CS 4390/5372 (Design and Specification of Real-Time Systems)
Lab Reports

Instructor: Dr. Salamah Salamah
isalamah@utep.edu

Lab Report Standard

Your report shall include the header, four sections (1 to 4), and appendices (if applicable) as shown in the example report below. Lab reports must be done individually (unless specified otherwise).

Note: For the lab procedures section, do not copy from the lab handout word by word. Instead, explain what you have done in your own words (e.g. explain the demo programs operations, comment on any required source code modifications).

Lab Grading and Submission

The lab report total score weights up to 25% of the CS5390 course grade. Each lab report will be graded out of a maximum possible 100 points. To get a high score, please address all questions/issues from the lab handout. For example: the handout may ask you to try a command or make parameter changes. Be sure to describe your findings in the report (e.g. the result of the specific command with comment); otherwise, I cannot give you points for your work.

Excerpt from the lab handout: “The amount of thoughts and originality you put in the report shall be reflected in the report grade”

The grading components include (see grading rubric below):

- **FORMAT** (20%): following the report prescribed format, quality of presentation, completeness of all items
- **DESCRIPTION** (40%): clear and unambiguous description of the procedure (resources used, executed steps, configuration, commands, etc.) and results (numerical values, units)
- **EXPLANATION** (30%): appropriate statement of objectives and answer/explanation of the procedures as a response to specified questions (often hidden in the procedures)
- **ORIGINALITY** (10%): correctness and originality of the analysis, individual exploration, and personal observation (it is not the length that counts, one paragraphs in most cases is enough)

Using somebody else’s report will be a clear violation of the code of ethics. Do your own work.

Labs must be submitted by e-mail to isalamah@utep.edu. Reports can be submitted up to 48 hours after the deadline. However, late submissions will be subject to 20% penalty. No later submission is accepted. Better submit even partial work than nothing at all.

NOTES ABOUT THE LAB REPORT

- Try to keep the report under 4-5 pages. Exceptions are justified to attach screen shots explaining your narrative, source code referenced in text (but no lengthy printouts of intermediate results).
- The grading considers quality and originality of report, not the length (see grading rubric)
- Include appropriate section numbers as the example below for different section of your report

Lab rules
1. No food or drink at the computer console or near the equipment.
2. Since CCS1.0510 is a restricted area, please don’t let unauthorized person into the lab.
   Exception: Your guest can come in under your supervision and not be left alone.
Sample Lab Report

NOTE: use font Times Roman 10-11, single spacing; hard copy - one side printing only

<table>
<thead>
<tr>
<th>Header: (no separate front page)</th>
<th>Grade: FOR /20 DES /40 EXP /30 ORI /10 /TOT __100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab # Title of the Lab</td>
<td>CS 5390 Fall 2013, Date of Submission: MM/DD/YY</td>
</tr>
<tr>
<td>Students Names: John Smith (JS - <a href="mailto:smithj@utep.edu">smithj@utep.edu</a>)</td>
<td>Instructor: Dr. S. Salamah</td>
</tr>
</tbody>
</table>

Section 1: Effort
3h 50m (rounded to 15 min, identifying each student contribution if working in pairs)
- Planning and preparation: 40m
- Experiment: JS - 120m (mm/dd/yy on simulator; mm/dd/yy in CCS 1.0510 on hardware target)
- Report writing: JS -70m

Section 2: Objectives
Provide a brief paragraph describing the background and the goals of the experiments.
Example: This week lab experiments focused on ... The objective of the lab was to.....

Section 3: Procedures and Results
An organized narrative describing what you did. Use letter and numbered points referring to the points/items identified in the lab handout (like A1, A2, ... B1, B2 ...). Avoid repeating the obvious: “I went to the lab and sat at the computer” or “I run the program and it worked fine” - be specific telling how did you do what you say you did (include used command lines and/or menu selections, occasional screen shots) to explain what was the outcome of your actions (place for numerical values, shell commands/responses or very short code snippets preferably in text boxes, screen shots, etc. – however, move any lengthy listings and extensive screen shots to Appendices while providing a clear reference to such with a figure number). Explain what you did using the simulator, and what you did on the target hardware (provide specific information about the configuration and the steps of the procedure used). Respond to all specific questions underlined in the handout identifying your answer by letter and number (e.g. A6 or B3)

Section 4: Observations, Comments, and Lessons Learned
A brief concluding paragraph with analysis of the above procedures and results as related to the course material (relate to the class notes, reference materials, textbooks). Include a brief paragraph describing personal experience related to the understanding, ease of use (or not), relation to earlier coursework, etc.

Examples:
“Presented procedures and results allow us to state that there is a difference between ... “
“These results can be confirmed by the ... and section X.Y of the Tornado Reference Manual which states that .... “
“Result of step X dealing with .... allows us to understand .... “
“The experiments allowed me to understand concept of... We/I learned ... “
“The difficulties included lack of access to ... and misunderstanding of ... “
“We/I resolved it by .... It would be good to have ....”

Appendices
New code source, if applicable. When based on an original demo code, provide clearly highlighted any modified/added lines (with comments). Attach only relevant code excerpts. Copy and paste your code (and format for a pleasant presentation) into electronic version of report. The appendices are also a placeholder for any lengthy listing and/or extensive screen shots and must be clearly referenced in Section 3.
## LAB REPORT GRADING RUBRIC

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory (0-60)</th>
<th>Satisfactory (60-90)</th>
<th>Excellent (90-100)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORMAT</strong></td>
<td>Does not conform to specified format, missing items and effort information, page numbers, sections, unpleasant spacing and indentation, exceeding vastly page limit, etc. (0-12)</td>
<td>Follows the format, some sloppiness and minor deviations in spacing and indentation, uneven font, (12-18)</td>
<td>Full conformance to the required format, eye-pleasing, and addressing all required items (18-20)</td>
</tr>
<tr>
<td><strong>DESCRIPTION</strong></td>
<td>Description is marginal, sloppy, missing points, and it is often difficult to assess what was actually done during the lab (0-24)</td>
<td>Description covers majority of the lab items and it is clear to follow, some minor flaws may be visible (24-36)</td>
<td>Description is complete, exhaustive, and correctly covers all the lab items (36-40)</td>
</tr>
<tr>
<td><strong>EXPLANATION</strong></td>
<td>Explanations and response to specific questions are missing, not complete and many incorrect (0-18)</td>
<td>Explanation is complete but response to some questions may be unclear or not responded fully (18-27)</td>
<td>Clear and complete explanation to all questions raised in the assignment (27-30)</td>
</tr>
<tr>
<td><strong>ORIGINALITY</strong></td>
<td>Repeating the assignment text, lack of own observations and comments, evident misunderstanding of the problems (0-6)</td>
<td>Reasonable but limited comments and observations, marginal depth, some minor repetitions (6-9)</td>
<td>Thoughtful, well formulated observations and correct comments (9-10)</td>
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