

CMPT 213 Assignment 3 Marking Guide for Dr. Fraser's class: Maze Game

Assignment may be done in pairs, or individually.

Total = 100 marks

Phase 1: Design

Total [20] Marks

[5] CRC

- Reasonable break-out of classes and high-lever responsibilities.
- List major class collaborators.

[10] UML Class Diagram

- Clear OOD:
 - * Each class responsible for one thing.
 - * Reasonably detailed break-out of classes to handle responsibilities.
 - * Each class demonstrates correct encapsulation.
 - * Consider use of immutable classes where applicable.
 - * Respect the command/query separation guideline when appropriate.
- Correct and meaningful class relationships
- Some methods and/or fields listed (but should not have all!)
(Should be at least enough to cover the big tasks for playing the game)

[5] OOD Explained

- Good description of how two non-trivial tasks are completed.
- Descriptions should highlight the responsibilities of some classes, and rely on the relationships between classes as needed.

Phase 2: Implementation [80 marks]

[30] Maze generation

Likely deduction per defficiencies

- * -5 internal 2x2 square of walls
- * -5 internal 2x2 square of no-walls
- * -10 lack path to all open cells
- * -5 maze lacks loops (it should sometimes have multiple paths to a cell)

[5] Maze display & maze cheat code

[5] User interaction handles errors (for example, asking user to re-enter move)

[15] Correct movement of the user, and revealing the maze.

[15] Correct movement and operation of the cats

[10] Correct handling of the cheese, winning and losing

Includes 1-cheese-to-win cheat code

[0] Correctly follow coding style guide.

(-30 point max deductions)

- * Must have separate packages for game logic and the UI.
- * Very minor violations have no penalty (ex: having "int myCount=0;" (spacing

wrong))

- * Lose a few marks for consistent problems (like always getting the spacing wrong).
- * Larger penalties possible for horrific code (such as not marked!)

Some specifics to check

* JavaDoc-style comment on each class (not needed on methods/fields if clear and well named)

- * Correct indentation, brackets, spacing
- * Good intention revealing class, method, and variable names.
- * Easy to read code; refactored if it was complex!
- * Limited depth of nested logic (if-if-if-if-for-if-switch-...)

Forward to Dr. Fraser if...

- Material is suspiciously similar to another submission or code posted online.

