Gamification as training tool for industries

KUALA LUMPUR: When technology is powered by creativity and innovation, it is another step forward into the future. In the world of gaming, a new trend has emerged in which games are used as effective teaching tools. Gamification is the name of this trend and it is gaining traction in industries to train employees effectively and efficiently.

This is why industry collaborations and partnerships are important components of the Beyond Education experience at Tunku Abdul Rahman University of Management and Technology (TAR UMT), where students are able to work with industries.

Bachelor of Computer Science (Hons) in Interactive Software Technology student Chee Juen Wei had the opportunity to work with two of his course mates to develop multiple mini-games as training tools in order to reduce wastage and training time for a manufacturing company.

Saying the project was quite a challenge for him and his course mates, Chee added, "My friends and I started working on this project during the Covid-19 lockdown. It was a challenge as there were no physical meet-ups.

"Another major challenge we had to deal with was the language barrier, as the end users of the games we were developing are foreigners and English is not their main language. This limitation required us to use more graphics as opposed to words in developing the games."

Although the hurdles were a great challenge for the students to develop the games properly, things started to turn for the better when the lockdown was lifted.

"The company understood the challenges we faced and this is why they bore the expenses for my trip to the factory during my semester break, so that I could enhance the game the team was working on. It was like a short internship, in which my whole day was spent at the factory with several supervisors who thoroughly explained everything I needed to know about the assembly line," he said.

Guiding the students at each stage of this project was Department of Computer Science and Embedded Systems, Faculty of Computing and Information Technology (FOCS) programme leader Andrew K H Tan.
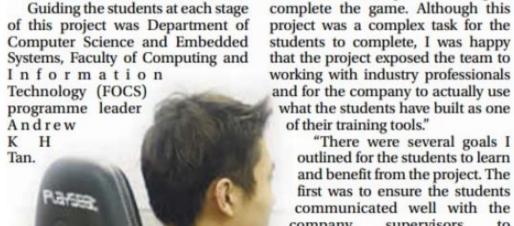

Gamification allows students to develop work processes for industries.

"Gamification is an effective training tool as it engages important senses in learning such as sight, hand movements and quick thinking to complete the game. Although this project was a complex task for the students to complete, I was happy that the project exposed the team to working with industry professionals and for the company to actually use what the students have built as one of their training tools."

"There were several goals I outlined for the students to learn and benefit from the project. The first was to ensure the students communicated well with the company supervisors to understand what they were looking for," Tan said.

"I also wanted the students to acquire a higher level of time and task management, which includes prioritising the purpose and goals of the project over other issues and problems they may encounter. This is important to ensure the end result of their effort and hard work not only meets but exceeds expectations.

"The company supervisors were happy with the results and plan to continue collaborating with the faculty for future projects."

For more information about TAR UMT computing and information technology programmes and to apply online, please visit tarc.edu.my or call 011-10758554. Various financial aid and merit scholarships are available for qualified students.