DESIGN REPORT

As it was specified in the problem statement that I had to design an autonomous food delivery robot model for stadium

that will use the vacant space below the stadium seat efficiently for its movement. The dimension of the robot should be in 30cm\*30cm\*30cm.

The model that I have designed has separate spaces for beverages , snacks , electronic components ,battery ,

Battery charging system, motors positionings, sensors, refrigerating system.

It will run on the electrical supply provided by the battery and

It will detect the position of of seat number by QR code scanner that is placed below the robot and it will move as a black line follower robot , I have even provided ample lightening in the model so that there will not be any problem during movement.

The robot has omni wheel that provides 2 degree of freedom to the bot and helps for its easy movement without occupying much space.

Material to be preferred for robot:

Aluminium :as aluminium is light weight (require less energy) ,durable , less costlier.