CPE 301 – Embedded Systems Design Fall 2019

EXTRA CREDIT - HOMEWORK No. 10 - DUE BEFORE 11:59 PM, December 6

NO LATE Homework will be accepted for this extra credit assignment

Description of Purpose

The purpose of this assignment is to learn more about circuit hardware description languages. This assignment is designed to give us a basic introduction of how to program in this language as well as to be able to describe hardware signals and the circuits themselves. Overall, while we might not be able to go in depth about the topic in class, this assignment is a good backbone to start learning about description languages.

Perform a WEB search for VERILOG and VHDL programming tutorials and pick two for each language which you think are useful. Also, briefly examine the history of both languages and examine their similarities and differences.

- 1. Print out 1 representative page from each of the best 4 tutorials (2-Verilog and 2VHDL) including URLs.
- 2. Write a 2-4 page report, **in your own words**, describing what you learned and why you think your chosen tutorials are good. Include references (URLs) to any really good web pages describing or comparing the languages.
- 3. Do NOT hand in more than 8 pages.

Be sure that you reference any *quotes* or *figures* you use from your search. It is OK to include material from other sources in your written report as long as you reference the source. *It is not OK to just cut and paste* from other sources and pretend you wrote the material. This is true for anything you prepare for any class, and if you do not reference the source it is considered plagiarism which is

academic dishonesty.

For Example:

The excerpt below is taken from the current University of Nevada, Reno web page defining academic standards http://www.cis.unr.edu/ecatalog/Default.aspx?article_list_id=25995 (copied 11/22/2011).

"Academic dishonesty is against university as well as the system community standards. Academic dishonesty is defined as: cheating, plagiarism or otherwise obtaining grades under false pretenses. ...

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Plagiarism is defined as submitting the language, ideas, thoughts or work of another as one's own; or assisting in the act of plagiarism by allowing one's work to be used in this fashion. ...

Cheating is defined as (l) obtaining or providing unauthorized information during an examination through verbal, visual or unauthorized use of books, notes, text and other materials; (2) obtaining or providing information concerning all or part of an examination prior to that examination; (3) taking an examination for another student, or arranging for another person to take an exam in one's place; (4) altering or changing test answers after submittal for grading, grades after grades have been awarded, or other academic records once these are official.."

Note that the example above references the source and makes it clear that I am quoting from it rather than writing my own words like I am in this sentence.