CIS 291 – Data Structures in C++ - Spring 2005
Homework #6 - PART 1

PART 1 - DUE AT THE BEGINNING OF LAB on TUESDAY, MARCH 8th.

(HW #6 - Part 2 will be handed out IN-LAB on TUESDAY, MARCH 8th)

Purpose:
Set-up for a future activity...

Create a class **wordcount**; it contains a C++ **string** representing a word, and a count representing its frequency.

It needs 2 constructors: one takes just a **string** word, and the other takes a **string** word and an initial count. If no count is provided, the count should be set to a default value of 0.

It needs the usual accessors, **get_word** and **get_count**; we'll only give it one modifier, however: **set_count**. You are permitted to change the count for a word, but you are not permitted to change the word field once it is set. That is because we are intending it to be our **key** field, eventually, and one doesn't change an item's key after it has been set.

To underscore this, also provide a **get_key** observer method that also returns the word value. (I know it is redundant, but we are doing it for a reason, to be explained later.)

You need to turn in:

*   pseudo-UML for the class **wordcount**, expressed in ASCII form on cs-server in a file named **wordcount_uml.txt**. Instead of boxes, separate the sub-sections with lines of dashes.

*   **wordcount.h** and **wordcount.cpp**.

*   **test_wordcount.cpp** that tests your class (remember the posted course templates!), with output redirected into **test_wordcount_output**.

All 5 of these files must be submitted using **~st10/291submit** by the beginning of lab on Tuesday, March 8th.