

## **Team TTD**

### **Project 2: Report**

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a)

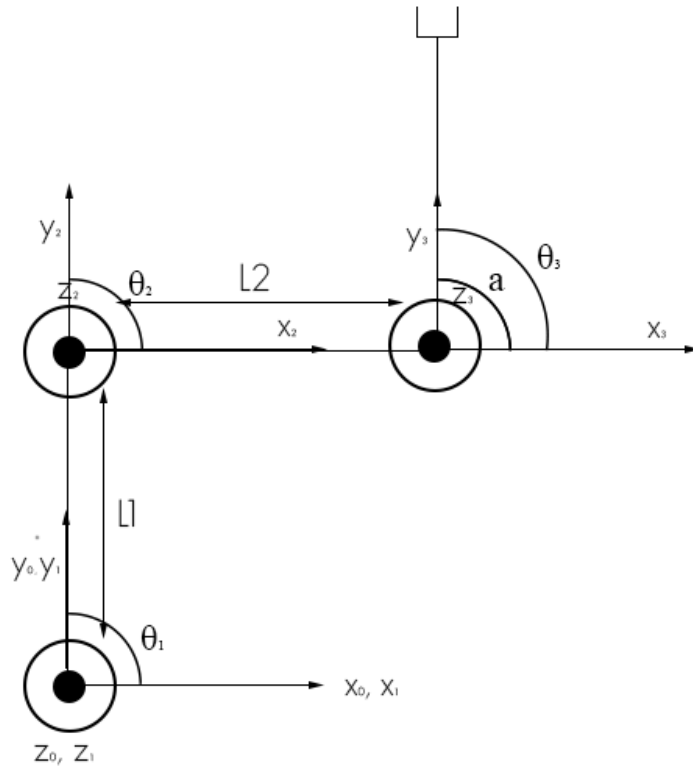


Figure 1: Robot Arm with frame attachments

| $i$ | $\alpha_{i-1}$ | $a_{i-1}$ | $d_i$ | $\theta_i$ |
|-----|----------------|-----------|-------|------------|
| 1   | 0              | 0         | 0     | $\theta_1$ |
| 2   | 0              | $L_1$     | 0     | $\theta_2$ |
| 3   | 0              | $L_2$     | 0     | $\theta_3$ |

Table 1: D-H Parameters

b) Inverse Kinematics

$$x_3 = x_1 \cos(\theta_1) + x_2 \cos(\theta_2)$$

$$y_3 = y_1 \sin(\theta_1) + y_2 \sin(\theta_2)$$

$$a = \theta_3$$