thana was a daily diary report. Hardly any effort was made to trace my children. I don't know where to go. My boy is just 11-year-old and my daughter nine. Their mother died long ago," Loni, a poor watchman at a Faridabad residential complex told The Tribune today.

MINOR SIBLINGS MISSING FROM FARIDABAD

44 days on, no FIR yet



Deepak

As for the Faridabad police, it continues to display brazen contempt for law, as laid down on July 25 by the Punjab and Haryana High Court. Referring to the landmark 2002 judgment of the Supreme Court in a related matter, the HC bench observed that every single case involving a missing child should be treated as a "cognizable offence" in which an FIR should be registered immediately. The HC ordered the Punjab, Haryana and Chandigarh



Anjana

police to comply with immediate effect. Inquiries have revealed that in Haryana, the advisory to this effect was never even sent to SPs.

As many as 3237 children went missing from Haryana since 2009 as per Home Ministry data. Out of these, 1517 are still untraced. Strangely, out of the untraced children, 899 are boys and 618 girls, pointing to the possibilities of use of boys in organ trade rackets.

Haryana, in fact, makes up

for almost half (43.3 pc) of all 7,460 children who went missing from six northern states — Punjab, Haryana, Chandigarh, Uttarakhand, J&K, Himachal — in the last three years.

"This is because the state police lacks the will to treat such cases with the urgency they deserve. Haryana is in utter contempt of the law," said child rights advocate Ravi Kant, who petitioned Haryana DGP last week in respect of the Faridabad case.

He has not heard back nor has an FIR been lodged. The children remain missing since July 9. "We are preparing to file a contempt petition in this matter," Kant said.

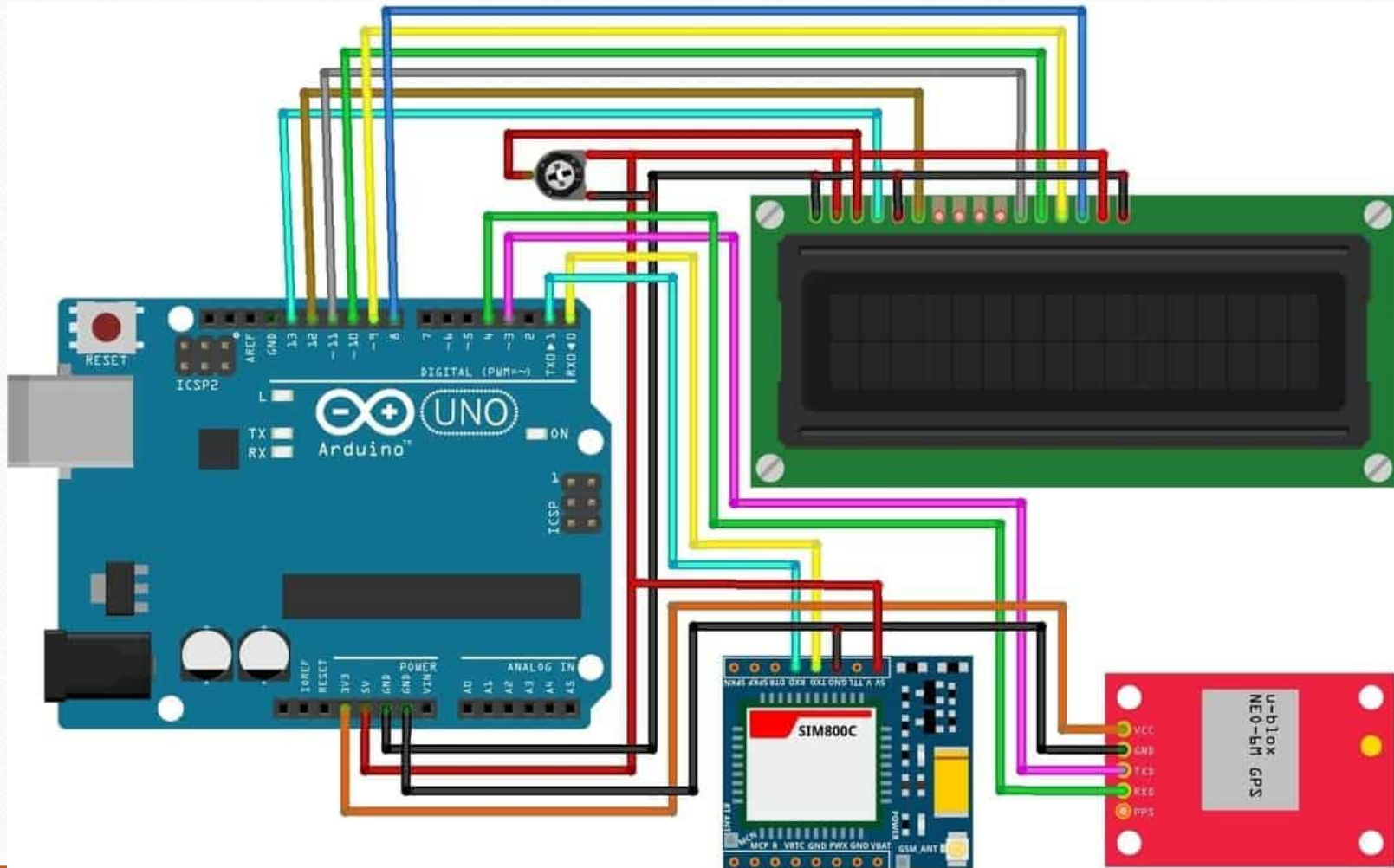
NS Virk, Joint Commissioner Police, Faridabad, was not available for comments. It is learnt that he ordered the SHO concerned in Faridabad's Sector 21 area to register a case. But action has not been taken yet.



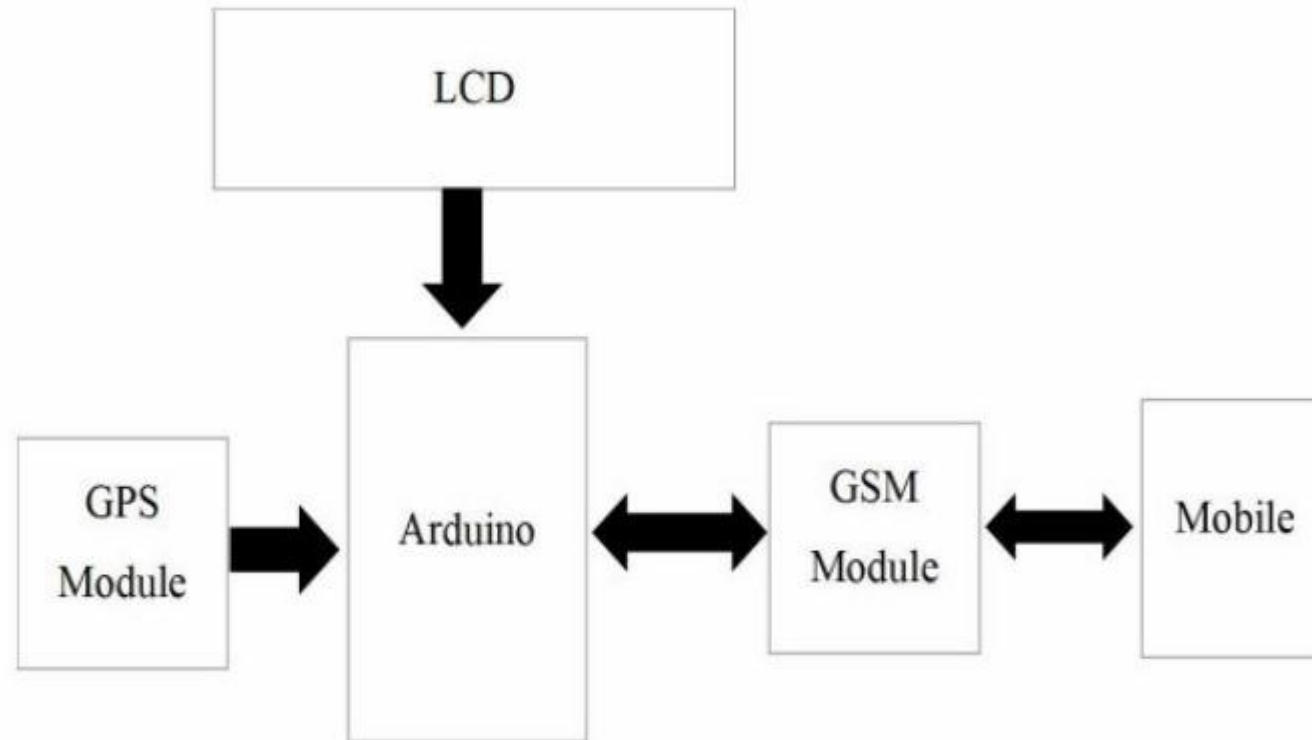
Electronics Components required:

1. Arduino UNO Board
2. 16x2 LCD Display
3. SIM800/900 GSM Module
4. Neo-6M GPS Module
5. Potentiometer 10K
6. Connecting Jumper Wires
7. Breadboard

The circuit is connected as shown in the circuit diagram



SCHEMATIC

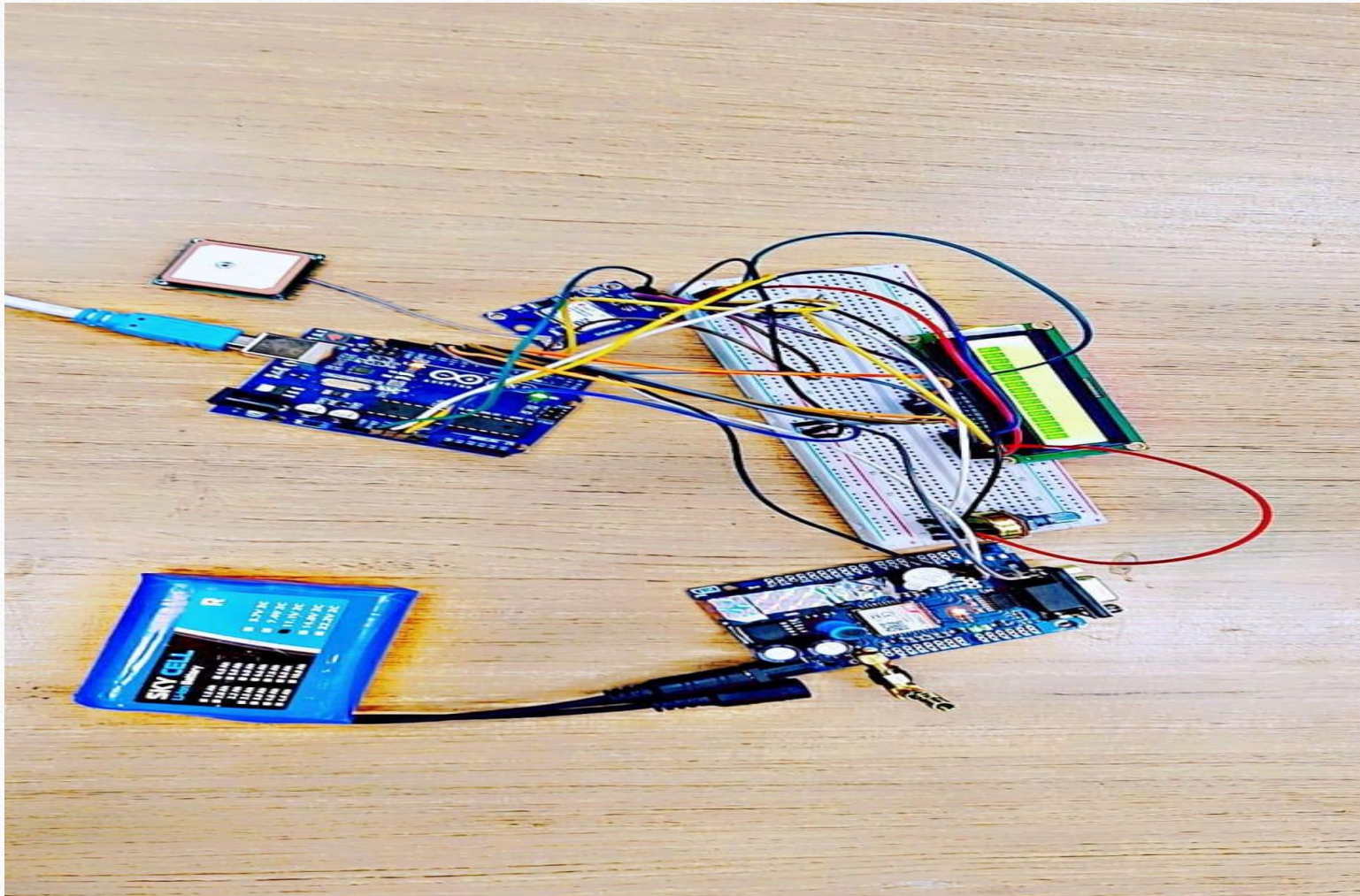




WORKING :

- 1)The GPS Module detects and tracks the location of the child and sends the latitude and longitude of the location via SMS with Google map.**
- 2)The GSM Module gets the signal from the GPS Module and sends it to the person concerned.**
- 3)The parent can detect the child and can take necessary action.**
- 4)The parent will get the flexibility to set the range using a mobile application.**

IMPLEMENTED CIRCUIT





ADVANTAGES AND APPLICATIONS

Smart wearable devices for kids offer a range of applications and advantages, catering to both the safety and developmental needs of children. Here are some key applications and advantages:

- 1. GPS Tracking:** Parents can track their children's whereabouts in real time, ensuring their safety and providing peace of mind. If a child wanders off or gets lost, parents can quickly locate them using GPS technology.
- 2. Safety Alerts:** Smart wearables can be programmed to send alerts to parents if a child leaves a designated safe area, providing an extra layer of security.
- 3. Health Monitoring:** Wearable devices can track children's activity levels, sleep patterns, and even vital signs like heart rate and body temperature. This information can help parents ensure their child is staying active and healthy.



4. Emergency Assistance: Some smart wearables come equipped with emergency buttons that children can press to call for help in case of an emergency. This feature can be particularly useful for children who may find themselves in unsafe situations.

5. Parental Controls: Parents can set up parental controls on smart wearables to restrict access to certain features or content, ensuring that the device remains age-appropriate.

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CONCLUSION:

Overall smart wearable detector takes care of the safety needs of children in this world of unpleasant cases. Parents can now rely on this device which tracks and communicates regarding the location where the device modified into a mobile application. The parents can take necessary steps like communicating the police , etc .The world is now moving into a “SMART” realm and many other associated devices can be made in order to maintain safety.



Submitted by:

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THANK YOU