# STELLAR ANALYTICS

## INTRODUCTION :

**Stellar Analytics** is a premier event at Technex designed to challenge participants in the field of astronomy and astrophysics. This competition invites teams to analyze real astronomical datasets, uncover valuable insights, and delve into the complexities of stellar phenomena. Participants will clean and preprocess data, develop advanced models, and classify celestial objects using innovative techniques.

The event emphasizes precision, creativity, and scientific rigor, encouraging participants to tackle complex problems with well-reasoned approaches. Teams will also develop interactive dashboards to present their findings, showcasing their analytical expertise and problem-solving abilities. Participants will gain valuable experience in astronomical research and data science while exploring the mysteries of the universe through a scientific lens.

## EVENT STRUCTURE :

This stellar event consists of two rounds that includes submission as well as presenting it against the judges.

### ROUND 1: ONLINE SUBMISSION ROUND

Participants will analyze raw astronomical datasets by cleaning, preprocessing, and performing exploratory data analysis (EDA). They will create models, derive insights, and submit their solutions as a detailed report with code (PDF and notebook formats). Submissions will be judged on creativity, accuracy, and scientific reasoning.

### ROUND 2: OFFLINE PRESENTATION

Shortlisted teams will develop an interactive dashboard to present their findings, including visualizations and classification results. They will defend their methodology and results in front of a panel of judges. A surprise twist, such as new data field or objectives, may be introduced during this round.

# RULES AND REGULATIONS :

1. Each team may consist of up to **3 members**, who need not belong to the same college or university.
2. Teams must register on the event platform and provide the Team Leader's details during registration.
3. No changes to the team structure are allowed after registration is complete.
4. Strict adherence to competition guidelines is mandatory. Use of unfair means, including internet searches, electronic devices, or interaction with other teams, will result in immediate disqualification.
5. The problem statement would include all the relevant details and instructions for submission and presentation with the problems.
6. The timeline and format of the event are subject to changes at the discretion of the organizers. All decisions made by the organizing authority will be final and binding on all participants.

# IMPORTANT DATES :

- **Round 1 Submission Deadline** : 1st Feb'25 - 10th Feb'25 (tentative)
- **Round 2** : 1st Mar'25 (tentative).

# EVENT COORDINATORS :

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