



**NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS  
DEPARTMENT OF INFORMATICS AND TELECOMMUNICATIONS**

SUBJECT: Graphics I

	CHYTIS THODORIS MAXIMILIANOS	1115201700197	sdi1700197@di.uoa.gr
--	---------------------------------	---------------	----------------------

## Moving Light emitting Object using Phong Model

## Description

A model of a Face and lit Sphere are rendered. The Sphere is constructed using vertices and indices. VAO,VBO and EBO buffers are used to draw the wireframe of the sphere. The sphere emits light and orbits around the face that is located in the middle of the environment. Texture is added to the face for it to look realistic. Phong's model is used to adjust the light coming off the orbiting sphere and onto the Face. Controls allow interaction

## Setup, Compile and Execute

- Run: **./env\_setup.sh**  
in order to configure the environment and the needed libraries
- Run **./run.sh**  
in order to run the makefile, compile and execute mainexe

## Controls

“UP” : Move Front

“DOWN” : Move Back

“RIGHT” : Move Right

“LEFT” : Move Left

“ESC” : Exit Program

Mouse cursor : allows changing angle of view

“H” : Increment speed of orbiting Sphere

“J” : Decrement speed of orbiting Sphere

## **Sources:**

<https://learnopengl.com/>

