

Game for exercise: Students develop virtual reality car for a healthy back

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BENGALURU: What positive upshot could a bone-jangling, eight-hour train ride in a crowded coach possibly have? For a group of students from Amrita University, Coimbatore, a eureka moment: The youngsters ended up with pain severe enough to think up a multidimensional car game that helps prevent backache.

Nehal Ram Surya, 21, and his friends — V Mohan Karthik, Kishore Ramesh and Paramasivam Ragul — all in their early 20s, are working on a prototype of the game that marries exercises with gaming. They hope the product will eventually push the unwilling to exercise.

The team said it has completed 90% work on the game, which a player controls through movements that give the back a healthy workout instead of a joystick or gaming console.

“It will be a virtual reality game in which the task will be to drive from point A to point B,” Surya said. “Doing this repetitively will mean a player is repeatedly doing exercise that benefits the back.”

Exercise or perish

The team is developing badges equipped with sensors linked to the game through algorithms. “The badges will be attached to the player’s body,” Surya explained. “The car will move in the right direction and at the ideal speed only if the player makes the

right movements — which means doing the exercise properly. If not, it will veer off the road or lose velocity.”

With most of the work on the game completed, they showcased the innovation at the Cisco ThingQbator — a CSR initiative by Cisco and Nasscom Foundation that seeks to foster innovation, entrepreneurship and the creation of innovative technology by college students — and received Rs 40,000 to take their work forward.

“We’ll soon have our first prototype,” Surya said.

Surya and his team were not alone. Fifteen other teams showcased their innovations. Here are a few of the best:

Smart Gloves

Priyamvada Mahesh and four other students, also from Amrita University, developed a prototype of a smart glove that provides directions. No need to keep checking your phone while riding anymore!

They fitted regular biker gloves with sensors that connect to smartphones via Bluetooth. The rider enters the destination on a mobile and connects it to the gloves. The gloves, which have LED lights and hardware, glow and vibrate to indicate the direction the rider has to take.

Rewarding trashcan

Four students from IIT (BHU) Varanasi developed a trashcan fitted with a device including ultrasonic sensors that detect when it is filled with garbage. It is connected to a mobile app in a system that offers coupons for users to earn rewards.

“We found that 40% of people we worked with were even willing to throw other people’s garbage in the bins to redeem the rewards,” Shrishti Singh said about the application, which its developers named ‘Swachch app’.