CS 216

Lecture 14
April 4th, 2014

Administrivia

PA3 Questions

Copy constructors

Operator overloading

```cpp
mt19937 mt;
mt.seed( time(NULL) );

int iRandom = mt();
```

(almost) Everything is an expression

```
a << b;
```

Without an overload, << is the left shift operator, and works on ints.

But the use you're more used to is the insertion operator…

… which is overloaded by <iostream> classes

Overloading an operator lets *you* decide what it does.

There are a bunch of overloadable operators.

```
  +  -  *  /  %  ^  &  |
~  !  =  <  >  +=  -=  *=  /=
%=  ^=  &=  |=  <<  >>  <<=
>>=  ==  !=  <=  >=  &&  ||
  ++  --  ,  ->*  ->  () []
    new delete new[]
        delete[]
```

```
   +   -   *   /   %   ^   &   |
~   !   =   <   >   +=   -=   *=   /=
%=   ^=   &=   |=   <<   >>   <<=
>>=   ==   !=   <=   >=   &&   ||
++   --   ,   ->*   ->   ()   []
      new delete new[]
           delete[]
```