

# Solar System Simulation

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## Code Flow

1. Output how you interact with the program:
  - Left/Right Arrow to turn the craft
  - Up/Down Arrow to move the craft
2. Initialize the Window
3. Enable the required OpenGL modes
4. Initialize the celestial objects
  - Each Object requires:
    - The distance from the origin
    - The radius of the object
    - The orbiting speed
    - The rotation speed
    - The emission matrix
    - The ambient matrix
    - The shine matrix
    - The Texture of the object
5. Call the frame counter function
6. Call the orbiting animation function
7. start the drawing routine
8. Increment the frame count
9. Set the main viewport
10. Adjust the camera position
11. Draw the solar system
12. Set a secondary viewport
13. Draw Borders of Viewport
14. Draw Solar System and Spacecraft
15. Swap the buffer

## Screen Shots



