mini project

Title :- Solar system in Opengl

objective :-

- To understand various computer graphics concepts.
- To implement the & understand the function of opengl.

s/w & h/w used :-

Opengl

Theory :-

Opengl :-

It is cross platform API for writing application that produce 2D & 3D computer graphics.

Solar system :-

The solar system consists of sun & the astronomical objects based to it by gravity . all of which formed from the

Conclusion :-

Collaspse of grant molecular cloud. There are 8 planets that revolve around the sun i.e. mercury, venus, earth, mars, jupiter, saturn, Uranus & Neptune

This project is to implement such a solar system using graphical components like openGL.

Function used :

i) glClearColor ()

It is word to make window on screen solid & white (to clear screen)

ii) glShadeModel()

The enable smooth shading we must set shades of follows:

glShadeModel (GL_SMOOTH)

iii) glEnable()

The depth buffer must be cleared wheneve we redraw the display.

iv) glLight()

It is used to enable light source.

v) glColorMaterial() :
It is used to change a single material property.

vi) myinit() :
Initialize the color buffer , set the points size & set window co-ordinate values.

vii) display() :-
Create & translate all objects in specified location in particular order.

viii) glutPostRedisplay() :-
It ensures that display will be drawn only once. each time program goes throug event log.

Keyboard based interfaces :-

1.) The keys m,v,e,r,j,s,u,h are used to rotat planet.

2) The keys M, V,E, R, J, S,U,N are used to r the planet around sun.

3.) The key Z rotates sun. B gives both rotatio revolution of planet around the rotating cancel revolution & star twinkle.

4) Key A revolve all planets.
5). The key B will make the stae twinkle.
6). left mouye button : Ralate anti clockwise.
7) Right mouye button : Rotate clockwise.

• Conclusion :

In this project, sun, planeh are acts as per
uyee command.
This project implemented with various CG component
like Opengl.