CS490

Project Specification and Structured Diagram
Draft Due: October 6, 2009 (in class) (5 points)
Date Due: Thursday, October 13, 2009 (11:59 pm) (25 points)
Points: 30

This goal of this assignment is to determine your project's structure. To do this, you'll need to give careful consideration to how you'll divide your project into modules. Once you've done this, you'll create a diagram of how the modules connect together to create your project. Then, you'll thoroughly document what each module is.

For many of you, your user interface will be the module that connects all the other modules. This user interface can be one module or broken down into multiple modules. You can think of your user interface as a placeholder for all your other modules.

The challenge of this assignment will be to break down the work you need to do into appropriately sized modules. A module should be roughly 2-3 weeks of work; it's acceptable to make them smaller, but not larger. A module doesn't have to directly correspond to a function or object, but it can. This 2-3 week period of work should contain both the module design, implementation, and unit testing.

1 Structured or Object Oriented Diagram

You are going to be following object-oriented design for this project and you need to create the appropriate diagram. The format of your diagram is up to you; you can use UML diagrams if you want or you can make it look like the diagrams we've looked at in class.

2 Module Descriptions

For this part of your assignment, you'll need to list the following information about each module:

- Module Name
- Purpose of module
- Input to module
  - Description of input (List ALL input)
  - Source(s) (this can be another module or some other input)
  - Datatype(s)
  - Format(s)
- Output from module
  - Description of output (List ALL output)
  - Destination(s) (this can be another module of some other output)
  - Datatype(s)
  - Format(s)
- Outline of algorithms used
- Data that will be internal to module (give datatype(s))
- Use case(s) satisfied by module
- Error checking/handling required
- Timeline for completing the module

You may find it useful to format your document so that each module starts on a new page. This can make it easier to read and to find the description of one particular module. You might also consider putting them in alphabetical order.

I think this organization will help you nail down the details of your project. This specification will eventually include a schedule and analysis, but those will be due later. I will give you the assignment for those next week.

3 General Guidelines

This document needs to be written in complete sentences. You may, however, include section and subsection headings for your module description, which make it easier to find information. Obviously, some of the information listed in the modules description won't be in complete sentences. Do a thorough spelling and grammar check before turning it in. Be sure to cite any information that you are using from another source. You may use footnotes or end references. Failing to cite references will result in serious point deductions.

Put this in a GoogleDoc and share it with profchadd@gmail.com by 11:59pm on October 13.

4 Grading

Draft: 5 points
Spelling, grammar and writing quality: 7 points
Structure Diagram: 4 points
Module Descriptions 14 points