**Project Title:** The Solar System

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| Id: 16-31194-1 | Id-16-31232-1 | Id-16-31274-1 | Id-16-31210-1 |
| Sec-A | Sec-A | Sec-A | Sec-A |

**Introduction:**

It is an educative scenario based project. From this project we can know about the planets and there details. We can visualize the movements of the plants around the sun and all planets are moving of their own orbits. Its features are user friendly a user can easily visualize the system and also can gain some knowledge about the solar system with visualization.

**Objective of the project:**

The main objectives of the system is to make a user friendly visualization environment and gain some information. In the project user can view the full solar system and can set the camera view by using arrow keys with their comfort. Also user can see each individual planets and their details user only need to press the first latter of the planets. Some information and the picture o rotating planets will be viewed. Not only viewed the system will automatically read all the information that are written in there. User need not read the details about planets he/she only need to hear.

**System Implementation method:**

For implementing the project Computer Graphics OpenGL functionalities are used. Used some OpenGL header file to implement the project. Windows.h, glut.h, gl.h, glu.h, glext.h, stdio.h, time.h, math.h this header file are used. For light effect and for color glLightfv(),glEnable(GL\_LIGHTING) are used. For reading the text in the project renderBitmapString() function is created that make a string as a charter and viewed in the opengl project. For camera setup gluLookAt() matrix function is used. Used the glRotatef() for rotating the orbits and the planerts. glTranslatef()and glScalef() used for maintain the shape and translate the location of the planets. glutSolidSphere() is used for give the shape of the circle. sndPlaySound() function is used for give the sound effects.

Some extra functions are created for doing the things. Keyboard() function is used to take the key from the keyboard and give a desire output. Update() function is used for update the rotation and time speed of the planets. keyboardSpecial() function used for setup the camera level and change the angle by using arrow key of the keyboard.

**Significant of the project:**

The project is useful for visualizing the solar system view and also helpful for gain the some idea about all planets. It is also useful for the children because will like to see the animation view of the solar system and their curecity may increase to know more about the planets. Though the system automatically read the information user need not read they can only heard the information.

**Conclusion:**

The Solar System is a scenario based informative project. It is user friendly user can view the solar system in any angle he/she like. Not only a good scenario based it is also an informative project and mostly useful for the children.

**Referencing:**

Have some help from google and youtube.

**Screenshot of the system:** 



