Report on Identified Refactoring Opportunities for SC/ST Refactoring

Each of the identified control-fields represents an SC/ST refactoring opportunity.

Statistics on Identified Control-Fields:

1. No. of Classes (IPC): 185
2. Classes Qualified for Refactoring (QC): 12
3. %QC: 6.486%
4. No. of Fields in All Classes (IF): 905
5. Indentified Control Fields (CF): 16
6. %CF: 1.768%
7. No. of Control-Fields for SC Refactoring: 6
8. No. of Control-Fields for ST Refactoring: 10
9. No. of Control-Fields Associated with More Than 15 Conditional-Statements: 1
10. No. of Control-Fields Associated with 11 to 15 Conditional-Statements: 0
11. No. of Control-Fields Associated with 6 to 10 Conditional-Statements: 0
12. No. of Control-Fields Associated with 2 to 5 Conditional-Statements: 15

Identified Control-Fields. A control-field is denoted as <C, f>, where 'f' is a field of a class with fully-qualified name 'C'. Uses = Number of conditional-statements associated with a control-field.

Uses	Replace Type Code with Subclass (SC)
17	<org.sunflow.core.ParameterList.FloatParameter,interp>
5	<org.sunflow.core.ShadingState, includeSpecular>
4	<org.sunflow.core.ShadingState, includeLights>
3	<org.sunflow.core.primitive.TriangleMesh.WaldTriangle,k>
2	<org.sunflow.RenderObjectMap.RenderObjectHandle,type>
	<org.sunflow.core.primitive.Plane,k>

Uses	Replace Type Code with State (ST)
5	<org.sunflow.system.UI, canceled>
4	<org.sunflow.core.Geometry, builtTess>
3	<org.sunflow.core.tesselatable.BezierMesh, smooth>
2	<org.sunflow.core.Geometry, builtAccel>
	<org.sunflow.core.photonmap.CausticPhotonMap, storedPhotons>
	<org.sunflow.core.Texture, loaded>
	<org.sunflow.core.photonmap.GlobalPhotonMap, storedPhotons>
	<org.sunflow.core.ShadingState, behind>
	<org.sunflow.core.tesselatable.BezierMesh, quads>
	<org.sunflow.core.shader.UberShader, glossyness>