humanoid robot project

The goal of the project is to create a robot with a human-like structure, arms that move like human arms, and walking motions for the feet based on the movement of wheels. The robot will also have a computer vision system and an induction system to interact with people and greet them.

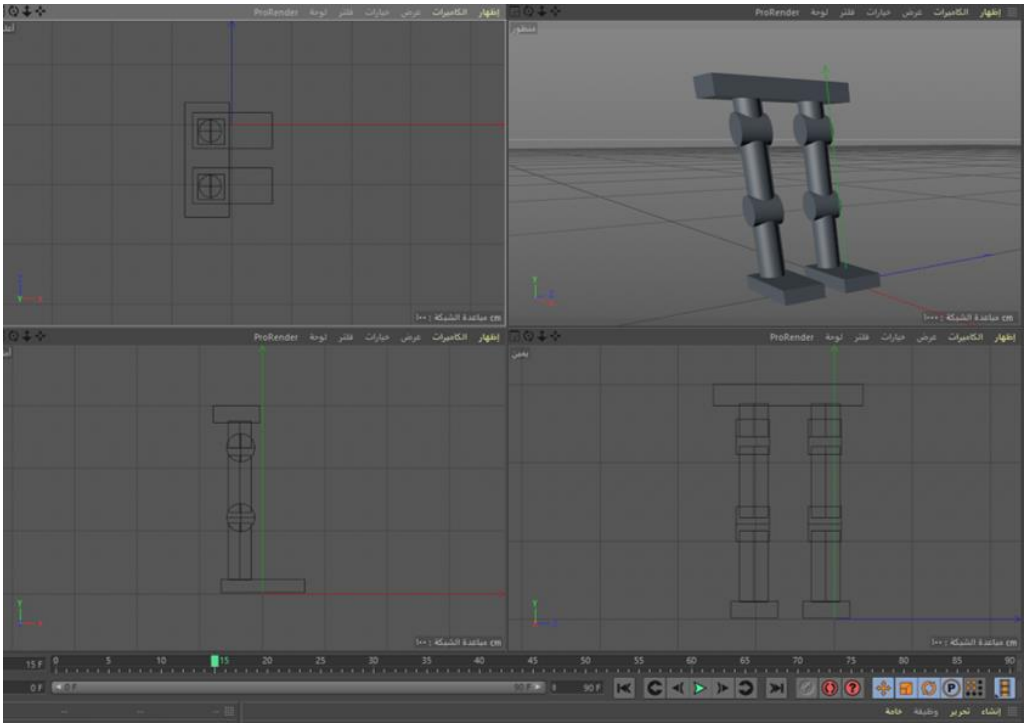
Requirements and analysis

- Kinetic balance and making sure the robot can move over uneven, slick surfaces and stand on them, as well as creating a system that allows the robot to keep its balance in order to prevent falling.

- Greeting people, thanking them for coming, and ability to use body language to interpret spoken expressions, and Giving the robot a sophisticated voice system so it can send commands from anywhere.

Design

The foot joint of the robot is designed



Testing unit

- Test run on the legs of the robot (suspension system):

Walking the robot on flat ground with sponges and bumps, then trying to walk on smooth ground and other ground with inclines