Protocols for Course Projects
in
CE 160, CE 101 and ELC 152
v. 0.5 (June 2004)

NOTE: This is **not** the final document.

Outline

1. Introduction

CE 160, CE 101 and ELC 152 are courses offered by the Department of Electronics, Computer and Communications Engineering of the School of Science and Engineering, Loyola Schools, Ateneo de Manila University in Loyola Heights, Quezon City, Philippines.

CE 101 and ELC 152 are courses on Digital Signal Processing while CE 160 is a course on Automata Theory. This document is being written after three semesters where course projects have been required in these courses. Course projects were first required in CE 101 in the second semester of schoolyear 2002-2003, then in ELC 152 and CE 160 in the first semester of schoolyear 2003 -2004, then in CE 101 in the second semester of school year 2003-2004.

While this document was written with the courses mentioned above in mind, specific references to these courses have been avoided, whenever this was possible without too much added effort.

2. General Flow of Activities

The course project requirement is announced to students at the start of the semester thru the course syllabus. Students may be expected to come up with a draft project proposal once they have a general idea of the scope of the course. Consultations on the draft proposals should follow, leading to finalization of the project proposal.

Preliminary work is not a requirement, but may help in the formulation of a project proposal.

Fullblown work on the project is expected as soon as agreement has been reached on the scope of the project. Students are expected to submit progress reports at regular intervals, and to present their project proposal and whatever progress they have made in class.

A prefinal project evaluation shall be conducted between two and three weeks before the actual project deadline. This serves as a soft deadline for the project. At this point the project should be very close to completion.

The deadline for submission of the project and all project documentation shall be at 4 p.m. of the Monday of finals week, also considered the last week of classes. Penalties shall be given for submissions beyond this deadline.

The requirement of course projects following the protocols of this document is not recommended during the summer semester.

3. General Project Policies, Requirements and Grading System

3.1. The Project Grade

This document shall assume that at the start of the semester various course requirements are assigned fixed weights, whether explicitly or implicitly, as percentages of a basic class standing on which the final grade is largely based. This does not discount the possibility that various additions and deductions might be made to the basic class standing prior to the assignment of a final grade.

The project grade shall form at least 30% of the basic class standing.

Course projects shall be graded over 100 points regardless of their actual weight in the final grade. The 100 points of the project grade are distributed as follows:
     * 10 pts for the formulation of a project proposal
     * 10 pts for 5 progress reports (2 pts per progress report)
     * 10 pts for the oral presentation of the project proposal and progress made so far
     * 10 pts for the prefinal project evaluation
     * 60 pts for the final project defense and project documentation

Various deficiencies may lead to the imposition of penalties on the project grade.

3.2. Language

All project documents shall be in English. All oral presentations and defense shall be in English.

Where the nature of the project is such that it involves the use of languages other than English, the use of such languages shall be limited to aspects of the project that need to be done in those languages. Documentation of these aspects of the project shall be in English.

3.3. Group Work

Students may work on projects individually or in groups. The number of students allowed to work on a given project depends on the nature of the project. This matter is settled during the consultations on the submitted project proposals.

3.4. Use of Opensource Software

All projects shall use opensource software and/or freeware. Exceptions to this rule shall

be granted on a case-to-case basis.

Project documentation shall be in openoffice format.

3.5. Ownership

All projects submitted become the property of the Department of Electronics, Computer and Communications Engineering.

4. Formulation of a Project Proposal

The purpose of the project proposal is to set definite goals.

Students are expected to formulate draft project proposals once an overview of the course has been given. The instructor shall discuss possible projects in class. However students shall not be constrained to choose from among projects suggested by the instructor. Students may formulate proposals based on their own ideas.

Students may be required to report on past projects as part of the process of formulating project proposals.

Students must have at least one draft proposal with a clear description of the expected output. An introduction and background information may help to provide some context for the proposed work. Students may propose projects individually or in groups.

If several groups submit similar proposals, the instructor shall have the final say as to which group would be allowed to pursue the project. This may be based on various factors such as who submitted proposals first and the quality of the proposals.

Students may submit more than one proposal. There is no guarantee that any proposal submitted would be approved.

The 10 points for formulation of a project proposal are given as follows:

> 2 pts - for formulation of at least one draft proposal clearly describing the expected output of the project, and involvement in the identification of possible projects, as might be manifested by active participation in the discussion of possible projects; a student who does not submit any draft gets 0 pts; these pts are given individually based on a student's conduct

2 pts - for participation in the consultative process towards finalization of the project proposal, as might be manifested in attendance of consultation sessions on the project proposal and positive contributions during such sessions; a student who misses consultation sessions shall earn either 1 pt or no pts; these pts are given individually based on a student's conduct

2 pts - for clarity of the objectives of the project in the final proposal, including the availability of verifiable milestones indicating the progress of the project; these points are given to the group based on the approved project proposal

2 pts - for clarity of the methodology in the final proposal as may be manifested by definite statements regarding how various tasks would be carried out, including definite statements regarding how correctness of the work shall be proven or verified; for projects pursued by a group, a clear description of individual responsibilities is also expected; these points are given to the group based on the approved project proposal

2 pts - for comprehensiveness and cohesiveness of the final proposal and agreement between the content of the final project proposal and the result of consultations on the draft proposals submitted; these points are given to the group based on the approved project proposal

A specific timeframe for formulation of the project proposal shall be set in the course syllabus. Points based on the approved project proposal shall be forfeited if no approved project proposal is submitted by the set deadline.

Students must retain a copy of the approved project proposal since this will have to be included in the project documentation CD to be submitted at the end of the semester.

5. Progress Reports

Progress reports are reports written by individuals detailing their activities since the last progress report, or since the start of the project, for the first progress report. Since a progress report is an individual's report about his activities, there should be no need to consult other group member's regarding one's progress report. Individuals shall write their own progress reports without consulting other group members.

Each progress report shall be printed on one whole sheet of short bond paper. Progress reports shall not exceed one sheet of short bond paper. Progress reports must in one sheet of short bond paper give detailed descriptions of an individual's specific contribution to the project during the interval covered by the report. For individuals working as part of a

group, the report must start with a brief summary of the groups efforts during the period covered by the report. The bulk of the report must be about his activities during the period. It is recommended that progress reports terminate with a brief statement regarding what might be expected by the next progress report.

Five progress reports shall be required. Deadlines for progress reports shall be indicated in the course timetable. Progress reports shall be accepted within 24 hours of, but not beyond, the indicated deadlines.

Progress reports are graded as follows:

> 0 pts are given to someone who does not submit a progress report by the indicated deadline, or whose report indicates too little progress, or whose report exceeds one sheet of short bond paper;

> 1 pt is given if progress made is significant but not sufficient; 1 pt is also given when various group members submit similar progress reports;

> 2 pts are given when sufficient progress has been made.

Project groups must retain copies of all progress reports submitted by all group members since these will have to be included in the project documentation CD to be submitted at the end of the semester.

6. Project Presentation

The project presentation shall be scheduled by the course instructor.

The presentation shall be in English.

7. Prefinal Project Evaluation

8. Final Project Evaluation

8.1. Project Documentation

Required Documentation:

The following documentation are required at the end of the semester:

a softbound hard copy of a formal written report on the project
a CD containing the following:
> a copy of the approved proposal
> copies of the progress reports
> a condensed journal-style article on the project with the course instructor as co-
>> author.
> copies of presentation materials used in presenting the project, if any
> a soft copy of the formal written report
> a website for the project
> other forms of documentation as may be appropriate for the particular project

Style

The third person shall be used in the formal written report. The passive voice is recommended in the abstract, and in discussions of the methodology and implementation. These rules do not apply to user's manuals and user's guides included in the documentation, nor to comments in the source code of software developed.

Intellectual Honesty

Intellectual honesty is extremely important. A complete list of references should be included in all documentation. These references should be cited properly and accurately in the text, possibly thru footnotes or endnotes. Credit must be given to all sources of information.

Intellectual dishonesty may be penalized with a 0 for the entire project grade.

8.1.1. Hardcopy

DEFINITION: *Project blue* shall be defined as the shade of blue used for the covers of the majority of project documentation for CE 160 in the first semester of school year 2003-2004.

Hardcopy:

The project documentation hardcopy shall be printed on good quality white short bond paper (8.5" x 11") and shall be softbound with a project blue cover. The spine shall either be black, the same shade of blue as the cover, or a darker shade of blue than the cover.

The cover shall have printed on it the title of the project in large black type followed by a list of the project proponents in smaller type. The names of the proponents shall be listed one name per line in alphabetical order of the surnames, with each name being of the form

<center>Firstname MiddleInitial Surname</center>

<center>or</center>

<center>Firstname Surname</center>

The title shall have a font size comparable to that of 20 pt Times New Roman or larger. The names of the proponents shall have a font size comparable to that of 12 pt Times New Roman or larger.

Both the title and the list of proponents shall be centered on the cover. The title may span several lines.

The main body of the documentation shall be preceded by

a title page, followed by
an abstract page, followed by
(an optional acknowledgment page), followed by
the Table of Contents

Lists of tables, figures, code listings, definitions, and other such lists if relevant and/or desired may follow the Table of Contents.

Chapters, sections, and subsections shall be numbered using Hindu-Arabic numerals. Chapters shall be numbered 1, 2, 3, and so on. (not I, II, III, ...). Similarly, sections might be numbered 2.1, 2.2, 2.3, ..., and subsections 2.1.1, 2.1.2, 2.1.3, and so on.

Normal text in the documentation shall be comparable to 12 pt Times New Roman or larger. Line spacing shall be 1.5.

Each chapter shall start on a new page.

The main body of the documentation may be followed by appendices, as needed. Each appendix shall start on a new page.

If there are appendices, the Bibliography shall follow the appendices.

The title page shall be considered page 1, the abstract page shall be page 2, and so on. Page numbers shall not be displayed on the title and abstract pages of the hardcopy. Page numbers shall be displayed centered on the footer starting with the Table of Contents.

Sample Cover

See next page.

Implementation of an MP3 to XMCS Converter

Beverley Joy G. Ang
Karen L. Arquiza
Renee Gayle M. Chua
Arland S. Mariano
Michael Stephen A. Tonido

Sample Title Page

See next page.

Implementation of an MP3 to XMCS Converter

A Project by

Beverley Joy G. Ang
Karen L. Arquiza
Renee Gayle M. Chua
Arland S. Mariano
Michael Stephen A. Tonido

Submitted to

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In Partial Fulfillment of the Requirements for the Course
CE 101: Techniques in Signal Processing

Department of Electronics, Computer, and Communications Engineering
School of Science and Engineering
Loyola Schools
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Abstract Page Format

See next page.

ABSTRACT

Body of abstract…

8.1.2. CD:

The CD containing documentation for the project shall be submitted in an individual transparent CD case. The CD shall have a sticker-label on which are clearly printed the project title, the names of the proponents, and the month and year the project was completed (e.g. February 2004). No date shall be specified, only the month and year. The project title shall be the same title that appears on the cover of the hard copy.

The CD shall contain the following:
> a copy of the approved proposal
> copies of the progress reports
> a condensed journal-style article on the project with the course instructor as co-
>> author.
> copies of presentation materials used in presenting the project, if any
> a soft copy of the formal written report
> a website for the project
> other forms of documentation as may be appropriate for the particular project

The copy of the approved proposal shall be placed in a directory named "proposal" in the CD root directory. The copies of the progress reports shall be placed in a directory named "progress-reports" in the CD root directory. The copy of the formal written report shall be placed in a directory named "doc" in the CD root directory.

The CD root directory shall be the home directory for the project website. That is, access to the project website shall be thru a file named "index.html" (NOT index.htm) in the CD root directory. Relative addressing should be used in all links to files within the CD. The links in the project website must work properly when the contents of the whole CD are copied to another location.

Students are expected to use the flexibility of the project website, to present the details of their work in the best way possible.

Microsoft office files shall not be allowed on the CD. Files with extensions .htm, .doc, .xls, and .ppt shall not be allowed on the CD.

The CD shall have a CD label on which are printed the project title, the names of the proponents, and the month and year the project was completed. The CD shall be submitted in a CD case similar to the CD cases used for a majority of project CD's for CE 160 in the first semester of school year 2003-2004.

Format of CD Label:

Title of Project

Names of Proponents

month and year

Hardcopy Checklist:

shade of cover must be project blue
title has a font size comparable to or larger than 36 pt Times New Roman
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Project Documentation with the following defects shall be redone. No final project grade shall be given pending resubmission of documentation.
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9. Final Project Evaluation

20 pts - completeness of the project
20 pts - completeness of the documentation
10 pts - excellence in execution of the project
10 pts - form and style, including creative use of html