CS 435 - Homework 1

Deadlines

Problem 1 is due by the **beginning of class, 3:00 pm, on Tuesday, January 28, 2014** (and can have increasingly negative effects on the Homework 1 grade if it is not completed by then).

The remaining problems are due by **11:59 pm on Thursday, January 30, 2014**, although Problem 4 includes a part that will be presented during class on Thursday, January 30.

How to submit

Submit your files for Problem 2 onward for this homework using `~st10/435submit` on nrs-labs, with a homework number of `1`

Instructions for using the tool ~st10/435submit

- If they are not already on nrs-labs, transfer your files to be submitted to a directory on nrs-labs.
  - If you are in a campus lab, you can do so by copying them to a folder on the U: drive
  - If you are not in a campus lab, you can do so by using `sftp` (secure file transfer) and connecting to `nrs-labs.humboldt.edu`, and then transferring them
- Once all of your files to be submitted are in a directory on nrs-labs, then use `ssh` (or Putty in an Academic Computing lab) to connect to `nrs-labs.humboldt.edu` .
- use `cd` to change to the directory containing the files to be submitted -- for example,

  ```
  cd 435hw01
  ```

- type the command:

  ```
  ~st10/435submit
  ```

  ...and give the number of the homework being submitted (or whatever number you have been asked to do for lab-related files) when asked, and answer that, `y`, you do want to submit all of the files with of-interest-to-435 suffixes in the current directory. (Note that I don't mind if a few extraneous files get submitted as well -- I'd rather receive too many files that too few, and typing in all of the file names for each assignment is just too error-prone...)
- you are expected to carefully check the list of files that the tool believes have been submitted, and make sure all of the files you hoped to submit were indeed submitted! (The most common error is to try to run `~st10/435submit` while in a different directory than where your files are...)

Purpose

To indicate that you have received, read, and understand the course syllabus, to think about -- and do a little technical writing about -- the Standish Group "Chaos" Report, and Brooks' "No Silver Bullet" paper (Chapter 16 in "The Mythical Man-Month"), and to get the project teams rolling.

Important notes

- Note that some of your submissions for this assignment may be posted to the course Moodle site.
- At ANY time during the semester, if any student or team has serious issues with a team member, please bring them to my attention as soon as possible.
- (slightly adapted from Cashman and Eschenbach's ENGR 111 Team Contract Guidelines): There will be **no illegal activity** during any team meetings or team working sessions. Illegal activity includes, but is not limited to, underage drinking and illicit drug use. This rule must be enforced regardless of whether the meeting takes place on or off campus. The team must notify me immediately (or by the next class meeting) if a violation of this rule occurs and the offending team member will be removed from the team and assigned a **0** for the entire course project.

A few additional project-related comments

If your team would like to look ahead to consider other tasks it will need to do (while awaiting the next project handout or handouts, and while the project scenarios are being determined), here are a few project aspects that will be included, in case you would like to think about them now:

- You will eventually be creating **user stories** for requirements specifications. If you would like to start reading about those, that might be useful.
- **Unit testing** of some kind will be required, for at least some of the project code. If you want to look into some of the possibilities for unit testing, that might also be useful.
- You will also be creating a **test plan** eventually; Jalote, Chapter 8 discusses this topic.
- Here is good advice for teams, from http://www.ece.rutgers.edu/~marsic/Teaching/SE/projects.html:
  - "Saying that “nobody asked me to do this or that,” or, “I did everything that I was asked to do” is an unacceptable excuse. Each team member should be proactive and not wait passively to be assigned responsibilities. Do not ask others what should be done; rather, take initiative and suggest what should be done to make your project successful. Take every opportunity to redistribute and/or rotate the responsibilities, make your personal suggestions be heard! Many times defining the problem and determining what needs to be done is more difficult than actually doing it. Hence, problem defining and task assignment must be contributed to by all team members, rather than by the team leader alone."
- It will be each team member's responsibility to keep track of her/her contributions to the project. You will be expected to submit a list of these at some point (or points).
- Note that peer evaluations will be required at several points during the semester. Your thoughtful participation in these will also be part of your project grade.

Problem 1

Read over the course syllabus until you are comfortable saying that you have read and that you understand it. (Be sure to ask me any questions you have as you are reading it!) Note that, in addition to the paper copy of the syllabus that was passed out in class last Tuesday, an electronic version of the syllabus is also available from the public course web site.

Then, go to the course Moodle site. In the "Miscellany section", you will see a link to a questionnaire, "CS 435 Required Syllabus Confirmation". Answer the three questions in this questionnaire.

This problem will be graded as follows:

- (negative values below indicate additional penalties taken from your remaining Homework 1 grade):

  IF you answer all 3 questions with "Yes" by: THEN your points for this problem will be:

  - 3:00 pm, Tuesday, January 28 +20 (full credit)
  - 3:00 pm, Thursday, January 30 +10
  - 11:59 pm, Thursday, January 30 +5
  - 11:59 pm, Friday, January 31 0
  - 11:59 pm, Saturday, February 1 -10
  - 11:59 pm, Sunday, February 2 -20
  - ...and so on, with your remaining Homework 1 grade going down by 10 for each subsequent day.

Please let me know if you have any questions about any of the above.

Problem 2

Create a file `435hw1-2.txt`. Start this file with your name.

We'll be referring to the Standish Group "Chaos" Report next week, and its summary is quite short -- just 8 pages! So, a PDF of this is now available on the course Moodle site, in the "Additional Readings" section.

Read this report, and then:

- List three things that interest you or that you consider to be noteworthy from this report.
- For each of these three things, briefly explain why it interests you or why you consider it to be noteworthy.

Problem 3

Create a file `435hw1-3.txt`. Start this file with your name.

Then, consider Brooks' "No Silver Bullet" paper (Chapter 16 of "The Mythical Man-Month").

- List at least three things that interest you or that you consider to be noteworthy from this paper.
- For each of these three (or more) things, briefly explain why it interests you or why you consider it to be noteworthy.

Problem 4

You now have your project team assignments.

Each team should meet at least once before the Homework 1 deadline -- and for each team meeting, the

team is expected to fill out the posted "official" team meeting report form (posted with this homework handout, as well as on the opening page of the public course web site).

- You can fill it out electronically, or print it out, fill it out, and scan it, or print it out, fill it out, and take a picture of it -- your choice, as long as the result is readable, and you submit the result as a PDF file.
- If you fill it out electronically, your "signature" in the final section can be your typing your name. Each team member is on his/her honor not to "sign" for another team member, and to only "sign" when he/she indeed is satisfied with the team meeting form's contents. It will be considered a serious breach of ethics if a team meeting form is "signed" by a member who did not attend or who does not agree that the information in that report is accurate, to the best of his/her knowledge.
- This form is provided in both tagged PDF and Word/.doc formats -- **HOWEVER**, if you fill out the .doc version, you should then save the filled out version **AS A PDF**.
- Decide on a naming scheme the team will use for the resulting completed team meeting forms, incorporating the meeting date into the resulting file name (e.g., `meeting-2014-01-25.pdf`)

Then, the team should create a file `435hw1-4-team.txt`, which one of the team members will submit on the team's behalf.

- Start this file with all of the team members' names.
- Agree upon at least one weekly regular meeting time for your team (and if the team wishes to meet regularly more often, that is great!), and list that time/those times.
- Determine your (no-worse-than-PG) team name, and include that.
- Brainstorm project ideas, and briefly list several (at least 4) here. Be prepared to informally present these project ideas IN CLASS next Thursday, January 30 -- since you are giving at least 4, each team member should present at least one of them in class next Thursday.
  - Note that another project requirement is going to be describing the clients for the project (whether they are real or imaginary) -- you will need to be able to describe their work, their needs, and their environment, related to the would-be project. You don't have to do this (yet) for these brainstormed ideas for next Thursday, but you will have to for your eventual project scenario, and it will be a red flag for a proposed project idea if this is not feasible.

Then, one team member should submit the resulting `435hw1-4-team.txt` file along with the filled-out team meeting form(s), on the behalf of all 4 team members (and all 4 members will receive Homework 1 credit for the resulting files).