



Get Ready to **Dairy-scover**



**Kumaraguru
Livestock
Hackathon**



About

Kumaraguru Livestock Hackathon, a groundbreaking event in the realm of Dairy innovation, hosted by Kumaraguru Institutions in partnership with Environmental Defense Fund (EDF) a global non-profit organization dedicated to tackling the biggest environmental issues, including supporting resilient farming communities whose livelihoods are threatened by climate change. For more than a decade, EDF has supported India's shift to a prosperous, healthy, low-carbon trajectory. We have implemented innovative solutions that address national priorities of income generation, livelihood security and environmental sustainability, and cultivated strategic partnerships to embed and scale up sustainable practices across the agriculture and dairy sectors.

The Kumaraguru Livestock Hackathon aims to stimulate innovation by uniting engineers and veterinarians to address real-world challenges in the Dairy industry. With a focus on fostering solutions that have a lasting positive impact, this hackathon brings together students and experts to create innovative software solutions.

Why should you join the Livestock Hackathon?

1 Solving Real-World Challenges

The dairy industry faces various complex issues related to productivity, sustainability, and supply chain management. The hackathon provides an opportunity to tackle these real-world challenges and develop innovative software solutions that can make a tangible difference.

2 Networking Opportunities

The hackathon brings together participants, mentors, industry experts, and potential investors. Networking during the event can lead to new collaborations, career opportunities, and exposure to the dairy industry's key players.

3 Exposure to Emerging Technologies

Hackathons often involve innovative technologies and tools that might not be part of your regular work or study curriculum. This exposure allows you to explore and experiment with the latest advancements.

4 Contributing to Food Security

The dairy industry plays a crucial role in global food security. By participating in the hackathon, you are indirectly contributing to ensuring a stable and sustainable food supply.



Objectives

The objectives of this hackathon are aimed at addressing critical challenges faced by the dairy sector and creating efficient tools to enhance productivity, sustainability and overall dairy management. Below are the key objectives for this dairy-focused hackathon:

1. Improving Dairy Farm Management

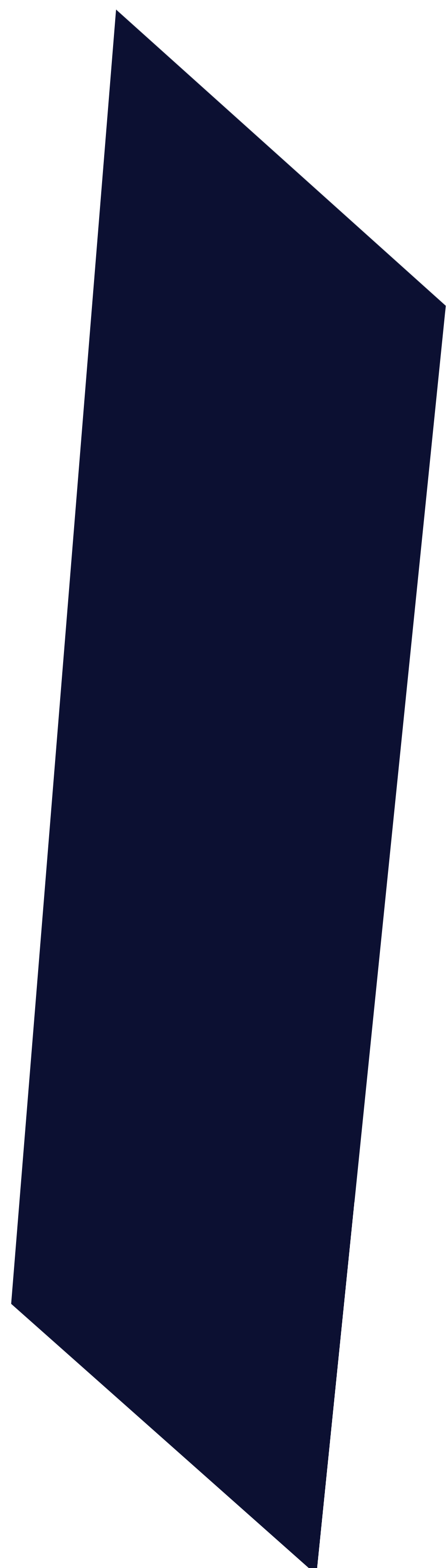
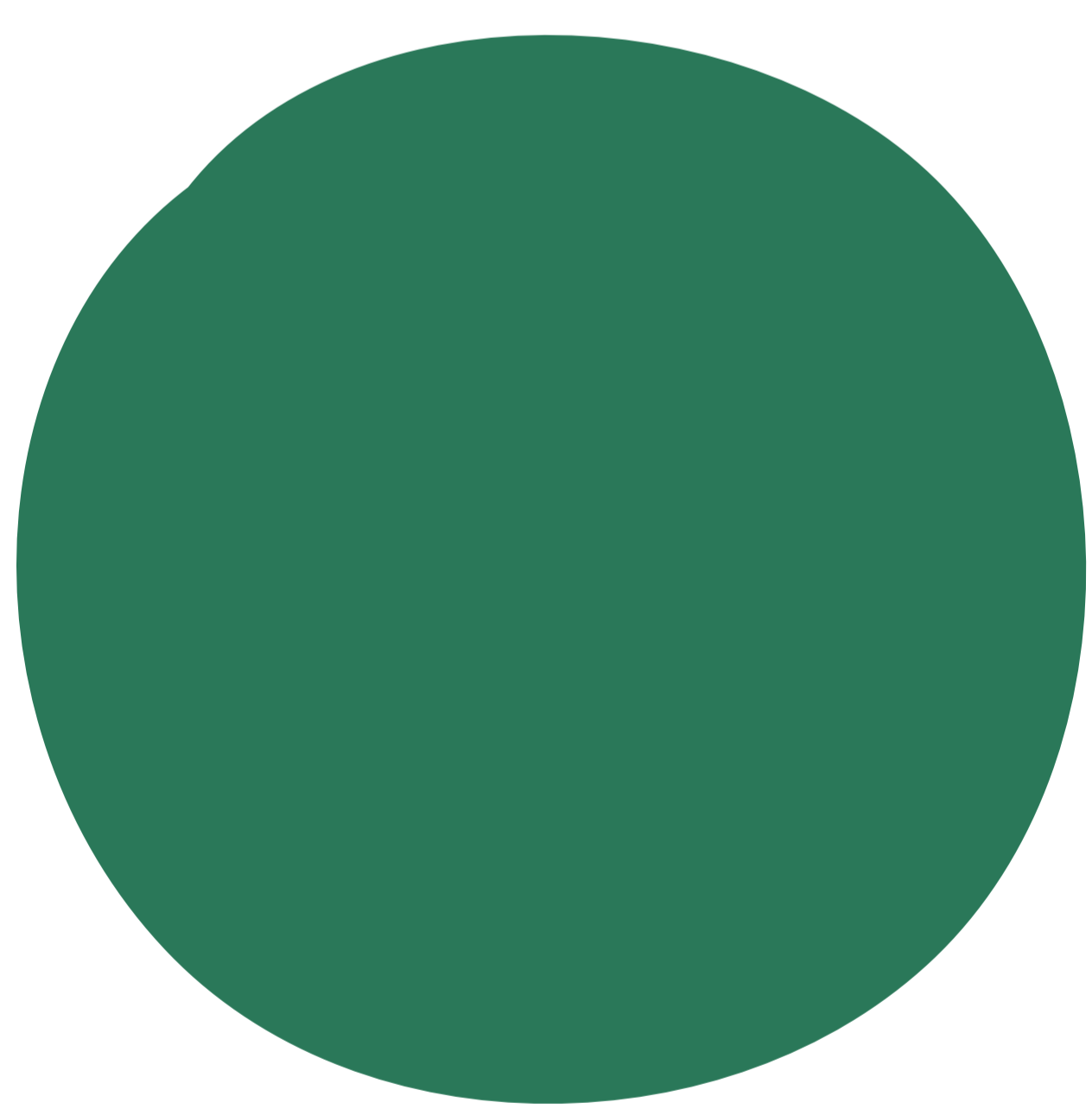
Develop software solutions that streamline various aspects of dairy farm management, including cattle health monitoring, feeding management, milking process optimization, and waste management. Efficient farm management systems will help dairy farmers increase productivity and profitability while ensuring the wellbeing of their cattle.

2. Data Analytics for Dairy Farming

Leverage data analytics and machine learning to analyse large datasets from dairy farms. Create predictive models that can anticipate issues like disease outbreaks, milk production fluctuations, and optimize breeding strategies. Data-driven insights will empower dairy farmers to make informed decisions for better outcomes.

3. Dairy Education and Knowledge Sharing

Encourage the development of platforms that promote knowledge sharing and best practices within the dairy industry. These platforms can provide access to resources, workshops, and training materials to empower dairy farmers and stakeholders.



Challenge



**Challenge
Statements**

Statement



Challenge Statement 1

Lack of animal health advisory system

India is the highest milk producer in the world contributing 24% of the global milk production in 2021-22. However, there is a huge gap in dairy productivity, and we have a greater number of dairy animals with low milk production that puts more pressure on environment. India has vast number of small-scale dairy farmers who often face challenges in managing the health of their animals due to limited access to veterinary services. There is a shortage in the number of veterinarians who are deployed by the government and private sectors. Because of this, farmers do not get quality veterinary treatment, vaccination support and advisory services to prevent diseases. This leads to reduction in the productivity of the animals thereby impacting the economy of the farmer.





Challenge Statement 2


Lack of quality feed advisory system

One of the key factors that determine the productivity of a dairy animal is the quality and quantity of feed that is provided. Feed given to animals in balanced proportion will help to realise their genetic potential as well as to build immunity in animals to protect from any diseases. Farmers in India rely more on the farm byproducts like crop residues, less on cultivated green fodder and concentrate feed produced by industries. There is a huge knowledge gap in the nutrition diversity and density in the feed and fodder that are available with them. Relying on off-farm feed base increase the cost of production of the milk which at times make dairy farming economically unviable.





Points for Consideration while Designing Solutions

- Poor connectivity to access technologies in remote villages.
 - Low literacy rate among the majority of the users (farmers) to access technology
 - Motivation, Benefits, and Incentives for the adoption of Digital Technologies are poor
 - Innovation shall demonstrate social and gender inclusiveness.
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Eligibility

1. Any UG/PG Engineering Students.
2. UG/ PG Veterinary students can form a team with the engineering students.
3. A Team should consist of 3 members and a Mentor.
4. Inter college and multidisciplinary teams are also encouraged to participate.



Application Submission

1. Incomplete applications will not be considered.

2. After Registration the presentation template will be mailed to the Team Lead.

Note: The Presentation must be sent via email klh@kct.ac.in

3. It is strongly advised not to wait until the deadline for the submission of entries. Organizers shall not be responsible for non-receipt of entries on account of server errors/traffic.

4. The participants represent that the submission is original and is not copyrighted by anyone or any firm. The participants also represent that the submission contains no violation of any existing copyright or another third party right including but not limited to copyrights, patents, trademarks, service marks, trade secrets or other proprietary rights or any material of an obscene, indecent, libelous, or otherwise unlawful nature and does not infringe the rights of others. The participants are solely responsible for the accuracy of any information and conclusions contained in their respective submissions. Further, the participants understand that any submission in violation of the instant clause shall stand disqualified, without any intimation to the participants.

5. Organizers reserve to cancel the competition or modify the rules, dates of the competition anytime. The Organizers shall have no liability whatsoever for any inconvenience/loss directly or indirectly caused to any Participant due to such modification of rules/cancellation of competition and the Participants shall accordingly not be entitled to raise any claims pertaining to the same.

6. Once the participants have made submissions on the platform, they shall have no claim even in the event of stoppage/cancellation of the competition.

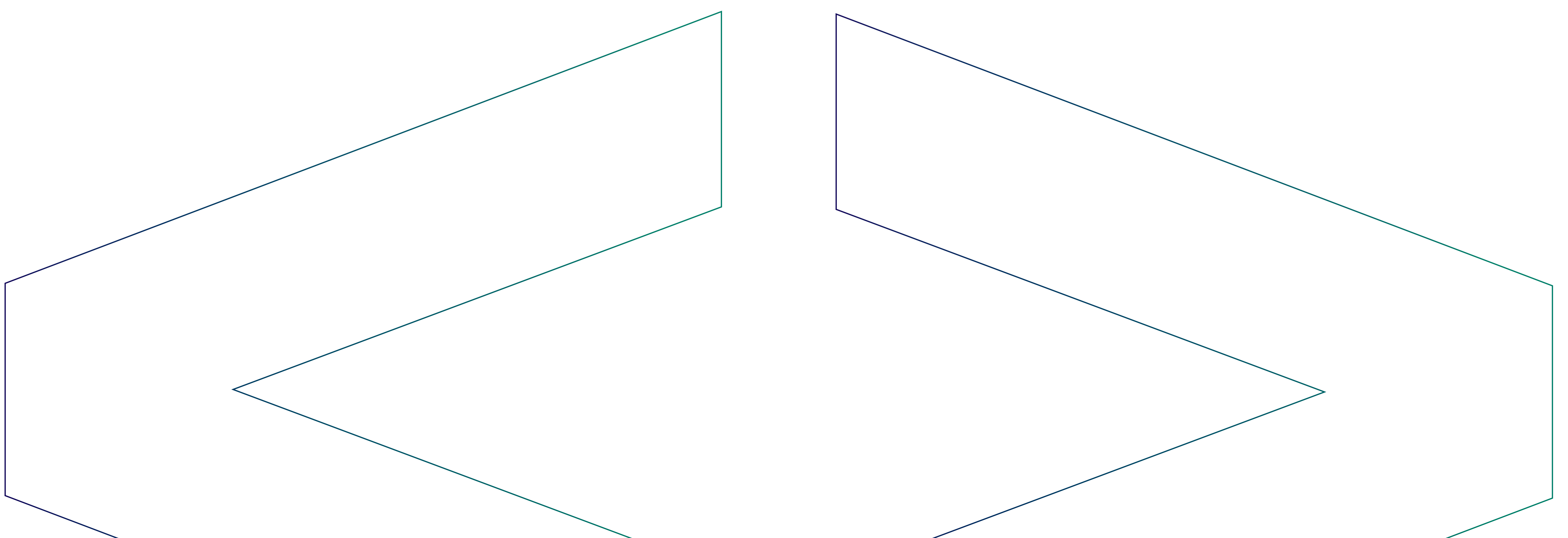
7. Removal/voluntary withdrawal of members from any team is not encouraged. No other form of team modification will be entertained at any point.

8. Teams shall maintain detailed documentation of their idea and solution at all stages of the hackathon for reference and record purposes. The organizers reserve the right to review these documents any time during the event.

9. Any decision by the organizers on any aspect of the hackathon at any point of time during the event is final and binding to all the participants, without any reservations.

10. The Participants shall indemnify and keep indemnified organizers against any claim raised by any party regarding the submission made by the participants. The participants shall be liable to indemnify the organizers for all costs and expenses they may have to incur against such claims.

11. The Participants shall preserve the confidentiality of all communication & information and shall not use the same for any other purpose whatsoever.





Team Selection

1. All the teams are requested to submit their presentations before the close date.
2. Teams will be intimated via email for the Zeroth Review (conducted online).
3. Shortlisted teams for the offline event will be initiated via email after the zeroth review.
4. After Zeroth review, the selected team must pay the registration fee Rs.1000 (On the 1st Day of Hackathon).

Note: the shortlisted team must be present in the campus on all the days during the event.



Travel & Accommodation

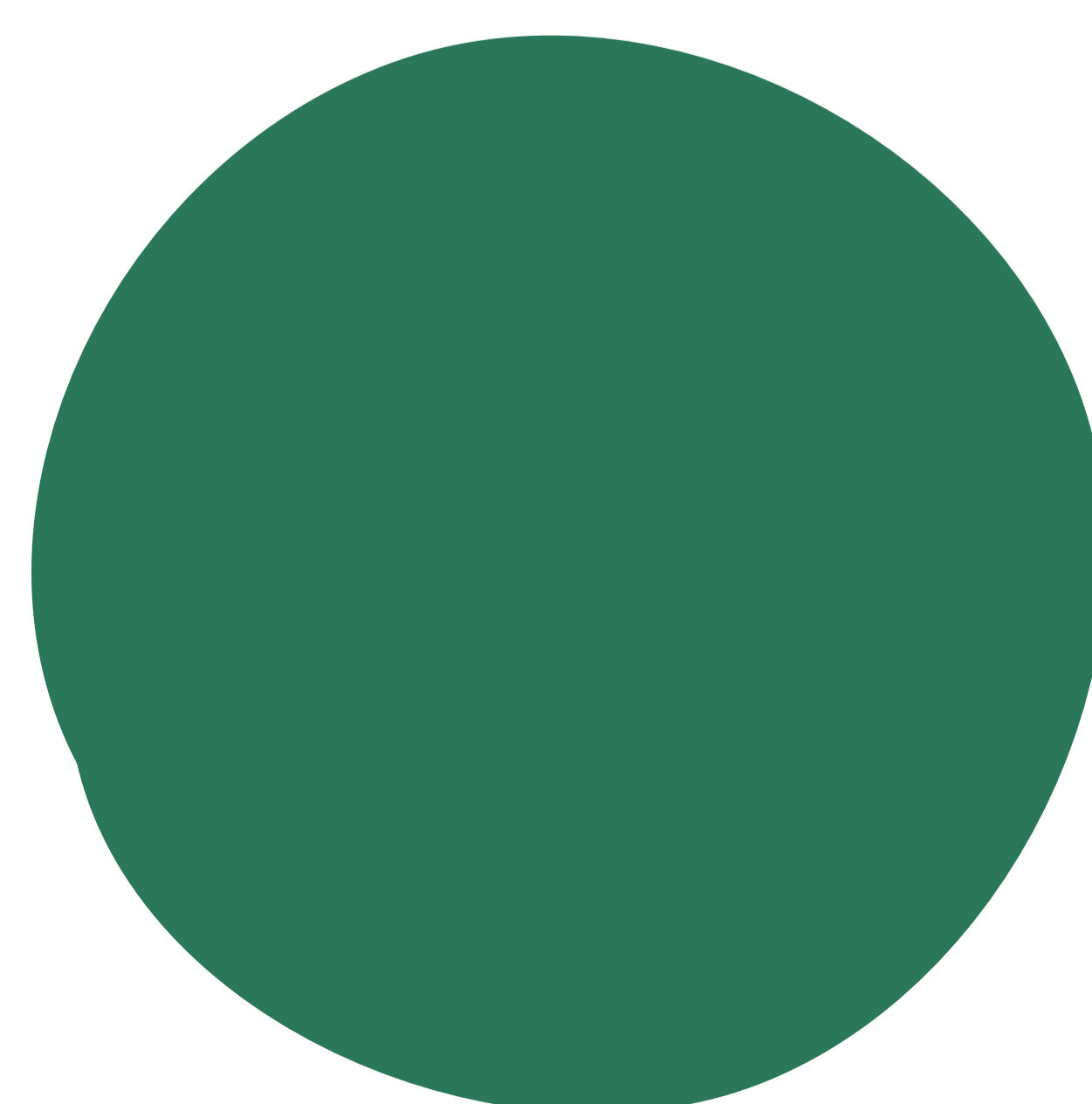
1. Travel must be arranged by the participants themselves.
2. Accommodation and food will be provided only to the selected participants.
3. Staff/ faculty mentors must arrange their accommodations on their own.

4. The participants who are not selected are not entertained to attend the event.

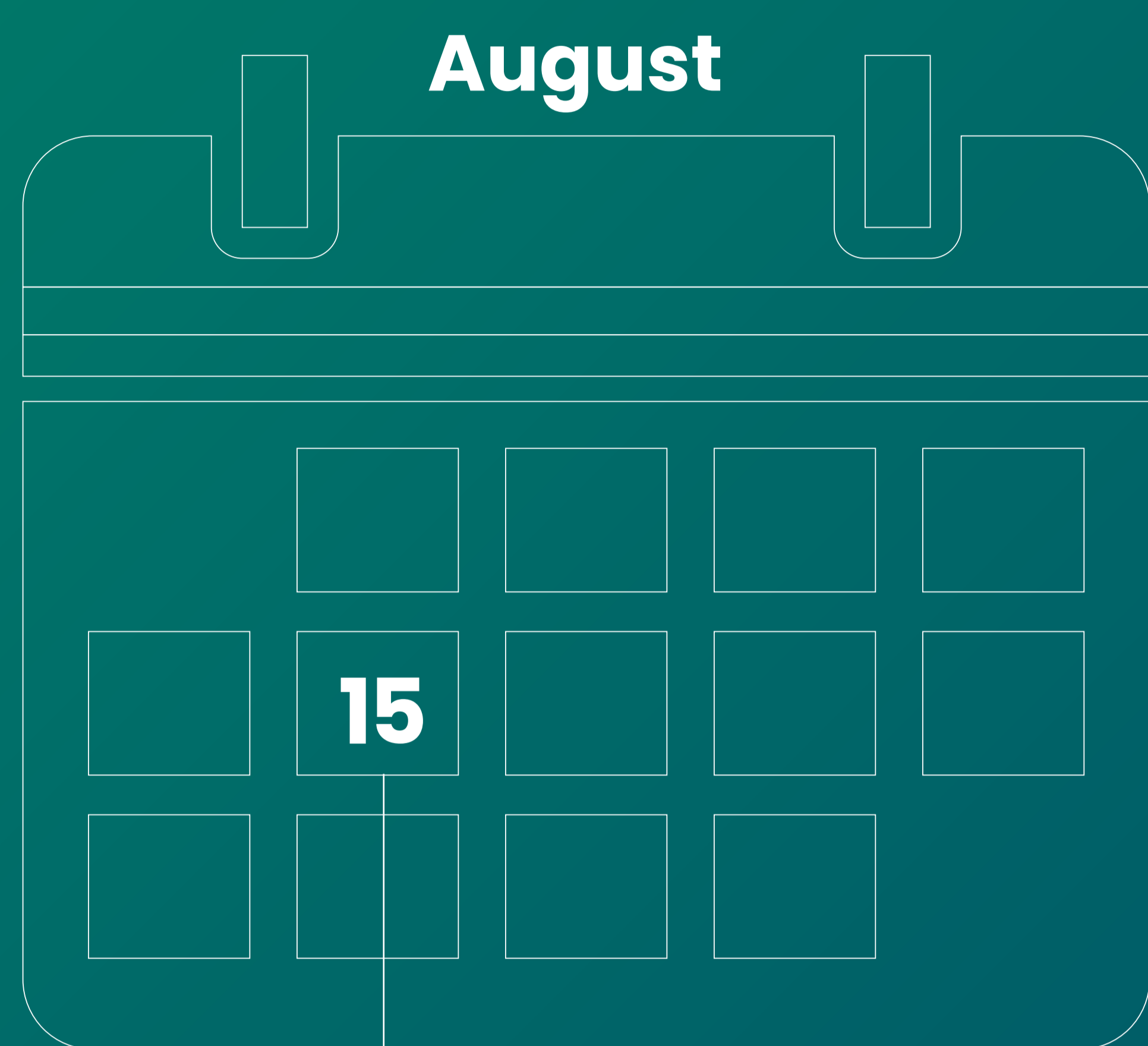


Communication

1. Please write us at e-mail klh@kct.ac.in for any queries, the team will respond back as soon as possible.
2. During the Hackathon, the team leader shall be considered as the Single Point of Contact for all engagements & communication by the organizing committee. Furthermore, the team leader cannot be changed during the hackathon.
3. All the Results , event updates and selection process will be communicated only to the team leader.



Important Dates



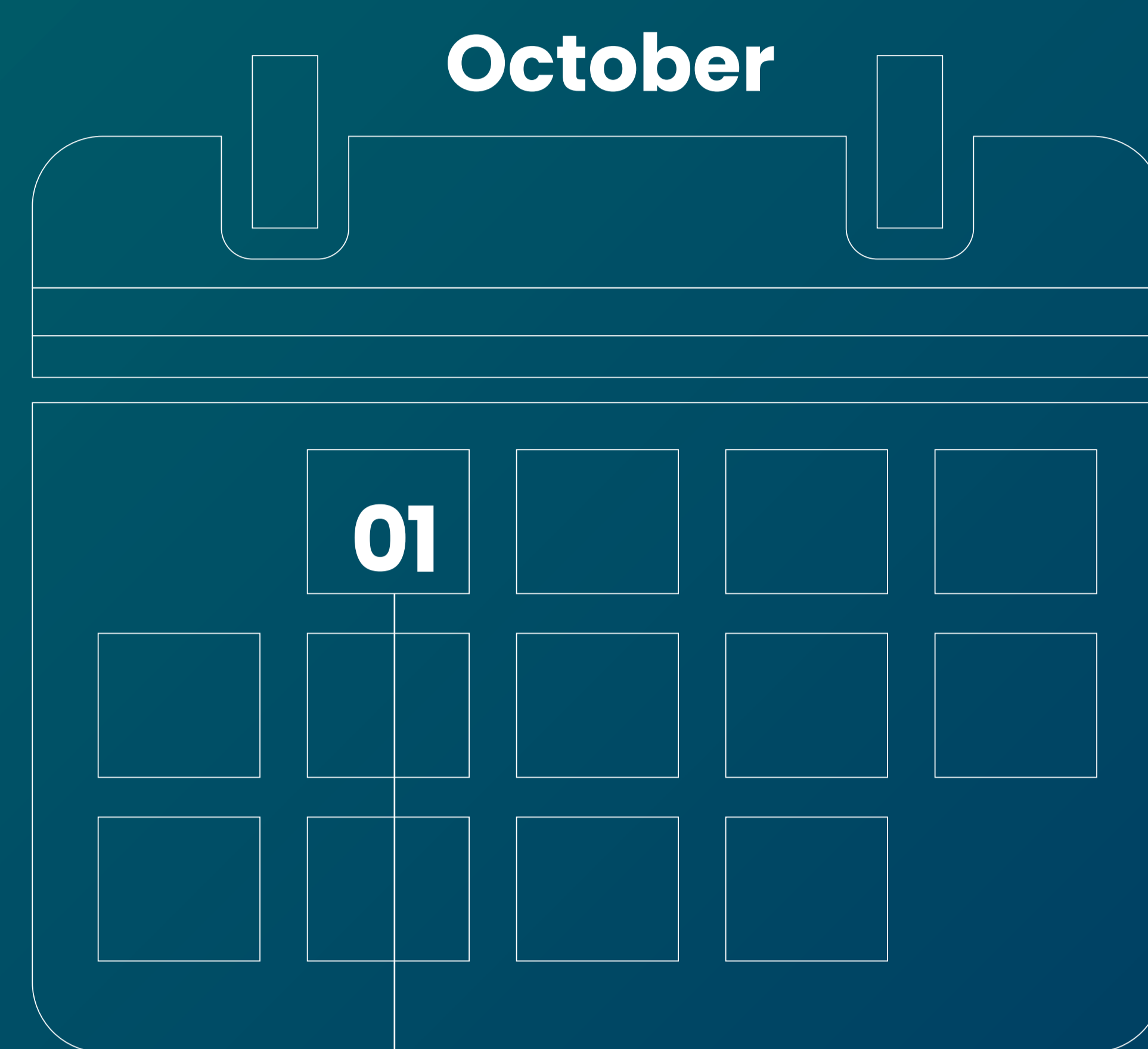
Launch date



Application
Deadline

Zeroth
review

Hackathon
Begins



Finale

Final
Selection



The Schedule

28 September 2023 – Thursday

- 4.00PM – Registration
- **5.00 PM – Opening Ceremony**
- 6.00 PM – Problem Statement Presentation & Team Collaboration, the organizer will assign a Veterinary student to each team.
- 8.00PM – Dinner

29 September 2023 – Friday

- 8.00AM – Breakfast
- **9.00 AM – Dairy Farm Visit (Mandatory)**
A one-day dairy farm visit to understand the Challenges in the dairy Industry. A live hands-on experience.
- 12.30 PM – 2.00 PM – Lunch and Networking,
The participants will have a chance to network with the stakeholders.
- **3.00 PM – Hacking Begins**
Teams start brainstorming ideas and planning their projects. Coding and development work begins.
Mentoring
- 6.00 PM – First review
- 7.00 PM – Dinner

30 September 2023 – Saturday

8.00 AM – Breakfast

9.00 AM – Hacking continues.

11.00 AM – Expert Tech Talks (Not Mandatory)

Throughout the hackathon, Tech talks on technical and non-technical topics will be arranged. These sessions will go in parallel with the Hackathon.

12.30 PM – 1.00 PM – Lunch

Mentoring

4.00 PM – Final Review

7.00 PM – Dinner

1 October 2023 – Sunday

8.00 AM – Breakfast

9.00 AM – Deadline Reminder

Mentoring

12.00 PM – Project Submission & Demo

12.30 PM – 1.30 PM – Lunch

1.30 PM – Judging and Evaluation

4.00 PM – Closing Ceremony

Winners are announced, and prizes are awarded to top-performing teams.

Reward



Rs. 50000



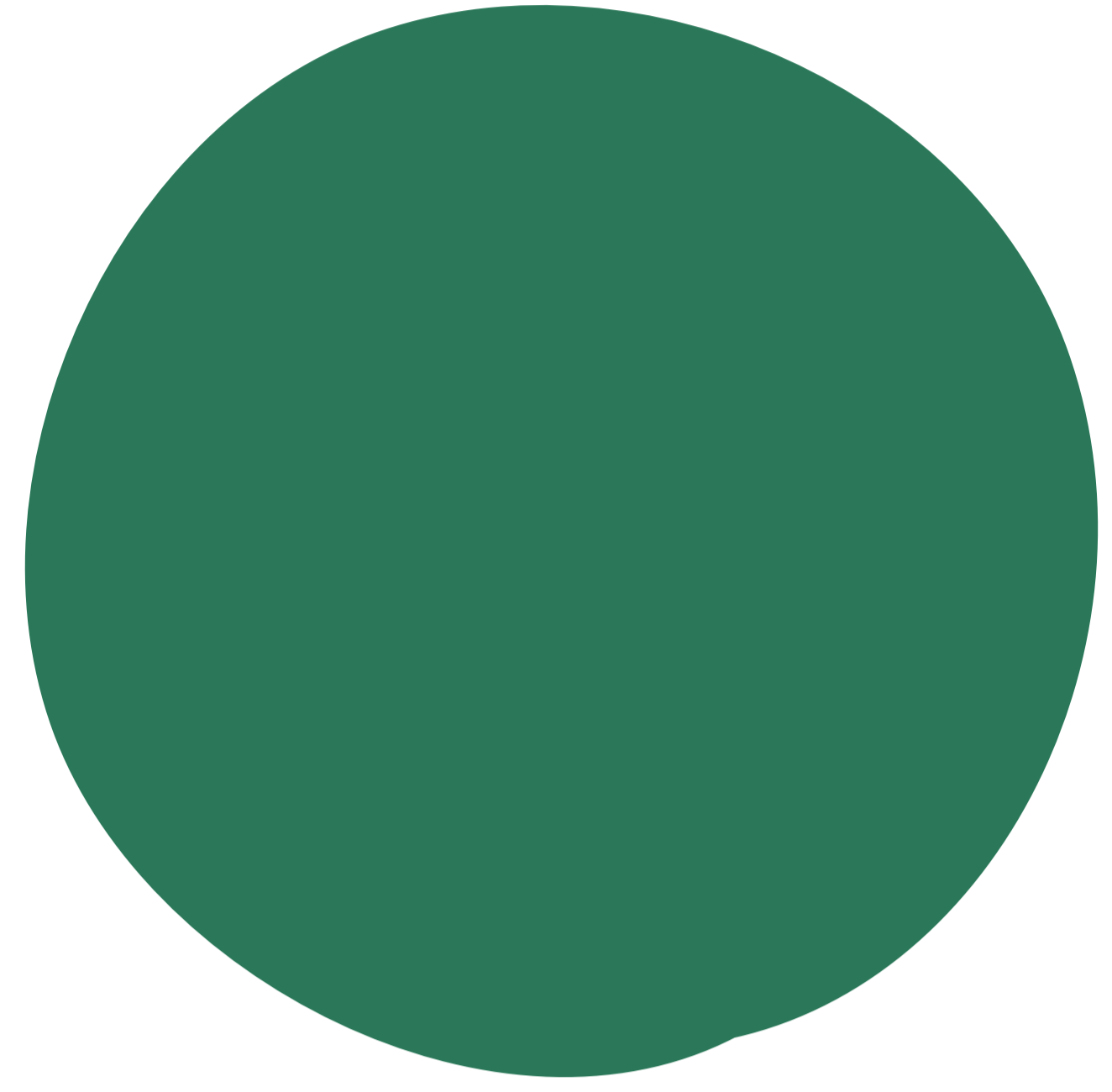
Rs. 100000



Rs. 25000

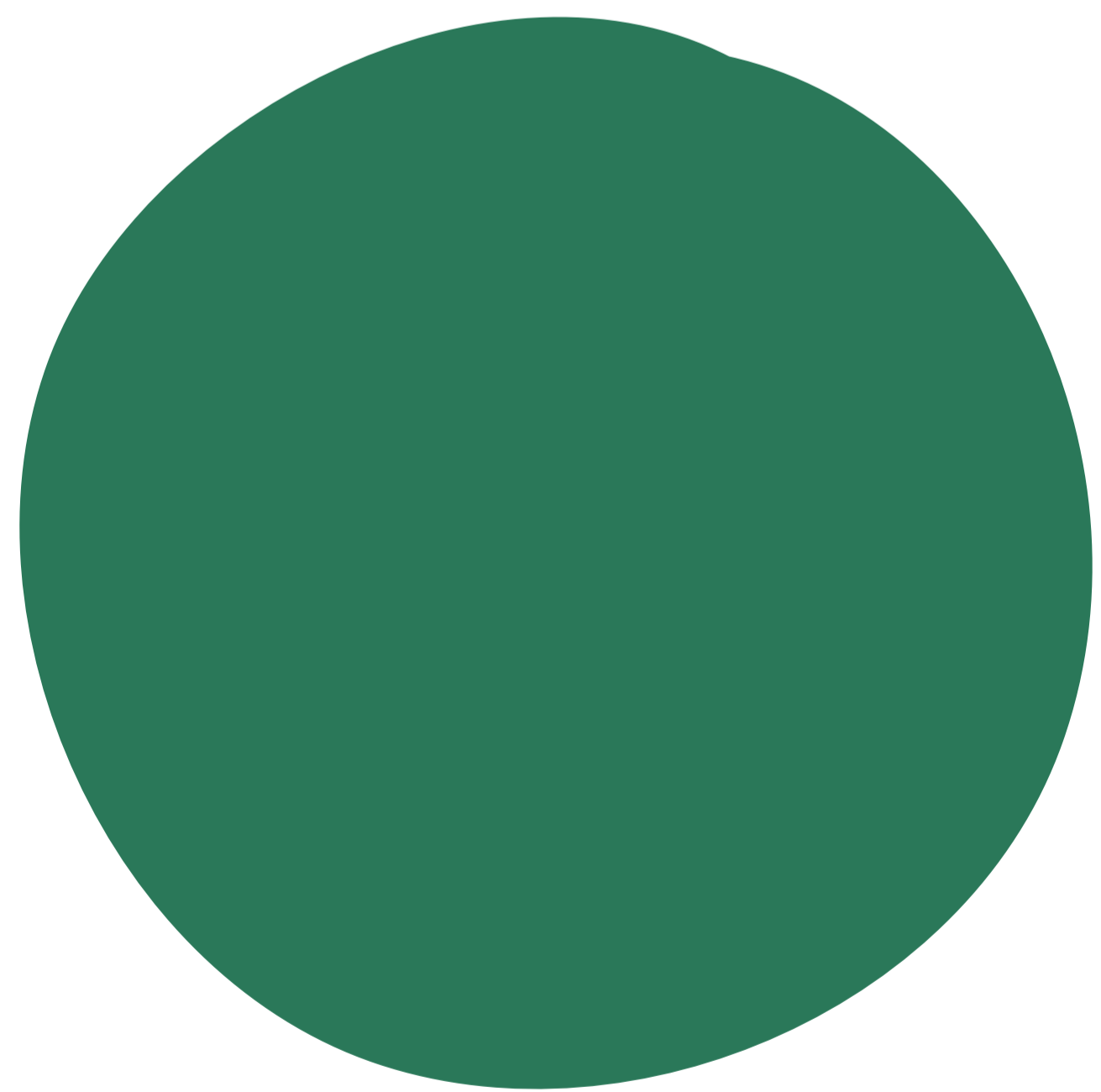
Rewards

wards



For Registration

[Click Here](#)



Designed By



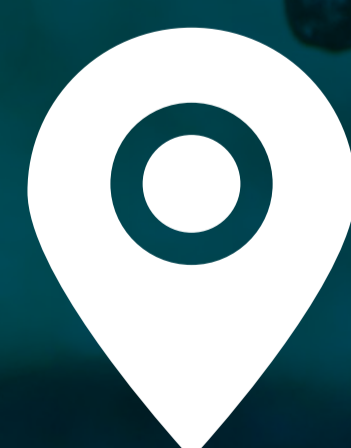
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Coimbatore.**