Fourth Task – Mech Track

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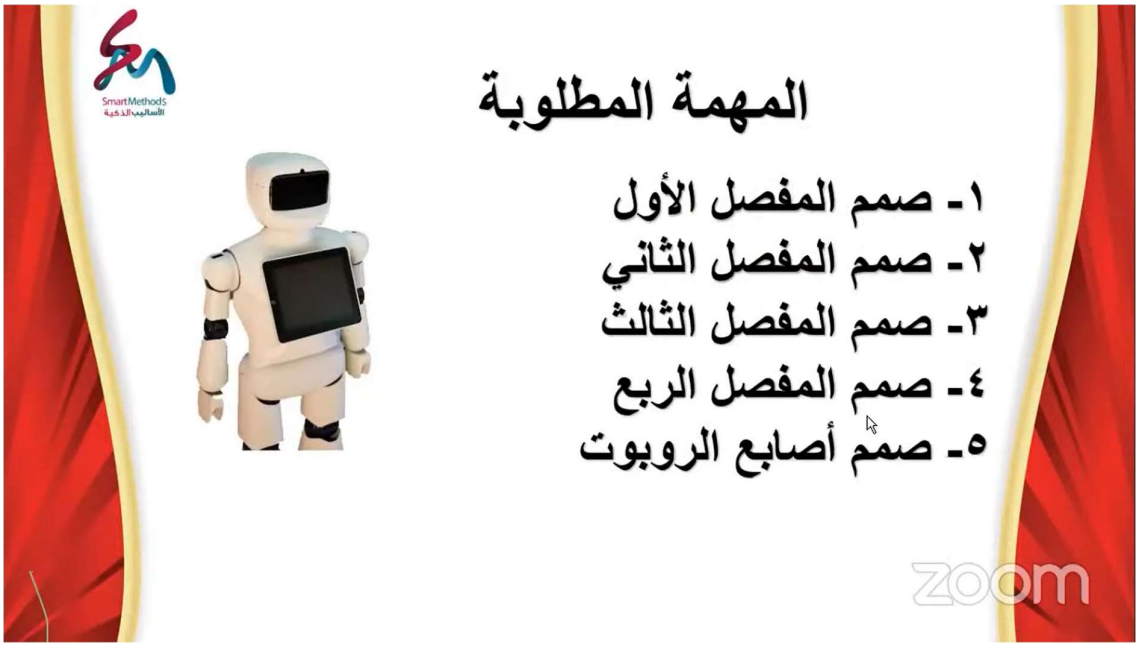
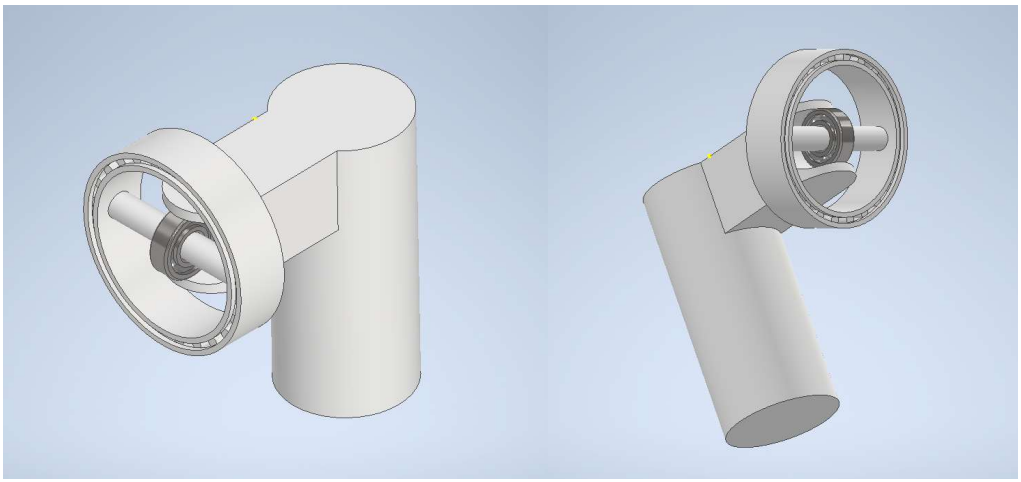
Task description:

- To design the shoulder joint for the humanoid robot. (1st & 2nd Joints)
- To design the joint for the humanoid robot. (3rd & 4th Joints)
- To design a model for a finger joint for the humanoid robot. (5th Joint)

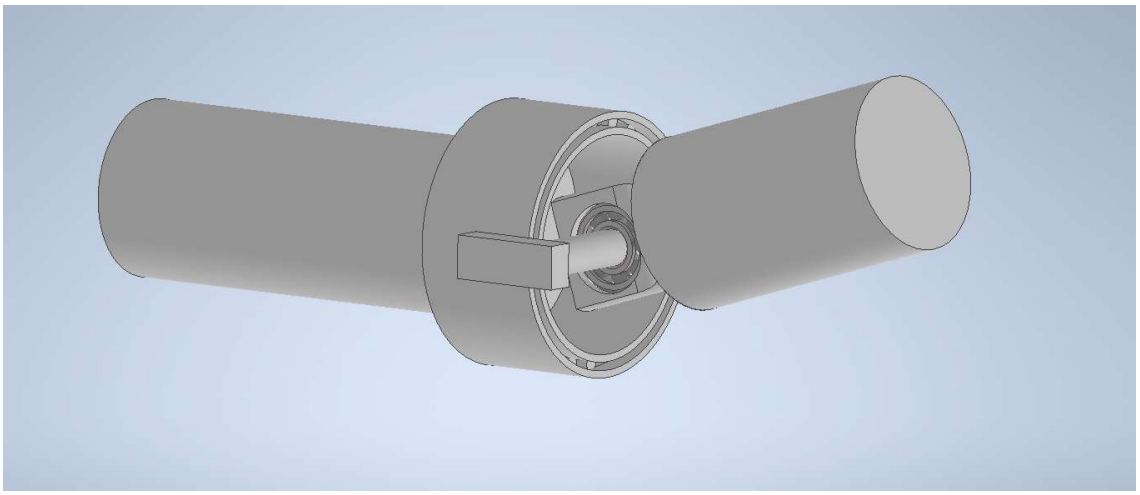


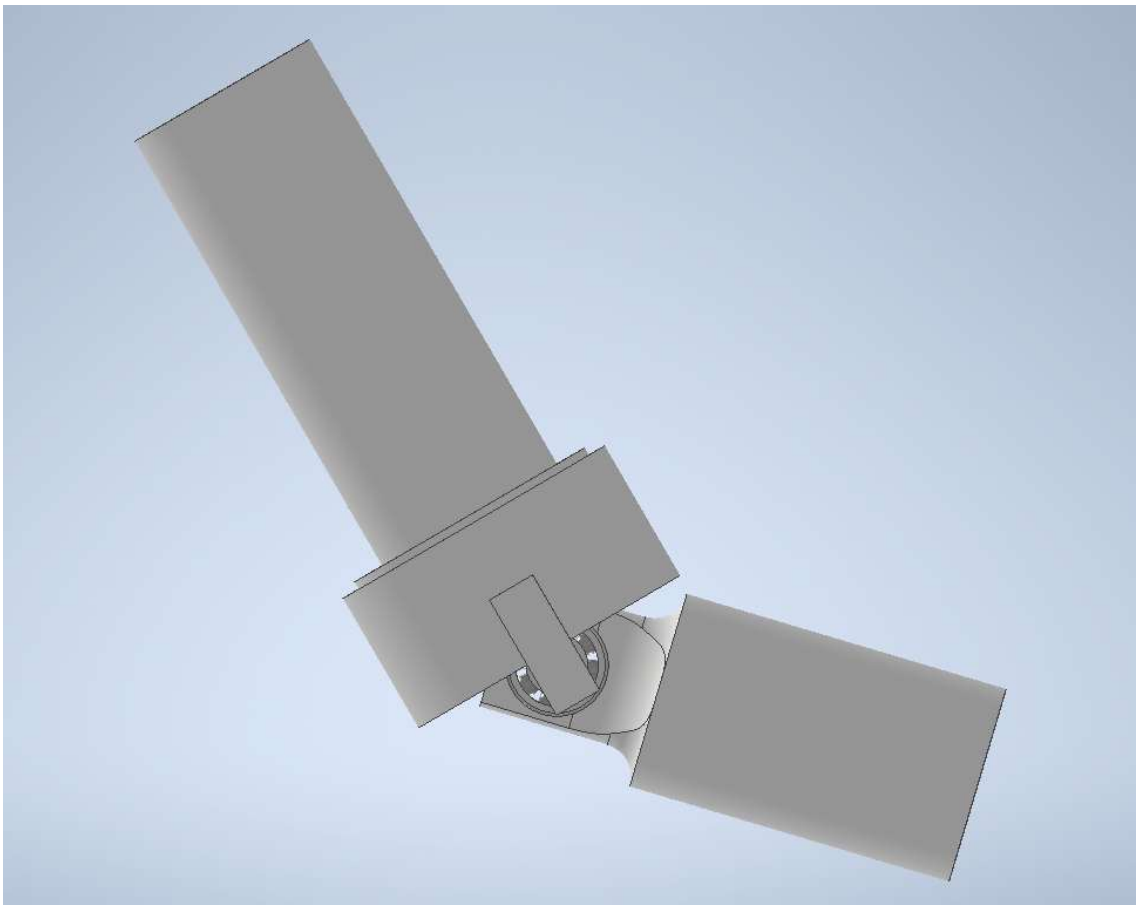
The 1st and 2nd Joints:



This joint design also utilizes the bearing designs made in the second task and in a 3D printing format. The design consists of two main components: a large roller bearing, and the hand attachment.

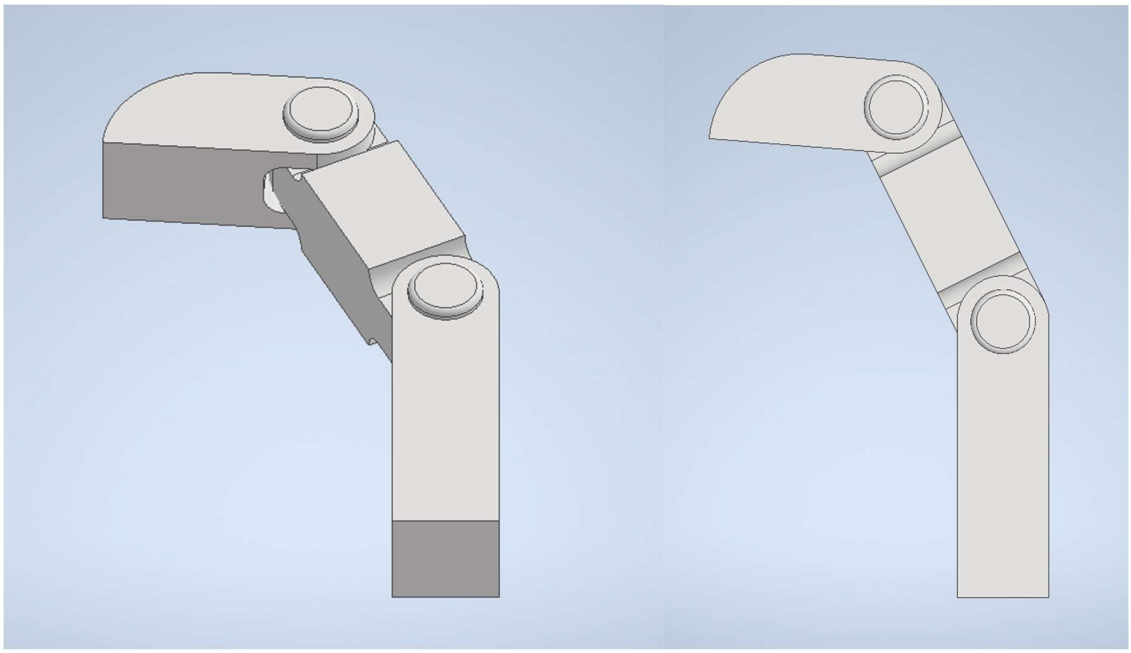
The 3rd and 4th Joints:

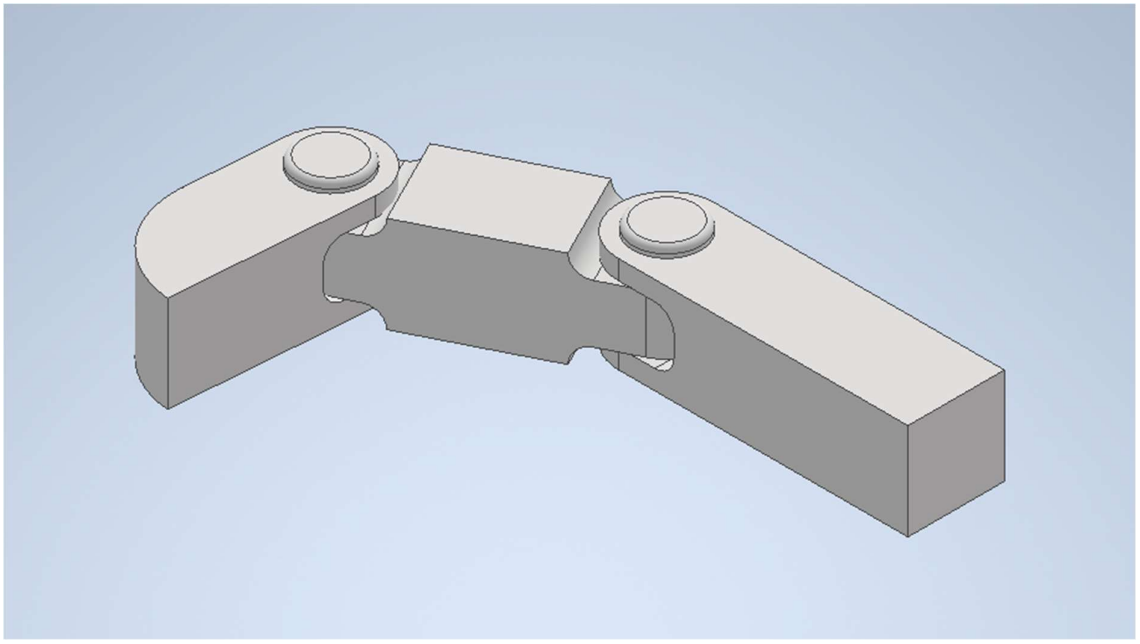




The same mechanism for the shoulder was used here with some modifications.

The 5th Joint:





The design can be replicated, for all four fingers.