



FII

EDITION 2016

CODE

Organized by:
Faculty of Computer Science,
University "Alexandru Ioan Cuza" Iași
In partnership with:
Computer Science Students Association Iași

www.fiicode.com
hello@fiicode.com
facebook.com/FIICode

Argument

Currently, there is no Computer science Faculty in Romania which organizes a contest of tradition with an open format for all university as well as high-school students.

Purpose

Description

The project wants participants to capitalize on their abilities (and develop skills) through competition: algorithmic and analytical thinking, modeling and implementation, development of new technologies, creativity, adaptability and the ability to publicly showcase their work.

Objectives

Means of implementation

SWOT analysis

Stakeholders analysis

Gantt chart

Risk Management

Organizational Team

Overview of „Computer Science Faculty”

Annexes

- Rules & Regulations
- Example of algorithmic problem
- Example of web problem

Argument

Currently, there is no computer science faculty in our region which organizes a contest of tradition with an open format for all university as well as high-school students. Major competitions contain samples addressed in particular to high school students, some of them having just one section addressed to university students, or addressed exclusively to university students. Also, merging elements of competition with training ones while eliminating the barriers between high-school and university students is an excellent way for the participant to consolidate and develop knowledge in a convenient, pleasant atmosphere.

Experience gained from this competition, will stimulate students and pupils involvement in international competitions. Moreover, the contest will serve as a gateway to industry companies, while also being an opportunity to get in touch with young, passionate IT people with excellent training.

Purpose

The purpose of the FII Code project is to offer high-school as well as university students an innovative computer science competition, which will unite in its 2 sections one of the most attractive sections of the IT domain in Romania.

Description

The project wants participants to capitalize on their abilities (and develop skills) through competition: algorithmic and analytical thinking, modeling and implementation, development of new technologies, creativity, adaptability and the ability to publicly showcase their work. The two sections are specifically designed for this, each covering a particular IT area currently in full expansion. Theoretical as well as practical knowledge is necessary for this competition.

The tasks and solutions are proposed by a commission composed of representatives of prestigious companies in the industry, high-school and university professors as well as students from the Computer Science Faculty Iasi. The evaluation for the algorithmic section will be done online, on the Infoarena platform, while for the Web section, a commission will evaluate the submission. Each of the two sections will have its separate rules & regulations.

Moreover, the creation of a closer relation between the two academic environments is wanted, each of the competitors being invited to share their experience.

01. The completion of a number of 15 partnership agreements until **20.03.2016**.
02. Promoting the competition in 5 university centers, 15 high-schools, as well as online until **27.03.2016**.
03. The creation of the regulation and competition subjects until **06.03.2016**.
04. Attracting a number of at least 300 competitors within the 2 sections until **27.03.2016**.
05. Ensuring the proper development of the three online competition rounds in the following periods: **25.03.2016-27.03.2016, 8.04.2016-10.04.2016, 22.04.2016-24.04.2016** as well as for the Web sections during **25.03.2016-24.04.2016**.
06. Selection of finalists, between **24.04.2016-30.04.2016**.
07. Ensuring the proper development of the final stage, between **06.05.2016-08.05.2016**.
08. Evaluation of the project and feedback analysis.

01. The completion of a number of 15 partnership agreements until 20.03.2016.

Contacting IT companies as well as various companies dealing with catering. Also we will try to complete a partnership with an accommodation complex.

02. Promoting the competition in 5 university centers, 15 high-schools, as well as online until 27.03.2016.

Online promotion will be achieved through the competitions and faculties website, social, networks, national and local blogs, as well as through the student's webmail network.

At the same time, offline promotion will take place on several fronts. The project team will conduct presentations in at least five universities and 15 schools to inform youths regarding the opportunity to participate in the FII Code contest. At the same time, the promotion will be achieved through flyers, posters and banners, as well as also in public transportation means and stations through the WINK network.

Moreover, the promotion will be achieved through the faculty's caravan.

03. The creation of the regulation and competition subjects until 06.03.2016.

In order to ensure a good development of the project, the regulations as well as the subject's structure will be made by students of the Faculty of Computer Science Iași, in collaboration with teachers and field experts until **06.03.2016**.

04. Attracting a number of at least 300 competitors within the 2 sections until 27.03.2016.

Attraction of a number of minimum 300 competitors within the 2 sections until 6.03.2016 mainly through the promotion campaign.

In order to participate in the algorithmic section of the contest, the participants will have to create an account on the **infoarena.ro** website, in accordance to our partnership with them.

05 Ensuring the proper development of the three online competition rounds in the following periods: 25.03.2016-27.03.2016, 8.04.2016-10.04.2016, 22.04.2016-24.04.2016 as well as for the Web sections during 25.03.2016-24.04.2016

The three preliminary sections of the algorithmic contest will take place online on the Infoarena.ro website. Each participant will have 3 hours to solve between 3-5 problems which will be evaluated automatically. For the web section, the assessment will be made based on a scale made by a commission made up of teachers, students and partners.

06. Selection of finalists, between 24.04.2016-30.04.2016.

Following the online sections, partial finalist lists will be published on the competitions's website, until 21.04.2016. Following confirmation of participation, the final finalist lists will be published until 24.04.2016.

07. Ensuring the proper development of the final stage, between 06.05.2016-08.05.2016.

The final stage will be held on 7th and 8th May in Iași, at the Faculty of computer science. It will consist of an algorithmic contest of 5 hours.

For the Web section, the final will consist of a task related to improving the projects, as well as presenting those.

08. Evaluation of the project and feedback analysis

At the end of the project, an evaluation session will be held to find its organizational strengths and weaknesses based on the feedback obtained from participants, and on statistical data obtained in the course of carrying out the project.

Strong Points	Weak Points
<ul style="list-style-type: none"> • Big and passionate human resource (ASII has over 150 members) • Unique project in Moldova • Corporate environment involvement alongside academic one • Addressing the competition to both university and high-school students which allows high-scholars to familiarize with the university environment • Promoting and expanding the project to the national level 	<ul style="list-style-type: none"> • The dependence on partners in organizing as well as financially • A lot of tasks can be added within a fairly short period of time • Dependency on the County School Inspectorates because students who are minors must be accompanied by an adult • Lack of own financial resources • The dependence of certain resources (computers, internet) • The need for specialized personnel on the various sections • Dependence on location
Opportunities	Threats
<ul style="list-style-type: none"> • The promotion of the contest, faculty of computer science Iasi, ASII and of partners in big university centers. • The promotion of the image of "Computer Science Students' from Iasi Association" and of the computer science faculty. • The creation and/or continuation of some partnerships between ASII and IT companies. • The creation and/or continuation of some partnerships between the faculty and IT companies. • Promotion of partners through posters, tickets and the contest website. • Preliminary selection of potential computer science students. • The possibility of partners to recruit participants. • The implementation of a different type of competition in Moldova. 	<ul style="list-style-type: none"> • Lack of participants enrolled in the challenges • Faulty promotion • Lack of logistic requirements • Missing financial funds • Online platform launched with delay • Problems with ranking the contests following the online rounds. • Just a few problems in the online rounds • Problems in the evaluation of sources or projects • Problems with the server or the online platform • Temporal overlap with other large-scale local or national projects

Stakeholder	Stakeholder benefits	Our benefits	Concrete gain	Rating	Strategies to fullfill the interest
FIICode Tem members	<ul style="list-style-type: none"> Organizing a unique competition in the area Offering a good environment for developing team-work abilities 	<ul style="list-style-type: none"> Putting together a trustworthy team, on which it can be counted on to deliver the project 	<ul style="list-style-type: none"> Voluntary team implicated directly in organizing Ensuring the fulfillment of objectives United team with tasks assigned explicitly, based on abilities and ideeas 	10	<ul style="list-style-type: none"> Organizing team-buildings Setting exact deadlines and tasks Constant updates on the projects development
Computer Science Faculty lasi	<ul style="list-style-type: none"> Promoting the faculty at a local level. Promotion in the ranks of high-school and university students. Promoting a one of a kind completion in the region. 	<ul style="list-style-type: none"> Continued partnership with the faculty. The support of the teachers and all the faculty. 	<ul style="list-style-type: none"> The possibility of attracting future students Better visibility in the region 	10	<ul style="list-style-type: none"> Promoting the contest in the faculty Timely acquisition of assets which depend on the faculty Implicating the teacher in creating the challenges
The association of computer science members (ASII)	<ul style="list-style-type: none"> Promotion of the association on a local level 	<ul style="list-style-type: none"> The implication of many volunteers in a big project 	<ul style="list-style-type: none"> Volunteers who encourage the project and help in its development 	10	<ul style="list-style-type: none"> Showcasing the project in front of volunteers in an attractive manner

Stakeholder	Stakeholder benefits	Our benefits	Concrete gain	Rating	Strategies to fullfill the interest
University Students	<ul style="list-style-type: none"> • Participation in a computer science contest with more than one section as well as at the partner companies presentations. • Expanding their community connections • The possibility of gaining internships for the best of them 	<ul style="list-style-type: none"> • More university students participants. 	<ul style="list-style-type: none"> • Following the online challenges as well as the final, we can consider the best students for summer internships. • Better ranking among students 	8	<ul style="list-style-type: none"> • Promotion among university centers. • Promotion on a local level. • Offering of awards to own participants.
High-school students	<ul style="list-style-type: none"> • Participation in a computer science contest with more than one section. • Getting to know the field companies. 	<ul style="list-style-type: none"> • More high-school students participants. • Training for future faculty admission contests. 	<ul style="list-style-type: none"> • High school students get into contact with field experts. • Receiving feedback for the submitting projects (web) 	8	<ul style="list-style-type: none"> • Promotion among high-schools. • Creating a partnership with the "County School Inspectorates" • Awards for the finalists.
Teachers	<ul style="list-style-type: none"> • Participation in a one of a kind completion. 	<ul style="list-style-type: none"> • Equilibrium in challenges as well as ranking. 	<ul style="list-style-type: none"> • Implication of university students in a national contest. 	9	<ul style="list-style-type: none"> • Internal promotion of the project • Creating a commission containing teachers for each section

Task	December				January				February			
	7-13	14-20	21-27	28-31	1-10	11-17	18-24	25-31	1-7	8-14	15-21	22-29
Select the team												
Draft General idea												
Project map												
Prepare algorithmic problems												
Create promotion materials												
Contact partners												
Promotion												
Web												
Round 1												
Round 2												
Round 3												
Display results & confirmation of participants												
Final round												
Feedback and evaluation of the project												

Task	March					April				May			
	1-6	7-13	14-20	21-27	28-31	1-10	11-17	18-24	25-30	1-8	9-15	16-22	23-29
Select the team													
Draft General idea													
Project map													
Prepare algorithmic problems													
Create promotion materials													
Contact partners													
Promotion													
Web													
Round 1													
Round 2													
Round 3													
Display results & confirmation of participants													
Final round													
Feedback and evaluation of the project													

Risk type	Chance of occurrence	Impact	Score	Measures to combat
Bad promotion of the project	4	9	36	Implementation of a promotion strategy targeted at a specific audience. This will be implemented online as well as offline according to a well-defined plan.
Lack of partners and funds	4	9	36	Full and concrete exposure of the objectives, purpose, visions and the target audience. Creating clear partnership guidelines, reflecting the benefits of each category of sponsors.
Reduced number of volunteers	4	8	32	Building a team of volunteers who want to get actively involved in project
Faulty ranking after online rounds /Unbalanced problems	4	7	28	Creation of a team made up of university and high-school teachers, as well as students with experience in contests with the task to create attractive and challenging sets for the participants. The creation of balanced problems (algorithmic) and requirements.
Lack of participants	3	9	27	Intensive online promotion of the project as well as through the faculty caravan as well as other promoting methods.
Lack of logistics	3	9	27	Early establishing and renting of equipment and rooms.
Problems in evaluating the sources	3	7	21	Early establishment of evaluation methods and tests required for each section.
Lack of finalists	2	9	18	Telephone and email confirmation of participation.
Wrong distribution of functions	2	7	14	The development of a core team which will involve unconditionally in carrying out the project.
Power outage /electrical network problems	2	7	14	The use of a backup generator. Possibly working on laptop.
Severs/internet network problems	2	7	14	Fetching the sources on 2 secure external devices and evaluating them on internal servers.
Online platform launched with delay	2	6	12	Setting a tight deadline for launching the platform and preparing it with at least 1 month prior to the commencement of the contest.

This competition benefits from the support from the "Computer Science Faculty":

President:

Dean of Computer Science Faculty: Adrian Iftene

Members:

Associate professor Doctor Corina Forascu

Associate professor Doctor Lenuta Alboaie

Associate professor Doctor Cristian Gatu

Web commission president:

Associate professor Doctor Sabin Buraga

Algorithmic commission president:

Associate professor Doctor Stefan Ciobaca

The team of volunteers who organizes the project:

Coordinator:

Alexandru Ionita

Vice-Coordinators

Gheorghe Balan

Robert-Ciprian Ciobotaru

Oriana-Maria Oniciuc

Alexandru Pavalo

Web section coordinator:

Alexandru Pavalo

Algorithmic section coordinator:

Alexandru Ionita

Quality and value

Many of our graduates are currently spread all over the world working for major software companies (Adobe, Amazon, IBM, Intel, Microsoft, Motorola, Siemens, etc.) or following a PHD in universities and research institutes.

Hallmark

Our faculty is the first Faculty of Computer Science of a university with a non-technic profile from Romania.

Level

We provide a solid foundation in computer science and at the same time a large variety of informatics modules in line with the latest technology.

Flexibility

Optional modules offer students the opportunity to specialize in their preferred area.

Overview

Our faculty offers specialization in Computer Science studies, 3 years needed for licensing. At master level, five programs are available:

- Software Systems Engineering
- Distributed Systems
- Computational Optimization
- Computational Linguistics
- Information Security

For all studies, the academic year is divided into two semesters.

In order to receive a diploma of graduate in computer science, students have to pass a public examination and submit a thesis for graduation. License and masters graduation sessions are scheduled each year in June.

The Faculty is run by the Faculty Council, consisting of the Dean, two pro-Deans, Chancellor, head of Department, and other teachers and students.

History

The computer science interest of the "Alexandru Ioan Cuza" University in Iasi has been dated as far back as 1958-1960 when professor Adolf Haimovici initiated a series of lectures on "applied mathematics and informatics". In 1960, Professor Adolf Haimovici held the first course of Informatics elements, while in 1961 Professor Costică Cazacu introduces in his Complementary Mathematics course, elements of Programming and game theory. In 1962, the course of Calculable Machines has been added to the curricula of the Faculty of Mathematics. The first Romanian book in this field was "Universal calculators and the theory of programming", published in 1968.

The Computable machines department has been founded in 1965, as part of the Faculty of Mathematics having its first promotion in 1970. In 1971 has changed its name in Computer Science, and in 1972 Professor Adolf Haimovici became the first head of this new department.

In 1990, the department of computer science has been split into two new departments: the department of computer science and department of applied mathematics. In 1991-1992 the first department became the faculty of computer science, having two departments: the department of computer science (4 years of studies) and the college of information technology (3 years of studies).

Since 1995, the Distributed Systems master has been available. Later, two new programs have been added: Computational Linguistics and Computational Optimization.

Now, the Faculty of Computer Science Iasi has over 1500 students and 50 staff members in academia.

Rules & Regulations

Regulations for the Algorithmic section

The national Informatics contest FII Code is organized by the Faculty of Computer Science Iasi and the Association of Computer Science Students from Iasi, in partnership with the County School Inspectorate.

Objectives

The algorithmic sections aims at the development of:

- passion and interest in Computer Science and Information Technology and Communication
- skills in solving problems using the computer
- presentation and promotion skills,
- algorithmic thinking
- programming skills
- competitive spirit

Participants

Participation in the contest is done individually, contestants being enrolled at beginning of the competition at a high school or faculty from Romania, regardless of nationality. Each competitor will be identified by a unique contest number. The online round will consist of 3 qualifying rounds. These will be made up of three to five problems which will be automatically assessed on the infoarena.ro website. As a result of these three rounds, the teams that will participate in the final round will be determined. The final will be held at the Faculty of Computer Science in Iași, being composed of five problems which will be automatically evaluated.

Participation in the contest is forbidden to those who have contributed to the creation of topics or have proposed topics.

Mentor requirements:

- must have completed 18 years of age on the date of March 1, 2016
- can accompany participants to the final stage, in the case of qualification

Stages

- Round 1: 25-27 March
- Round 2: 8-10 April
- Round 3: 22-24 April
- Final round: 6-8 May

The 3 rounds online consist of solving a set of 3-5 problems. The solutions are evaluated automatically and after each round to every participant's total score, the score from that round is added. The qualifying phase consists of selecting the participants which will take part in the final stage, based on the online rounds.

The final round, which will be held at Iași, consists of solving a 5 item problem-set.

Signup

Each participant will register on the competition's website. Also, every participant will create a user profile on the infoarena.ro website, which is where the online rounds will be held.

Languages

The programming languages accepted are Pascal, C, C++ and Java. The compilers and work environments will be installed on each workstation. The use of resources of any kind other than those allowed by the Commission is strictly prohibited.

Commission

The commission for the algorithmic challenge is composed of:

- the president of the algorithmic commission
- the coordinator of the algorithmic section
- teachers or representatives of the Faculty of Computer Science Iași
- representatives of partner Platinum companies

Optionally, part in the commission will take:

- teachers of high schools and colleges in Iași

Evaluation

It is recommended that you install on your computer the same compiler version as the ones specified in the regulation, because there are differences between the versions.

Be especially careful with the header files used. The evaluator checks if the program does not return an error code. Contestants are invited to meet the space and time requirements for each problem. Otherwise, points will not be awarded for those solutions.

The solutions will be evaluated online on the infoarena.ro website.

Results

Ranking the teams for the qualifying standings for the final round is based upon, in order of importance:

- total score of the three qualifying rounds (descending), followed by
- age of the youngest team-member (ascending).

Teams ordering after the final round takes into account, in order of importance:

- the result from the final stage (descending), followed by
- result from qualifying rounds (descending), followed by
- age of the youngest team-member (ascending).

This method ensures uniqueness of results and allows setting the percentages from the total prize-pool from the start. In agreement with the partners, special awards may be established, but no later than the award ceremony. Every participant will receive a participation diploma. Prizes will be offered in a specially organized award ceremony.

The prizes obtained are:

- First Prize: 45% of the total available,
- Second Prize: 25% of the total available,
- Third Prize: 15% of the total available,
- First mention: 10% of the total available,
- Second mention: 5% of the total available.

Every competitor will receive a certificate of attendance.

Laboratories

The contest rooms will have a computer available for each participant and a visible clock. Writing instruments and paper will be provided.

Competitors may not use:

- computers, including programmable ones
- previous code sequences
- external storage media, discs,
- communication devices, including mobile phones,
- printed materials, other than those offered by the Commission.

All workstations are running the same configuration and have installed Microsoft Windows together with:

- Microsoft Visual Studio Professional Edition,
- C compilers GCC, G ++, free Pascal.

The exact configuration will be communicated in advance to the participants qualified for the final.

Disqualification

A competitor which:

- interferes with the activities of other participants,
- attacks the workstation or the Scientific Commission
- instigates fraud by any means (including electronic)
- accesses the network,
- attacks the system security or the evaluations one,
- changes file permissions,
- read system information,
- violates in any other way the rules & regulations
- frauds or instigates to fraud by any means (including electronic)

will be disqualified without the possibility to enroll again.

The coordinators of the competition reserve the right to disqualify without notice and contestation the participants found in a disqualifying situation. In order to disqualify a team, the agreement of both the competition-coordinators is needed.

Regulation

The coordinators of the competition reserve the right to modify these terms without prior notice. We assure the participants that no change in technical data will be made during any round.

Web section regulations

The national Informatics contest FII Code is organized by the Faculty of Computer Science Iasi and the Association of Computer Science Students from Iasi, in partnership with the County School Inspectorate.

Objectives

The "Web Technologies" section aims to develop:

- skills and aptitudes of using existing Web technologies
- communication skills, teamwork and time management
- the ability to present, in front of a jury, a personal project

Participants

Participation in the contest is done in teams made up of a number of 2-4 contestants enrolled at the beginning of the competition at a high school or Faculty from Romania, regardless of nationality. Each team will have a mentor, except if one of the members of the team is an adult. Each team will be identified by a unique number and team member will have a unique alias within that team.

Participation in the contest is forbidden to persons who have contributed to the creation of the topics or to those who proposed topics.

Mentor status requirements:

- must have completed 18 years of age on the date of March 1, 2016
- can accompany participants to the final stage, in the case of qualification

Stages

- the development phase
- the judging stage
- the contest stage

The development phase consists in carrying out a project of their choice, in accordance with the specifications of the commission for the Web Technologies section. If the number of participating teams in the development phase exceeds 5, the commission reserves the right to hold a qualifying stage where just the top 5 teams will qualify. The qualification stage consists of judging the projects by the commission according to a scale available from the beginning of the development phase.

The contest stage, which will be held at Iași, consists of a presentation of the project created during the development phase. Therefore, the teams will have to present their projects in accordance to the specifications of the commission.

Signup

The development phase will be carried out on the contest website FII Code. In order to participate, a team must register on the website at least 24 hours prior to the start of the contest. When completing the application form, the team must provide accurate and complete information. After sign-up, every team will have a user name and a password with which they will send the projects for judging. At the same time, each team will send a short video presentation of the project. It will specify the project name and the names of the authors. At the same time, each presentation will start with a sequence of 5 seconds, which will be presented to the event's partners. (See grid partnership)

Participation

Once the list with the finalist teams have been announced, they have a week to confirm their presence. In the event that a team, for any reason, cannot participate in this stage, the right of participation will be provided, to the following team based on the overall ranking.

Technologies and tools

In creating the projects, any technology, tool, platform, and programming language is allowed.

Commission

The commission for the algorithmic challenge is composed of:

- the president of the Web Technologies commission
- the coordinator of the Web Technologies section
- teachers or representatives of the Faculty of Computer Science Iasi
- representatives of partner Platinum companies

Optionally, part in the commission will take:

- teachers of high schools and colleges in Iași

Topics

The topics for the projects fit the current trends in the social Web. The difficulty of the tasks permits a team of high-schoolers to finish the project in the specified time. Topics will allow simultaneous evaluation of all projects by common criteria. The commission reserves the right to specify additional requirements for some topics related to the modeling, development, testing, evaluation and presentation, but equally to all themes.

Evaluation

Within the contest stage, the commission will assess in accordance with:

- implementing idea
- the way the solution is presented
- the final result and its source code

The final scale for the contest stage, which contains the percentages and the criteria for the assessments will be published at the beginning of the development.

Results

Ranking the teams for the qualifying standings for the final round is based upon, in importance order:

- result from the development phase (descending), followed by
- the average age of the team (ascending)
- the age of the youngest team-member (ascending).

Ranking the teams for the awards standings takes is based upon, in importance order:

- the result from the final stage (descending), followed by
- result from the development phase (descending), followed by
- the average age of the team (ascending)
- the age of the youngest team-member (ascending).

This method ensures uniqueness of results and allows setting the percentages from the total prize-pool from the start. In agreement with the partners, special awards may be established, but no later than the award ceremony. Every participant will receive a participation diploma. Prizes will be offered in a specially organized award ceremony.

The prizes obtained are:

- First Prize: 45% of the total available,
- Second Prize: 25% of the total available,
- Third Prize: 15% of the total available,
- First mention: 10% of the total available,
- Second mention: 5% of the total available.

Every competitor will receive a certificate of attendance.

Laboratories

The contest rooms provide a number of computers at least equal to the number of participants and a clock. After qualifying the competitors will be notified about the exact configurations. According to their own preferences, competitors may choose to use their own devices (laptop, Tablet, etc.).

Disqualification

A team which:

- interferes with the activities of other road participants,
- attacks the workstation or the scientific commission
- frauds the contest or stir up to fraud by any means (including electronic)

will be disqualified without re-enrollment to participants.

The coordinators of the competition reserve the right to disqualify without notice and contestation the participants found in a disqualifying situation. In order to disqualify a team, the agreement of both the competition-coordinators is needed.

Regulation

The coordinators of the competition reserve the right to modify these terms without prior notice. We assure the participants that no change in technical data will be made during any round.

Example of algorithmic problem

Intercoder

The interstellar organization of programmers organizes every year an algorithmic competition titled "Intercoder", where competitors from N galaxies participate. Knowing how many participants will be from each Galaxy, the head of the Commission wishes to know the total number of participants.

Requirement

Build a program that can calculate the total number of participants.

Input

The first number in the input file "intercoder.in" is the number of tests. Each test will read a natural number N , representing the number of galaxies, and continued as far as N numbers, a_1, a_2, \dots, a_N representing the number of participants in each Galaxy.

Output

In the output file will be T numbers, each on one line. The number on the i -th line represents the answer for the i -th test.

Restrictions

- $0 < N < 10^5$
- $1 \leq T \leq 10$
- $1 \leq a_i \leq 10^9$

Intercoder.in	Intercoder.out
3	3
2	114
1 2	500000
5	
100 2 3 4 5	
5	
100000 100000 100000 100000 100000	

Execution time per test: 0.5 s Memory limit: 256KB

Example of Web requirement

Develop a Web application which provides in an attractive form, adopting a responsive design, news regarding computer science, on different interest domains: languages/programming paradigms, technologies, engineering, operating systems, high-profile industry such as games or electronic commerce, etc.

Those will be filtered according to user's areas of interest (for example, relating to a given hardware platform and/or software, a development tool, or regarding the fulfilment of a specific purpose: training, sharing of information, entertainment, and so on) or will be focused on the type of the offered resource: e.g., text, presentations, tutorials, source code examples. Among the considered data sources will be notorious sites like Hacker News and Reddit, InfoQ, and other user-supplied or recommended according to the preferences of other users or via services/applications such as *Delicious*, *Feedly* and *Pocket*. In addition, the system will provide statistics on the consulted news, popularity, etc. and the possibility that significant resources are shared across social platforms, also in desirable in iCalendar format.

* Dr. Sabin Corneliu Buraga- Web Technologies course -2015-proposed projects

Facility		Platinum	Gold	Silver
Online	Mention in the online promo campaign	•	•	•
	Logo on fiicode.ro	•	•	•
	Logo Facebook article	•	•	
	Mention in Facebook articles and in the press release	•	•	•
	Mention in the internal FCS Iași online platform	•		
	Logo in the presentation video for the Web section	•		
Offline	Participation in promoting FIICode in Moldova region (along with FII Caravan)	•		
	Promotional materials in the promo campaign in Moldova region	•	•	
	Logo on poster	•	•	•
	Logo on flyers	•	•	•
Event	Roll-up/Banner in the final round and at the press conference	•	•	
	Promotional materials of the company for the finalists	•	•	
	Logo on promotional materials for the finalists	•	•	•
	Mention in the press conference	•	•	•
	Logo on finalists t-shirts	•	•	
	Presentation stand during finals	•		
	Representative in the jury (Web section)	•		

Starting with
700 €Starting with
500 €Starting with
400 €