

Vocational Skills Contest

V20 Computer Programming

1. Task Assignment

The task consists in designing a Web software capable of managing all of the registrations to an international competition like Abilympics.

- Using a database that will be provided on the day of the competition (structure, tables and relations will be pre-completed), contestants will have to:
 - Develop a registrations management interface (contestants and judges).
 - Develop a tasks management interface capable of affecting all of their registered participants (contestants and judges).
 - Develop an evaluations management interface capable of allocating their scores to each participant in the skill category they competed in.
- The details of functionalities will be revealed on the day of the competition. To complete the task, contestants may choose to use either of the following programs, which will be installed on every computer:
 - Wamp or EasyPHP for the Web server part of the task;
 - Notepad++ or Sublime Text 3 for the text editing part of the task.
- Contestants are invited to practice the use of the following technologies:
 - Framework: Codeigniter in PHP language, available for download here:
 http://www.codeigniter.com/
 - Framework: AngularJS in JavaScript language, available for download here:
 https://angularjs.org/

These two Framework tool must be used in conjunction to complete the programming.

- Contestants can use Bootstrap as a CSS framework for the interfaces' graphic design. The program is available for download here:

http://getbootstrap.com/getting-started/

2. Allocated time: 6h00

6 hours of competition.

Day 1 (March 25th): 3 hours and 30 minutes.

Day 2 (March 26th): 2 hours and 30 minutes of

competition.



3. Requirements

- All computers will be equipped with an AZERTY keyboard. However, contestants may install their own keyboard before the beginning of the competition.
- The jury will collect all electronic means of communication contestants may have at the beginning of each module. They will be returned to their owners once each module is finished.
- Contestants will not have access to the Internet and may not use equipment or software other than that provided by the organization. Any contestant caught cheating, talking to someone from the public or using a communication device will suffer a penalty of 5 points for the first transgression. A second transgression will lead to an exclusion from the contest.
- Contestants will have a resource file installed on their computer's hard drive, in which they will be able to seek all of the necessary information to complete their task.
- Contestants will save their work on an USB flash drive and hand it to the jury for evaluation.

4. Procedure

On the day before the competition, contestants will be welcomed by members of the jury. Contestants will draw lots to be assigned to a work station, where they may install their personal equipment (keyboard, mouse...). The jury will not take account of any problem coming from the contestants' personal equipment.

5. List of the provided equipment

Non-exhaustive list.

N°	Equipment	Specifications	Qty per	Notes
			contestant	
01	HP computer,		1 set	
	keyboard,			
	mouse and two			
	21-inch screens			
02	Work table		1	
03	Chair		1	
04	Wamp	http://www.wampserver.com/en/	1	Open source Web Server
05	Easy PHP	http://www.easyphp.org/	1	Open source web
				server
06	Note pad ++	https://notepad-plus-plus.org/	1	Open source text
				editing software
07	Sublime text 3	http://www.sublimetext.com/3	1	Open source text
				editing software
08	Codelgniter	http://www.codeigniter.com/	1	Open source PHP
				framework
09	AngularJS	https://angularjs.org/	1	Open source
				JavaScript
				framework
10	CSS Bootstrap	http://getbootstrap.com/getting-started/		Open source CSS
				framework



6. List of tools to be brought for each contestant

N°	Equipment	Photo	Qty per	Notes
			contestant	
01	Personal keyboard and		1	Other than
	mouse			AZERTY
02	Mouse pad		1	Contestant's
				choice
03	Personal pencil case (pens, pencils)		1	Contestant's choice
04	Special needs equipment		1	Specific to each contestant's handicap

7. Evaluation Criteria



N°	Items to be Evaluated	Scoring scale
01	Respect of the coding conventions of the two imposed frameworks	15
02	Optimization and coding quality	10
03	Development of the registrations management interface	20
04	Development of the tasks management interface	20
05	Development of the evaluations management interface	20
06	User-friendliness and creativity	15
	Total	100