COP4020: Programming Languages   **up** ↑

Individual Study Presentations

 Fall Term 2007

Introduction

This file may be updated periodically, to improve the organization, and to provide additional topics and details based on interactions between students and the instructor.

Overview

1. Each student works independently
2. Proposes a list of preferred topics (see **list**), then negotiates a topic and date with the instructor
3. Looks up information about the topic
4. Prepares and delivers an oral presentation on the topic, in class, on the agreed date
5. Writes and submits a written report on the topic, no later than the end of the term

Timetable

- Now: choose a ranked list of (5) of the topics and dates listed on the **Presentations Signup** page.
    - Some topics are appropriate for multiple individuals
    - Instructorwill confirm one of those topics and a date
    - That becomes your contract
    - If you need to change dates, you must arrange with the instructor and another student to swapto swap
- Before the date of your presentation:
    - Do research on the topic
    - If you run into questions, or difficulty finding information, contact the instructor in time to get help or agree on a change in topic
    - Prepare visual aids
    - Prepare a talk to fit the time limit.
    - Practice the talk to make sure it fits in the time limit.
- On the date:
    - Be in class
    - Give the presentation
- Before or after the talk:
    - Write up the paper
    - Turn it in on or before 30 November
    - Note that papers are expected to be written individually
        - Turn in an electronic copy to "turnitin.com". To do that, log into campus.fsu.edu, and go to the page for this course, COP4020. Then you need to click on the linked labeled "Assignments" on the left-side menu. On the next page you should see a line labeled "Individual Research Paper", with a link below it labeled "View/Complete". Click on that and follow the instructions.
        - For back-up, or if you would like a marked-up copy back with comments, also turn in hard copy to the instructor.

Signing Up for a Topic and Date

- Presentations will generally be given in recitation meetings, which are on Thursdays this term.

- Each student is expected to sign up for a topic and a week in which to give the oral presentation on that topic. (One student per topic per section.) Most people will probably prefer a date late in the semester, but in order to fit everyone in we will need to start presentations fairly early in the term. Presentations given late in the term will be expected to show more depth of study than presentations given early in the term. However, since the papers are not due until the end of the term, they are all expected to show a similar level of study.

  See the **Presentations Signup** page for more detail, including a list of possible topics.

- Once the topics are assigned and the presentation schedule is set up, the information will be posted on the **Presentations Schedule** page.

Instructions for Presentation

Your presentation should be informative. You cannot cover an entire language. Give an overview, with examples of a few interesting details. You are talking to other students in the class, who probably know nothing about this language. Provide information you think would be interesting, and perhaps useful in deciding whether to look deeper into the language. If you can, make comparisions to other languages with which students in the course are likely to be familiar (C, C++, Java, maybe Ada, Scheme, Prolog).

Timing of Presentation

Oral presentations are expected to fit the time limit, plus or minus 2 minutes. (Running under or over time will result in a reduction in score.) Prepare a talk that you can give within the time limit. For most topics this will require that you narrow the scope of your oral presentation, relative to your written report. Cover the most interesting bit that fits in the time limit.

Based on pre-registration enrollment numbers, we should have 15 minutes per talk. If we need to shorten the time the class will be notified before the date of the first talk.

Five (5) minutes will be allowed between talks for comments and questions from the audience. If you run over into the question period by more than two minutes you will have points deducted from your score. If you are still talking at the end of 5 minutes you will be cut off, to allow the next person to proceed.

To keep within the time limit, here are some suggestions:

- Prioritize. Select the most important, interesting, and useful information. For example, if you are covering a language, you can only give a flavor. Concentrate on some features that are unusual about the language. Include at least one example showing actual code, that you can explain. You need some introduction, but don't give a long background and history that could chew up all your time.
- Practice running through the talk to see how long it takes.
- Organize in a way that some parts (at least the last part) of your talk are optional, allowing you to skip forward to a conclusion if you are running out of time. It does not hurt to have some extra optional material in case talk faster in class and discover you have extra time. (BTW, in real-time computing this use of optional parts is how some people code computations that need to fit into a time slot in a fault-tolerant way.)

Visual Aids for Presentation

You are expected to prepare visual aids for your presentation in an electronic format that is accessible on your personal Web page (or, if you have not yet set up a personal Web page you can bring in the material on a floppy disk). Acceptable formats are: (1) HTML (best); (2) MS Powerpoint files (next best); (3) Plain text files (poor). Make certain the font in your visual aids is large enough to be read from the back of the recitation meeting room. Make certain the material is accessible, so that there is no delay getting started.

Make certain in advance that your aids can be viewed on the equipment in the recitation meeting room, and that it will not take you more than a minute or two to set up.

*Do **NOT** expect to bring in your own laptop and hook it up to the project in the classroom,* unless you have previously checked that the two are completely compatible. One term a student wasted 20 minutes fussing with trying to get a loptop to work with the projector projector in the classroom. We cannot afford to repeat that experience.

Advice

- Speaking loudly enough to be heard at the back of the room.
- Face the audience. Don't spend too much time looking at the screen, your notes, or the floor. That makes it hard for people to hear you, even if you think you are speaking loudly enough. It is also less engaging, and does not let you see how the audience is reacting to what you say.
- Plan your talk, and stick to the time limit. Avoid trying to pack in more detail than can fit.
- Prepare visual aids.
- Making the font large enough to be read from the back of the room.
- Don't rushing through visual aids faster than people can read them.
- Provide some technical meat. This is not a marketing talk. Avoid generalities. Give specific examples to back up general statements.
- Give some examples of actual code. Use fragments, if necessary, to avoid getting bogged down in something you don't have time to explain. Picking examples that illustrate something special and interesting about the language.
- Don't try overly hard to be entertaining, to the point of not conveying anything of educational valuee. A joke or two is good, but personality will not make up for lack of substance.

Grading Criteria for Presentation

The evaluation of the quality of the presentation (as well as the paper) will take into account the originality, relevance, and currency of information that you present, as well as the clarity of the presentation. The presentation will be scored according to the following criteria:

Criterion	points
Student is prepared and ready to begin on time	(0 or 5)
Student is within the prescribed time limits.	(0 or 5)
Student speaks audibly and clearly.	(0 .. 5)
Student presentation is well organized.	(0 .. 10)
Student's visual aid is appropriately used and enhances the presentation.	(0 .. 5)
Student addresses all issues mentioned in the topic description.	(0 .. 10)
Student explains the material well, going appropriately in depth given time constraints.	(0 .. 10)

Please be prepared to start on time when you are presenting. If you get started late not only will you lose points, but we will have difficulty finishing within the class period.

If you do not show up when you are scheduled to give a presentation, and do not have a valid excuse, your grade will be zero (0) for the oral presentation.

Instructions for Paper

You are to write a short paper on the same topic as your oral presentation. The paper should give as balanced treatment of the topic as will fit in the page limits (see below). That will ordinarily mean going into somewhat more detail than fits in the oral presentation.

Paper Organization and Format

The form of the paper should follow the typical form of a Computer Science research or technical report. In particular, it should include the following components:

- Title page, with title, author, course, and date
- Abstract page, summarizing the content of the report. [one paragraph]
- Introduction, summarizing the purpose, content, and organization of the paper. [for this course, 1/2 page to a whole page]
- Body, comprising several sections, each several pages long. [for this course, two to five sections, each a few pages long]
- Conclusion, summarizing the content of the paper and emphasizing what you think are the main insights or conclusions of your research. [for this course, between 1/2 a page and a whole page]
- Bibliography, a numbered list of complete citations of the sources from which you obtained the

information in the paper (there should be at least one citation within the introduction or body for each of these references). [for this course, at least 4 references]

The ranges of pages shown in square brackets above are suggested lower and upper bounds based on a letter-sized paper (8.5" x 11") if you use double spacing and 10-12 point type. There is no upper bound on the entire paper, but length does not make up for quality of writing and selection of content.

Advice

The same basic advice applies here as for the talk. Don't be overhwhelmed by the size of a language. You will only have time and space to give an overview, plus a few interesting details. Pretend you are another person in the class, who knows nothing about this language, and provide information you think would be interesting and useful in deciding whether to look deeper into the language. If you can, make comparisions to other languages with which a student in the course is likely to be familiar (C, C++, Java, maybe Ada, Scheme, Prolog).

The following are a few of the most common pitfalls. Beware of them.

- Padding, with extra words, redundant statements, etc. to make up for lack of content.
- Chatty, conversational style. This is a technical report.
- Plagiarism, mainly text from the Web quoted without proper punctuation and citation. (See more detail further below.)
- Excessive use of quoted material, with proper citations.
- Weak research. The extreme would be providing only information that is in your textbook and on Wikipedia.
- "Marketing" material, i.e., vague statements, claims unsupported with factual details.
- Using words that you don't fully understand, incorrectly. This can occur when one grabs material from the Web without taking the time to read enough background to understand it.

Grading Criteria for Paper

The paper will be will be assessed subjectively, giving approximately equal weight to the quality of the writing and the quality of the research, according to the following criteria:

Criterion	points
Quality of content, including a reasonable balance of breadth and depth.	(0 .. 10)
Understanding, as demonstrated by the ability to correctly express and discuss the concepts in your own words.	(0 .. 10)
Evidence of analysis, and reflection on the information you found.	(0 .. 10)
Quality of writing, including clarity, correct grammar, word choice, spelling, and punctuation.	(0 .. 10)
Thoroughness of research, evidenced by completeness and relevance of references in the bibliography.	(0 .. 10)

Submission

Papers are due 30 November. You are required to submit your paper in *both* hard copy (paper) and electronic format. Hand the hard copy of the paper to the instructor, or place it in his CS Department mailbox, to make certain it is received. The electronic copy must be in one of the forms accepted by *turnitin.com*. Instructions on how to use turnitin.com will be given later in the term.

Plagiarism

Please take care to write the paper in your own words. Do not copy/paste material without enclosing the text in quotation marks and citing the source. Follow the standard punctuation and citation rules for quotations: "...*re-used text*..." [ref], where *ref* is the number or other identifying label of the source in your bibliography. Citations should also be given for the sources of ideas or facts that you have re-stated in your own words, like this [ref].

Cutting and pasting words from sources without quotation marks and citations amounts to plagiarism, which

will be treated as a violation of the FSU Honor Code. Cutting and pasting words from other sources *with* quotation marks and citations is better, but still indicates lack of creative effort and a potential lack of understanding.

Why are we doing this?

1. Because this is a "capstone" course.
2. To test whether you are ready to graduate.
3. To satisfy requirements of the State of Florida and accreditation agencies.

Some students have complained about the oral presentations and reports in this course. They feel they have not not learned anything new about giving presentations or writing reports. That may be true. You are supposed to already know how to give oral presentations and write reports. However, this course serves as the point where the State of Florida and our accreditation agencies require us to test that you have mastered these skills and can apply them to the subject in which you are majoring. (For more detail, see the Web page on **Accreditation, Outcomes, and State-Mandated Academic Learning Compacts.**) You should also learn something about programming languages. That is, we will used these as an opportunity to expose everyone to tidbits about a larger number of programming languages than we could otherwise cover.