



Final Project

User Guide

 $Computer\ Graphics\ and\ Human-Computer\ Interaction\ Lab$

School of Engineering
National Autonomous University of Mexico

Néstor Iván Martínez Ostoa

Proff.: Ing. Carlos Aldair Roman Balbuena

May, 27th, 2022

Group: 12

Class Code: 6590

Contents

1	Objective			
2	Project Description	2		
3	Virtual space to recreate	2		
4	Virtual space recreated 4.1 Facade 4.2 First Room 4.3 Second Room	2		
5	Running the project	3		
6	Environment interactions 6.1 Camera movement			
	6.3 Animations			

1 Objective

The student must apply and demonstrate the knowledge acquired throughout the course.

2 Project Description

- The student must select facade and a space that can be real or fictitious and present reference images of those spaces for their 3D recreation in OpenGL
- In the reference images, 7 objects must be shown that the student will recreate virtually. Those objects must be as close as possible to their reference image, as well as their environment

3 Virtual space to recreate







Figure 1: Facade and rooms to recreate (reference)

4 Virtual space recreated

4.1 Facade



Figure 2: Recreated facade

4.2 First Room



Figure 3: First recreated room

4.3 Second Room



Figure 4: Second recreated room

5 Running the project

Follow the next steps to run the project:

- 1. Download the project repository from this link
- 2. Open the following file: /Proyecto Final/Release/ProyectoFinal.exe

6 Environment interactions

6.1 Camera movement

Movement through the environment is done with the following keys:

Key	Description
\mathbf{W}	Forward movement
A	Left movement
S	Backwards movement
D	Right movement

6.2 Environment interactions

Key	Description
U	Exterior door animation
I	Room's door animation
J	Leaves animation
K	Bedside furniture's drawer animation
L	Wardrobe's drawers animation
N	Wardrobe's lamp animation

6.3 Animations

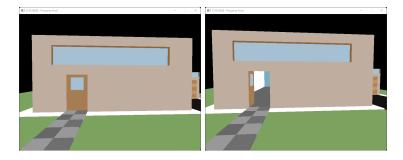


Figure 5: Animation with U key

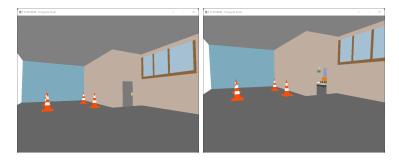


Figure 6: Animation with \mathbf{I} key

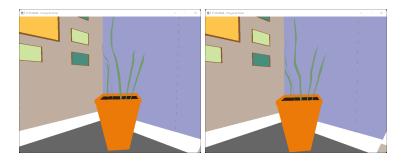


Figure 7: Animation with \mathbf{J} key



Figure 8: Animation with ${\bf K}$ key



Figure 9: Animation with ${\bf L}$ key

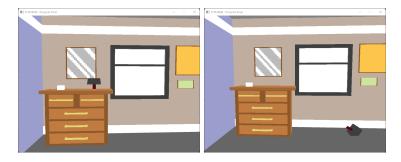


Figure 10: Animation with ${\bf N}$ key