

Action Project Competition



GIS Taiwan 2019

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About Action Project



Rather than simply being an academic exchange platform, GIS Taiwan emphasizes more on practical approaches. Thus, professional knowledge we cultivate from every academic topic speech is applied to respective industrial fields. GIS Taiwan expects that after listening to the speeches delivered by outstanding speakers, each delegate will have the motivation to make a difference and further come up with creative ideas.

Before the Symposium, every delegate is required to choose a topic that one is interested in. GIS Taiwan will then divide delegates into groups according to their preferences. Group Discussion can start as soon as the group is formed. After carefully looking through the instructions and requirements of each action project problem, each group should come up with a project which can solve the situation given. During the symposium, each group will

get the opportunity to exchange ideas on the project with well-experienced mentors. The final output of each group will be a poster which will be exhibited in the Action Project Exhibition including all the requirements given in the problems. Every group will present their concept to the judges and the judges will decide the final winner. The winner of each topic will eventually receive prize and certificates for their outstanding performance.

By action project, GIS Taiwan hopes to provide an environment where students and the industry can exchange great ideas and turn those concepts into practical projects. Meeting excellent people, hearing different voices, GIS Taiwan welcomes every unique idea and is looking forward to making a difference together.

Timeline

Before the symposium

Early June : Delegates will be divided into groups according to the topic they have chosen. There will be six delegates in each group. Each group will be given action project question, reading material and initial concept sample which can assist them through future discussion.

July 7 : Each group should submit an initial concept to academics@gis-taiwan.ntu.edu.tw by July 7, 2019.

GIS Taiwan will then send the initial concept to our mentors which we expect deeper discussion and engagement between mentors and delegates.

Timeline

During the symposium

7/8 Group Discussion: GIS Taiwan Staff will carry out an Action Project Orientation which will explain how the action project session works, the deadlines of each submission and the scoring system for the final project.

7/9 Mentor Discussion: Each group can exchange ideas and seek practical experiences from our mentors. If there are any adjustments on the project, or an updated version, please send it to academics@gis-taiwan.ntu.edu.tw before 7 p.m.. GIS Taiwan will send the updated version to the mentors who will participate on July 10 (the mentors of July 10 will be different from July 9).

7/10 Mentor Discussion: After mentor discussion session ends, each group should submit the poster for the AP presentation on July 11. The poster must be in PDF format and could be the draft version of the poster for the Action Project Exhibition on July 12. Each group should submit the file before 8 a.m on July 11 to academics@gis-taiwan.ntu.edu.tw .

7/11 AP presentation: Each group will have a 5-minute brief presentation. After receiving feedback from our mentors, each group could adjust the contents on the poster and must submit the final version before 3 p.m. to academics@gis-taiwan.ntu.edu.tw. Points will be deducted for late submission.

7/12 Action Project Exhibition: Each group will present their final project to the judges. GIS Taiwan will calculate the final score and announce the winner of each topic.



Action Project Questions

FinTech

Theme: Future of FinTech

Instructions:

Due to technology advancement, we are facing significant changes in our daily lives.

Progress in technology not only brings convenience to our lives and but also reduces the usage of human capital. Financial technology, also known as FinTech, is the new technology which aims to deliver financial services. It is utilized to help companies and customers to manage their financial operations better. For example, mobile payment, online shopping, and digital currency improve the process of traditional trading. Delegates are encouraged to come up with the new invention of FinTech in order to enhance the traditional way of trading.

Requirements :

1. Regulatory sandbox

Your concept of FinTech is under the regulatory sandbox programme i.e., you are offered the exemption from financial laws testing out your offerings in a limited market environment, under regulatory supervision, but without having to be fully licensed temporarily.

2. Open banking

All the existing banks have to share their customers' financial information with the authorized third-parties securely and only under the approval of the customers.

3. Security

FinTech services often handle sensitive information and store data in digital formats, which increases the risk of facing cybersecurity breaches. To stand a chance of remaining successful in the financial service market, the delegates' action project should include security-guaranteeing mechanisms.

4. Decentralization

Centralization leads to a lack of oversight and high-security risk. On the other hand, decentralization brings on versatility, security, flexibility, and provides a platform that attracts more developers, businesses, and customers. Therefore, delegates are highly encouraged to emphasize FinTech's decentralized nature.

Future Education

Theme: Thinking for the next generation - From industrial to project-oriented

Instruction:

Different thinkings influence people's attitude and solution when facing the social problem, and patterns of thought partially developed in education. Thus, we should set education as the cornerstone to solve problems from the root and exert long-term effects.

For instance, three Taiwanese students who studied abroad in Europe found that street views in Europe blended fully into their natural surroundings. However, the street views in Taiwan are mostly disorganized. They realized the difference was resulted from people's aesthetic, and they decided to promote aesthetic education for children. As a result, they founded "Aestheticell", an organization seeks to reform the textbook with creativity and design as well as to cultivate national aesthetic in early phase.

Requirements:

1. Think of an unsolved issue in the society. (e.g. disorganized street view)
2. Describe a thinking to improve the issue you mentioned. (e.g. aesthetic)
3. Propose a plan that cultivates critical thinking in process of education to solve problems (e.g. reformed textbooks)
4. Talk about the basic plan of your project and vision of your plan.

Smart Healthcare

Theme: Smart health solutions

Instruction:

Nowadays, increased life expectancy has given rise to a growing aging population, thus jeopardizing the socio-economic structure of many countries in terms of costs associated with elderly healthcare and wellbeing. To address the problems, smart healthcare has been widely adopted. Smart healthcare is defined by the technology that leads to better diagnostic tools, better treatment for patients, and devices that elevate the quality of life for everyone. Delegates are encouraged to come up with innovative, cost-effective ways to deliver patient-centered, technology-enabled smart healthcare either inside or outside hospital walls.

Requirements:

1. Current Situation

Please describe the current situation and explain why the application of IoT and AI can improve the current situation of healthcare.

2. How it works

Today's healthcare system has recognized the advantages of using Information and Communication Technology to improve the quality of healthcare across home, hospital, and community. This includes information and data sharing between patients and health service providers. Others encompass telemedicine services, portable patient-monitoring devices, operating room scheduling software, patient flow optimization, personal digital assistants, and other wireless devices. Delegates should make an overall understanding of the technologies involved in their application and illustrate how their concept can be put into practice.

3. Impact

Analyze the impact of the application and compare it to the current situation. Explain how healthcare becomes more efficient and user-centered with the existence of the application.

Eco-Echo

Theme : Green is the new black - Practice of a sustainable life

Introduction :

Climate change has been a serious issue for decades. This year, tens of thousands of students from all over the world have taken part in the Global Climate Strike in demand for stronger climate policies from their governments. It's time for the younger generation to take action and influence the globe. Therefore, during the action project, the goal is to come up with an idea containing environmental sustainability. Delegates will be encountered different situations in real life, planning on how to solve the problem and sustain the ability of natural systems at the same time.

Sustainability is the broadest, most inclusive conception of environmental protection or stewardship. Recycling or reuse of resources, materials and in the end, of waste is an important part of sustainability because it reduces the negative human impact on the environment and helps reduce the pressure on natural resources. We all know the basic concept of sustainability: "reduce", "reuse", "recycle". A recyclable resource is one that can be used over and over but must first go through a process to prepare it for re-use.

How to do?

When it comes to "renewing", it not only just declines the level of pollution passively but also create a new life or way for sustainability such as solar power and wind energy resources. Both can be harnessed for energy use.

Second, glass and aluminum are examples of recyclable resources. Each material then goes on to live its second life. It is reported that Nespresso uses aluminum for its capsules as it is the best material available not only to protect the freshness, taste, and quality of the Nespresso Coffees but also is infinitely recyclable and ecosystem. This means that there is potential for a second life within every capsule. Once separated from the coffee grounds, the aluminum is compacted. It is then sent for smelting and refining. The refined metal can then be used in a variety of different products, such as cars, bikes or homewares - the possibilities are infinite. Eventually, the recovered coffee grounds combined with dirt and organic matter,

creating rich and nutritious compost, later distributed through many hardware and gardening stores.

Last but not least, water can be considered a recyclable resource since it must go through the process of precipitation and evaporation in order to be reused. In addition, water can also be renewable in the form of hydroelectric energy. All creatures need water. Therefore, the sustainability of water would be one of the most important factors influencing our human.

Requirements :

1. Current Situation

After figuring out the difference between “reduce”, “reuse” and “recycle”, please discuss the current situations in your daily life. And describe the pros and cons of the way we solve the waste.

2. By analyzing the problems and products happened in the current situation, trying to brainstorm with other delegates, and designing a creative, proactive and sustainable product to ameliorate the waste in our daily life or try to image another concept or idea to explain a better method of garbage recycling.



Action Project Scoring

Action Project Scoring System

A	B	C
<p>Sector A : Initial concept (maximum 5 points)</p> <p>Initial concept will be scored by mentors who will attend on July 9.</p>	<p>Sector B : Scoring Sheet (maximum 100 points)</p> <p>Mentors will score at Action Project Presentation(7/11) and at Exhibition(7/12).</p> <p>Judges will score at Exhibition(7/12).</p>	<p>Sector C : Popularity</p> <p>Each person will get 4 stickers, 2 points per sticker. Delegates should choose one group from each topic, repeated votes are invalid.</p>

Initial Concept (A):

- Mentors on July 9 will score initial projects.
- A maximum of 5 points can be given.

Scoring Sheet (B):

- On July 11, mentors will give scores after hearing the brief presentation of each group at the action project presentation section. The score will stand for 5% of the Scoring Sheet Scores.
- On July 12, mentors will give scores at the poster exhibition. The score will stand for 15% of the Scoring Sheet Scores.
- On July 12, judges will give scores at the poster exhibition. The score will stand for 80% of the Scoring Sheet Scores.
- A group can get a maximum 100 points if they get a full score in each sections.

Popularity (C):

- Each delegate will get 4 stickers, each sticker stands for 2 additional points.
- Each delegate should choose 4 different groups, one from each topic. Repeated votes and votes for oneself will not be counted.

Prizes

In each academic topic, we choose the most outstanding group, who provides smart solutions and demonstrate high-level of creativity. Popularity award will be given according to result after delegates' votes for other groups:

Prize	Qualifications	Award
1st place	Group who get the highest score in Sector A (Initial Concept) and Sector B (Scoring Sheet)	NT\$ 36,000
Popularity Award	Group who get the most stickers in each topic	NT\$ 6,000

Additional Information

- Each group can only get one award. For example, if a group gets the highest point in each sector, the group will eventually receive the 1st price, according to the amount of award money.
- GIS Taiwan reserves the right to adjust deadlines, action project questions and award details. Please be aware of our final announcement.

Appendix I : Scoring Sheet

Group	Poster (15%)	Presentation (20%)	Impact (15%)	Novelty (15%)	Feasibility (15%)	Topic Relevance (10%)	Additional Credit (10%)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Judges	Percentages of Total Score
Mentors on 7/11	5%
Mentors on 7/12	15%
Professors on 7/12	80%
Initial Concept	Additional credits up to 5 points

Further Explanation:

Poster: Clarity of the poster.

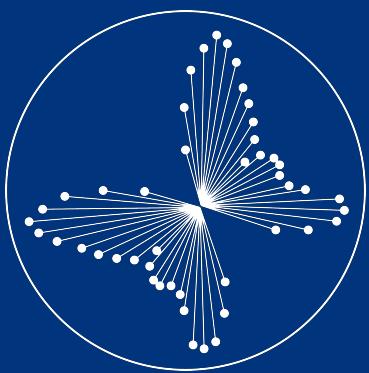
Presentation: Clarity of the presentation.

Impact: How great will the project influence the society?

Novelty: How novel/unique is the solution in terms of difference from existing products/solutions/IP ?

Feasibility: Is the solution actionable?

Topic relevance: Does the solution address an important problem backed up by evidence in each topic?



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