

Autodesk FBX SDK Exercise 02

Exercise 02: Create an importer and list the nodes of a FBX file

First, please note remaining exercises are mainly setup for Visual Studio 2010 (VS) on the Windows platform. In order to run any of the samples on Mac OS, or Linux, you will have to start with a base project for that platform and add the skeleton source code to it.

1. Set environment variables for the project to load correctly and find your copy of FBX SDK. You need these two variables:

```
ADN_FBXSDK_VER= <FBX SDK Version>
ADN_FBXSDK_PATH=<your install location>
```

For example, you might set them like:

```
set ADN_FBXSDK_VER=2013.1
set ADN_FBXSDK_PATH=D:\me\FBX\FbxSdk\%ADN_FBXSDK_VER%
```

Resulting in:

```
ADN_FBXSDK_VER=2013.1
ADN_FBXSDK_PATH=D:\me\FBX\FbxSdk\2013.1
```

Hint, you can set these variables in a Visual Studio command window for that session. If you start Visual Studio (devenv) from that window, it will pick up the variables without having to modify the global or user settings for the machine.

2. Open the “FBX-SDK-Exercise-02\Skeleton\fbx-exercise-02.vcxproj” project file in Visual Studio
3. Open the “fbx-exercise-02.cpp” source code file in the VS editor and scroll down to the “main” console application entry point function. Within this function, you will implement certain functionality for the export of an ASCII FBX file. The source code is commented to ask you for this functionality and is also listed here:
 - a. Using the console input arguments, accept a file name using FBX utility classes.
 - b. Create an instance of the FbxManager
 - c. Create and initialize the importer
 - d. Create the scene object that will be filled with the imported data
 - e. Import the FBX file into the scene
 - f. You can now cleanup the importer memory
 - g. Print out the animation takes in the scene

- h. Also traverse the scene nodes and print the data. There is a helper function already implemented to do this. Review the code to see how the traversal works. The output goes to the console, so to see it you will have to run it at a console command prompt, add a pause statement (ie. `scanf()`), or redirect the output to a file.
 - i. Finally clean-up and end the program
- 4. Run the program on the two sample FBX files. Using this program, you can also inspect the FBX output from your favorite Autodesk exporter tool (for example, both Maya and 3ds Max can export FBX files).

NOTE: The solved version is also included in the adjacent sub-directory to help you if you are stuck.