

EVENTS WATCH

HACKATHON SPARKS PRACTICAL TECH SOLUTIONS

Overcrowded emergency departments (ED) at public hospitals in Hong Kong have become a chronic problem, so Classified Post organised a Mini Hackathon to encourage young people to use their creativity in developing innovative tech solutions to address the issue.

Held at the South China Morning Post's Tai Po office in mid-November, the event attracted nearly 80 entrants who took part in teams of four or five. One aim of the contest was for teams to include a mix of undergraduates and recent graduates from different universities in Hong Kong, with many of the participants also hailing from overseas.

Premium partner Peoplebank Hong Kong provided generous support for the event, while seasoned IT professionals from major businesses made up the panel of judges.

The format for the Mini Hackathon allowed contestants to use a wide range of specialist skills and knowledge of different aspects of the broad field of technology. The main task set by the organiser was for teams to develop an innovative prototype, incorporating the Electronic Health Records (eHR) launched by the government in 2016, which could enhance the overall operational efficiency of EDs at local public hospitals.

Any proposed solution had to be target-specific and cover at least one of four designated areas: optimising waiting time; helping with patient registration and diagnosis; prioritising urgent cases; and reducing overcrowding at EDs.

The full-day event featured two separate rounds. At the end of the first, all 15 teams had five minutes to showcase the major functions and unique features of ideas and solutions they had developed during the

morning session. In the second round, five shortlisted teams had 15 minutes to take the judges through their solutions in greater detail, in some cases doing demonstrations of a prototype, and to answer questions about their concepts and methods.

Members of the participating teams agreed that the Mini Hackathon was a great learning experience for the participants, but I was also able to see some new concepts and ideas," she added. "The tenacity and passion shown by all the teams was something to admire. It's not easy to stand in front of a large group of strangers and pitch your product or solution. But we saw that each team had different strengths, and we hope that the participants learned from the experience and can all continue to improve."

In addition, listening to presentations by the other contestants and the various Q&A sessions was a chance to learn from one another and, perhaps, improve the viability and practicality of their own proposals once the competition had concluded.

Some of the solutions put forward clearly made an immediate impression on some of the professionals who work in the digital communications sector. Indeed, members of the prize-winning teams were subsequently approached by one of the judges to set up meetings to further explore their ideas.

Annie Cheung, general manager of Peoplebank Hong Kong, believes that hackathons provide a great platform for young innovators to showcase their creativity and skills.

"Our industry focus is on technology, and we are always looking for ways to connect with young IT talent," Cheung said. "These days, there is a high demand for tech professionals in all sectors, especially in software development, so we felt this event was a great opportunity to meet future tech experts and, hopefully, start to build a good relationship with them."

Cheung made the most of the

chance to talk to contestants from Hong Kong and further afield, who share a passion for using technology to solve real-world problems.

"This Mini Hackathon was a great learning experience for the participants, but I was also able to see some new concepts and ideas," she added. "The tenacity and passion shown by all the teams was something to admire. It's not easy to stand in front of a large group of strangers and pitch your product or solution. But we saw that each team had different strengths, and we hope that the participants learned from the experience and can all continue to improve."

Cheung noted that the standout teams were those which could demonstrate a prototype App to support their solutions.

For example, the winning team developed a solution which featured a patient referral system that made use of high-tech kiosks at EDs. "They tackled the assigned task from a unique perspective," Cheung said. "Their product utilised facial recognition and chatbot technology. The solution was simple but effective,

and their demonstration was very impressive."

Members of the winning team have already established a start-up specialising in advanced IT solutions.

"This hackathon was different from the type of projects we do at university," said team member Jacky Kwan, a fourth-year information engineering student at the Chinese University of Hong Kong. "Because of the time constraints, we had to quickly pinpoint the specific requirements in the challenge before developing our solution. We also had to be meticulous in devising our workflow, and then following it, to ensure we accomplished all the tasks by the deadline."

Team leader Ali Shamaz, a graduate in integrative systems and design from the Hong Kong University of Science and Technology, said that previous participation in several other hackathons meant his group were well aware of each other's strengths. This made things easier when it came to deciding the division of labour and ensured smooth collaboration.

"I enjoyed the design/packaging

part of the solution and focused on working on professional-looking interfaces for the various components we developed," Shamaz said.

The app designed by the first runners-up included artificial intelligence to help users detect possible heart diseases. Team leader Li Wenqiang said he learned a great deal about different presentation styles by watching how other teams showcased their solutions.

"By taking part in this hackathon, I have learned more about the healthcare sector and the issues it faces," said Li, who is taking a master's in engineering management at City University. "The contest also helped me appreciate the importance of teamwork because I'm more used to working on projects on my own. And I was able to use my leadership skills in assigning tasks and providing overall direction."

As for the second runners-up, their app used a deep learning neural network algorithm to help patients record their symptoms. It is able to give an initial analysis and then assign an urgency level for individual cases

and QR codes to facilitate visits to EDs.

Team leader Mohammad Owais Kerney said the key to success was harnessing the creativity of team members studying different majors at the University of Hong Kong (HKU), and leading by example.

"I got a thrill from our presentation because it showcased the hard work we had put in," said Kerney, a computer science graduate from HKU. "Although the full job was not even half done, we were able to show what we were developing by presenting it as a story so that resonated with the audience and potential users."

Cheung of Peoplebank added that advanced technology is transforming the way we live, and it will continue to affect every aspect of our lives.

"We hope this hackathon was a great experience for all the participants," she said. "While a great tech solution requires excellent technical skills, creating an effective solution also requires teamwork and the different skills contributed by each member of a project."

