Framework For a Customized Robot

About the Robot: is a customized robot which can do multiple of needed works for the company and it will be built by various of engineers with technical, mechanical and industrial experiences.
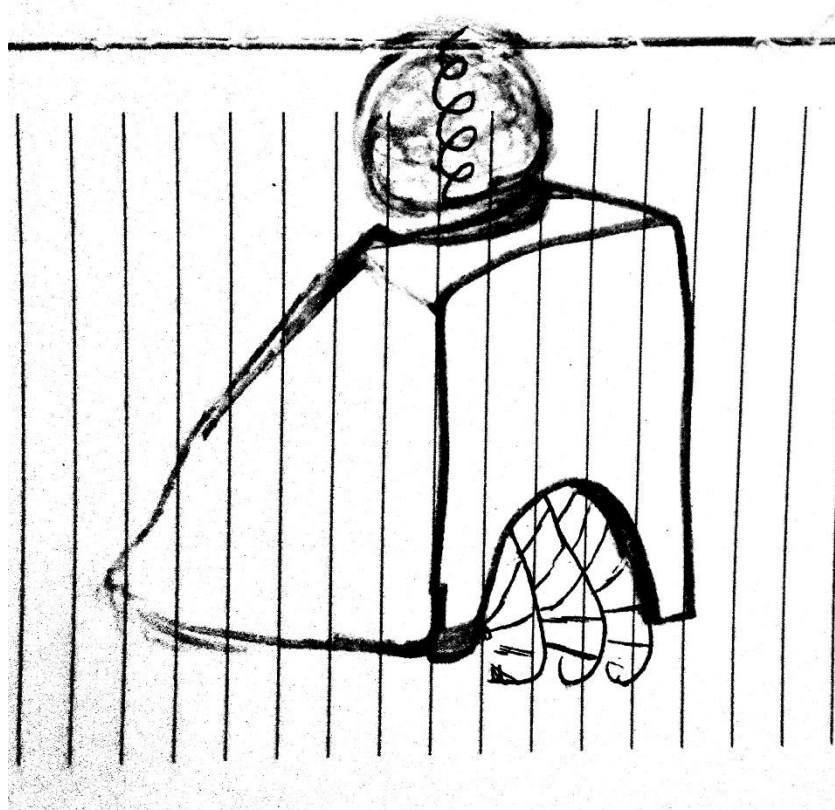
Requirements

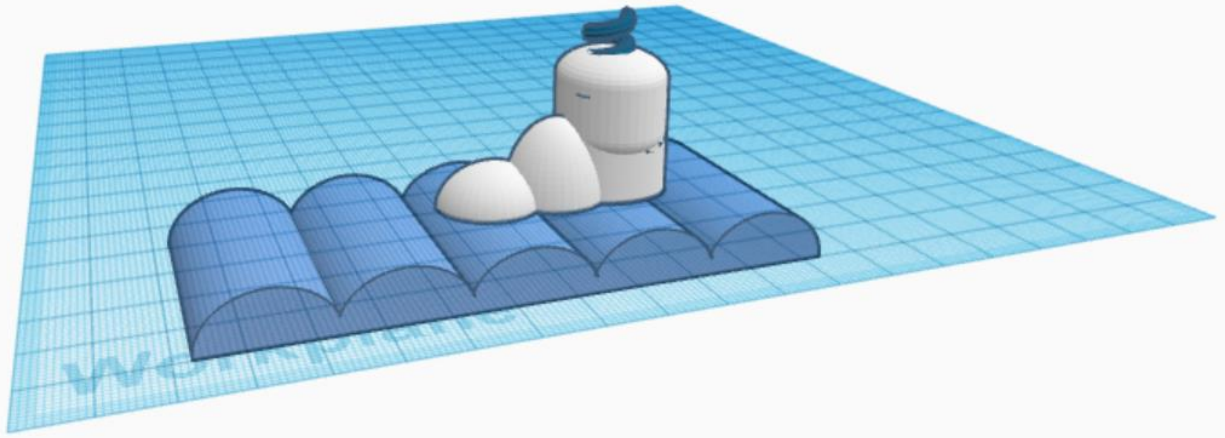| Functional	Non-Functional
1. The robot will understand the unformal Arabic language.	1. The robot can only be accessed (to be executed) by an authorized members.
2. The robot will be familiar with at least 100 words that predefined by the company.	2. The robot should be able to carry things with weight 400 gram at most.
3. The robot will have an access code.	3. The robot should be perfectly working in any type atmosphere.
4. The robot will include an interface.	4. The maximum time for running should be 5 hours.
5. The robot will introduce information about itself\the company based on its interface.	5. it should be able to wave.

Explanation:

F-5. The interface will be having different questions so people will choose a question and the robot will answer that specific question.

The Design of Wheels

Simple design of how supposed the wheels look like.

The wheel's width is 142mm and the length is 120mm, there are 3 wheels in the prototype design that will help the robot to walk or run in balanced and consistent speed; and there's the suspension system right above the wheels, It used directly above the wheels to improve the way in how robot would face any obstacles in the floor and make its walk smoother and in control.

3d design for the testing unit (the floor), which we will test the suspension system that located in the legs in.