Iteration 2

\*All ideas for iteration 2 are found on the Reverse Engineering- Ideas Document

* Iteration 2 looks to add new features to the safe taxi, as well as expand upon certain features introduced in our first iteration.
* The contactless pay and doors remain the same as the first iteration
  + Contactless pay is utilized through a mobile app on your phone
  + Contactless doors use automated doors that are activated by a motion sensor. People simply have to wave their hand in front of the door for it to open
* We also implemented our second design of the passenger shield. This time, we decided to use a polycarbonate/plexiglass shield. We decided on this material because they are commonly used for Covid-19 barriers. They also don’t shatter, which is good for a car environment
* To allow for better communication between passengers and the driver, we’ve included a microphone that is accessible to the passengers. This way, the driver can hear the passengers clearly despite there being a passenger shield present.
* This design also improves upon the replaceable seats idea presented in our first iteration. This time, we’ve opted to use disposable paper (similar to what is used in doctor’s offices). We believe that this change will allow us to use a more affordable material without compromising the effectiveness of the original design. In addition, it being a recyclable material makes it a greener alternative to plastic.

The second iteration of our design looks to add new features to the taxi, while also expanding upon previous features introduced in the first iteration. The contactless pay and doors remain the same as the first iteration. Passengers are able to pay and submit their proof of vaccination through a mobile app, and automatic doors enable entry without direct contact. This iteration improves upon the replaceable seats idea presented in our first iteration. Instead of plastic, the seat coverings are now made of thin, disposable paper. This change allows the taxi to utilize a more affordable material without compromising the effectiveness of the original design. In addition, paper is recyclable, making it a greener and more sustainable alternative. We also implemented our second design of the passenger shield. This time, we decided to switch the material of the shield to plexiglass. Plexiglass is a common material used for Covid barriers, and when used in conjunction with face masks, proves effective in blocking airborne particles and droplets. The material also does not shatter, which is good for a car environment. Furthermore, the shield now includes a microphone which allows for better communication between passengers and the driver. The microphone, which is attached to the passenger side of the shield, is connected to a speaker system that is attached to the driver side.