

UTAustinX: UT.6.01x Embedded Systems - Shape the World

KarenWest (/dashboard)

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For each lab we will first design, develop, and debug in simulation. Since Lab 2 does not require you to build any hardware or software, all you will do here is run the example program in simulation mode. This step also verifies you have properly installed **Keil** and **TExaS**, and you can interact with the automatic grader. You will find the example files and starter codes for lab in the \Keil\TExaSware directory. In particular the Lab 2 starter code is in the directory \Keil\TExaSware\Lab2\_HelloLaunchPad

- 1) Open the Lab2 project file, which is the file Lab2.uvproj in the Lab2\_HelloLaunchPad directory.
- 2) Verify it is configured to run in the simulator
- 3) Build the project
- 4) Start the debugger in simulation mode
- 5) Run the program and interact with the switches, notice the LED outputs

If you do not see the window with the Port F input/output, execute Peripherals->TExaSPortF. Another trick to reset all the windows in their default position is to execute Window->SetViewToDefault.

**GRADE IN SIMULATION** 



PROFESSOR JONATHAN VALVANO: Let me show you how to get a grade for the

lab 2 simulation.

We begin by taking this number from edX and then going over to Keil.

We make sure we're in simulation mode by looking at Options.

And here in the debug window, we see we are using the simulator to debug. 01/28/2014 05:28 PM Push OK.

0:00 / 0:00

Next we build the project which is compiling, and then we

debug it in the simulator.

That number we got from edX will then go into this window here, so I'm going

to execute a paste, and there's the number.

And now when I'm ready to grade, I push the grade button.

In this window over here, we can see what the grader is doing.

It is running tests, first the initialization.

It's running with this switch not pressed, and it passed.

It's running with the switch pressed, and it is testing to see if the green

light toggles.

And it passed.

We got 100.

Help





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