EEL3801: Computer Organization

Project 2 Report Submission Guidelines

1.0 Submission Requirements

1.1 Preface

As when responding to a professional work solicitation/submission, we gain practice with the protocol that Submission Requirements must be met for the submission to be considered for credit. Most companies set this standard, and most government agencies uphold such requirements per their legal contracting and acquisition processes. So we learn these conventions in our course projects and gain practice with formal "Project Solicitation"-style Task Definitions.

1.2 Submission Mechanism

Please upload the submissions identified below to webcourses using the Assignments tab. No other form of submission can be accepted.

1.3 Project Report file

For your project report, submit a *single* file in .pdf, .doc, or .docx format with the filename **`Project-2-Report-<LastName>-<FirstName>.doc`** where the fields <LastName>-<FirstName> are replaced with your last name and first name, or else .pdf or .docx extensions as appropriate. This submission will be a single file containing your entire report for the project. If your file is not already a single **`.doc`**, **`.docx`** , or **`.pdf`** file, please convert it using free online tools such as http://www.convert-jpg-to-pdf.net/ or merge it using http://www.pdfmerge.com/

1.4 Incremental Submission

Upload your submissions as you progress in creating results, which will overwrite previous partial submissions. Only the last submission received before the due date/time will be graded.

2.0Grading Rubric

Project Report submission: 100 points total as follows:

- **Professional preparation: [3 points total]** as follows:
  i.e. Typed document with text of the paragraphs in Times New Roman 11 pt font, clear and grammatically well-formed explanations, cover sheet provided, page numbering and document heading numbering (1.0, 2.0, 3.0, etc to identify the required sections listed below). [3 points]
- **Report Content: [97 points total]** as follows having the following numbered section headings:

  1.0 Project Description: project name, narrative description of at least 4 sentences, including identification of program inputs and outputs. [5 points]

  2.0 Program Design: narrative description of how your code operates, and a flowchart with sufficient explanation about the program design for someone else familiar with MIPS to be able replicate your design [20 points for detailed narrative per below items and 5 points for high quality flowchart per below items]

  2.1 Detailed explanation on the assembly code. [10 points]

  2.2 Detailed explanation on code optimizations in Part B. [10 points]

  2.3 High quality flowchart for the assembly code mentioned in **Section 2.1**. [5 points]

3.0 Symbol Table: a 2-column Table describing all Registers used and their specific Purpose in the code, where each register is listed on a separate row and identified by register name **`$t0,`** **`$s0,`** etc., as well as any Labels used and their purpose on separate rows. [10 points for register table per below items and 10 points for label table per below items]

3.1 Register table for registers used in the assembly code [10 points]

3.2 Label table for labels used in the assembly code [10 points]

4.0 Project 2 Part B: Please include all the data analysis and calculations in Project 2 Part B in this section. [10 points]

5.0 Learning Coverage: provide a meaningful list of at least 5 technical topics learned from this project that you could mention in a job interview. [15 points]

6.0 Prototype in C-language: paste the C-code in the report as you do not need to submit a .c file and do not need to provide a screenshot of the C-language output for this project. However, the .c code shall be a viable fully working prototype for all parts to receive credit. [10 points]

7.0 Test Plan: provide details in sentences identifying the inputs chosen to test the program and why these were selected, and justification why they provide adequate test coverage. [5 points]

8.0 Test Results: provide screen shot(s) of at least 3 proper MIPS code executions in MARS for your Test Plan inputs. [5 points]

9.0 References: provide a list of all reference materials you used in the project. [2 point]