## **CprE 3810: Computer Organization and Assembly Level Programming**

## **Team Contract – Project Part 2**

Project Teams Group	#: A_02	
Team Members:	Matthew Estes	
	Luke Olsen	-

Discuss the following aspects of teamwork with your team – make sure to get input from each member. Write down your team's consensus for each of the bolded headings. Italicized text contains instructions and examples and should be deleted once you've read it. Please see the example contract for rough length expectations.

**Course Goals:** List and acknowledge the goals of your individual team members. Examples may include:

- learn everything about computer architecture
- know enough to understand security risks posed by hardware primitives
- get an A/B/C/Pass in the course
- minimize the number of lost points
- prepare myself for a career in hardware design
- prepare myself to be able to do research involving FPGAs
- be able to explain the workings of a stored-program computer from gates to C

## **Team Expectations:**

- Conduct: What are the expectations for personal conduct of group members?
  - Contribute to the project and make dealines and communicate effectively
- **Communication:** What is the best mode of communication for the group? How often should communication occur? How fast should a response be expected?
  - During lab time and over discord. A response should be as soon as possible.
- **Group conventions:** *Naming conventions? Compilation and simulation methodology? Testbench strategies? Do file usage? Version control strategies? Commenting standards?* 
  - Use the same naming conventions throughout all files. The compilation and simulation can be modeled off of the previous labs, so same as before. Version control and files usage will be tracked by github repository

- Meetings: Given the significant portion of the course that the lab covers, it is expected that your team will spend more time working on the labs than in your scheduled lab sections. How will your group expect to handle this? Please include at least two additional times outside of lab that your team can meet (preferably in-person). Examples of other issues to consider include:
  - Work together in-person outside of lab sections?
  - Work together online outside of lab sections?
  - Work separately on responsibilities?
    - We can meet Monday afternoon and Wednesday afternoon. We will also be meeting whenever possible online.
- Peer Evaluation Criteria: Now that you have experience working on a 381 lab with a team, please create a brief criteria for how effort and contribution are defined. Note that teams with vastly divergent scores may require a meeting with course instructor and result in different grades for different group members. Teams with reasonably equitable scores will receive the same grade.
  - Contribution

Does work assigned, or does not

- Communication
  - Does communicate, or does not
- Follows group conventions Follows group conventions, or does not
- Attendance for meetings Participates in meetings, or does not

Role Responsibilities: Complete the following planning table. Each lab part should be the responsibility of one team member. Also make sure that no one team member is the lead on both the design and test aspects of a single lab part. These guidelines aid in all students having a complete view of the lab. Note that the non-lead is encouraged to participate and support the lead wherever possible, increasing both the quality of the lab part and each team member's knowledge.

Lab Part		Estimated	Design		Test	
		Time	Lead	Deadline	Lead	Deadline
Software- Scheduled Pipeline	Control Signals	0.5 hr	Luke	Week 11	Luke	Week 11
	Datapath	3 hr	Luke	week 11/12	Luke	Week 11/12
	Testing	3 hr	Luke	week 11/12	Luke	Week 11/12
	Synthesis (human effort)	0.5 hr	Luke	Week 11/12	Luke	Week 11/12
Hardwar e- Schedule	Pipeline Register Update	1 hr	Matt	Week 13	Matt	Week 13
	Data Hazard Avoidance	4 hr	Luke	Week 14	Luke	Week 14

	Control Hazard Avoidance	2-6 hr based on group size	Luke/ Matt	Week 14	Luke/ Matt	Week 14
	Integration (Hardware- Schedule Pipeline)	3 hr	Matt	Week 15	Matt	Week 15
	Testing	3 hr	Matt	Week 15	Matt	Week 15
	Synthesis	0.5 hr	Matt	Week 15	Matt	Week 15

Estimated Time is given as a **very rough** guide for even distribution of tasks assuming you've already read through the lab document and have the prerequisite knowledge. Please note that to be done properly, the test programs will require significant time investment, but will result in a much stronger final design.

**Integrity of Work:** *Do not delete the following.* We agree that the work we provide to other team members and ultimately submit for a grade is a direct result of our own work as described in the course syllabus. Specifically, we will generate all VHDL code ourselves and not copy VHDL code from online sources, other groups, book companion material, or past student projects to which anyone outside of my team has contributed.

Student Signature Luke Olsen Date 10/28

**Student Signature** Matthew Estes **Date** 10/28