CS 435 - Homework 7

Deadline

Due by 11:59 pm on Thursday, April 17, 2014

How to submit

Submit your files for this homework using ~st10/435submit on nrs-labs, with a homework number of 7

Purpose

To make sure you know at least some git basics, and to think and experiment a bit with UML.

Important notes

- Note that some of your submissions for this assignment may be posted to the course Moodle site.

- Create a file named 435hw7.txt or 435hw7.pdf (your choice) that starts with your name. Then give the problem number and your answer(s) for each of the following problems.

Problem 1

To help encourage everyone to get "up to speed" on git, answer each of the following questions. (Remember, you have your "GitHub Git Cheat Sheet" card from SIGCSE, as well as a variety of resources from github.com.)

1 part a

Assume that, at some point in the past, you have cloned your team's private repository on GitHub into a local repository on your own computer.

Give the command you can now type to get the newest updates from the team repository on GitHub, (changing your local copy).

1 part b

Assume that you have modified a file in your local repository named action.cpp so that it now implements a user story **Add widget control**. Give the command you can now type to *stage* your modified action.cpp for a commit.

1 part c

Give the command you can now type to commit, including an attempt at a descriptive log message.

1 part d

Finally, give the command you can now type to push your committed changes to the team's private repository on GitHub.

1 part e

Answer one of the following -- I'm trusting your decision as to which is appropriate for you to answer:

IF you are new to git/GitHub this semester: list at least one thing you would still like to know/learn about git or GitHub at this point.

IF you are not new to git/GitHub this semester: list at least one thing you'd want to make sure your project teammates who are new to git/GitHub this semester know, besides how to do activities such as those in parts a through d.

Problem 2

2 part a

In Jalote Chapter 6, a number of the types of UML diagrams are described. Just to encourage you to look them over, and consider them a bit:

- which type of UML diagram, at this point, is your "favorite" type of UML diagram? (Note that "favorite" is a pretty broad term -- maybe you might take it to mean which you think would be most useful in a project, or maybe you might take it to mean which is clearest to you, or maybe you might take it to mean which is most intriguing to you at this point. For this question, I'm leaving the possibilities deliberately broad.)

- why is that choice your favorite at this time?

2 part b

Go the HSU Library's link to the ACM Digital Library, and find an article of your choice on UML.

- (Searching for "Unified Modeling Language" does indeed lead to an interesting variety of options. You are also welcome to add additional search terms to focus this search further if you would like.)

- Browse as you would like -- but once you have found an article you'd like to read at least some of, BEFORE you follow the link, take a screen shot of your ACM Digital Library window at this point.

  - (This can be a screen-shot of that window, or a cell-phone photo of that window, etc. Make sure it can be saved as a .jpg, .gif, or .png, whichever screen-shot means you use -- and name it `acm-dl-img` followed by the appropriate suffix.)

  - Paste your selected article's title, author, date, and publication as part of your Problem 2 response, and then download your selected article's PDF.

  - Read at least enough of that selected article to give at least 3 things from that article -- related to UML! -- that interested you, and also include these in your Problem X response. I hope to post your responses to Problem 2 to the course Moodle site, and perhaps have you peruse everyone's contributions on a future homework assignment (I hope...!).

2 part c

Consider the following free, freely-available UML drawing tools:

- ArgoUML - available from http://argouml.tigris.org/

- Violet - available from http://www.horstmann.com/violet/index.html

- UMLet - available from http://www.umlet.com/

Try out at least one of these, and create a UML diagram of your choice. Somehow take a screen shot or save a copy of your resulting diagram.

- (This can be a screen-shot of the application's window, or a cell-phone photo of that window, etc., if the application does not provide a reasonable way to save the diagram. Make sure it can be saved as a .pdf, .jpg, .gif, or .png, whichever means you use -- and name it `uml-ex` followed by the appropriate suffix.)

In addition to this separate file containing your resulting diagram, include in your `435hw7` file, for this problem, the following:

- state which one or ones of these tools you tried

- say whether you found it/them reasonable to use or not in creating your example UML diagram.

Submit your resulting file `435hw7.txt` or `435hw7.pdf` along with Problem 2 part b's `acm-dl-img.*` screenshot image file and Problem 2 part c's `uml-ex.*` diagram file.