### "SEA PORT USING MODERN OPENGL (3.3)"

#### **OUTLINES**

- Introduction
- Keyboard Controls
- Features

#### INTRODUCTION

- OpenGL 3.3 is used to simulate Sea port in computer graphics.
- Basic objects that are created in this project are as below
  - 1. Sea
  - 2. Sand
  - 3. Road
  - 4. Truck

- 5. Ship
- 6. Container
- 7. Craine
- 8. Stop Bar

#### **KEY CONTROLS(VIEW)**

- Press W: Forward
- Press S: Backward
- Press A: Left
- Press D: Right
- Press I: Up
- Press K: Down

- Press X: Pitch up
- Press V: Pitch down
- Press Y: Yaw left
- Press U: Yaw right
- Press Z: Roll left
- Press B: Roll right

#### **KEY CONTROLS(LIGHTING)**

• Press 1: Direction Light

• Press 4: Ambient

• Press 2: Point Light

• Press 5: Diffuse

• Press 3: Spot Light

• Press 6: Specular

#### **FEATURES**



Figure 1: Sea port Overview

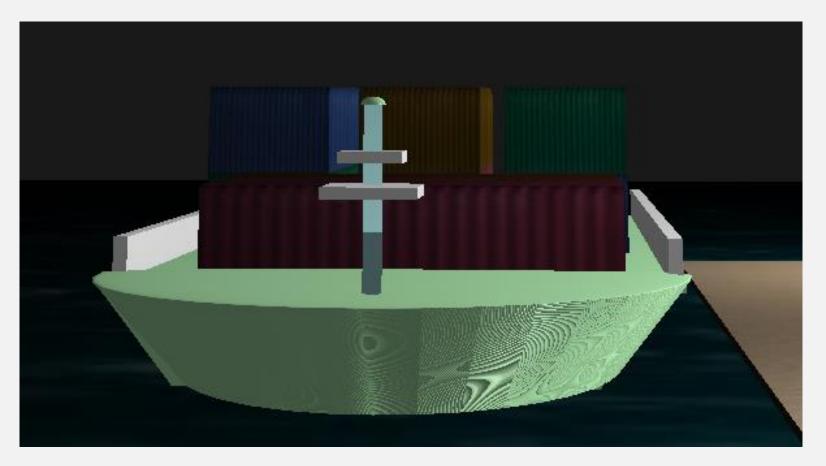


Figure 2: Ship (front view)

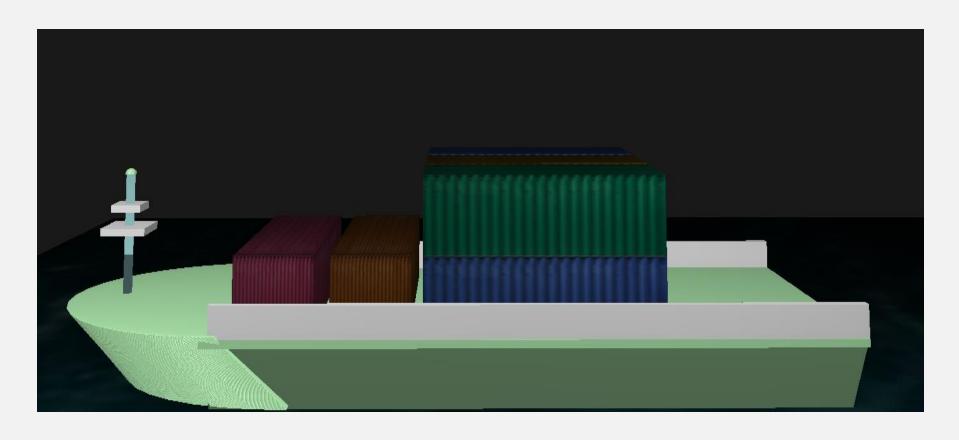


Figure 3: Ship (side view)



Figure 4: Containers



Figure 5: Craine pulling up container from ship

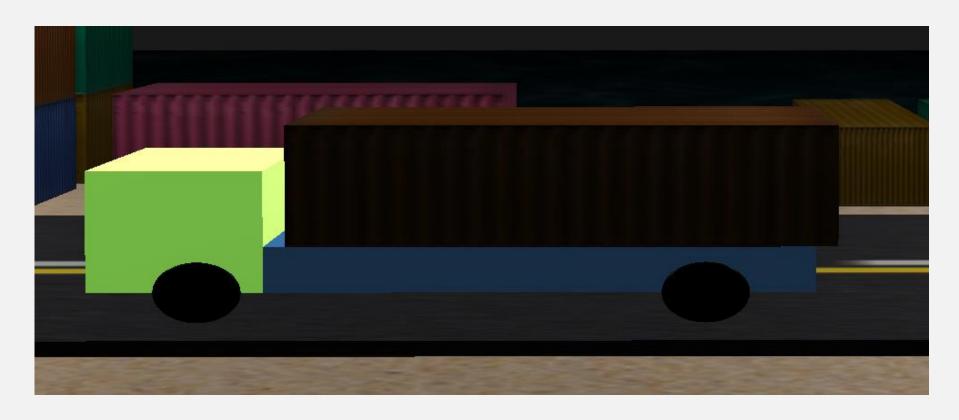


Figure 6: Truck carrying container

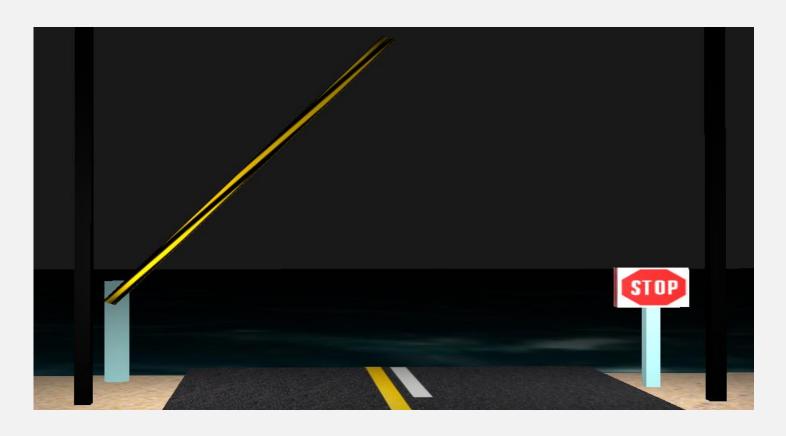


Figure 7: Stop Bar



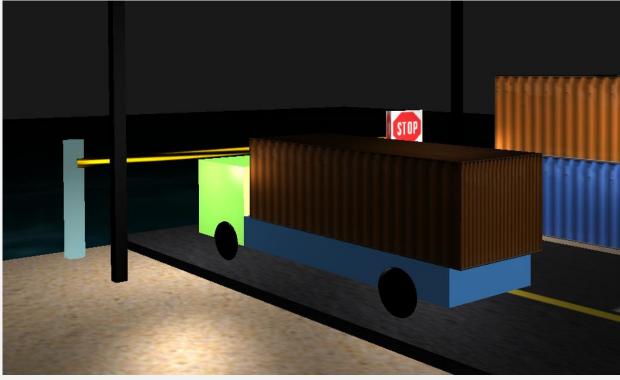


Figure 8: Truck stopping at Stop Line



Figure 9: Road Lights



Figure 10: Sea port Overview with Moon

#### REFERENCES

- <a href="https://learnopengl.com">https://learnopengl.com</a>
- <a href="https://en.wikipedia.org/wiki/Computer\_graphics">https://en.wikipedia.org/wiki/Computer\_graphics</a>

#### THANK YOU