The University of Kansas
HC12 - EECS 388: Computer Systems and Assembly Language

Lab Syllabus

Lab Description:
The lab for this course is designed to give you hands-on experience with assembly language and the development board. During each lab, you'll be asked to complete a small project, which will help you to develop understanding of a particular course problem area.

GTAs:

- Jason Agron, jagron@ittc.ku.edu
- Fabrice Baijot, bricefab@ittc.ku.edu

Course Website:
The lab projects, homework, announcements, and other information are available at the course website: http://wiki.ittc.ku.edu/ittc/Hc12

Lab Equipment:
You must bring your own Axiom development board to each lab. No boards are provided. The boards for this course are on sale at the campus book store. Please see your GTA if you have questions about the board.

Lab Preparation:
You should spend approximately two hours preparing for each lab, before you arrive at the lab. This means you should read the lab, and do as many of the problems as possible beforehand. This will ensure that you will be able to demonstrate your lab results by the end of the lab session. The lab assignments are available on the lab website.

The amount of pre-lab work is up to you. If you are willing and able, you may potentially complete the entire lab before the session and show us your results at the beginning. You aren't being graded for effort during the session.

Lab Reports:
Each lab requires that you prepare a lab report. A hard-copy of the lab report for a given lab session is due at the beginning of the next lab session. Emailed reports will not be accepted.

Lab Report Format:
Each lab report must be typed and should contain the following elements:

1. Project Heading:
Your name, student number, course number, lab section number, lab project name and number, and date.

2. Design/Description:
A description of the lab in your own words. Try to summarize in 2-3 paragraphs. You should provide the real results for your lab, regardless of success or failure in your experiment. If the project does not work properly, explain why in the report. Provide the answers to any lab questions, and clearly label them with the question numbers. Provide any output, if requested in the assignment. Label this section "Description." Figures (such as flow charts and/or screen-shots of output) should be included in this section. A proper description should include a flow chart that describes the overall design of your assembly program.

3. Code:
All project code. All code must be properly commented and annotated. Label this section "Code."

4. Evaluation:
A short evaluation of the lab. What did you like about the lab? What could be improved? Label this section "Evaluation."

Tentative Lab Projects:
Lab 1: Introduction.
Labs 2-8: Assembly language projects.
Labs 9-13: Hardware projects.

Door Codes:
Students can get door codes from the EECS Lab Check-Out (Eaton 3048) with written permission from the professor. Consider requesting this if you find yourself needing extra time (e.g., with the oscilloscopes or other lab equipment) to prepare your labs so you can finish them during your normal sessions.

Lab Grading:
Each lab is graded as follows:
Demonstration of results: 60%

Each lab project assignment describes what results need to be demonstrated to the GTA during the lab session. Typically, this will mean running a program and showing that you're able to produce the correct output. You must demonstrate the complete results by the end of the lab session.

However, if you cannot complete a lab during the lab session, you may demonstrate your results at the beginning of the next lab session only. You will receive up to 75% of the total lab grade for results you demonstrate at the beginning of the next session. If you cannot demonstrate your results at the beginning of the next session, you will receive no demonstration credit. In other words, you can't work on the prior lab and demonstrate it at the end of the session. To get any partial credit for your demonstration during the next session, you must trace

the problems and explain to the GTA where in your code the errors are likely to exist, and why. If you are having trouble completing labs, you should consider doing extra preparation for future labs.

Lab report: 40%

Each lab assignment requires a lab report, as described above. Lab assignments may also specify particular elements which should be included in a given report.

<u>Working Together:</u>
You may discuss the lab with each other, and ask questions or offer advice. You may not share any code with each other, or use code written by anyone else. This includes copying code directly from web pages, etc. Such activities can and will qualify as academic misconduct and will be reported to the department.

<u>Lab Attendance:</u>
Attendance for all labs is mandatory, and missing labs can result in an automatic failing grade. Any absence must be approved by the professor.

<u>Making Up Excused Absences:</u>
For any excused absence, you must demonstrate your results at the beginning of the next lab session. This is necessary due to the cumulative nature of the labs. If you need help in lab preparation for a makeup lab, contact your GTA within three days of your absence. Remember, you are responsible for you work, your GTA is only there to assist.

<u>Course Syllabus Disclaimer:</u>
Note that if this syllabus conflicts in any way with the course syllabus, the course syllabus should be considered to be correct.