

First Call for Participation

NAPROCK* 8th INTERNATIONAL PROGRAMMING CONTEST

(* Nourishment Association for Programming Contest KOSEN, non-profit organization)

1. Overview

(a) Introduction:

NAPROCK has co-sponsored the College of Technology Programming Contest (Kosen Procon) since 2008. Because of the flexibility of ideas and advanced skill level of the participants, the Kosen Procon has been gaining lots of media attention as well as acclaims by the leaders in the industry. In this welcoming background, we have started NAPROCK international programming contest since 2009. Since the start, the NAPROCK international programming contest has grown into an active venue of international communication for those who share the same passion for information technology throughout the world. We hope this great annual event will attract many applicants again this year.

This year, the NAPROCK 8th international programming contest is held with the 27th Kosen Procon. In this contest, the participants are challenged to utilize their insights and practical skills in information processing technology. The accumulation of their hard work in their study will come to fruition on the stage during the competition. Just like last year, we will call for participants in the following three categories: a Themed Section, an Original Section and a Competition Section. This is a great opportunity to check their ability in the international setting and we look forward to being inspired by a fresh approach with purely original ideas which only students can come up with. Also, we hope to witness many entries full of ingenuities, which take advantage of the cutting-edge information technologies introduced in recent years. This contest aims to promote flexibility of thinking through programming, at a very high level. At the contest, students from kosens or universities compete with each other by utilizing knowledge and ideas in information processing technology they have learned everyday of their lives. It is required for them to make full use of the latest and evolving information processing technology.

(b) Sponsors and Secretariat:

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| Main sponsor: | Nourishment Association for Programming Contest KOSEN(NAPROCK) |
| Co-sponsor: | Technical College Association |
| Supporters: | Companies/institutes supporting 27 th Kosen Procon |
| Supervising college: | National Institute of Technology, Toba College |
| Judging Committee: | Kosen Procon judging committee |
| Secretariat: | NAPROCK |

(c) Website:

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|--------------------------------------|---|
| NAPROCK Procon official site: | http://naprock.jp/IntProcon/ |
| NAPROCK facebook page: | https://www.facebook.com/naprock2008 |
| Kosen-Procon official site: | http://www.procon.gr.jp/ |

(d) Important Dates and Venue:

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| Application Period: | May 20(Fri)-June 10(Fri), 2016 |
| Contest Dates: | October 8(Sat)-9(Sun), 2016 |
| Venue: | Ise City Tourist Culture Hall (1-13-15, Iwabuchi, Ise-shi, Mie 516-0037, Japan) |

(e) Application Qualification:

- Students in foreign universities/institutes in cooperation with Japanese KOSEN (Institute of Technology/Polytechnic)
- Students in domestic universities
 - (* Japanese Kosen students attending the Kosen Procon will also be automatically entered in NAPROCK International Programming Contest.)

(f) Application Categories and Examination Method:

We would like to welcome any team to develop software executable on PCs or tablets and to participate in any of the following 3 categories:

Themed Section and Original Section:

The teams will be judged for its overall performance from their presentation skill to the demonstration quality. The focus is placed on originality, applicability, operation performance, system development skill, manual development skill and presentation skills (the quality of both the stage presentation and presentation material), and other aspects are to be considered.

Both the operation manual and the sources list of the program are subject to be examined. Thus, every team must submit the operation manual and the sources list of the program in advance before the designated deadline. Every team will be informed about the submission procedure of these materials later.

Each team can include 2-5 student members.

Competition Section:

Each team competes in a progressive tournament for victory.

The winners of the special awards are selected based on the overall performance of the developed software/system including the system overview, the sources list of the program, the user interface of the program and the detailed system description. Please submit the following supporting documents before the designated deadline for judgment: the sources list of the program, and the detailed system description. The submission procedure of these materials will be provided to every team later.

Each team can include 2-3 student members.

NOTES:

Any student members CANNOT enter two or more categories at the same time.

(g) Awards:

Themed Section and Original Section:

Grand Prize: 1 team, Second Prize: 1 team, Special Prize: several teams

Competition Section:

Champion: 1 team, First Runner-up Prize: 1 team, Special Prize: several teams

(h) Miscellaneous Notifications:

Double Registration:

Any Student members CANNOT enter two or more categories at the same time.

Travel Costs and Reservations:

Travel costs should be basically covered by each participating team. NAPROCK can have financial support for foreign teams (Conditions apply). Please ask the Japanese KOSENs in

cooperation with your team for the details. Flights, trains and accommodations should be basically booked by each participating team or Japanese KOSENS in cooperation with each team.

Logistics:

Each team should carry/transport any computers/devices required for the contest at its own risk. Please ask Japanese KOSENS if any help is required. The organizer will not supply any computers/devices.

Demonstration Spaces:

A demonstration space will be assigned to each team participating Themed/Original section. Each space is limited within 1800mm(w)*1500mm (d)*1800mm (h) including any PCs, devices as well as presenters.

Internet Connections:

For the internet connection, a wired LAN connection (at its best available performance) will be provided to each booth. For the demonstration hall, the organizer will provide a wireless connection (at its best available performance).

The participating team may set up a wireless LAN access point in the booth. Depending on the volume of usage, however, the connection may become unstable. Therefore, we would like to encourage you to use the main access point of the venue, for the general connection needed from your device such as a tablet, instead of setting up an additional wireless LAN access point. Thank you in advance for your cooperation in our effort of providing a stable connection in the contest venue.

Finally, in either case (with or without a separate wireless LAN access point in your booth), please make sure to set up your system to operate without an internet connection so that the demonstration shall not be affected by the connection status.

Intellectual Property Rights:

Please pay special attention not to have any infringement of intellectual property rights. Any rights shall not be violated by the presented software, documents and presentations. At the same time, please make sure to protect the intellectual property rights of your software, documents and presentations. All rights on the developed software, are reserved by each participant. However, the contest organizer may use the following materials for video recording, website, brochure, and educational purposes:

- Any documents and files (the introduction file, the summary file of your entry) submitted to enter into the contest.
- Any documents and files (the brochure file, the operation manual, the system configuration, the detailed version of system manual, etc.) submitted for the contest.
- The photos, video clips and presentation slides that are recorded during the contest.
- Submitted data during the competition matches in the contest.

Duplicate Submission:

Any developed software should be original. Each participants cannot submit the same software to any other similar contests/competitions.

(i) Inquiries:

Any inquiries on the contest can be sent by e-mail to: **naprock-procon@tokyo-ct.net**

2. Themed Section

“Light UP the Society with a Torch of Sportsmanship!”

We selected the theme for the Themed Section on this year’s contest as “Light UP the Society with a Torch of Sportsmanship”.

Tokyo has been selected to be an official hosting city for the 2020 Olympics and Paralympic Games. Since the accouchement, people all over the country are working together to make this memorable event successful. As we witnessed after the last Tokyo Olympics in 1964, it opened up a great path in our future; the Japanese economy has grown steadily, the Japanese society has prospered, and Japan has expanded its presence in the international society. We all hope to make the coming 2020 Tokyo Olympics and Paralympic Games to be another great accomplishment for us and make our country grow more positive, confident and proud.

In the same trend, in October, 2015, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) added a Sports Agency under its wing. According to the preamble of the Basic Act on Sports, the aim of the Agency is set to realize "a society in which people are healthy both in body and mind, and lead a cultural lifestyle throughout their lives" through sports. Besides the conventional sports promotion activities, such as further enhancement of Japan’s competitiveness in sports and more sports activities for all, it is aiming to apply the power of sports to benefit the country even further. The Agency also thrives to achieve the further longevity of its people, the containment of growing medical expenses, revitalization of the communities, more active international exchange and support, and the further growth of the overall national economy; all through the power of sports.

As we can see from our government’s efforts, sports can energize not only us individually but also the society as a whole. In the 27th Annual Programming Contest, therefore, we selected “sports” for the theme of this section. Please propose a system which will influence a wide range of users through sports, such as a program which can revitalize a community(s), promote an active international communication or cultural exchange through sports, while helping to maximize “the joy of (playing) sports” or “the excitement of viewing sports” via ICT. We look forward to seeing an exciting program that can thrill the world.

Notes:

- The participating teams can use their original peripheral devices. However, the usage of the devices will be also judged. Please make sure to set up your devices within your display booth. Also, make sure you can finish setting up your devices in a given time (approx. 40 mins.) on the contest date.
- In the Themed Section, the proposed system is also assessed for its fitness to the provided theme.
- The highest priority is set on the originality of the proposed system for the judgment. At the same time, we will also evaluate the level of programming skill based on its applicability, completeness and other factors.

3. Original Section

In the Original Section, we call for the original software that was developed from the original concept and idea of each team.

There has been a great increase in the users of new technologies, such as smartphones and tablets in the recent years, and now another cutting-edge device, such as wearable computers are attracting the consumers worldwide. At the same time, the internet technology has evolved dramatically as seen in the cloud computing and open data. These are a tangible result of how the IoT (Internet of Things) can impact our lives. And in the midst of the changing world, we wonder how the new technologies such as open data and ICT, could take off the restrictions of space and time and connect us further regardless of our physical locations (e.g., work, home or relaxation) as

well as time zones (e.g., day or night, seasons or era). The potential of IoT application is limitless and it may hold a key to bring a breakthrough in our current issues in the field of education, ecology, food supplies, telemedicine and more.

For the applicants of the Original Section, we would like you to take a moment to understand the ever changing world we live in today, and develop a truly original system, a creation of an out-of-the-box thinking. We look forward to being inspired by the many creative and fresh approaches of yours.

Notes:

- The participating teams can use their original peripheral devices. However, the usage of the devices will be also judged. Please make sure to set up your devices within your display booth. Also, make sure you can finish setting up your devices in a given time (approx. 40 mins.) on the contest date.
- The highest priority is set on the originality of the proposed system for the judgment. At the same time, we will also evaluate the level of programming skill based on its applicability, completeness and other factors.

4. Competition Section

“Find MANY Beauties withIN Mie”

Outline of the Competition Section

Mie Prefecture offers many beautiful tourist sites such as the Kumano Kodo pilgrimage trails and the Ise Shrine. It is also famous for its rich food products only found in Mie. For instance, the famous Ise-ebi spiny lobster and the Matsuzaka beef are indigenous foods from the Mie prefecture. However, in reality, not many people know these facts. To share its abundant culture and history with more people, it has been promoting a series of tourism campaigns since 2009, focusing on the delicacies and famous dishes, or the proud components of Mie. This year, the G7 Ise-Shima summit 2016 is held here in Mie.

For the Competition Section this year, we designed a game in which the beauty and charms of Mie are packed together. It is a puzzle game in which frame and pieces are made to complete a delicious plate, a breathtaking site, and other famous aspects of the Ise-shima and Toba regions in Mie. The contestants compete for the “speed” and the “accuracy” of their answers. Puzzle “pieces” are a polygonal wooden piece with straight sides. The competing teams will fill the provided “frame” with “pieces”. A team which completes the puzzle first wins the game.

Overview of the Competition

- (1) A set of a “frame” and “pieces” that are cut out from a figure.
- (2) It is a puzzle game to fill the “frame” with “pieces” quickly. All the “pieces” need to be filled in; there are no excess “pieces”.
- (3) If there is an overlapping “piece(s)” or a “piece(s)” is out of the “frame”, the “piece” will be removed by the judge. The removed “piece” is not counted for the score.

A team which completes the puzzle with all the “pieces” the fastest wins the game.

If all the “pieces” are not used, a team which used more “pieces” to complete the puzzle wins the game.

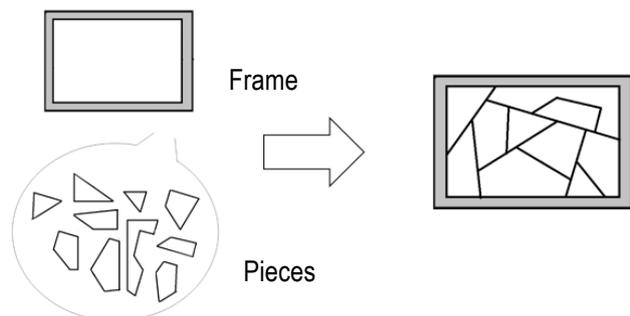


Figure 1: Competition Overview.

Piece

“Pieces” are a set of polygonal-shaped cut-outs from a sheet of medium density fiberboard (MDF). All “pieces” are a polygon in various shapes with straight sides (includes a dented polygon with a small angle inside (□)). We do not place any constraints with a gild line. The size of a “piece” is a 1cm x 1 cm square or more. The maximum number of “pieces” for a puzzle is 50 pieces. The front side and the back side of a “piece” has the same appearance; no distinction is made. You may mark a “frame” or “pieces” with a symbol or a label during the match. However, please do so carefully; if the “frame” or the “pieces” are damaged due to the act of marking, the team will be disqualified from the competition.

Frame

A “frame” and “pieces” are made of the same material. The “frame” is a 30cm x 30cm rectangular which is the left-over of the original board after “pieces” are cut out. Not all inner sides of the “frame” are rectangular. The width is 2 cm or more even at the narrowest point.

Both “frame” and “pieces” may come with some minor surface discoloration due to the fabrication process of these on our end. Please check the official web site for the images of the “frame” and “pieces” or refer to the sample “frame” and “pieces” which will be found in your package.

Competition Booth

We will provide a table for each team (a minimum 45cm (D) x 180cm (W)). The table comes with a white cloth cover, and the frame is preset on one side. The participants are not allowed to take a “frame” or “pieces” outside the booth. In other words, all activities to fill the puzzle: assembling the “pieces” together, labeling of “pieces”, taking pictures and other, must be done in the booth.

The personal computer and other devices that each team brought with them, may be placed either on or under the table (on the floor). Please make sure everything is set up inside the booth.

Tournament Format

The maximum of 12 teams will compete in a match. 1 set of assignments are given per match.

Time Limit

The time limit is set per assignment. It is going to be anything between 10 to 20 minutes. The time limit will be announced before the match starts.

Methods of Distributing the Assignments and Answering

A set of actual “frame” and “pieces” of the puzzle are distributed to the competing teams as an assignment. The answer is the final condition in which the “frame” is filled with the “pieces”. Each team is responsible to inform us when they are ready to submit an answer once their puzzle is complete. You may submit your answer without filling up all the spaces.

Method of Team Ranking

A winner is determined based on the following factors in order:

1. The number of “pieces” put in place (a team with the greater number of “pieces” precedes)
2. If teams used the same number of “pieces” and both teams tie, the team that answered in a shorter amount of time precedes.
3. If teams used the same number of “pieces” and the response time of each team are the same, the winner is decided by rolling the dice (a team with the higher sum of dots on the dice precedes).

Other Rules and Notes

- Computer:

There is no limit on the number of computers and other devices that each team can bring for the competition.

- Allowed Device and the Set-up:

There will be NO power outlet provided in the booth (a power outlet is provided in the waiting area). If you plan to use a networking cable, switching HUB and other external devices, please make sure to bring your own power source for your team. Also please make sure that all the devices fit in the given booth (either on the table or under the table; do not go over the depth or width of the table).

There is no restriction on the type of device used for competition as long as they won't disturb and interfere with other participating teams. However, it is not allowed to communicate with anyone outside with any of your devices including a personal computer. This includes exchanging information with other participating teams. If we detect any unauthorized communications, the teams will be disqualified from the competition. Depending on the layout of the booths, the status of the devices such as the computer screens, may be exposed to the other teams.

In addition, the lighting condition on the booths are not the same for all teams due to the layout of the booths. Please be sure to this fact when taking pictures/videos of the frame or the pieces within the booths.

- Act of Interference:

Any act of interference shall be prohibited during the contest.

If the organizer judges that a team interrupted the progress of a competition, judgment or other activities of other teams, or if they performed other prohibited acts in the competition, the team will be disqualified to compete. These acts of interference include any activities to emit the intense light in the booths. A disqualified team shall receive the lowest rank in the tournament.

- Rematch:

In case any trouble is experienced on the organizer's side, teams may compete again with another assignment.

- Judgment:

During the competition, members of the judgment committee may come to view the participants and their working status in the booth for judgment purposes.

- Display of the Booth Status:

During the competition, the response status, the results, the participants, the booths of the teams, and other conditions, will be filmed, recorded and projected on the screen or other media by a video camera or another device.

Contact

Please send your inquiries to the following contact address.

Email: naprock-procon@tokyo-ct.net