

# SMART INDIA HACKATHON 2024



2024 SIH HACKATHON ,  
NEED 6 MEMBERS, 1 GIRL as TEAM MEMBER it's COMPLUSORY

TEAM NAME : **ASHVAMEDHA** OR **UNSTOPPABLE** OR **UNFAZED** OR **DECISION** WILL BE **MADE**

TEAM MEMBER1: DHANAVANTHESH S → Team leader

TEAM MEMBER2: HARSHA P,

TEAM MEMBER3: ASIF KAMAL,

TEAM MEMBER4:

TEAM MEMBER5:

TEAM MEMBER6:

Before submitting our ideas, it's crucial to make sure we fully understand the objectives and requirements of the SIH Hackathon. what we need to do as a team:

We first need to get registered. It's important to confirm the registration process with our SPOC (Single Point of Contact) or the relevant faculty member.

After registering, there might be internal hackathon they have said it in ms teams

Participating in Internal Hackathons:

The internal hackathons are happening in September, so let's we actively participate and do well to qualify for SIH.

The deadline for submitting our ideas is 12th September. wwe should be ready and submit our ideas well before this date.

## Choosing Problem Statements

We need to carefully review the problem statements provided. Problem statements are given by government . This way, if one idea doesn't work out, we have others to consider. Max is 2 ideas or problem statement

## Final Preparation

Once we've chosen the problem statements and finalized our ideas, we should double-check all the submission materials.

We should also participate in any preparatory sessions or meetings scheduled before the submission date.

All the best lets go in depth about the problem statements

# SMART INDIA HACKATHON 2024



Don't worry—we'll quickly learn any other skills we need. That's exactly why we're in this together as a team. We've got this, and we'll make sure everyone is ready

**TOTAL STATEMENTS**

As per available data

**65**

Hardware

**170**

Software

They're 170 software ps better we will go with software rather than hardware ...

You can check it out :

<https://www.sih.gov.in/sih2024PS>

22	Bharat Electronics Limited (BEL)	Women Safety Analytics – Protecting Women from safety threats	Software	SIH1605	0	Miscellaneous
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24	Department of Science and Technology	A smart AI based solution for traffic management on routes with heavy traffic from different directions, with real-time monitoring and adaptation of traffic light timings	Software	SIH1607	0	Smart Automation
21	Bharat Electronics Limited (BEL)	Conversational Image Recognition Chatbot	Software	SIH1604	0	Smart Automation
31	Government of NCT of Delhi	Learning path dashboard for enhancing skills	Software	SIH1615	0	Smart Education
46	Government of Punjab	Mentor Connect	Software	SIH1630	0	Smart Education
57	Ministry of Coal	A web application specifically designed for Indian coal mines to quantify their carbon footprint and explore pathways to carbon neutrality.	Software	SIH1644	0	Renewable / Sustainable Energy
160	Ministry of Communication	Dashboard for Swachhta and LiFE. Develop a dashboard aimed at maintaining cleanliness and LiFE practices, integrating AI-powered image processing technology for effective monitoring of Swachhta and green practices adopted in post	Software	SIH1751	0	Clean & Green Technology

These are the problem statements what I have selected

I will give highest priority to women safety analytics -> where it is a real world issue, we can make it possible

#### PROBLEM STATEMENT DETAILS

Problem Statement ID	1605
Problem Statement Title	Women Safety Analytics – Protecting Women from safety threats
Description	<p>Background: The growing concern for the safety of women and the increase in crimes against women in various cities, highlight the need for advanced surveillance and analytical solutions to protect women from various possible threats. We need a promising approach to address these issues through real-time threat detection software. Detailed Description: By leveraging advanced analytics through real-time monitoring, Women Safety Analytics should create safer environments for women and assist law enforcement in effectively addressing and preventing crimes against women. The proactive approach of detecting anomalies and generating alerts can play a crucial role in enhancing public safety and fostering a secure atmosphere for women. Women safety analytics software should continuously monitor the scene to count the number of men and women present, offering insights into gender distribution in specific locations and times. It should identify unusual patterns, such as a lone woman at night, unusual gestures and generates alerts to pre-empt potential incidents. Advantages of the system: ? By providing real-time monitoring and alerts, the system helps to create a safer environment for women. ? Early detection enables law enforcement to intervene before situations escalate. ? Continuous analysis provides valuable data to identify hotspots and trends, aiding in strategic planning</p>
Organization	Bharat Electronics Limited (BEL)
Department	Bharat Electronics Limited (BEL)
Category	Software
Theme	Miscellaneous
Youtube Link	
Dataset Link	

Background: The growing concern for the safety of women and the increase in crimes against women in various cities, highlight the need for advanced surveillance and analytical solutions to protect women from various possible threats. We need a promising approach to address these issues through real-time threat detection software. Detailed Description: By leveraging advanced analytics through real-time monitoring, Women Safety Analytics should create safer environments for women and assist law enforcement in effectively addressing and preventing crimes against women.

The proactive approach of detecting anomalies and generating alerts can play a crucial role in enhancing public safety and fostering a secure atmosphere for women. Women safety analytics software should continuously monitor the scene to count the number of men and women present, offering insights into gender distribution in specific locations and times.

It should identify unusual patterns, such as a lone woman at night, unusual gestures and generates alerts to pre-empt potential incidents.

Advantages of the system: ? By providing real-time monitoring and alerts, the system helps to create a safer environment for women. ? Early detection enables law enforcement to intervene before situations escalate. ?

Continuous analysis provides valuable data to identify hotspots and trends, aiding in strategic planning for city safety Expected Solution: Women safety analytics should include the following functionalities

1. Person detection along with Gender Classification
2. Gender Distribution : Count the number of men and women present in the scene
3. Identifying a Lone Woman at Night time
4. Detection of a Woman Surrounded by Men
5. Recognizing SOS situation through gesture analytics
6. Identifying hotspots where incidents are more likely to occur, based on the past alerts

Basically we can achieve it I have idea about it .....

NOW we need to make team to collaborate and understand how can we make it possible and submit the ideas

And next I would traffic management

#### PROBLEM STATEMENT DETAILS

Problem Statement ID	1607
Problem Statement Title	A smart AI based solution for traffic management on routes with heavy traffic from different directions, with real-time monitoring and adaptation of traffic light timings
Description	Background: Urban areas often face significant traffic congestion, especially at intersections where multiple routes converge. Traditional traffic management systems rely on pre-set traffic light timings, which may not adapt well to fluctuating traffic conditions. This can lead to increased waiting times, fuel consumption, and emissions. Description: An AI-based traffic management system can dynamically adjust traffic light timings based on real-time traffic data, improving traffic flow and reducing congestion. Expected Solution: Problem statement is to develop a smart, AI-based traffic management system that can monitor traffic conditions in real-time and adapt traffic light timings accordingly. The system should be capable of handling heavy traffic from multiple directions and optimizing traffic flow to minimize delays and improve overall efficiency.
Organization	Department of Science and Technology
Department	Department of Science and Technology
Category	Software
Theme	Smart Automation
Youtube Link	
Dataset Link	

We can see it is a real issue  
example consider our hebbala and airport road other etc....

We need to think carefully and make decisions with the bigger picture in mind

They are several other like **mentor** problem go through it and understand if any one has doubt or come with an idea just inform me ...

Look choosing is easy but developing as to made easy

What I have been suggested ps above

Skills Requirements are

Django , tensor flow,node js , html , css , js , java, flask , ai knowledge , Machine learning , python, other etc

**Don't worry** after submitting an idea we will get a month to learn quick ,  
we will distribute within our team so we can do better , example if one person knows iot python then he will get to do on that , if a person knows frontend he need to work on it  
no need everyone as to learn 14 to 15 skills in a month

First we will participate , giving our best ppt copy to submit an idea...

Choose wisely ps..