

CST8110: Introduction to Computing

Lab 8: Coding Your Game

Overview

In your previous lab work, you developed the *problem statement (assumptions)*, *algorithm* and *test plan* for your game.

In this lab, you and your partner will implement your game in C++ code.

Game enhancements can include the use of random numbers, tracking timing, letting the player use arrow keys and playing sounds. My website has code samples that explore these extra features.

Submission Standards

- Due date will be posted on my website.
- Cover page:
 - Course Name / Number (including lab section)
 - Lab Number
 - You and your partner's names
 - Date of Submission
- Game solution containing *Problem Statement (Assumptions)*, *Algorithm* and *Test Plan*. If your previous lab work was perfect, these will be a direct copy of that work. If there were corrections to be made, you will submit the revised versions of these.
- Use the variable-naming convention shown in Lab 1.
- Use a consistent approach to indentation to communicate program structure.
- Include many useful comments:
 - Multi-line sections of code need a short description of that section's purpose. These comments will be aligned at the same left margin as the associated code (that is, indent comment the same amount as the code)
 - Most individual lines need a clarifying comment to the right.

Submission Process

- Staple all paper components together with the evaluation sheet (shown on the right side of this document).
- Arrange for a demonstration of your working program with the professor or lab assistant during the lab period.

Evaluation Criteria

See the attached marking guide.

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Your lab assignment has been evaluated using the following criteria: This lab is to be completed with your partner. You will receive the same mark (unless there is evidence that one of the partners did not make a real contribution). Look to Lab 1b for coding standards (sample code, variable naming conventions, etc.)

- Statement of Assumptions, Test Plan, Algorithm (*Included from previous lab work with any revisions*)
- Program and function headers (remember, *main()* is a function), including history.
- Comment each significant line of code.
- Comment each related section of your program.
- Variable naming as defined in handout.
- Indentation follows standard in handout.
- (4 marks) Program performs runs correctly from source code (Including meaningful user prompts).

Subtotal /10

- Penalties (up to 3 marks deducted): Penalty for redundant code, unused code, unnecessary extra steps. Penalty for poor organization and binding of program and documentation.
- Bonus marks (up to 3 marks added): Clever, clear, useful enhancements.
- Adjustment for unequal effort by partners.

Total /10