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HSBC HK COMMUNITY PARTNERSHIP PROGRAMME 2020 ANNOUNCES SMART COMMUNITY HACKATHON WINNERS

Seven Winning Projects Support Hong Kong's Vulnerable Groups

The HSBC Hong Kong Community Partnership Programme (CPP) today announced the winners of SMART Community Hackathon 2020 (Hackathon) that challenged secondary school students to create innovative tools that support our community's vulnerable populations.

Huifeng ZHANG, Head of Corporate Sustainability, Asia-Pacific, HSBC,

said, "For the second year in a row, the SMART Community Hackathon has provided an excellent platform for our younger generation to apply their creativity, critical thinking and STEM knowledge towards developing practical tools that support our community's vulnerable groups. I would like to thank all the participating schools, teachers, students and the public for their tremendous support. COVID-19 has challenged us all, and yet this competition has demonstrated that our students have the ability to innovate with empathy and understanding."

Forty teams from 18 secondary schools submitted their projects to the Hackathon in August. Half of the teams were selected as finalists and each received HKD5,000 from the CPP to develop their ideas. Among them, seven projects were awarded the ultimate title in the Hackathon's five categories for their ingenuity and practical solutions which go towards supporting those with physical disabilities, visual impairments, those experiencing social isolation and the elderly.

Participants were encouraged to take inspiration from the CPP's theme "Support Hong Kong!" and to specifically put their STEM (Science, Technology, Engineering, Mathematics) knowledge into practice.

Award	Winning Project and Secondary School
Community-Friendly	Beach Wheelchair Vehicle
Award	(TWGHs Wong Fung Ling College)
Most Creative Award	Smart Kung Fu Trainer
	(HKTA Lee Heng Kwei Secondary School)

The seven winning projects are as follows:

STEM Pioneer Award	SAVE In Time (Pak Kau College)
Best Potential Award	BI-f-ind way (The Yuen Yuen Institute MFBM Nei
	Ming Chan Lui Chung Tak Memorial College)
My Favorite STEM	Smart Drug Dispenser (Salesians of Don Bosco
Project	Ng Siu Mui Secondary School)
(chosen via online	Laughter Catcher (St. Paul's Convent School)
poll)	Wheel Connect (St. Paul's Convent School)

This year's judging panel had representatives from the business, social welfare and academic sectors, including HSBC Volunteers and members of The Hong Kong Council of Social Service (HKCSS). The winners of "My Favourite STEM Project" were chosen online using a public poll.

Due to COVID-19, the Hackathon held its panel presentation and interactive session online. Participating teams were also invited to showcase their work at various public events and exhibitions including the Gerontech and Innovation Expo cum Summit.

To find out more about HSBC Hong Kong Community Partnership Programme, please visit: <u>https://www.communitypartnership.org.hk</u>

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Note to editors:

Photo Caption



The HSBC Hong Kong Community Partnership Programme announced the winners of SMART Community Hackathon 2020. "BI-f-ind way" designed by The Yuen Yuen Institute MFBM Nei Ming Chan Lui Chung Tak Memorial College received the Best

Potential Award. The project aims to help visually impaired people to safely go jogging.



"Beach Wheelchair Vehicle", designed by TWGHs Wong Fung Ling College to allow wheelchair users to safely visit the beach, was presented the Community-Friendly Award.

Winners of SMART Community Hackathon 2020

Community-	Beach Wheelchair Vehicle
Friendly Award	(TWGHs Wong Fung Ling College)
	The Beach Wheelchair Vehicle was specifically
	designed to allow wheelchair users to safely visit the
	beach. The electric vehicle features a caterpillar
	band to enable wheelchair users to travel freely and
	securely on sand. A mobile app will also be
	developed to support a rental and return service.
Most Creative	Smart Kung Fu Trainer
Award	(HKTA Lee Heng Kwei Secondary School)
	Combining the traditional Chinese Kung Fu Wooden
	Dummy and the latest technology, Smart Kung Fu
	Trainer was designed to teach the elderly Chinese
	Kung Fu, which can improve memory, coordination,
	concentration, mental power and judgement. It also
	features a scoring and health monitoring system for
	users to track their physical progress, which may be
	shared with family and friends.
STEM Pioneer	SAVE In Time (Pak Kau College)
Award	SAVE In Time was developed with AI technology
	and can be installed in any home to monitor elderly
	individuals in real-time. If an emergency situation is
	detected, the device will sound an alarm and send
	an alert to other registered relatives. This device
	was conceived to ensure the elderly who live alone
	can receive immediate care when needed.
Best Potential	BI-f-ind way (The Yuen Yuen Institute MFBM Nei
Award	Ming Chan Lui Chung Tak Memorial College)
	BI-f-ind way aims to help visually impaired people to
	safely go jogging with a smart vest embedded with
	an AI enabled camera and a vibration detection
	device. The vest can detect the conditions of the
	running route ahead, analyse the surrounding
	environment and evaluate the potential risks, in
	order to provide users with alerts and directions to
	avoid obstacles. This invention was created to
	enable the visually impaired to exercise safely for
	both physical and mental wellness.
My Favourite	Smart Drug Dispenser (Salesians of Don Bosco
STEM Project	<u>Ng Siu Mui Secondary School)</u>
	The Smart Drug Dispenser is designed to
	differentiate medicines according to their colour and
	shape, helping elderly people to take the correct

medications and prevent dosage errors. With 3D- printed components, the dispenser features a small electronic motor controlled by Arduino programming software to sort medicines into different colours and shapes.
Laughter Catcher (St. Paul's Convent School) Laughter Catcher is a creative mobile application that allows users to capture videos of them laughing and share them with friends. After watching a video from a friend, the user can take a selfie and "Laughter Catcher" will analyse the facial expressions with an advanced AI emotion sensor to generate a "happiness score". This mobile application's big data may also be used to guage a community's mental health.
Wheel Connect (St. Paul's Convent School) Wheel Connect is an Internet of Things (IoT) enabled wheelchair with various built-in devices such as an alarm, ultrasonic sensors and light sensors, that aims to enhance the user's quality of life and safety. Key features include a "wheelchair rollover detection and alert", "GPS tracking", "gesture control" and "emergency stop control". The student team believes Wheel Connect's real-time monitoring and risk assessment capabilities will draw public attention to existing safety issues of the elderly who live alone.

HSBC Hong Kong Community Partnership Programme

Since its launch in 2012, HSBC Hong Kong Community Partnership Programme (CPP) has been supported by the Home Affairs Department, the Social Welfare Department and The Hong Kong Council of Social Service (HKCSS). HKCSS has been appointed by HSBC to administer the applications and monitor the grant projects. CPP aims to inspire district-based community initiatives to foster a more inclusive society. Also, it encourages cross-sector collaboration to address the social needs of local districts and help charities and community organisations in Hong Kong build capacity. CPP has supported more than 1,200 projects reaching 5 million beneficiaries since its launch.

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