1. Name of the event: GameBot

2. Abstract:

It is a game programming event using Artificial Intelligence. Every participating team will have to submit the code for their bot. Its not as tough as it sounds! All you have to do is write a function in C. The bots will be pitched together to compete with each other in a tournament format.

3. Introduction:

The area of focus of this event is Artificial Intelligence Programming. Al in the simplest terms is a branch of computer science dealing with the simulation of intelligent behavior in computers. Al programming is required in many fields these days like game playing, speech recognition, understanding natural languages, computer vision, robotics, etc.

This event mainly focuses on the application of AI in game development. The skeleton of the game will be provided. Only the functions for the bots have to be written in C or C++. The rest of the program will be provided. The input parameter for the function is the present state of the game. The function has to return the next move to be performed by the bot.

The event will be held in a league format. Hence each bot will have to compete with every other bot twice. Once as player 1 (player making the first move) and once as player 2. The bot which has most number of wins will win the event.

The game for the event and the required programs and sample bots will be provided one month prior to the tech-fest. (The game selected for last tech-fest was Dots n Boxes. The details of the event in last tech-fest can be found here : DotsNBoxes).

The game selected this time is Conenct 4 (or also known as Four in a row). The link for the game is given here :

Link 1, Link2

The game description can be found here: Link1, Link 2

There is a very good ppt for solving this game. The ppt can be found at : link

4.1. Event details:

- GameBot is an AI game programming event.
- The starter code and the sample codes is uploaded.
- Each team has to build one function for their bot in C. This is all you have to do!!!
- Deadline for the submission of the bots is 25th October. This deadline is mainly to check your progress and to solve any errors if any. You can mail the code to the organizers before the deadline.

- You can modify your bots later if you wish to.
- On the first day of Tech Nidarshan you will have to submit their bots for testing.
- The game selected is Connect 4. All details are given in the starter kit.

Round 1: Online submission of bots. (By email)

Round 2: Bot testing on the first day of the fest.

Round 3: All the working bots will compete with each other in a league fashion.

4.2.1. Rules:

- The programming language to be used for the bot is C.
- Each team can consist of a maximum of 2 programmers.
- On the 1st day of Tech Nidarshan they will have to submit their bots for testing.
- You can submit it through email if you are an external participant and are not attending the fest.
- Only on successful test they can proceed to the final event which will be held on the 2nd or 3rd day.
- The event will be held in a league format wherein each of the bots will play against every other bots twice. Once as player 1 (that is making the first move) and next time as player 2.

4.2.2. <u>Judging criteria</u>:

The bot which wins the game is the winner among the 2 bots.

4.2.3. Abstract submission:

Each team will have to submit the working code or the part of the code that they have finished showing the progress that they have made along with the individual programmer's names and the college name. (The code submission is not a must. Even a flow-chart or an algorithm can be submitted at this stage).

5.1. Team and registration details:

- 2 programmers per team.
- Any number of teams from a college is allowed.
- Teams must register themselves online for this event.

5.2. Accommodation details :

Accommodation will be provided.

6.1 Contact us:

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6.2. Additional information: