1 Requirtments that Defined in the Meeting

- Robots must be built at a low price.
- Actuation system should be limited.
- If possible, the robot's parts must be fabricated with 3D printers. (Except Plainer laser cutting)
- There is no need for too many sensors (IMU).
- Robots need to control remotely. (WIFI)
- They need to be small in size (size of sides more important)
- To design a circuit board for the components to make the system feasible. (Layer number of the board can be 2)
- To use in Lab of ME461 or as a game, LED or Neopiksel can be placed on board.
- To direct, the camera at the top can be used with an Aruco marker.
- Augmented reality is the crucial part of the project
  - The robot needs to be monitored in Webots or Gazeboo.
  - There should be created different simulations
  - In reality, boxes will be placed. However, they need to be changed in the simulation.
  - Additional equipment can be added at Webots environments.
- Robots need to have the self-charging ability. (There needs to be a sensor to detect of battery)
- Mini OLED screen can be placed to front.
- Step motor can be used to rotate wheels.
- The robot needs to be available for homework for ME461.