



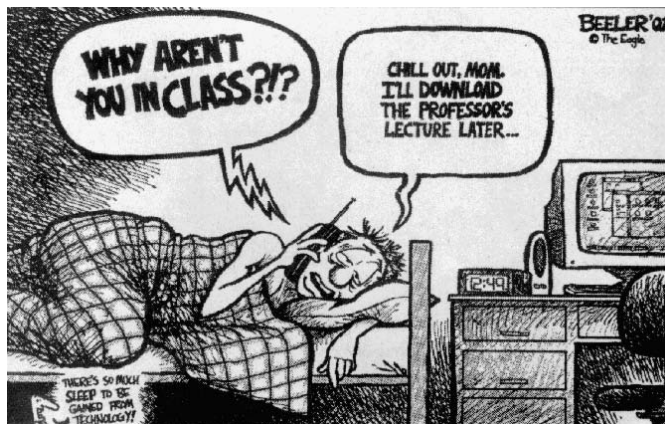
## Course Resources

- Required resources:
  - Course website: <http://www.cpsc.ucalgary.ca/~tamj/219> (Get the notes off the course webpage before lecture)
- Recommended but not required:
  - “*Head First Java (2<sup>nd</sup> edition)*” by Sierra K., Bates B. (O’Reilly)

James Tam

## 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.



James Tam

## 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.CLOAKED))  
                    System.out.print(" ");  
                else  
                    System.out.print(grid[r][c].getAppearance());  
            }  
            else  
            {  
                System.out.print(" ");  
            }  
        }  
        System.out.println("|");  
        System.out.println(HORIZONTAL_BORDER);  
    }  
}
```

James Tam

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}
```

*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)*

James Tam

## 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

James Tam

## Course Goals

- Implementing a procedural solution to a problem using a low level programming language
- Design a program using the Object-Oriented approach
- Solve problems using principles of good Object-Oriented design

James Tam

## Feedback

What is he talking about???

Wow I am the greatest speaker in the world!



Let me know how things are going in the course:

- Am I covering the material too slowly or too quickly.
- Can you read the slides and my hand writing.
- Can you hear me in the class.
- Etc.



James Tam

## How To Succeed

### •Successful people



Leonardo da Vinci



Bruce Lee



J.R.R. Tolkien



Amadeus Mozart



Wayne Gretzky

James Tam

## **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

James Tam

## **How To Succeed In This Course (2)**

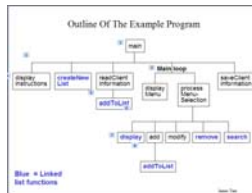
### 2. Make sure that you keep up with the material

- Many of the concepts taught later depend upon your knowledge of earlier concepts.
- Don't let yourself fall behind!
- *At least* attempt all assignments!

James Tam

## 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 textbooks (if you bought them)



```
Main Procedure: Example Program
begin
  use main_menu;
  use main_help;
  use main_quit;
  use main_menu_options;
  use main_menu_commands;
  use main_menu_quit;
  use main_menu_help;
  use main_help_options;
  use main_help_commands;
  use main_help_quit;
  use main_help_help;
  use main_quit_options;
  use main_quit_commands;
  use main_quit_quit;
  use main_quit_help;
end
```

```
2. Creating A New List (2)
Description
The purpose of the beginning of the list is passed into the procedure as a variable
parameter and returned in the output list for use in the program.
Example
procedure createNewList (var aList: list of Integer);
begin
  aList := [];
  add (1, createNewList);
end
```

```
Reading The Client Information From A File (2)
procedure readClientInformation (var aList: list of Integer);
var
  f: TextFile;
  line: TextLine;
  i: Integer;
begin
  f := TextFile ('client.txt', fmOpenRead, fmShareDenyNone);
  while not f.Eof do
    line := f.ReadLine;
    i := i + 1;
    add (i, readClientInformation (line));
  end;
  f.Close;
end
```

James Tam

## 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.

James Tam

## 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

James Tam

## Are You In Right Place?

- CPSC 217 and CPSC 231
- CPSC 219 and CPSC 233
  - 219: Largely the same topics but a few additional ones that were covered in 231 (recursion, classes/objects).
  - 219: Additional examples (i.e., slower).
  - 219: Extra contact time (4 vs. 3 hours per week).



James Tam