Lesson 3: Input and Output

3D Game Programming With C++ Digital Media Academy (Summer 2011)

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A program needs to be able to talk to its user. How do we do it? Later in the class, we'll learn how to do it using the Panda3D game engine, but for now, let's use simple text.

We already saw above how to output text to a console. We can chain together a bunch of things with the << operator and write to the cout stream:

```
cout << "Hi, my name is " << name << ", how are you?" << endl;</pre>
```

We can read text from a prompt in a similar way, and save it to a variable, like this:

```
int year;
cout << "Oh man, what year is it??" << endl;
// This next line will wait for user to type something in,
// hit enter, then it will do type conversion to "int" so
// that it can save the result in the integer variable "year".
cin >> year;
```

Try this program out in Eclipse!

<u>Caution:</u> When you run your program, make sure you enter **numbers only**. Don't enter letters or symbols like "\$" or "." or commas. This program expects numbers only, and if you put in anything else, it will misbehave.

Exercise 3.1: Reading input from user

Write a program that asks your name and age and writes it back out to the console as something like this:

Hi Bilbo, you are 111 years old