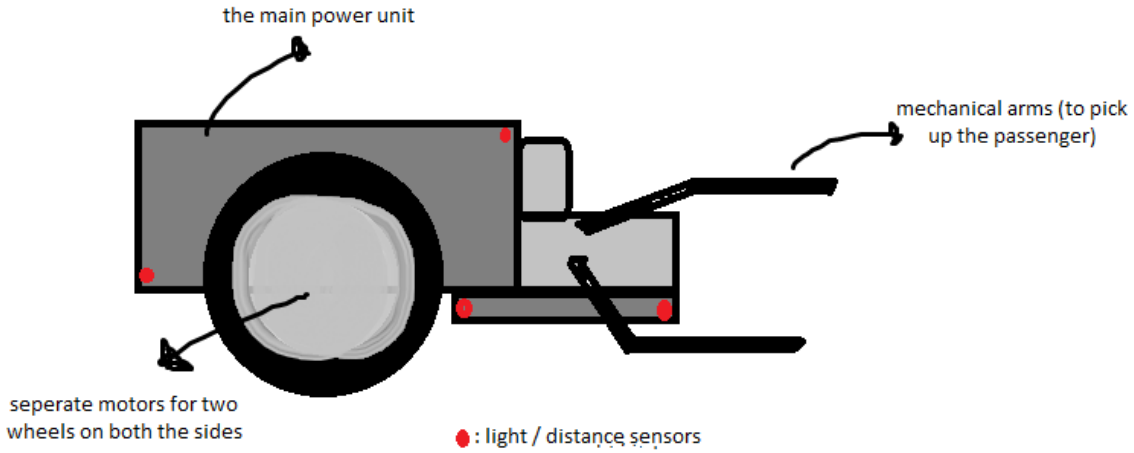
FSE 100: Introduction to Engineering

PROJECT SPYN (TEAM 5: Dhruv Bansal, Krishna Balaji, Lillian Weng, Ryan Hanover)

DECISION TABLE

Criteria	**Weighting**	**Design 1** *Ratings*	**Design 2** *Ratings*	**Design 3** *Ratings*
Speed	**10 ***	5 = 50	7 = 70	5 = 50
Power	**5 ***	5 = 25	6 = 30	5 = 25
Size	**3 ***	8 = 24	4 = 12	2 = 6
Cost	**3 ***	4 = 12	7 = 21	3 = 9
Total		111	133	90



Q: Why did we choose this particular design?

Ans: *Design 2* had the highest rating in comparison to the other designs. The thing that stood out the most in the design was the use of two motors instead of one in the other designs. The extra motor, although, did increase the cost of the design, but did help provide extra speed and power which was one of the main reasons in it's rating being so high. Lastly, the size being not too large and not too small was also another main factor in choosing to go with *Design 2.*

BEHAVIORAL MODEL

The mechanical arms are supposed to pick up the passenger and seat them in the seat. The model is powered by two separate motors for two wheels on either side of the car, and the main power unit making up the majority of the structure. Along with this, it is equipped with light and distance sensors to make it automated throughout its travel distance.