

AstroCode

AstroCode is a dynamic competition designed to challenge students in their Python programming skills, problem-solving abilities, and teamwork. Participants will engage in two exciting rounds, showcasing their knowledge of Python fundamentals and applying their skills in a practical project involving GUI application development using GUI libraries offered by Python such as PyQt or Tkinter.

RULES:

1. Python is to be used for both rounds.
2. Each team must consist of 1-2 members
3. Team members must belong to grades 8-12
4. Teams are prohibited from bringing laptops, mobile devices, notebooks, paper, etc., into the challenge room. Paper for rough work will be provided to the participants.
5. Internet access will be provided during the second round.
6. Use of the internet other than to access the quiz is strictly prohibited during the first round.

Provision and Requirement

1. Wifi will be provided throughout the competition.
2. School PCs having Tkinter and PyQt installed are to be used.
3. Each team is required to have an email id that can be used to open the quiz.

Grounds for Disqualification

1. Plagiarism
2. Exceeding time limit.
3. Use of any library other than Tkinter or PyQt.
4. Unauthorized use of the internet during the first round.

Rounds Overview

Round 1 : QUIZ

The first round will consist of a timed multiple choice quiz conducted through google forms.

Time allotted: 20 minutes

Concepts tested: Python fundamentals such as basic data structures, loops, conditional statements etc.

All teams will be promoted to the second round regardless of their performance in the first.

Performance in the quiz will be taken into account when calculating the final result.

Round 2 : GUI App Development

During the second round, teams will be asked to create a GUI application as described during the challenge using ONLY PyQt or Tkinter library.

Time allotted : 1 hour 30 minutes.

Code Editor : IDLE

Judgment and Scoring

- 40% for correct execution
- 30% for functionality
- 20% for creativity and UI design
- 10% for conciseness of code

Judgment for the app will be made on the basis of features, functionality, UI design and code quality.

Final winners will be declared on the basis of the sum of their marks in the first and second round.