

CH10_002

EXERCISE

COMPILING TORQUE IN OS X

Exercise Files

Starter – n/a

Answers – n/a

Exercise Mission

n/a

Special Setup

If you have not already done so, please install the the engine SDK (with source code). In this exercise, I will assume that the SDK is installed on your desktop in a folder named "Torque Game Engine 1.5.2 SDK/Torque SDK/". For the remainder of this exercise I will simply refer to this as "SDK/".

Getting Xcode

On the off chance that you haven't installed Xcode yet, you can get it from the Apple website at: <http://developer.apple.com/tools/xcode/>. Once you have downloaded this, please install it on your system and you'll be ready to go.

Warning

Please be aware that I am not a daily OS X user. I primarily work in Windows so you'll have to bear with me if I don't describe some things quite the way you're used to hearing them or thinking of them.

Synopsis

In this exercise, we will walk through the basic steps that are required to compile the engine under OS X using the Xcode tools.

These instructions are specific to the Xcode version 2.5 (latest version for OS X 10.4), but should work just as well for version 3.0 (for OS X 10.5).

Prerequisites

1. [ch1_001.pdf "Using The Kit"](#)

Exercises

1. [Opening The Project \(pg 2\)](#)
2. [Selecting a Build Target \(pg 3\)](#)
3. [Your First Build \(pg 4\)](#)
4. [Getting Your Files In Place \(pg 4\)](#)
5. [Adding New Folders/Files \(pg 5\)](#)

COMPILING TORQUE IN WINDOWS

1 Opening The Project

Locate the file "*SDK/xcode/torque_xcode_2_2_UB.xcodeproj*" and double-click it. This will open the build file (see figure 1 below).

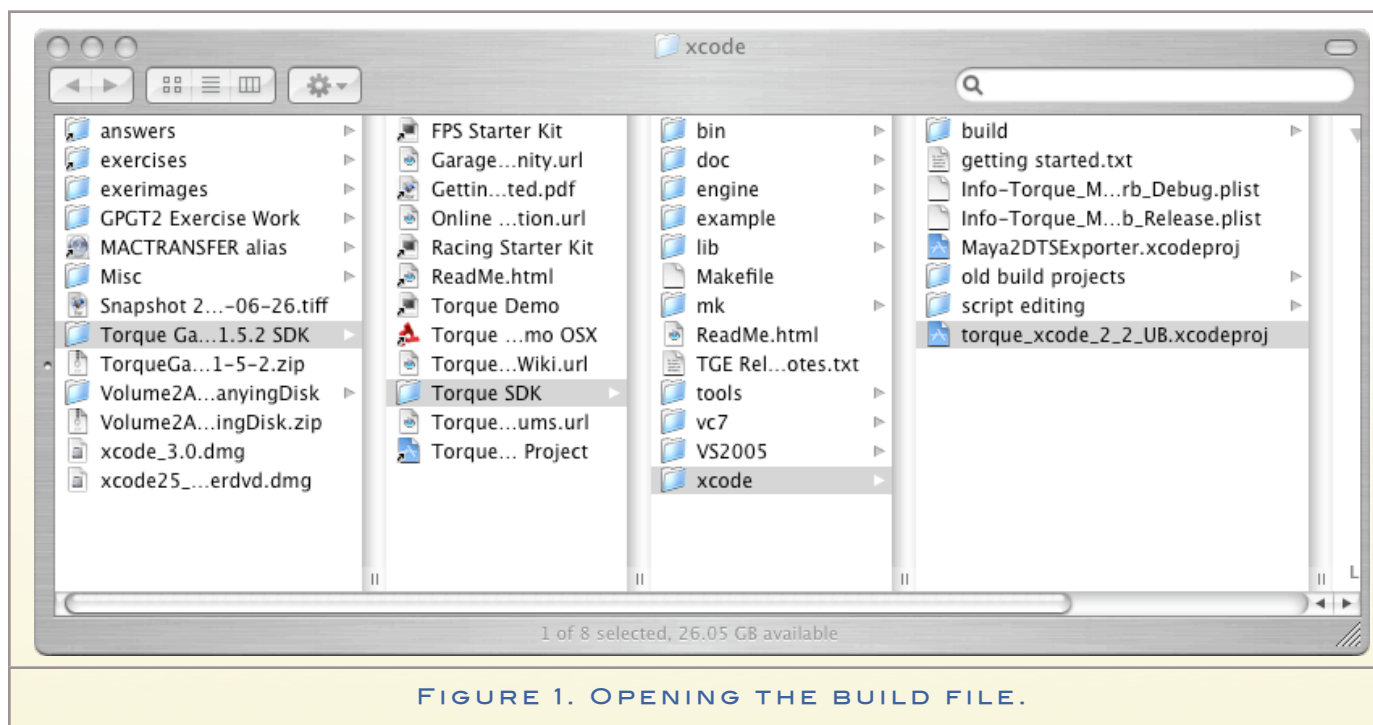


FIGURE 1. OPENING THE BUILD FILE.

COMPILING TORQUE IN WINDOWS

2 Selecting a Build Target

When Xcode finishes loading, you should have something like figure 2 below. I use the word "like" very loosely, because your screen layout is likely to vary from mine.

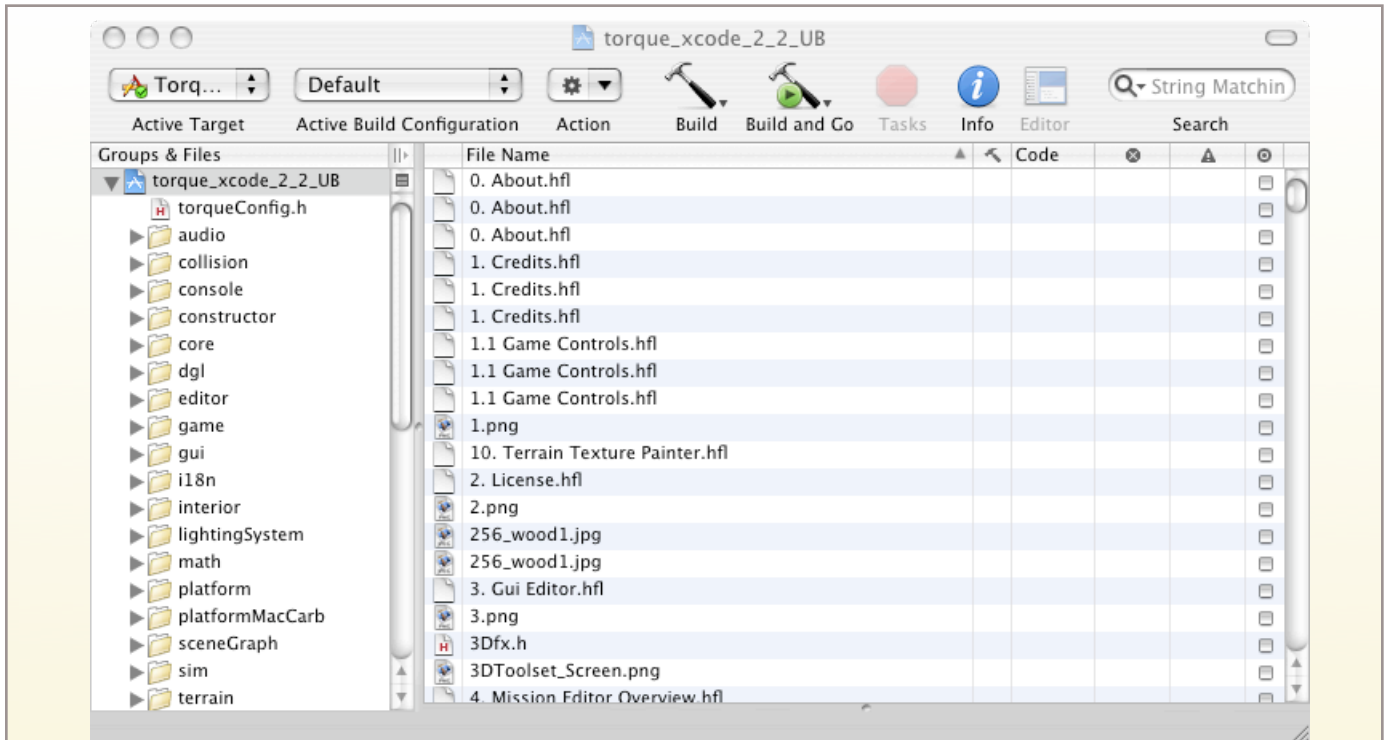


FIGURE 2. THE TORQUE SDK PROJECT IS OPEN.

While you are working on exercises (and later on your own), you will need to choose either a “Debug” or a “Release” build target (XCode calls it an “Active Target”).

You can select the target to build by clicking on the “Active Target” drop-down (upper left corner of application window; see figure 3), and then by clicking on one of the targets (see figure 4). For now, let's leave it on the debug target.

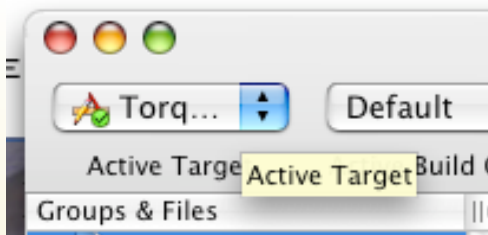


FIGURE 3. ACTIVE TARGET DROP-DOWN

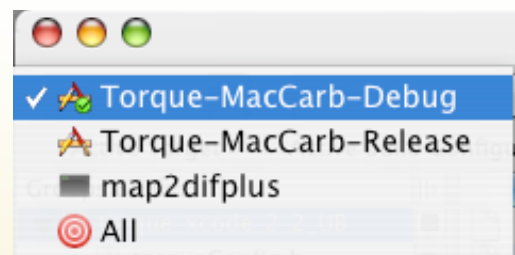
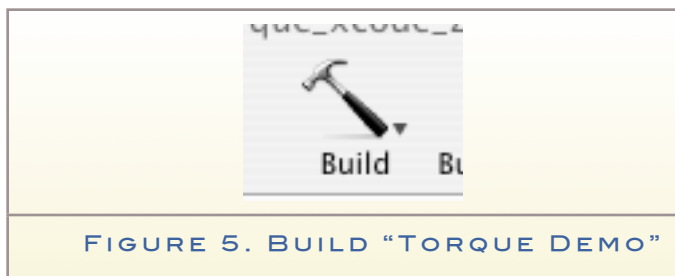


FIGURE 4. SELECT DEBUG TARGET

COMPILING TORQUE IN WINDOWS

3 Your First Build

Now, we are ready to do our first build. To do this, simply click on the build icon (figure 5) and wait for the build to complete.



This build will take some time depending on your machine, so you may want to take a break, get some coffee, watch a short show.... Ah! It's done!

4 Getting Your Files In Place

Before we can add any new files to the "Torque Demo" project, we should first copy them into an appropriate location.

For the purpose of this exercise, I suggest that you locate the "*SDK/engine/game*" directory and create a new subdirectory named "myFiles".

Now, copy the file "*gpgt/engine/answers/chapter10/exer_004.cc*" (from the location you installed the accompanying disk) into the newly created directory.

When you are done, you should have a new directory and file:

"SDK/engine/game/myFiles/exer_004.c"

COMPILING TORQUE IN WINDOWS

5 Adding New Folders/Files

Now that we have a new file, let's add it to our project.

To add new files to a project ("Torque Demo" is a project), you need to decide where to add them.

Generally, I like to have my directories match my project folders. So, we'll follow that guideline in this example.

In this example, please expand "torque_xcode_2_2_UB" so it looks like figure 6 below and right-click (or the equivalent single-button action) on the game directory. Finally, select the "Add -> New Group" option from the context-sensitive menu that pops up (also shown in figure 6).

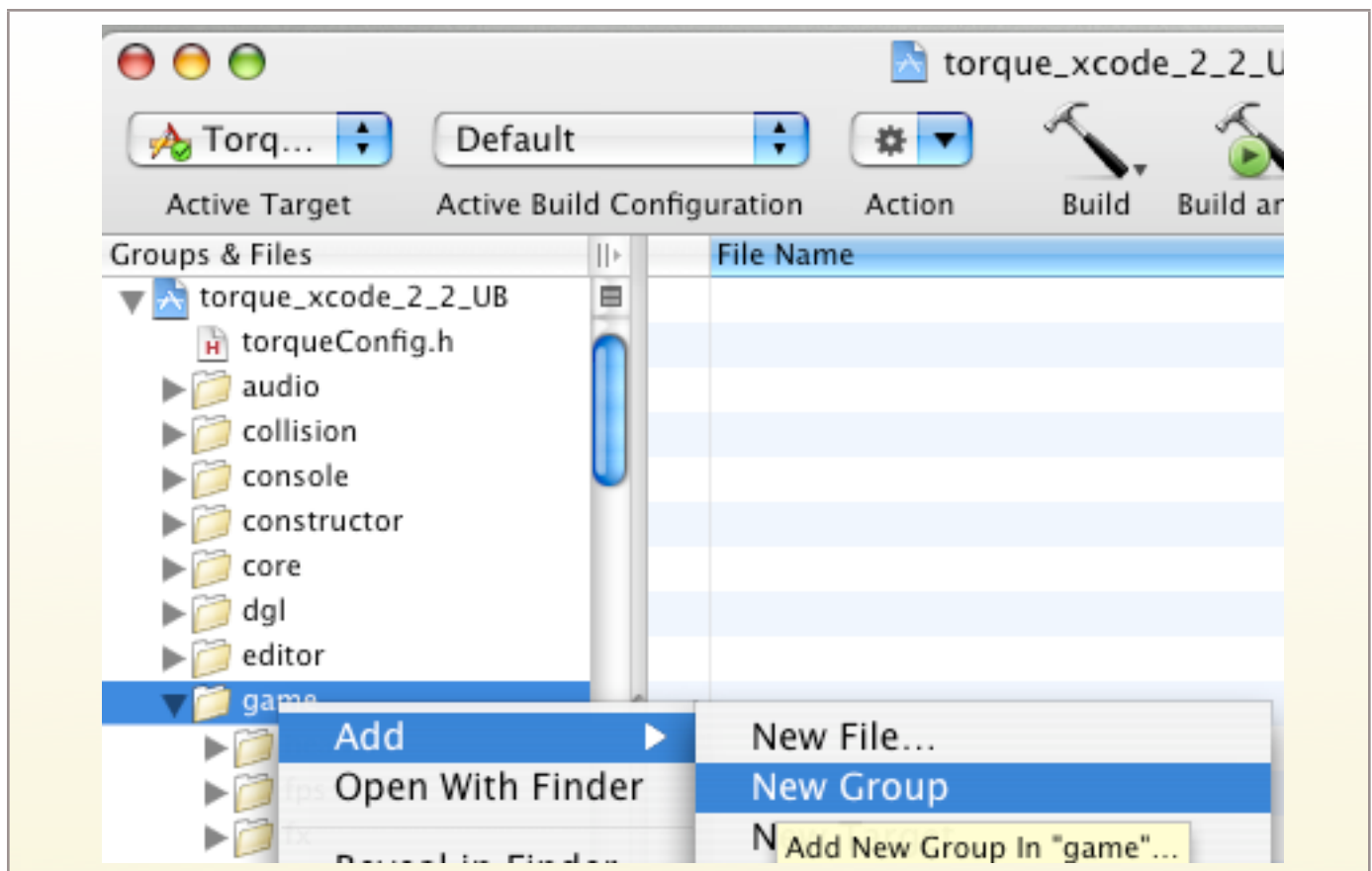


FIGURE 6. ADDING A NEW GROUP

After you select "New Group", a new group will be added to game, named "New Group". Simply rename this group to "myFiles" to match your directory name..

COMPILING TORQUE IN WINDOWS

To add new files to this folder, we simply click on the new group (folder) we added, then click on the action drop-down (see figure 7 below) and select “Add->Existing Files...”.

This will bring up a finder dialog. Now, find the file we added above, and “Add” it.

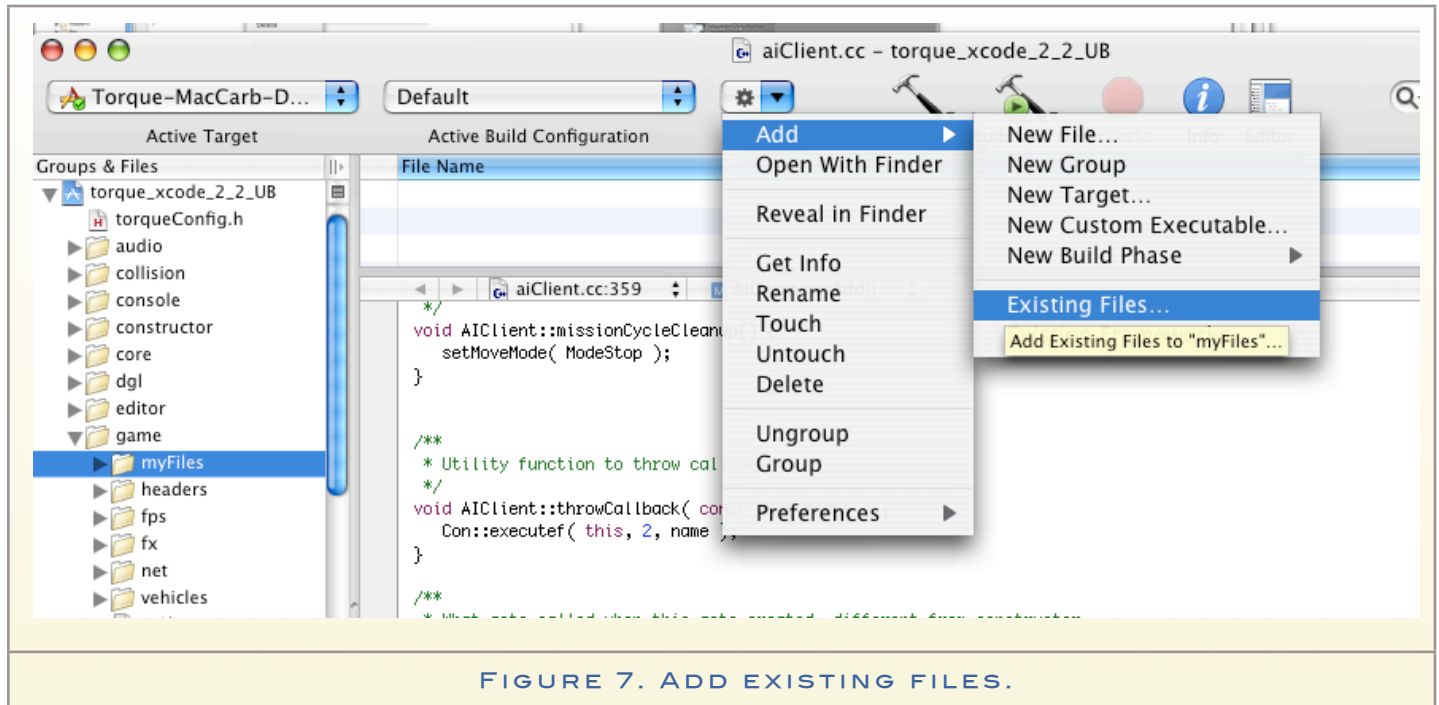
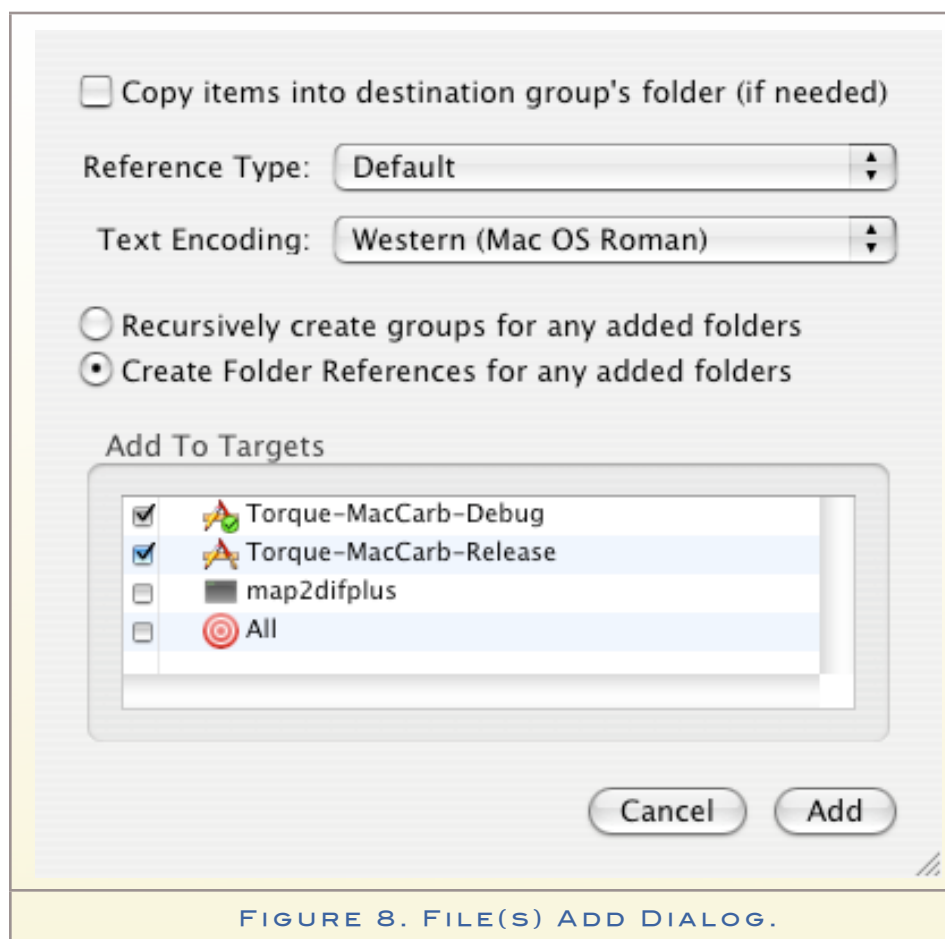


FIGURE 7. ADD EXISTING FILES.

When you do this, an “Add Dialog”. will pop up (figure 8). Be sure your selections match those in figure 8 (below) and click “Add”.

COMPILING TORQUE IN WINDOWS



Yes, there are other ways to add files, but I find this to be the easiest. So, for now, please try it my way. When you have done this, the file "exer_004.cc" will appear under "myFiles".

Test Compile

Now, you can compile again, by clicking the "Build" button like we did before, and the new file should be compiled into the engine.

As you can see, adding new files to the engine and compiling is pretty easy with Xcode.