# **Blockchain Blitz**

### **Overview**

The Blockchain Blitz competition is tailored for developers looking to showcase their expertise in key areas of Blockchain development. With a primary focus on Ethereum Smart Contracts, participants must demonstrate proficiency in the Solidity programming language, a prerequisite for engagement. The competition extends its scope to Smart Contract auditing, challenging developers to refine and optimize contracts based on criteria such as gas fees and memory consumption. While a basic understanding of blockchain suffices for participation, a mandatory prerequisite is a strong command of Solidity. Participants will leverage their knowledge of smart contract features, including modifiers and callback parameters, to strategically minimize transaction costs. This competition promises a dynamic environment for developers to hone their skills and tackle real-world challenges in Blockchain development.

#### **Rounds**

There are 2 main rounds and each will take place on their respective day (SCTF on 1st day, SCS on 2nd day)

• Round 1 (SCTF = Solidity Capture the Flag):

There will be four questions with increasing difficulty. Team can proceed to the next question after completing the previous question. There is **NO** time-bound for any question.

In case of any team having time left over after completing the questions, will be awarded bonus points in overall competition at the end of the round. Correct solution gets the highest grade. Overall time of submission will rank higher than other teams in case of tie between the teams. All teams will progress to the next round regardless of points due to the combined system (explained below)

• Round 2 (SCS = Smart Contract Speedrun):

There will be three questions with increasing difficulty. These questions are scenario-based which will require participants to write a smart contract to solve the given scenario and pass the test cases. This is a development-based round unlike SCTF which requires specific and technical knowledge of contracts. There will be a combined time bound. Lowest gas fee holds most points and vice versa. Least memory consumption holds the most points and vice versa.

- Combined system
  - All teams will progress to the final round (SCS)
  - o SCTF round points (including bonus points) are calculated.
  - SCS round points are calculated.
  - o Combined total points of SCTF and SCS rounds are added.
  - o Top teams having highest points are considered as position holders

## **Team Formation**

Each team can have a maximum of 2 members.

#### Rules

- Internet access will be **allowed** throughout the competition venue just to access development environment such as Remix IDE and MetaMask.
- Teams found using ChatGPT, Google Bard or any other Generative AI website will be disqualified.
- Mobile usage is strictly **prohibited.**
- Collaborating with other groups in any sort of way will lead to **disqualification**
- Equipment, other than provided, are **NOT** allowed during the competition
- Languages supported for each round
  - o SCTF (Round 1) Solidity
  - o SCS (Round 2) Solidity
- Edibles are strictly prohibited in the competition venue
- Any team will **disqualify** due to any of the reasons mentioned below
  - o Plagiarism
  - Usage of the internet during the competition (except for development purposes).
  - Disturbance or misconduct with any invigilator or fellow competitors
- Teams are **NOT** expected to bring the laptops with them in the competition because PCs will be provided in the lab venue, communicated through the mail beforehand.
- There is no question paper for any round. All instructions and questions will be provided in the competition portal.
- Competition will be started on the stated time. All participants are expected to arrive on time or earlier to get a head start on instructions.
- Submission will be done using a portal provided by the Organizing team.

• The organizers reserve the right to modify the rules or competition parameters in the event of unforeseen challenges, technical difficulties, or circumstances beyond control. Any changes will be communicated promptly to all participants to ensure fairness and transparency.