Scene: place objects, lights and cameras <https://threejs.org/docs/#api/en/scenes/Scene>

Object3D: the base class for most objects <https://threejs.org/docs/#api/en/core/Object3D>

Group: group objects together <https://threejs.org/docs/#api/en/objects/Group>

requestAnimationFrame() creates a loop to draw the scene, and the animation will pause when the user visits other browsers. <https://threejs.org/docs/#manual/en/introduction/Creating-a-scene>

Three.js Scene Graph: <https://threejsfundamentals.org/threejs/lessons/threejs-scenegraph.html> ,including another version of solar system demo

Use two packages in this lab:

npm install –prefix . three

npm install –prefix . dat.gui

Note: Teapot has to compensate to stay on top of earth

Scene Graph Strucutre:

-Scene

-Solar System

-Sun

-Earth Rotation

-Earth

-Teapot

-Saturn Rotation

-Saturn

-Torus

-Moon

Final results demo: we can see the teapot is always on the top of earth.

A picture containing scatter chart

Description automatically generated A picture containing graphical user interface

Description automatically generated