

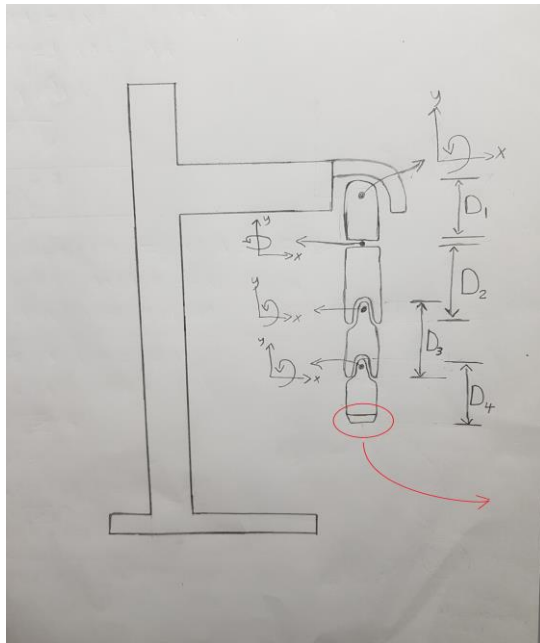
## Requirement:

**Controlled** Robotic Arm mounted on a fixed T-shaped structure.

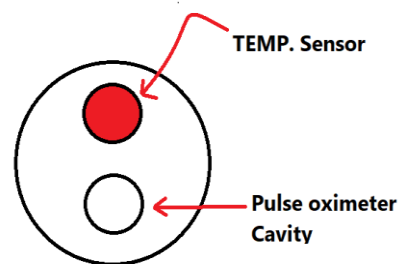
## THE MAIN TARGET IS:

**Control the robot arm and move it in points (X, Y, Z) in space.**

Embedded in the arm an IR temperature sensor + a cavity for a pulse oximeter sensor.



Robotic Arm



The end of the arm at which the sensors will be embedded.

**Suggested total length of the arm is 65 cm:**

- Part1: 15 cm
- Part2: 20 cm
- Part3: 15 cm
- Part4: 15 cm

## Degree of freedoms:

illustrated in the diagram.

## Expected behavior:

The arm is expected to go from point  $(X_A, Y_A, Z_A)$  to point  $(X_B, Y_B, Z_B)$  in space, to **illustrate** this **controlled** movement the arm will move to a point where it can take the patient temperature, also we can move the arm to a specific point and then the patient will be asked to put his/her finger in pulse oximeter cavity to take the heart rate reading.