



Thailand-Japan Game Programming Hackathon 2022

Summary

1 Overview

1.1 What is “Hackathon”

"Hackathon" is a coined word combining "hack" and "marathon". It is a contest that competes in originality and technology. Participants team up and develop software in a few days on a given theme.

1.2 Thailand-Japan Game Programming Hackathon

Thailand-Japan Game Programming Hackathon (hereinafter referred to as TJ-GPH) is a game-programming contest for high school students in Thailand and Japan. Until now, students from Princess Chulabhorn Science High School (hereinafter referred to as PCSHS) in Thailand and students from National Institute of Technology (hereinafter referred to as Kosen) in Japan have participated in the contest. (Refer to P.3 1.5 The Past Contests)

In TJ-GPH, students make teams and compete in hackathon style. The purpose of this contest is improving technological skills, mutual cultural understanding and international exchange by students in each country.

TJ-GPH is comprised of 3 contests, "The Preliminary Round in Thailand ", "The Preliminary Round in Japan" and "The Final Round". However, " The Preliminary Round in Japan " may not be held due to the number of participating teams or the schedule.

1.3 Purpose

In order to become an engineer who will be active internationally in the future, Thai and Japanese high school students compete in programming technique and experience various international exchanges.

The details of the purpose are as follows.

- Promote interest in programming through game development.
 - Develop global awareness through participation in international contests.
- Also, motivate students to study programming and English.

- Acquire multilateral and multifaceted values through international exchange.

1.4 International Exchange

In TJ-GPH, we will conduct international exchange through various activities and excursions to Japan (such as Kosen and cultural facilities) in addition to game development. In past contests, we conducted cooking exchange teaching how to make traditional sweets of each country and visits to Hakodate Kosen, Kure Kosen, Hiroshima Peace Memorial Park, etc.



Snowball fight



Cooking exchange



Visiting Hakodate Kosen



Visiting Hiroshima

International exchange of TJ-GPH 2017 and 2018

1.5 The Past Contests

The first TJ-GPH was held in 2017, the second in 2018, the third in 2019.

In 2017, we held “The Preliminary Round in Thailand” at PCSHS Pathum Thani and “The final Round” at Greenpia Onuma (Hokkaido) in cooperation with Hakodate Kosen. 36 students from PCSHS and 9 students from Kosen (45 in total) participated in the contest.

In 2018, “The Preliminary Round in Japan” was held online with the cooperation of Oshima Kosen, “The Preliminary Round in Thailand” at PCSHS Lopburi, and “The Final Round” at JICA Chugoku (Hiroshima) with cooperation of Kure Kosen. In addition, we received support from Tsuyama Kosen. 45 students from PCSHS and 30 students from Kosen (78 in total) participated in the contest.

In 2019, “The Preliminary Round in Thailand” at PCSHS Loei, and “The Final Round” at PCSHS Mukdahan (Thailand-Japan Student ICT Fair). 11 students from PCSHS and 12 students from Kosen (23 in total) participated in the contest.

In 2020 – 2021, we could not be held due to Covid-19.



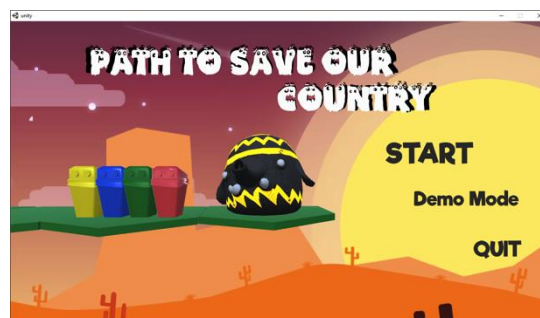
Developing a game



Presentation



Trying games of other teams



The created game

Hackathon of TJ-GPH2017 and 2018

2 Thailand-Japan Game Programming Hackathon 2022

We are planning to hold “The Final Round” at Thailand-Japan Student ICT Fair (hereinafter referred to as TJ-SIF) 2022 which will be held at Chiang Rai in

December.

2.1 The Preliminary Round in Thailand

2.1.1 Schedule

3th (Mon) ~ 6th (Thu) October 2022

2.1.2 Venue

Princess Chulabhorn Science High School Chonburi

2.1.3 Participants

4 students from each PCSHS (48 students in total) will participate.

2.2 The Final Round

2.2.1 Schedule

21st (Wed) ~ 23th (Fri) December 2022

✘ To be determined in consultation with the Ministry of Education in Thailand in consideration of the results of the attached questionnaire.

2.2.2 Venue

Princess Chulabhorn Science High School Chiang Rai

2.2.3 Participants

- 12 students from top 3 teams in “The Preliminary Round in Thailand”.
- Teams from Kosen that will participate in TJ-SIF

✘ If there are many entries from Kosen, we will select teams by technical screening in advance.

3 Rules

3.1 Entry Condition

Participants must complete the tutorials distributed before the contest. There are no restrictions on grade, but all Thai students are first graders in high school.

Participants must bring the following items on the day of the contest.

- a) Laptop computer

✘ Unity® (refer to the next section) must be installed.

✘ Refer to the following URL for recommended specifications

[Unity - Manual: System requirements for Unity 2021 LTS \(unity3d.com\)](https://unity3d.com/manual/system-requirements-for-unity-2021-lts)

- b) Writing instruments
- c) USB memory (for data transfer in the team)
- d) Presentation tool (Microsoft PowerPoint etc.)
- e) Project files of the tutorial

3.2 Software for Game Development

In TJ-GPH, students use Unity® (version 2021.3.8f1) of Unity Technologies for game development and C # as a programming language. Students who have not developed games can participate because the tutorial is distributed before the contest. Most of the participants in the past contests had never developed a game. By the way, participants can use any presentation tool.

3.3 Theme

In TJ-GPH, we will announce the theme on the day of development start. Each team must develop a game in line with the theme. In past contests, themes such as "Enlightenment of domestic social problems" and "The future world of 2030" were adopted.

3.4 Rules of Game Development

- a) Each team has 4 students.
- b) Teams are able to freely utilize the internet.
- c) Teams are prohibited from consulting with other teams and teachers.
- d) Teams are prohibited from exchanging data between teams.
- e) Teams are allowed to use free assets (3D models, image, music, etc.) freely, but are prohibited from using paid assets.
- f) Teams are allowed to use 3D models created with modeling software such as Blender.
- g) Teams must follow copyright law.
- h) Teams shouldn't make other people uncomfortable.
- i) Teams who violate the rules will be disqualified or their score will be reduced.

3.5 Rules of Presentation

- a) The presentation time is 15 minutes per team. (Preparation: 2minutes, Presentation: 10minutes, Questions and answers: 3minutes)
- b) Use English for presentation, questions and answers.
- c) Can use any tool to create presentation material.
- d) Be sure to include a game demonstration in the presentation.

4 Judging Method

4.1 Scoring

The score of each team is the total points of 2 items below.

- a) Judge points (out of 25pt)

Average points of judges. For evaluation items, refer to next section.

- b) Student point (out of 6pt)

All students will vote 3 best teams. The teams get points in order of the most votes

as shown below.

1st: 6pt 2nd: 4pt 3rd: 2pt

4.2 Evaluation Items

The judges score the following 5 items out of 5pt.

- a) The theme – concept and execution

- b) Enjoyment
- c) Design skill
- d) Degree of completion
- e) Presentation skill