Report on Identified Refactoring Opportunities for (SC/ST) Refactoring

The tool identifies the Control-Fields and conditional constructs (Switch/If) that use these Control-Fields to simulate the (SC / ST) refactoring. It prioritizes the Control-Fields (refactoring opportunities) based on the following criteria:

- Number of conditional constructs that switch on Control-Field
 Group i represents i different conditional constructs where the Control-Field is used
- 2. Average size of the conditional body
- 3. Number of control values
 - 2-3 control values
 - 3-6 control values
 - 6-n control values
- 4. Presence of conditional constructs with respect to the class of declaration (COD) of Control-Field
 - In COD (A)
 - Outside (B)
 - Mixed (C)
- 5. Qualified for SC or ST
- 6. Static Field
- 7. Have subclasses already

Input Benchmark Statistics:

No. Of Classes: 185

No. Of Primitive Felds: 506

No. Of Control-Fields for Subclass Pattern: 6 No. Of Control-Fields for State pattern: 10

Total No. Of Control-Fields: 16

	Uses	Replace Type Code with Subclass (SC	<u></u>	Uses	Replace Type
	17	<pre><org.sunflow.core.parameterlist.floatp< pre=""></org.sunflow.core.parameterlist.floatp<></pre>	(B)	5	<org.sunflow.sy< td=""></org.sunflow.sy<>
-	5	arameter,interp> <pre> <org.sunflow.core.shadingstate,< pre=""></org.sunflow.core.shadingstate,<></pre>	(B)	4	<org.sunflow bui</org.sunflow
-	4	includeSpecular>	(D)	3	<org.sunflow.core< td=""></org.sunflow.core<>
	4	<pre><org.sunflow.core.shadingstate, includelights=""></org.sunflow.core.shadingstate,></pre>	(B)	2	esh, <org.sunflow< td=""></org.sunflow<>
	3	<pre><org.sunflow.core.primitive.triangleme sh.waldtriangle,k=""></org.sunflow.core.primitive.triangleme></pre>	(A)	_	buil
-	2	<org.sunflow.renderobjectmap.render< td=""><td>(B)</td><td></td><td><pre><org.sunflow.core hotonmap,<="" pre=""></org.sunflow.core></pre></td></org.sunflow.renderobjectmap.render<>	(B)		<pre><org.sunflow.core hotonmap,<="" pre=""></org.sunflow.core></pre>
		ObjectHandle,type> <pre><org.sunflow.core.primitive.plane,k></org.sunflow.core.primitive.plane,k></pre>	(A)		<org.sunflow.core< td=""></org.sunflow.core<>
					otonMap, s
					<org.sunflow.< td=""></org.sunflow.<>
				1	

Uses	Replace Type Code with State (ST)		
5	<org.sunflow.system.ui, canceled=""></org.sunflow.system.ui,>		
4	<org.sunflow.core.geometry, builtTess></org.sunflow.core.geometry, 	(A)	
3	<pre><org.sunflow.core.tesselatable.bezierm< td=""><td>(A)</td></org.sunflow.core.tesselatable.bezierm<></pre>	(A)	
2	<pre><org.sunflow.core.geometry, builtaccel=""></org.sunflow.core.geometry,></pre>	(A)	
	<pre><org.sunflow.core.photonmap.causticp hotonmap,="" storedphotons=""></org.sunflow.core.photonmap.causticp></pre>	(A)	
	<org.sunflow.core.texture, loaded=""></org.sunflow.core.texture,>	(A)	
	<pre><org.sunflow.core.photonmap.globalph otonmap,="" storedphotons=""></org.sunflow.core.photonmap.globalph></pre>	(A)	
	<pre><org.sunflow.core.shadingstate,< td=""><td>(B)</td></org.sunflow.core.shadingstate,<></pre>	(B)	
	<pre><org.sunflow.core.tesselatable.bezierm< td=""><td>(A)</td></org.sunflow.core.tesselatable.bezierm<></pre>	(A)	
	<pre><org.sunflow.core.shader.ubershader,< td=""><td>(A)</td></org.sunflow.core.shader.ubershader,<></pre>	(A)	