Internal Hackathon Report for SIH 2023

Smart India Hackathon 2023 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving. **Smart India Hackathon 2023** was launched by AICTE and MoE. The first four editions SIH2017, SIH2018, SIH2019, and SIH2020 proved to be extremely successful in promoting innovation and out-of-the-box thinking in young minds especially engineering students from across India.

What is Smart India Hackathon 2023?

The hackathons 2023 edition will have statements linked to a range of themes. The themes including- Agriculture, food and rural development, Block chain and cyber security, Clean and Green Technology, Fitness, and Sports, Heritage, Culture, MedTech/ Biotech/HealthTech, Miscellaneous, Renewable/ Sustainable Energy, Robotics and Drones, Smart Automation, Smart Vehicles, Travel and Tourism, Transportation and Logistics, Disaster Management, Smart Education. The process involves the submission of problem statements by central and state ministries, departments, PSUs, industries, and NGOs; the review of submitted problem statements and finalization by concerned committees and the publishing of finalized problem statements.

Objectives of SIH 2023

The main goal of a **Smart India Hackathon** is to provide students with a platform to solve some of the pressing problems we face in our day-to-day lives. SIH is organized once a year for students to come up with solutions to problems posed by ministries, public sector units, Nongovernmental organizations, and industries.

About the Internal Hackathon

The Computer Science & Engineering department of Nanhi Pari Seemant Engineering Institute, Pithoragarh conducted an institute level internal hackathon as part of the Smart India Hackathon (SIH 2023) on September 29 at seminar hall of the institute. This event was in accordance with the directive of the Ministry of Education Innovation Cell-AICTE and aimed to foster innovation and problem-solving skills among engineering students. The goal of this Internal Hackathon was to prepare the student teams for national level Smart India Hackathon 2023.

The Hackathon was inaugurated by Dr. Ajit Singh, Director NPSEI and also patron of this event. In his address, he spoke about the importance of thinking out-of-box, and how it can help students to turn their idea into a product and do great things. The inauguration session was enlightened by the online speech of the chief guest of this event, Prof. Onkar Singh, Vice Chancellor, Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun.

Mrs. Jyoti Joshi (SPOC, Smart India Hackathon 2023) elaborated the goals and purpose of this programme and she also mentioned that this is the first time a Hackathon is conducted in the campus, and this programm is a nationwide initiative to provide students a platform to solve some of the pressing problems face in daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving.
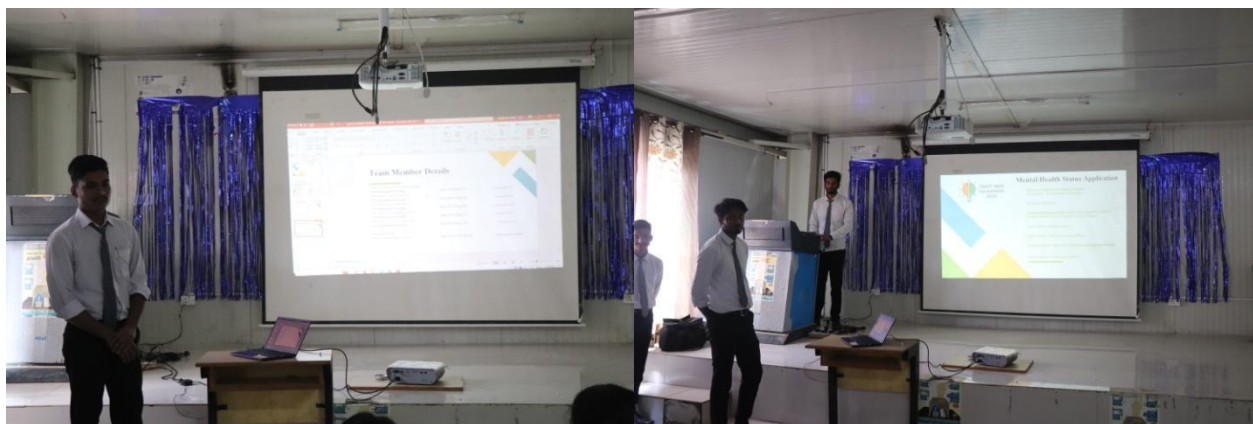
Total 9 teams (54 students, 40 male and 14 female) of students have participated in this event. As per the guidelines of Smart India Hackathon – 2023, and to encourage female participation in innovative projects, each team consists of at least one female student as member.

The participants of the institute have worked on 25 different problems put forward by various ministries of Government of India as well as problems from various PSUs. Out of them, 9 software problems were chosen by the participants to work upon. To evaluate and shortlist the teams, 9 judges having academic experience in various fields were selected from the institute. The registration process was started at 9:00 AM on September 29, 2023 at seminar hall. Total 9 teams with 54 students reported for the event. After that, the presentations on various ideas had started at 10:00 AM

The evaluation process followed the SIH 2023 format, which required teams to present their solutions and demonstrate the basic functionalities of their projects, both in hardware and software categories. The rigorous evaluation process provided valuable feedback to the participating teams, helping them understand their strengths and areas for improvement. At the end of rigorous evaluation by judges, total 3 winning teams (Code Breakers, The Time Travellers and Boolean Pundits) are decided to be registered for Smart India Hackathon – 2023.These winning teams will now be provided mentorship from experts from industries and academia and will be nurtured for SIH-2023 as well as other competitions.

The following teams have participated in Internal Hackathon

S.no	Team Name	Team Leader	Problem statements	Problem Id
1.	Innovators	Gaurav Pandey	Centralized Nasha Mukti Database	SIH1366
2.	The Time Travellers	Manthan Joshi	Development of systems for effective environmental, social and governance {ESG} intervention in higher education.	SIH1372
3.	Heaxbrains	Ashish Nishad	Ideate and implement a system to enhance the quality of education in rural areas.	SIH1326
4.	Boolean Pundits	Uday Neoliya	Education ecosystem for especially abled student needs provision and improvement to take care of compliance, governance and conduct.	SIH1500
5.	Code Breakers	Riya Kharakwal	Fake social Media Profile Detection and Reporting.	SIH1364
6.	Time Limited exceed	Amit Chaudhary	Self identifying mental health status and get guidance for support.	SIH1363
7.	Algorithmic avengers	Gaurav Singh Khati	Application for assessment of quality of textbook /reference book/e-book.	SIH1340
8.	Noobies	Deepak Chandra Kapri	Comprehensive inspection and analysis of water supply distribution lines.	SIH1514
9.	Ask vegs	Vandana Joshi	Sustainable development with net zero goal.	SIH1472
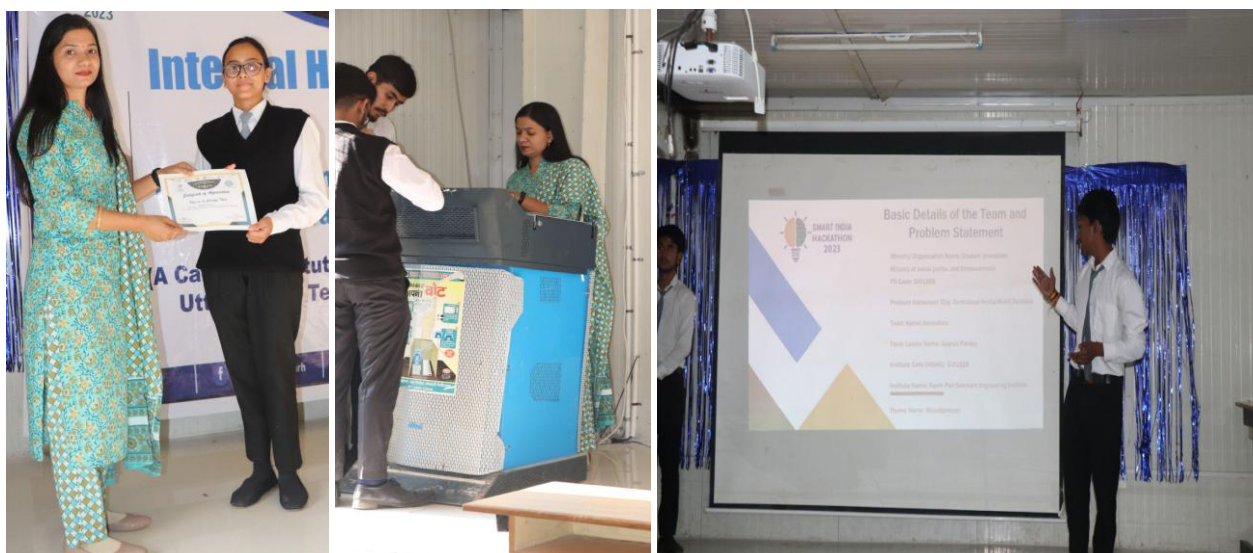
The following problem statements have selected for the Internal Hackathon

S. No.	P ID	Problem Statements
1	SIH1363	Self-identifying the mental health status and get guidance for support.
2	SIH1362	Student dropout analysis for school education project.
3	SIH1365	Online Block chain based certificate generation and validation system for government organization.
4	SIH1300	Automated Public Lighting.
5	SIH1372	Development of systems for effective Environmental, Social and Governance (ESG) Intervention in Higher Education.
6	SIH1373	One-stop solution for monitoring dairy plant energy consumption, hygiene and packaging waste collection from consumers.
7	SIH1312	Chatbot to respond to text queries pertaining to various Acts, Rules, and Regulations applicable to Mining industries
8	SIH1379	Vegetation measurement along the line corridor using satellite imagery.
9	SIH1323	Development of Smart Toilet.
10	SIH1386	Developing software for dubbing of videos from English to other Indian regional languages.
11	SIH1387	Detection of embedded Malware/ Trojan in hardware devices used in Power Sector.
12	SIH1390	Pro Planet Person App
13	SIH1344	Al-based tool for preliminary diagnosis of Dermatological manifestations.
14	SIH1393	Water and Electricity Tracking App
15	SIH1407	Chatbot based helpdesk for govt. employees and departments

16	SIH1366	Centralized Nasha Mukti Database.
17	SIH1374	Cloudburst prediction system.
18	SIH1383	Optimizing Doctor Availability and Appointment Allocation in Hospitals through Digital Technology and Al Integration.
19	SIH1499	Green options for milk packaging (Low cost, environment-friendly, and extended shelf life packaging for milk)
20	SIH1282	Tech-Driven Solutions for Under trial Prisoners in India.
21	SIH1454	Create an intelligent system using AI/ML to detect phishing domains which imitate look and feel of genuine domains

The following three teams have shortlisted for SIH 2023

S.no	Team Name	Team Leader	Problem statements	Problem Id
1.	Code Breakers	Riya Kharakwal	Fake social Media Profile Detection and Reporting.	SIH1364
2.	The Time Travellers	Manthan Joshi	Development of systems for effective environmental, social and governance {ESG} intervention in higher education.	SIH1372
3.	Boolean Pundits	Uday Neoliya	Education ecosystem for especially abled student needs provision and improvement to take care of compliance, governance and conduct.	SIH1500

At the end, there was a valedictory session where students and organizing committees were felicitated by awarding certificates. The event ended with vote of thanks by hackathon coordinator Mrs. Jyoti Joshi.

List of Jury Members

Judges Name	Designation	Deparment
Mr. Dinesh Singh Negi	Assistant Professor	CSE
Mr. Bhupender Bharti	Assistant Professor & Head	ME
Mrs. Pranjali Bafila	Assistant Professor & Head	EE
Ms. Tripti Kumar	Assistant Professor & Head	CE

Mr. Nitesh Verma	Assistant Professor	ME
Dr. Hemant Kumar Joshi	Assistant Professor	ASD
Ms. Geeta Dhyani	Assistant Professor	ECE
Dr. C.M.S Negi	Assistant Professor & Head	ASD
Mr. Rajendra Kumar	Assistant Professor	CSE