Introduction To CPSC 233

James Tam

Java

Object-Orientation

Graphical-user interfaces

James Tam

Administrative (James Tam)

- Contact Information
  - Office: ICT 707
  - Email: tamj@cpsc.ucalgary.ca

- Office hours
  - Office hours: Mon 11:00 – 11:50, Wed 13:00 – 13:50
  - If I'm not in my office give me a few minutes or check the lecture room.
  - Email: (any time)
  - Appointment: email, phone or call
  - Drop by for urgent requests (but no guarantee that I will be in if it's outside of my office hours!)


My Office

James Tam

Course Resources

- Required resources:
  - Course website: http://www.cpsc.ucalgary.ca/~tamj/233 (Get the notes off the course webpage before lecture)
- Recommended but not required:
  - "*Absolute Java (5th Ed)*" Walter Savitch, *(Pearson)*

How To Use The Course Resources

- They are provided to support and supplement this class.

- Neither the course notes nor the text book are meant as a substitute for regular class attendance.
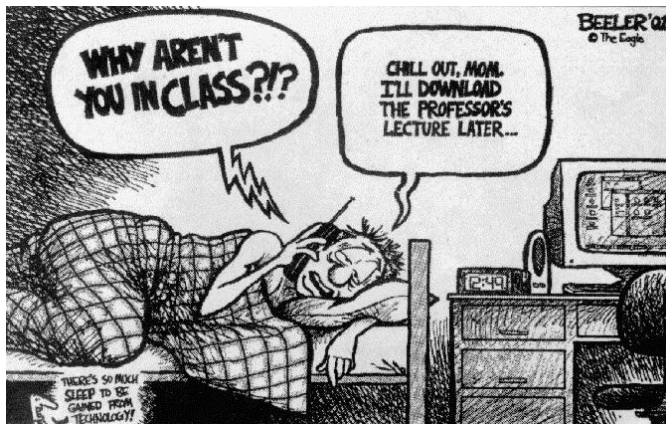
How To Use The Course Resources (2)

```
/***********************************************************************
   Displays the current state of the galaxy.  Each sector is bounded
   by a square and the row and column values are labeled.
 ***********************************************************************/
// INH: Added char parameter to indicate if it's the attack or movement
// turn phase. Cloaked ships only appear during the attack phase.
public void display (char turn)
{
   int r, c;
   int combatInitiative;

   System.out.println();
   System.out.println(HORIZONTAL_NUMBERS);
   System.out.println(HORIZONTAL_BORDER);
   for (r = 0; r < SIZE; r++)
   {
      System.out.print(r);
      for (c = 0; c < SIZE; c++)
      {
        System.out.print("|");

        if (grid[r][c] != null)
        {
           combatInitiative = grid[r][c].getCombatInitiative();
           if ((turn != 'a') && (combatInitiative == KlingonAttackCruiser.CLOACKED))
             System.out.print (" ");
           else
             System.out.print(grid[r][c].getAppearance());
        }
        else
        {
           System.out.print(" ");
        }
      }
      System.out.println("|");
      System.out.println(HORIZONTAL_BORDER);
   }
}
```

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How To Use The Course Resources (2)

If you miss a class make sure that you catch up on what you missed (get someone's class notes)

...when you do make it to class make sure that you supplement the slides with your own notes (because you aren't going to remember it in the exams if you don't)

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How To Use The Course Resources (3)

- What you are responsible for:
  - Keeping up with the content in class which includes the topics covered but also announcements or assignments whether you were present in the class or not.
  - If you are absent, then you are responsible to get the information from the other students in class.

- However, after you've caught up by talking with a classmate:
  - Ask for help if you need it.
  - There are no dumb questions.

Image from "The Simpsons" © Fox

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233 Students: Assumed Knowledge

- You completed CPSC 231 (or the equivalent) with a grade of C- or higher.

- You do not need to know Python programming for this class.
  - However sometimes I will refer briefly to Python programs just to contrast what (most/all) students already know with what they need to learn.

- You are proficient at using common procedural programming tools e.g., branching, loops, decomposition into functions etc.

- If you are new to the CPSC network then you should (quickly) familiarize yourself.
  - One starting point (Topic #0):
    http://pages.cpsc.ucalgary.ca/~tamj/233/#Course_Topics_and_Notes_for_lectures

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How To Succeed In This Course

1. Practice things yourself.
   - Write lots programs
     - At the *very least* attempt every assignment
     - Try to do some additional practice work (some examples will be given in class, some practice assignments will be available on the course web page).
   - Trace lots of code
     - Reading through programs that other people have written and understanding how and why it works the way that it does

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How To Succeed In This Course (2)

2. Make sure that you keep up with the material
    -   Many of the concepts taught later depend upon your knowledge of earlier concepts.
    -   Don't let yourself fall behind!
    -   *At least* attempt all assignments!

How To Succeed In This Course (3)

3. Look at the material before coming to lecture so you have a rough idea of what I will be talking about that day:
    a) Read the slides
    b) Look through the textbook (if you bought it)

How To Succeed In This Course (4)

4. Start working on things as early as possible:
   - Don't cram the material just before the exam, instead you should be studying the concepts as you learn them throughout the term.
   - Don't start assignments the night (or day!) that they are due, they may take more time than you might first think so start as soon as possible.

How To Succeed In This Course: A Summary

1. Practice things yourself
2. Make sure that you keep up with the material
3. Look at the material before coming to lecture
4. Start working on things early

Evaluation Components

- Assignments (35%)
- Examinations (65%)
- Bonus component: in-lecture questions using TopHat Monacle (1%)

Assignments

- There will be two types of assignments
  - Mini assignments (3%)
  - Full (regular) assignments (32%)

- Full assignments (5):
  - Marking is based on a number of factors (such as program functionality, documentation, style)
  - Assignment 1: worth 5%
  - Assignment 2: worth 8%
  - Assignment 3: worth 8%
  - Assignment 4: worth 5%
  - Assignment 5: worth 6%

- Mini assignments (3 worth 1% each)
  - The goal is to create a small and relatively simple program in order to learn basic programming concepts such as Java syntax
  - Marking is focused on program functionality

Assignments

- Assignments must be individually completed and individually submitted.
  - There is no group work allowed for this class.
  - Students should not see the computer program code of other students.
- Both types of assignments will be marked by the tutorial instructor.
  - You can contact him/her for the grade and/or the completed marking sheet.

Examinations

- There will be two exams: midterm and final.
- Midterm exam (worth 30%)
  - I set the date, info on course web page:
    http://pages.cpsc.ucalgary.ca/~tamj/233/#Assignments_and_exams_
- Final exam (worth 35%)
  - Date/time/location determined by the Office the Registrar.
  - (That means I find out these details at the same time that you do).
  - You can find information about your final exams online via the university PeopleSoft portal.
- Both will completed on paper (not in front of a computer).
- Note: you need to pass the weighted average of the exam component in order to receive a grade of C- or higher in this class.

Estimating Your Term Grade

- As stated in the course information sheet (official signed document) each major component will be awarded a grade point.
  - Individual assignment
  - In-lecture questions
  - Midterm exam
  - Final exam
- The mapping of raw score to grade point will be posted before each assignment is due (variation between assignments will occur).
- The mapping of the midterm to grade point will be posted sometime after the midterm.
- The mapping of final to grade point cannot be provided until after the official term marks have been released (Department policy).

Estimating Your Term Grade (2)

- To determine your weighted term grade point simply multiply each grade point by the weight of each component.
- Sum the weighted grade points to determine the term grade.
- Simple and short example (not exactly the same as this term but it should be enough to give you an idea of how to do the specific calculations required this semester):
  - Assignments: weight = 30%, example score = A
  - Midterm: weight = 30%, example score = B+
  - Final: weight = 40%, example score = C-

  Weighted assignments: 0.3 * 4.0 = 1.2
  Weighted midterm: 0.3 * 3.3 = 0.99
  Weighted final: 0.4 * 1.7 = 0.68
  Total term grade point = 1.2 + 0.99 + 0.68 = 2.87

Official university listing of letter grades/grade points: http://www.ucalgary.ca/pubs/calendar/current/f-2.html