



UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY

(A Constituent Autonomous Institute and Recognized by UGC under Section 12(B) and 2(F))

KURUKSHETRA UNIVERSITY, KURUKSHETRA

(Established by the State Legislature Act XII of 1956)

(A+ GRADE, NAAC Accredited)



E-CELL
UIET KUK

&



Google Developer Student Clubs
UIET KUK

presents



May 10, 2023



INNOVATE-A-THON

WHERE CODE MEETS INNOVATION

INNOVATE-A-THON focuses on campus - oriented problems where young pioneers collaborate to solve problem statements or showcase their Designing & Building Skills and earn rewards. This is a 9-hour campus hackathon cum exhibition which aims to bring together creative minds to present innovative solutions which tackle real-world issues.

Get Set, Innovate!

NOTE : Teams can either participate under the Software Category or Hardware Category.



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9 HOURS



SOFTWARE



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Problem Statement no. - ICG-001 [Software]

Title - Development of an Attendance Tracking System For One-Time Events

REQUIREMENTS

- Mobile-accessible system with no additional hardware required.
- Provides unique identification.
- Real-time attendance tracking and reporting to event organizers.
- User-friendly and easy to use for event organizers and attendees.
- No need for biometric data or sensitive information.
- Scalable and adaptable to different one-time events.
- Robust security features to prevent unauthorized access and protect attendance records' integrity.
- Detects fraudulent practices.
- Only basic information may be available about attendees like (Name, phone, email, etc.).

Taking attendance manually on pen and paper during one-time events such as seminars, workshops, and conferences has been a common practice for many institutions and organizations. However, this method can be unreliable, as attendees may put fake attendance leading to inaccurate and fraudulent attendance records. Additionally, manually taking attendance can be time-consuming and tedious.

Therefore, the problem statement is how to develop a system that allows for the easy and accurate recording of attendance during one-time events, without using any hardware components or storing biometric data. The system should be secure, reliable, and easy to use, and prevent fraudulent practices such as proxy attendance.

The system could also provide real-time attendance tracking and reporting, making it easier for organizers to monitor attendance and evaluate the success of the event.

Such a system would not only streamline attendance tracking but also prevent fraudulent practices, provide a tamper-proof record of attendance, and save time and effort for event organizers.

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Problem Statement no. - ICG-002 [Software]

Title - Automated Certificate Management System

REQUIREMENTS

- Automated certificate generation with unique IDs for each participant.
- Should be able to use custom templates as provided by the user to generate certificates.
- Certificates are to be delivered automatically to participants' respective email addresses.
- Ability to verify certificates.

The manual process of generating and distributing certificates is time-consuming, labor-intensive, and error-prone. Therefore, we require a solution that can automate the certificate management system for events. The solution should be able to generate unique certificates for each participant with a unique ID and deliver them automatically via email. Furthermore, the solution should include a verification system to ensure the authenticity of certificates.



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Problem Statement no. - ICG-003 [Software]

Title - Prediction of Admission & Jobs in Engineering & Technology / Management / Pharmacy with Respect to demographic locations

REQUIREMENTS

- Use data analytics and machine learning algorithms to predict employment potential for courses in Engineering, Management, Pharmacy, and other fields.
- Analyze data from various sources to identify current trends in job sectors and admissions.
- Provide short-term and long-term predictions for job market trends and admissions.
- Update recommendations based on user feedback and job market trends.
- Ensure user privacy and data security.
- Be scalable and able to handle a large volume of data.
- Be accessible across different devices and platforms.

In India, predicting admissions and job scenarios in engineering, management, and pharmacy is challenging due to changing technology and job requirements.

As of now the grant of approval for the establishment of new technical institutions and starting of new courses in the field of Engineering and Technology, Management, Pharmacy, Architecture, etc. is based mainly on the infrastructure available and the lack of information on employment potential which results in the students unemployed. No mechanism exists to estimate employment potential for courses on a short and long-term basis. So, there is a need to develop application software that uses data correlation and AI to estimate employment potential would be useful in granting approval and forecasting the current trend in the admissions and job sectors so as to blend the courses and syllabus accordingly to keep the youth employed and skilled with rapidly changing world.

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SOFTWARE CATEGORY RULES AND REGULATIONS

- 1 It is mandatory for each team to have 4 members.
- 2 All the members of the team must be from the same college.
- 3 Students enrolled in any UG courses in Kurukshetra University can participate in "INNOVATE-A-THON".
- 4 You will not be allowed to make any changes to your team structure once registered.
- 5 Registered teams will be able to submit their PPTs from April 27th, 2023 onwards.
- 6 Registered teams will be required to submit their PPTs (Sample PPT – <https://bit.ly/Innovate-a-thon>) along with team details latest by 11.59 P.M. on April 29th, 2023.
- 7 Four teams will be shortlisted for each problem statement.
- 8 List of shortlisted teams will be released on 1st May 2023.
- 9 Shortlisted teams will be notified about any important updates through email or through WhatsApp Group.
- 10 The shortlisted teams will have to develop "working solutions" by the end of the final round on May 10th, 2023.
- 11 The judging criteria for the competition are as follows:
 - i) Novelty
 - ii) Feasibility
 - iii) Implementation
 - iv) Final Prototype

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HARDWARE



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9 HOURS



HARDWARE OPEN INNOVATION

RULES AND GUIDELINES

- Students shall opt for individual or group (not exceeding 4 members in a team).
- Registered teams will be required to submit their PPTs (Sample PPT - <https://bit.ly/Innovate-a-thon>) along with team details by 11.59 P.M. on April 29th, 2023.
- List of shortlisted teams will be released on 1st May 2023.
- The shortlisted participants/teams will be required exhibit their innovative projects with a working model/prototype on May 10, 2023.
- Students can bring descriptive posters to their model (optional).
- The prototype should be of minimum MRL (Manufacturing Readiness Level) 3
- About MRL 3: This implies that you've developed a proof of concept for manufacturing-development of some experimental hardware and processes have been created. The materials/processes have been characterized and tested for manufacturing but these processes/hardware have not been integrated completely yet. Further testing and demonstration is required.
- The judging criteria for the competition are as follows:

i) Novelty	ii) Feasibility
iii) Implementation	iv) Final Prototype

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9 HOURS

This category allows the participants to think outside the box and explore new ideas, technologies, and resources to develop their solutions. Participants are free to work on any type of hardware solution, from wearable devices to robotics, drones, and IoT devices to present solutions that are not only innovative but also practical and impactful.

Bring your ideas to life through skill and innovation and display them to a wider audience.



TIMELINE

22.04.23

Announcement of
Problem Statements

23.04.23 - 27.04.23

Registration

27.04.23 - 29.04.23

PPT Submission

01.05.23

Result of PPT Selection

10.05.23

Hackathon Day

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PRIZES

SOFTWARE

Rs. 4000
ICG - 001

Rs. 4000
ICG - 002

Rs. 4000
ICG - 003

HARDWARE

Rs. 4000
For
1st Prize

Rs. 3000
For
2nd Prize

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**GOODIES WORTH
Rs.10000 UP FOR GRAB**



CONTACTS

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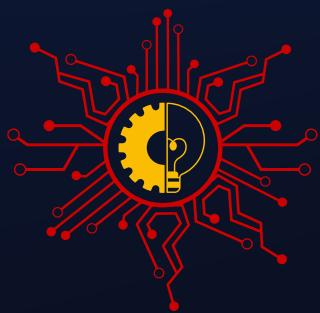
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INNOVATE-A-THON

Where Code Meets Innovation