COMPUTER GRAPHICS PROJECT

Title: Solar system and it's planets.

Submitted to,

Aneem Al Ahsan Rupai

Group 4

Information		
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Faculty use only		
FACULTYCOMMENTS	**Marks Obtained**	
	Total Marks	

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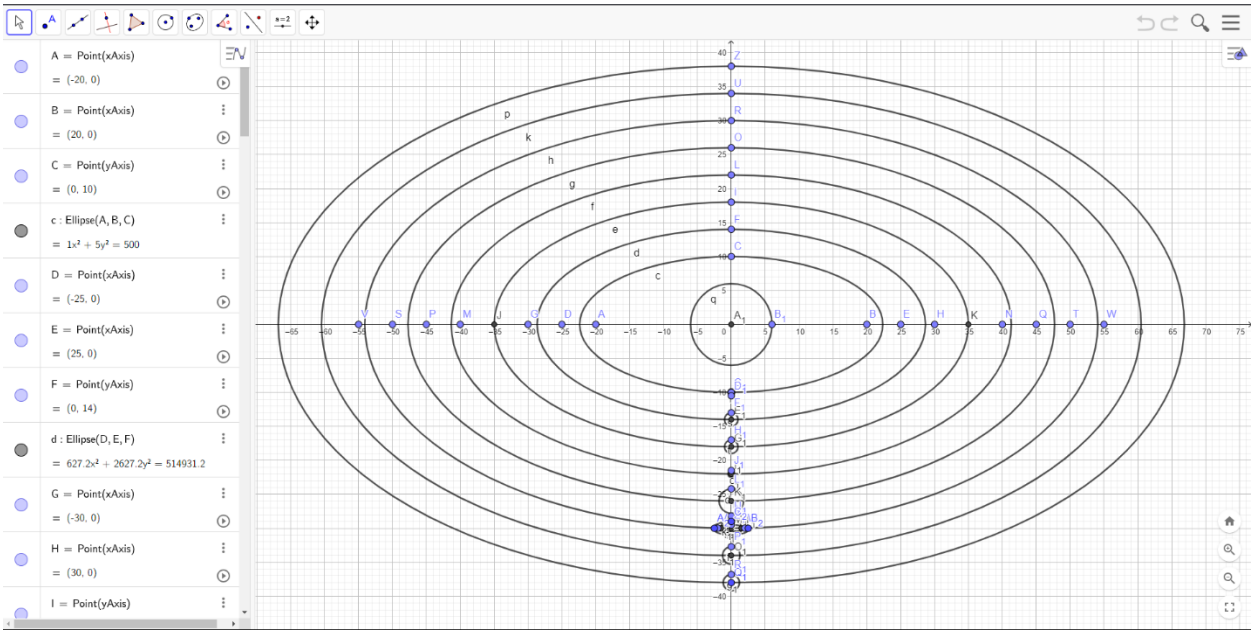
Introduction

Our project, titled “Solar System and Its Planets,” is designed on a 2D plane and includes four distinct scenes: Facts and Exploration on Neptune, Facts and Exploration on Earth, the Solar Model, and Facts and Exploration on Mars. The project features animations that depict the planets orbiting the Sun, the takeoff and landing of a rocket on Neptune along with gravity comparisons, the movement of Mars rovers on Mars, and various scenarios on Earth. Additionally, we have implemented functionalities that allow users to issue commands using keyboard inputs.Such as:

- **“E” or ”e” key:** Pressing the "E" or "e" key will navigate to the solar system model from the home page.
- **“D” or ”d” key:** After transitioning to the solar system model, pressing the "D" or "d" key will display the distance of the planets from the sun.
- **“R” or ”r” key:** Pressing the "R" or "r" key will display the approximate radius of the planets.
- **“H” or ”h” key:** Pressing the "H" or "h" key will return to the home page.

Project Graph



List Of Objects

SL#	Object ID	Object Name
1	001	Solar Sun
2	002	Mercury
3	003	Venus
4	004	Earth
5	005	Mars
6	006	Jupiter
7	007	Saturn
8	008	Uranus
9	009	Neptune

List Of Functions

SL#	Object Name	Function Name
1	star	star();st[][]
2	sun	circle();
3	Planet	ellipse();circle1();
4	Text	drawText();

List Of Animations

SL#	Animation Function ID	Animation Function	Object/Scene
01	01	drawScene(),drawScene2(),drawScene3();	Solar system model

Contribution

Member Name	Implemented Functions	Implemented Animation Functions	Percentage of Contribution
Tanbhir Ahamed Shuvo	Welcomepage, Solar system model	Solar system model,rotation of planet around sun	25%

Conclusion

The Solar System, with its variety of planets and other celestial entities, offers a captivating look into the complexity and magnificence of our cosmic surroundings. From the fiery Sun at its core to the frigid boundaries of the Kuiper Belt, each planet and object plays a vital role in maintaining the dynamic equilibrium of the Solar System. By studying the characteristics, atmospheres, and orbits of these planets, we not only expand our understanding of the universe but also gain essential insights into the conditions that support life. As we continue to explore and analyze these celestial bodies, our appreciation for the intricate and awe-inspiring nature of the Solar System deepens, highlighting the vastness and splendor of the cosmos.