Infomatrix 2020 Computer Programming
Rules

General description : You are expected to make an application (web,mobile,desktop) which is significant for society, user friendly and robust (with server side of a high quality). The aim of the category is to test participants in computer programming field. You need to be able to implement various algorithms with data structures and solve challenging problems. You may use any programming language or scripting languages you wish like; C++, Java, Pascal, Python, or PHP.

In order to participate, your project should be accepted by the registration committee.

Registration acceptance criteria :

- Quality of documentation (it must be in English)
- Video presentation of project (upload video on youtube and send link)
- Full information about all participants

There will be 2 stages.

1st stage : The first stage is about presenting the projects. Each team member must be present, otherwise the work will not be accepted. There mustn't be any delay in the coming of the team to the defense. The team will have only 10 minutes for defense. You should have all the things you need for presentation (ex: computers, chargers, booklets etc.)). Prepare required presentation slides.

Grading policy for the 1st stage :

1. *50 % complexity*
    a. 20 % (how good database management system was implemented)
    b. 10 % (how good artificial intelligence method was implemented)
    c. 20 % (general coding structure and features)
2. 50 % design
    a. 30 % (how good UX is implemented)
    b. 10 % (color friendliness)
    c. 10 % (how good minimalism was implemented)

2nd stage : The second stage is a programming examination, which is individual. Each team member will have an examination list, and he will write the code on his laptop (**which he must bring with himself**). For the second stage there will be allocated only 1.5 hours. After that your works will be checked (you must be able to explain your code and rewrite it if it is needed).

Sample questions :

- Find product of 2 matrices
- Find longest common subsequence using dynamic programming
- Find shortest path from one city to another

Grading policy for the 2nd stage : first question (*25 points*), second question (*35 points*), third question (*40 points*)

Appeal process: it will be conducted only for the first stage. For the second stage you will be checked right after you completed your work and you will see your grade.

Medals will be distributed according to the average of the results of both stages.

Important notes

- *Rules are subject to change*
- *Projects from the past or from previous years will not be accepted in the old view.*