

THE NEW ZEALAND PROGRAMMING CONTEST

CONTEST RULES FOR 2005

CONTEST CATEGORIES AND GRADES

- 1. This contest was originally for students enrolled at New Zealand tertiary institutions but has been expanded to allow school teams, and teams from businesses and other commercial institutions to compete. Other teams may be accepted at a Site Coordinator's discretion but will not be eligible for an official placing in either category.
- 2. There are five grades of team:

School Secondary school pupils.

Tertiary - Junior: Each contestant has done the equivalent of at most two semesters of programming and is not very fluent in one language. Would find a 10-point problem reasonably challenging.

Tertiary - Intermediate: Each contestant has done up to 3 or 4 semester equivalents of programming and is reasonably fluent in at least one language. Finds 10 point problems reasonably easy but finds 30 point problems reasonably challenging.

Tertiary - Open: One or more of the contestants has done lots of programming and is very comfortable with at least one programming language. Can solve 10 point problems at the keyboard, finds 30 point problems mildly challenging.

Open: Professional programmers or anyone else who does not fit into any of the other categories.

TEAM COMPOSITION

General

Each team is registered with a coach. The coach is a member of the competing establishment (school, tertiary institution or business) who is responsible for

- a. certifying that the team meets the composition requirements defined below,
- b. ensuring that the entry fee for the team is paid and
- c. communicating between the team and the contest administration.

School Category

- 1. Each team consists of three contestants with one designated as the team captain. Normally these will all be from the same school, but a team of pupils from different local schools will normally be accepted.
- 2. All team members must be full time pupils at a New Zealand secondary school.
- 3 Teams who report on the day with fewer than three contestants will be allowed to compete at the Site Coordinator's discretion, but fully constituted teams will take precedence if there is limited space.

Tertiary Categories

- 1. Each team consists of three contestants from a single tertiary institution with one designated as the team captain.
- 2. All team members must be enrolled for at least a half-time load at the time of the contest. The coach must be a member of staff.
- 3. Where a team has members of different experience, the team must enter in the category of the most experienced member.
- 4. A computing graduate must enter in the Tertiary Open section regardless of their number of years of programming training.
- 5. There may be no more than one person per team who has had four or more years programming training at a tertiary institution.
- 6. Teams that are illegally constituted may compete at the Site Coordinator's discretion, but they are not eligible for any prizes.
- 7. Teams who report on the day with fewer than three contestants will be allowed to compete at the Site Coordinator's discretion, but fully constituted teams will take precedence if there is limited space.

Open Category

- 1. Each team consists of up to three contestants with one designated as the team captain.
- 2. Teams may represent any New Zealand organisation.
- 3. The coach may be one of the contestants

REGISTRATION

Teams should register through the New Zealand Programming Contest Web site on:

http://www.NZProgContest.org.nz.

CONDUCT OF THE CONTEST

- 1. There will be four levels of problems (3, 10, 30 and 100 points) with up to four problems per level. So far as is possible, problems will avoid dependence on detailed knowledge of a particular area.
- 2. Problems will be posed in English and all clarification requests must be expressed in English.
- 3. Contestants may bring resource materials such as books, manuals, program listings, and non-programmable calculators to the contest. Contestants may not bring any machine-readable versions of software or data, and may not have their own memory devices (eg disks or memory sticks) in the contest area. Contestants may not bring their own computers or cell phones. The Contest Directors are solely responsible for distinguishing calculators from computers.
- 4. Teams may not accept help or advice on Contest problems from anyone other than Judges, Contest officials, and host-site staff. Contest judges will clarify problem statements as needed, and the host-site staff may advise on system-related problems, such as explaining system error messages.
- 5. Solutions to problems are submitted for judging electronically. Site specific information on how this is done will be given before the contest.
- 6. While the contest is scheduled to last five hours, the Contest Judges have the authority to shorten or lengthen the contest in the event of unforeseen difficulties. Should the Contest duration be altered, every attempt will be made to notify contestants in a timely and uniform manner.
- 7. A team may be disqualified by the Contest Director or Site Coordinator for any activity that jeopardises the Contest such as dislodging power cords or connecting cables, or distractive talking.

SCORING

- 1. The Contest Judges will be solely responsible for determining the correctness of submitted runs. They are empowered to adjust for or adjudicate on unforeseen events and conditions. Their decisions are final.
- 2. Teams are ranked within categories according to the number of points received, the highest score first.
- 3. Teams that tie on points will be ranked according to the number of incorrect submissions for accepted problems, the lower the better, and then on the total number of submissions for accepted problems, the lower the better.

CONTEST ENVIRONMENT

- 1. The main languages used in the contest will be C/C++, Pascal and Java. Not all languages will be available at all sites, and some sites may provide additional languages. Check with the site co-ordinator to find out what is available at a particular site, and which versions will be available.
- 2. Each team will have a single computer or terminal. All teams at a site will have functionally equivalent equipment.

CONTEST LOCATIONS

The contest will be held simultaneously at various sites on Saturday 13th August 2005, beginning at 1pm.

Rules for the New Zealand Programming Contest are determined by the judges of the Contest. The New Zealand Programming Contest Director is solely responsible for interpreting the rules and for ruling on any unforeseen situations. These rules supersede those of previous years.