Rulebook

Dhaka Divisional Hackathon 2024

(Only for Dhaka Division)

About

A hackathon is an event where programmers, designers, and innovators come together to collaboratively build solutions to real-world problems, often within a tight timeframe. In an **API and Machine Learning (ML) focused hackathon**, participants go beyond traditional software development to explore cutting-edge data integration and predictive modeling techniques. Using APIs, teams can access live data from various sources, like social media, location services, or real-time databases, providing a rich foundation for building applications that respond dynamically to real-world inputs. ML adds an additional layer, enabling participants to develop algorithms that can analyze patterns, make predictions, or provide personalized insights based on this data.

This environment is also ideal for **learning, networking, and showcasing** technical and creative abilities in these specialized fields. Participants get hands-on experience with industry-standard tools, gain mentorship from experts, and connect with like-minded peers and potential employers or investors. In essence, an API and ML hackathon is a high-energy event where innovation meets advanced technology, empowering teams to create impactful solutions with the power of data and machine learning.

About Dhaka Divisional Hackathon 2024

The **Dhaka Divisional Hackathon** 2024 is a premier coding competition organized by the **International Institute of Engineering & Computing (IIEC)** in collaboration with the **CSE Department** of **IUBAT** and hosted at the **International University of Business Agriculture and Technology (IUBAT)**. It brings together developers, designers, and students across Dhaka to solve challenges fostering innovation, digital transformation, and societal impact. This hackathon is part of a broader initiative to highlight the potential of technology in addressing local and global challenges.

Rules & Guides

1. **Teams:** Open to all undergraduate universities inside the Dhaka Division.
2. **Team Formation**: Teams must consist of **2-3 members**. Cross-university teams are allowed.
3. Participants must be physically present at the venue on the day of the Hackathon
4. **Timeframe**: The hackathon will last **(8+2) hours**, during which teams are required to design and build their solution. The teams will then need to pitch their solution to the final evaluation.
5. **Project Scope**: Each team must create a project that aligns with one of the provided problem statements. Solutions can be software, mobile apps, or web platforms.
6. **Language and Tools**: Participants are free to use any programming language, development framework, or tools of their choice. The focus will be on solving the problem creatively, regardless of the technology stack used.
7. **Originality**: All code, designs, and content created during the hackathon must be original. Pre-existing codebases or designs will not be allowed.
8. **Tools**: Participants can use any open-source platforms, libraries, or APIs. No paid resources and resources with a free tier but requiring a credit card are prohibited.
9. **Judging Criteria**: Projects will be judged on:
    - **Consistent Fulfilment:** Mentors and judges will continuously check your solution throughout the event.
    - **Innovation**: How unique and creative the solution is.
    - **Functionality**: How well the solution solves the problem.
    - **User Experience**: How intuitive and user-friendly the solution is.
    - **Presentation**: How well the idea is presented to the judges.
10. **Submission**: All projects must be submitted via the provided portal by the deadline. Late submissions will not be accepted. Participants will need to start a new GitHub repository onsite and submit it at the end of the competition. The project must be developed on the day of the Hackathon. Any project which was developed (even partially) in advance will not be accepted.

11. **Code of Conduct**: Participants must maintain integrity, professionalism, and ethical standards throughout the Hackathon. Plagiarism or any form of academic dishonesty will result in disqualification.

Guides

1. Participants are requested to bring laptops, chargers, multiple plugs, and any other necessary devices.
2. Internet facilities will be provided by us but it's recommended (due to infrastructural issues) to have mobile data as backup.
3. Food, security, and accommodation will be provided by the organizers.

Event Summary

Date: December 06 – 07, 2024

Venue: International University of Business Agriculture and Technology (IUBAT)

Duration: Day-long hackathon (8 + 2 hours)

Event	Location	Date & Time
Registration Start	Online	November 01
Workshop 1 (API)	Online	November 08
Workshop 2 (ML)	Online	November 15
Registration Deadline	Online	November 17
Preliminary Round	Online	November 21
Onsite team list publishes	Online	November 25
Payment Deadline	Online	December 01
Arrival	IUBAT Campus	December 06 (08:00 AM)
Onsite Round	IUBAT Computer Lab	December 6 (09:00 AM – 05:00 PM)
Final Judgement	IUBAT Campus	December 6 (5:30 PM)
Prize Giving	IUBAT Auditorium	December 7 (04:00 PM)

Prize Pool

Total Prize Pool: 52,000 BDT

Title	Amount	Comments
Champion Team	25,000 BDT	
1st Runner-up Team	15,000 BDT	
2nd Runner-up Team	8,000 BDT	
IUBAT Top Rising Team	3,000 BDT	Students up to 6th semester of IUBAT qualify for this prize (if any)

Key	Value
Registration fee (per team eligible for Onsite)	2000 BDT
Participants Members	2-3

Segment

1. **API & ML:**

   Empower your applications with smart, real-time solutions using APIs and machine learning. Design innovative tools that automate workflows, analyze data, and enable intelligent decision-making for dynamic, responsive applications. Integrate cloud/ local AL services with APIs from own/ 3rd party platforms.

How to participate

- **Registration**: Teams can register via the provided link within the deadline.
  - **Link**: https://forms.gle/15ruP6b6y9eVcLgs5
  - **Registration Deadline:** 17 November, 2024
- **Eligibility**: Open to university students in the Dhaka division. Cross-university teams are allowed.
- **Team Composition**: Teams must consist of 2-3 members.
- **Preparation**: Participants are encouraged to brainstorm ideas and familiarize themselves with the different concepts of API and ML before the event.

Example Questions

Scenario 1:

As urban air quality continues to deteriorate, local governments and health organizations seek innovative solutions to monitor and predict air quality levels. Your task is to develop a web application that leverages real-time air quality data from an external API and applies a machine learning model to predict future air quality indices (AQI).

Scenario 2:

With the growing number of dining options in urban areas, helping users find suitable restaurants based on their preferences and dietary restrictions has become increasingly important. Your task is to create a web application that recommends restaurants based on user inputs and utilizes machine learning to enhance the recommendations over time.

Contact Person

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