\EPIDEMIC

Escape epidemic is a modeling and simulation competition requiring participating teams to address data acquisition, preprocessing, subsequent modeling and inferential analysis of circumstances during a simulated epidemic with a motive of speculating the type and schedule of executing preventive procedures in advance.

The teams will receive a program to simulate a community. The simulation has no explicitly evident variables, the teams are supposed to measure and form a dataset out of whatever factors they consider are affecting the spread of the epidemic. Proceeding further, the dataset is to be analyzed and inferences have to be drawn through modeling and statistical / ML techniques about the timing and location of lockdowns, prioritizing vaccine supply, facilitating medical response etc. Lockdowns, vaccines, hospitals etc. are part of the simulated environment and will be available to the participants. However in the real world, everything cannot be optimized at all times and measures like lockdowns are taken keeping in mind the effect on the economy, public unrest and other conflicting factors against say, a complete lockdown or vaccines for everyone which is not viable at large. Abstractions of the same are also being incorporated in the environment and have to be taken care of.

PLATFORM

Details regarding the platform of event and submission will be discussed well in advance in a detailed version of the problem statement which will have all information regarding the simulation and how to access its variables etc. The same will be provided ~1 week before the launch of techfest.

TEAM SIZE

Maximum of 4 participants

JUDGING CRITERIA

Automated scoring + organizing team ; The objective of the event is multivariable optimization, the best optimization wins.

AWARDS

Rs. 10,000

BENEFIT TO THE COMMUNITY

The participating teams learn to model an epidemic and the involved analysis, especially considering the prevalent circumstances. The event promotes technical and critical thinking.

POTENTIAL SPONSORS

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