

Assignment1

Solar System in OpenGL

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Deadline

Wednesday, 31 October 2018 at 23:55.

Task

- Implement a Scene Graph. (35%)
- Extend the ApplicationSolar class in order to display a solar system with at least 8 planets revolving around a sun and one moon. (35%)
- Comment the code extensively. (10%)
- **Additional Task:** implement camera controls with mouse look using the mouse and the keyboard. (20%)

Tips & Suggestions

- You need a **SceneGraph** class, a **Node** superclass from which derive a **GeometryNode** and a **CameraNode** classes (see Figure 1).
- The orbits can be assumed as being circular.
- A change of the mouse position results in the execution of the mouseCall- back function, containing the x and y movement as arguments.
- The relative distance between the planets is up to you.
- Do the first point for next week, I will be available to take a look to you work and help you.

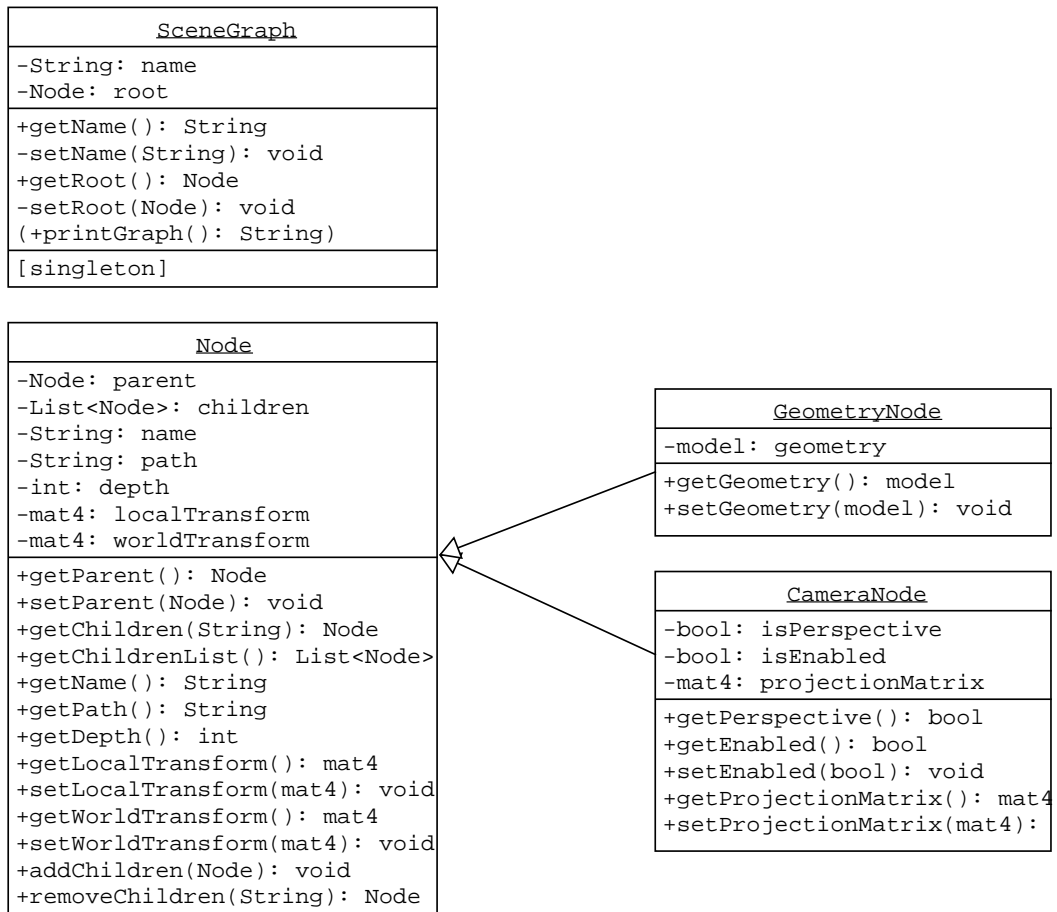


Figure 1: UML representation of the classes you have to implement