Harry Potter's Undetectable Extension Charm Engineerable!



Imagine: you are having a 12-hour economy flight with a really big backpack and a carrier with you, and after putting your carrier in the overhead compartment, you are left with no choice but to stuff your backpack underneath the seat in front of you. Bags sorted, the problem is: whether you can survive the flight with your feet cramped in that 30 x 30 cm space you are left with.

Would you not want another compartment to store you bags?

This dream may come true after all with the award-winning design by year-4 engineering student Li Hayden Hean Ting and his team, with Dr. CK Chan as their supervisor.

Hayden has always loved airplanes, and when he gathered 3 more plane-lovers, it is no surprise that the four of them will be drawn to join Airbus Fly Your Ideas 2017 ("AFY") competition.

AFY is a global engineering competition organised by Airbus, hoping to gather innovative ideas to create a sustainable aviation industry, to identify research and technology development and to facilitate interactions between academic research teams.

So, what is his project all about?

Drawing inspiration of how things are often stored 'beneath something' in Hong Kong, and the popularity of loose furniture in the city, Hayden and

his team designed an 'under-floor' storage compartment in front of each passenger seat such that passengers can enjoy the legroom in front of them. Not only can you enjoy the (barely sufficient) legroom to the fullest extent, your bag is arguably stored more securely. The magic here is, well, engineering. Hayden and his team incorporated a remote on each seat's arm rest such that by a mere push of a button, the compartment will pop up swiftly, allowing you to store your bag there before pushing it close. As simple and functional as a piece of loose furniture, your legroom is expanded.



Despite tough competition with 356 other teams worldwide, Hayden's team idea caught the judges' eyes and won a ticket to France for the final round as well as the \in 30,000 prize in the end. His reward however, definitely worth more than \in 30,000. He found that he has achieved an all-round personal growth after the experience, seeing improvement in his communication and team building skills as well as a boost in his confidence.

Hayden & his team's efforts in designing the product's prototype and bring engineering knowledge outside the classroom is highly commendable. Taking the initiative to take the extra mile to do additional research, he has proven himself a motivated and active learner who does not hesitate to apply his learnings to everyday uses.

Learn more at

https://www.youtube.com/watch?v=wFtMCc60-dg

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