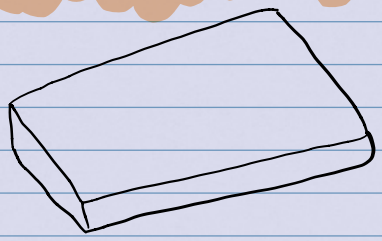
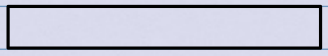
Base Designs

#1

Shelled Base Design:



Isometric View



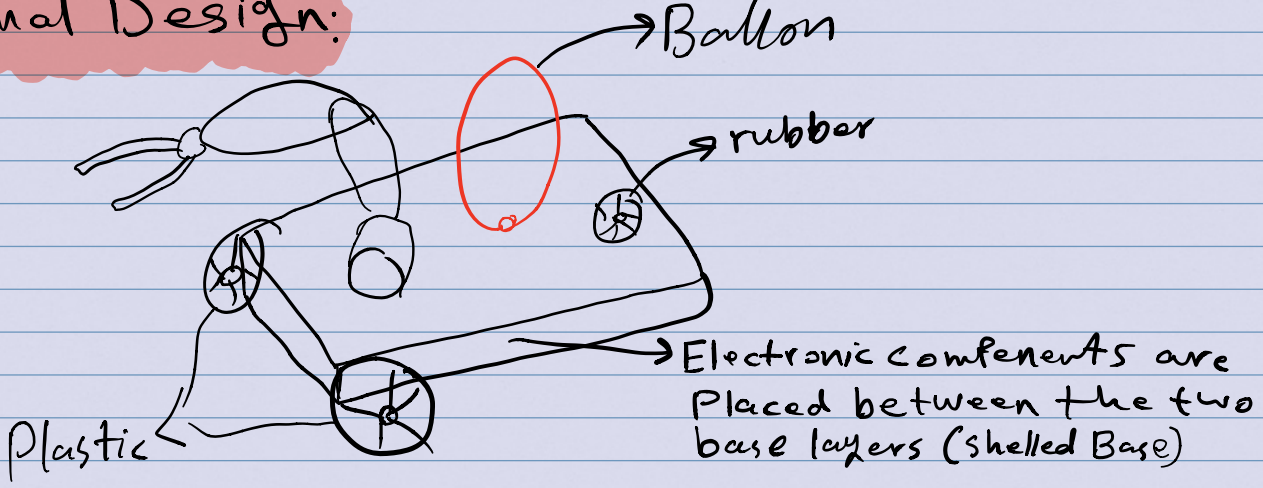
Front View

Upper view

Morphological Analysis:

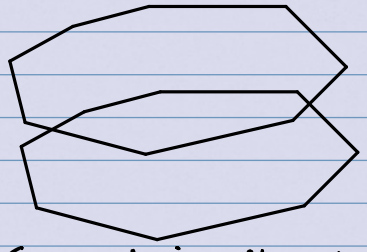
Main component	Type, number, material
Motor	Servo motor
Wheels	normal, 3 wheels, 2 Plastic and 1 rubber
Base	rectangle, Wood
Mounting motor screws	Regular screws

Final Design:

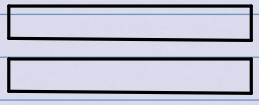


#2

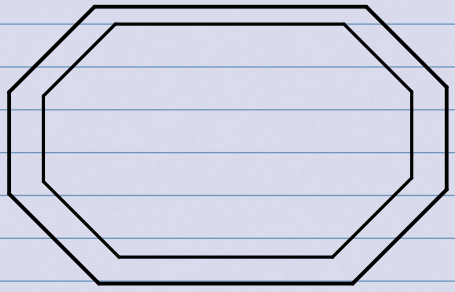
Octagon Shelled Base:



Isometric view



Front view

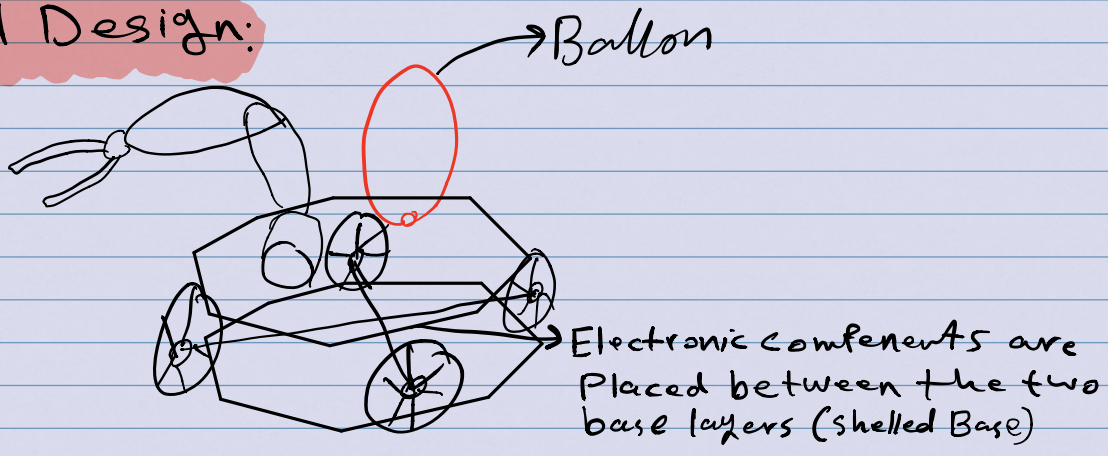


UPPer view

MorPhological Analysis:

Main component	TyPe, number, material
Motor	Brushless motor
Wheels	normal, 4 wheels, all of them are Plastic
Base	octagonal, Wood
Mounting motor screws	Regular screws

Final Design:

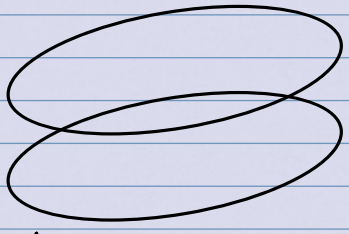


* The reason I chose this design is because:

1- the robot can move 360° degrees freely
2- The electric components will be placed between the two octagon layers.
3- Having a brushless motor provides enough torque to the robot to move smoothly

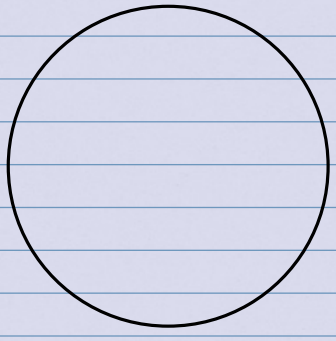
#3

Circle Shelled Base:



Isometric view

Front view



Upper view

Morphological Analysis:

Main component	Type, number, material
Motor	DC motor
Wheels	normal, 3 wheels, all of them are Plastic
Base	circular, Wood
Mounting motor screws	Regular screws