Solar System

Project Description 5
Create a model of the solar system with as many basic details as possible such as the planets and the main moons around each planet. The user should be able to explore each planet and moon that you include in your prototype individually and learn about their basic characteristics. Specifically, for the earth, the user should be able to learn about the effect of the tilt of the earth's axis on the prevalence of seasons on earth. The user may also be able to learn about the occurrence of solar and lunar eclipses. There are bonus marks for every additional physical phenomenon that you illustrate

Instructions for Run the Solar System

Step 1 : download the zip file
Step 2 : Extract the folder
Step 3 : In that folder you will find a folder "Solar System", open it.
Step 4 : In that folder you will find a Application file which has named "Solar System"
Step 5 : Click on the file , the solar system will run on your PC in full screen mode.

Instructions for Explore the Solar System

- The first screen will display four buttons to explore each section: Solar Space, Seasons on Earth, Solar Eclipse, and Lunar Eclipse
- When you click on the Solar Space button, you will navigate to the entire solar system. On the screen's top-right side, there are four buttons: Top View, Front View, Reset, and Exit.
  - You can explore each planet by clicking on it
    - When you click on a planet, it will pop up with information about it, and by default, it will display the front view of that planet
    - You can explore the top view of that planet by clicking on the 'Top View' button.
    - Similarly, you can return to the front view of that planet by clicking on the 'Front View' button.
    - There are 6 controllers to navigate the virtual reality experience: the UpArrow key for upward movement, the DownArrow key for downward movement, the LeftArrow key for leftward movement, the RightArrow key for rightward movement, the W key for zooming in, and the S key for zooming out.
    - When you click on the Reset Button, it will display the top overview of the complete solar system.

- - - When you click on the Exit button, you will exit to this part and return to the First Screen, where you can explore other sections or revisit it.
- When you Click on the Season of Earth, it will navigate to the season of Earth
    - It will showcase a revolving Earth around the Sun, demonstrating how the seasons change.
    - There is a pitcher on the top-left, which demonstrates which hemisphere is northern and which one is southern, as well as presenting the angle of Earth.
    - There are two buttons, 'Top View' and 'Front View', which allow you to explore the top and front views, respectively
    - When you click on the Exit button, you will exit to this part and return to the First Screen, where you can explore other sections or revisit it.

- When you Click on the Solar Eclipse, it will navigate to the Solar Eclipse
    - It will showcase a revolving moon around the earth, demonstrating how the Solar Eclipse occurs.
    - There is 'Replay' button, which allow you to replay the model
    - When you click on the Exit button, you will exit to this part and return to the First Screen, where you can explore other sections or revisit it.

- When you Click on the Lunar Eclipse, it will navigate to the Lunar Eclipse
    - It will showcase a revolving moon around the earth, demonstrating how the lunar Eclipse occurs.
    - There is 'Replay' button, which allow you to replay the model
    - When you click on the Exit button, you will exit to this part and return to the First Screen, where you can explore other sections or revisit it.

Tool used : Unity

Thank You

Team: Collider