CPSC 101 Team Term Project

Winter 2016

last revised March 15, 2016 — **David Casperson**

Teams: The list of teams and members will be distributed separately. It is each team's responsibility to distribute work amongst itself and find appropriate times to meet.

Project: Design and implement "Scheduling Tools" programs using the techniques of object-oriented programming in JAVA. The specifications and the problem statement are distributed separately.

Design (30%): Read the sheet "Thinking about Objects". As a group, discuss how you might apply these concepts to your Scheduling Tools programs. Submit a design document that includes

- table of contents.
- a list of nouns,
- precisely worded paragraphs describing each noun,
- a list of facts,
- a list (by class) of attributes, behaviours, and messages sent to other objects,
- a cover, and a
- the percentage of work completed by each member of the group and provide the proposed distribution of workload for the implementation part of the project.

The above list gives minimal requirements for your design document. Include other information that you think will help you design and implement your project.

Some textbooks emphasize formalized design using UML diagrams. While I strong encourage you to learn as much UML as you can on your own, I am not going to teach it, or require it of you. In particular, *UML is not necessary in your design document.*

There may be further specification of what is required in the design document.

Also, identify the percentage of work completed by each member of the group and provide the proposed distribution of workload for the implementation part of the project. **Due Date: February 05, 2016**

Revised Design (0%): I shall attempt to constructively criticize the design documents and return them to the project groups by early in the week of Februabry 19. I may insist in some cases that the design be re-submitted before work on the implementation begins. **Due Date: February 19, 2016**

Implementation (50%): Complete the implementation of your simulator by writing code. Thoroughly test your program and provide the following:

1. An itemized list of contributions of each member. **Due Date: March 16, 2016**
2. Your revised design document. **Due Date: March 16, 2016**
3. Complete listings of your program. **Due Date: March 16, 2016**

4. Sample screenshots if feasible. **Due Date: March 16, 2016**
5. A short users' guide explaining how to find and use your program(s). **Due Date: March 16, 2016**
6. A 5–10 minute presentation of your work and a demonstration of the simulation. **Due Date: March 21, 2016**

Note: As you proceed with the implementation, you may want to revise your design. This is acceptable, and even encouraged. However, *all changes to the original design must be clearly documented.*

Testing (10%): Your group will make your programs (`.jar`-files, but not the source code) and users' manual available to another group in the class assigned by the instructor. That group will thoroughly test your code and provide feedback for improvements in the design, interface, *etc.* You will do the same for a different group, and supply a copy of your written report to the group you review and to the instructor.
Due Date: April 01, 2016

Revision (10%): You may agree or disagree with the suggested changes and criticisms contained in the report reviewing your project. In case you agree, you may choose to revise your design and implementation. If you disagree, you may submit a critique of the proposed changes. In either case, you will submit a formal final report.
Due Date: April 08, 2016

Notes:
1. You work on this project as a group. It is your responsibility to divide the work within the group and to make sure that your group functions effectively.
2. All submissions *must be* formal reports, meaning that they must be neatly presented and bound, grammatically correct, correctly spelled, and professional looking.
3. Both the testing report and the final written response should be written as objectively and professionally as possible. In particular: they should have opening and concluding paragraphs; and they should state who is reviewing or responding to what (by whom). Statements like "*Obviously, the group who reviewed our project never bothered reading p.96 of our user manual*" automatically lose marks (whether or not they are true).