Introductions & Review (3)

CS 165 – Object Oriented Software Development

Macbeth – Week 1

Agenda

- Invite the Spirit
- Brainstorm - Structures
- Code Together – Structures & File I/O
- Explore Assignment #1
- Preparation

Invite the Spirit

<u>Music Friday – The Spirit of God (#2)</u>

The Spirit of God like a fire is burning!

The latter-day glory begins to come forth;

The visions and blessings of old are returning,

And angels are coming to visit the earth.

We'll sing and we'll shout with the armies of heaven,

Hosanna, hosanna to God and the Lamb!

Let glory to them in the highest be given,

Henceforth and forever, Amen and amen!

File I/O Review

	Input / Reading	Output / Writing
Library for File I/O	#include <fstream>	
Create File Stream	ifstream fin("a.txt");	ofstream fout("b.txt");
Failure Opening a File	fin.fail()	fout.fail()

Read/Write 1 word or value	fin >> text;
	
	NOTE: You can use this in your while loop. It will return false if EOF is reached. Example:
	
	    while (fin >> text)
	    {
	        // Do stuff
	    }
		fout << text;

Read/Write 1 line	getline(fin,text);	fout << text << endl;
Close File Stream	fin.close();	fout.close();

Assignment 1 Requirements

- Pass Test Bed:
  - Req 1: Program prompts for your DNA and the number of your relatives.
  - Req 2: Program prompts for the name of each relative.
  - Req 3: Program prompts for the relative DNA using the relative name.
  - Req 4: Program displays 100% for a complete DNA match and 0% for a complete DNA mismatch.
  - Req 5: Program displays the correct % for a partial DNA match.
- Every function has a detailed comment block and complex code is also commented.
- Must have at least 5 functions (excluding main), use arrays, have proper function declarations (including the use of &, [], and const as appropriate), and no global variables.

Preparation

- No Class on Monday

- Finish Assignment 1 – Turn in on Tuesday Evening

- Complete Reading and Submit Checkpoint 2A