

# **Sri Lanka Institute of Information Technology**



**Year 3 Semester 2  
3D Modelling and Animation  
SE3031**

**1 (b) (i): Industry standards 3D asset modelling and texturing**

# **Contents**

- 1. Tools**
- 2. Techniques**
- 3. Lighting**
- 4. Methods**
  - Texturing Methods**
- 5. Images of Robot**

# Including tools

I select a cube, then move it along the Z-axis by pressing 'G' and 'Z,' making a slight adjustment.

I tab into edit mode and press 'S,' then 'X' to scale it along the X-axis. After that, I right-click and choose 'Subdivide,' repeating this action twice. Next, I add a sphere to the scene, click on it, and then drag it to the desired location. I apply a Subdivide modifier to the cube, select some faces, extrude them inside, press 'P,' and choose 'Separate' to create a separate part.

I obtain a circle, tab into edit mode, click, press 'F' to create a face, 'E' to extrude, and then drag to shape it. Additionally, I select some faces, press 'Alt + E,' and choose 'Face Subdivision.'

I apply modifiers to this object, including a Mirror tool. I select the eye dropper tool to pick the body as a reference for mirroring to the other side, creating a duplicate.”

## Technique

### 1.Move Cube along Z-Axis:

Shortcut: **G** then **Z**

### 2.Subdivide Cube:

Shortcut: Right-click, then choose 'Subdivide' or use **Ctrl + R** in Edit Mode

### 3.Add Sphere:

Shortcut: **Shift + A** to open the Add menu, then choose Mesh > UV Sphere

### 4.Extrude Faces Inside:

Shortcut: **E** to extrude, then move the mouse inward or input a value, followed by pressing **Enter**

### 5.Separate Selection:

Shortcut: **P** to open the Separate menu, then choose 'By Selection'

### 6.Create Circle (Face):

Shortcut: **Shift + A** to add a Mesh > Circle, then **F** to fill the face

### 7.Extrude and Shape Circle:

Shortcut: **E** to extrude, then move the mouse or input a value, followed by pressing **Enter**

### 8.Face Subdivision:

Shortcut: **Ctrl + Alt + S** or use the menu: **Mesh > Faces > Subdivide Faces**

### 9.Apply Modifiers:

Shortcut: **Ctrl + A** to open the Apply menu, then choose the desired modifier

### 10.Mirror Tool:

Shortcut: **Ctrl + M** to activate the Mirror tool

### 11. Eye Dropper Tool:

Shortcut: **C** to activate the Color Picker (Eye Dropper) tool

# Lighting Methods

I choose an area light, press 'G' and 'Z' to move it, and slightly increase its size. Also, let's boost the power to something like 500 watts."

## Texturing Methods

I choose a new material, click on it, and then select a white color. After that, I set the roughness size to 0. Additionally, for another part, I choose black and grey. Moving on to the display section, I select black, and for some faces, I choose blue. I set the Emission strength to 5

## Images of Robot



