Problem Statement 5
Multi-Purpose Online Examination Portal

Sam is a Professor in the Department of Computer Science. He is fed up of the whole examination system. He figured out a way to change the way of conducting examinations. He planned to build a Multi-Purpose Online Examination Portal. "No Way!!" said his fellow associates in the department. So he planned to make a team of students for this purpose.
You are a part of this team which will help Sam out of his miseries.....
All Sam wants is a flexible portal which can be used for planning and conducting any type of examination, irrespective of its type, field, subjects, etc.

This website is not just limited to just Sam's department but it will have global perspective. It can be used by any user to organize an online examination.
We prefer you to have certain things in your website:
- Create an Administrator's account and login
- Administrator should be able to make his own rules like:
    a. Marking Pattern
    b. Number of winners
    c. Type and the number of questions (Discussed below)
    d. Total time limit (Discussed below)
    e. Minimum marks for qualification
- Invitation to participants by sending mail (by giving some invitation link or some code).
- Participants can maintain their profile; input contact details, etc.
- Administrator can set the timer to start the exam.
- If possible, design a control panel for administrator to see the current status of the exam.
- Since the exam is online a scoreboard of current top performer can be included.
- Administrator should be able to monitor and block specific users by determining their username (or IP address).
- Types of questions should pop up randomly; could be as per difficulty levels (or as the Administrator permits).
- Types of questions can be :
    a. MCQ's with one or more correct options.
    b. Subjective questions.
    c. Fill in the blanks.
    d. Sudoku type puzzles (if possible).
- Bonus points will be given for implementing the following question types:
    a. Match the columns (Using drag and drop)
    b. Any other type you can think of.
- Time limit is set by administrator you can include these features that will fetch you extra marks :
    a. Overall timer of whole examination
    b. Timer for each question (according to the type of question)
    c. If a participant submits the answer in less than the allotted time, he will get the remaining seconds as reward for further questions.
    d. If the time limit for a question exceeds the limit, then the administrator may punish by penalty.

Note:

- A proper check should be on timer.
- If administrator wants he can punish any user by deducting few seconds.
- Multiple users can run their test on same time.

Hints:

There are different types of examinations which are conducted by different organizations around the world. Each examination is different and has a different pattern. You have to design a portal which includes different types of question types, if not all of them (as mentioned above) for different kinds of exams.

For example: You can consider the event Softathalon in Avishkar. It has 3-5 rounds with different level of difficulty or platforms. Your portal should have the flexibility to conduct such varied patterns based on Administrator's settings.

Rules:

- You are not allowed to use any CMS like Joomla, Drupal etc
- You are not allowed to use any open source libraries except jQuery.
- Cross browser compatibility is a must.

P. S.: *We expect the majority of the features to be implemented. Apart from these, new add-ons would be appreciated and will fetch you a better score!!!*