As mentioned before, Metbin’s functions are divided into two parts – Move & return and Pack & lift. We designed two methods to test these functions respectively.

Before putting our bin into the test field, we input the coordinates of destination. Then we observe whether it can reach the destination with the correct route and return. To test the lift function, we put objects of different masses into Metbin. Then we cover the laser sensors and measure its lifting time. Here are two videos recorded when we test its functions. This is our test result, I think our product is quite reliable.

However, our product still has some risks. Metbin is insensitive to obstacles of lower height because its infrared sensors are not so close to the ground. It’s unable to move on wet or rugged ground because its wheels may slip or stuck. It’s hard for Metbin to lift heavy rubbish due to the power limit of motors. It’s also incapable to detect trash in nontransparent bag because laser can’t penetrate it.

Overall, we’ve finished the prototype within budget, and MetBin is capable of moving to appointed destination, returning to initial position, packing the trash automatically and lifting the package. We have strong confidence in our product to bring you convenience and reliable performance. We cannot wait to see how you enjoy your brand-new life with the MetBin.

Eventually, I want to thank all my teammates in JEAR for their hard work in creating and building such excellent product. Also, thank you all for listening, it’s time for questions.