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| Title | Model Manager Test | Test priority | High |
| Module Name  Com.eteks.[sweethome3d](eclipse-javadoc:%E2%98%82=SweetHome3D-4.6-project/src%3Ccom.eteks.sweethome3d).[j3d](eclipse-javadoc:%E2%98%82=SweetHome3D-4.6-project/src%3Ccom.eteks.sweethome3d.j3d).ModelManager | | | |
| Test type | Black box, unit test | | |
| Purpose | Test a functionality for loading furniture model from various type of model files | | |
| Test Description  Test a function for loading furniture model from various type of model files | | | |
| Prerequisite  model files exist in the defined file path  Apply the VM arguments as follow:  -Djava.ext.dirs=lib/windows/i386;lib,  -Djava.ext.dirs=lib/windows/x64;lib,  -Djava.ext.dirs=lib/macosx:lib,  -Djava.ext.dirs=lib/linux/i386:lib  or -Djava.ext.dirs=lib/linux/x64:lib  according to your system and its architecture, except under Java 7 and Mac OS X,  where VM arguments should be:  -Djava.ext.dirs=lib/macosx/java3d-1.6:lib -Djava.library.path=lib/macosx/java3d-1.6  -Djogamp.gluegen.UseTempJarCache=false | | | |
| Dependencies  j3dcore and j3dutils library, Vecmath vector arithmetic library, Batik SVG Toolkit | | | |
| Input Data  A path of existing model file with name “coffee\_machine.obj”  A path of existing model file with name “test.obj”  A path of existing model file with name “test.dae” | | | |
| Expected Result  The number of nodes of read in coffee machine model object is equal to 2  The number of nodes of read in test OBJ model object is equal to 1  The number of nodes of read in test DAE model object is equal to 2 | | | |
| Actual result  The number of nodes of read in coffee machine model object is equal to 2  The number of nodes of read in test OBJ model object is equal to 1  The number of nodes of read in test DAE model object is equal to 2 | | | |
| Steps   1. Assign the path of model files into the list 2. Execute the test | | | |
| Output  number of nodes read from the model file | | | |
| Exit criteria  number of nodes read from the model file equal to expected number of nodes defined in the test case | | | |
| Recommendations  Assign multiple files and expected node number, run test with multi threads. The test is changed to use an array to store those path and expected values, then constructs equal number of threads to test the file loaders in individual thread. | | | |
| Post-condition  Test case run successfully with no assertion error | | | |
| Notes  The test is changed to use an array to store those path and expected values, then constructs equal number of threads to test the file loaders in individual thread. | | | |
| Finite State Machine  Inspected execution results of four type of model file loaders, the main function starting from resource file initiation, then try to use OBJ loader, end with LWO format and report error if no suitable file loader. When an appropriate loader found, start load the model data. Afterwards, test the model object is valid by checking the number of node is bigger than 0, and then consistency of model object is evaluated by checking if it equals to expected number of nodes. | | | |