CSI 32 LECTURE NOTES (Ojakian)

Topic 13: Classes - private, public, and declarations

OUTLINE PRIMER: 12.1, 12.2, 12.4 TRANSITION GUIDE: 7.1, 7.2

- 1. Private and Public part
- 2. Declarations and Definitons
- 3. Overloading methods

1. RECALL - Classes with everything public

- (a) This is the Python way.
- (b) Can do this in C++ (non-standard!)

PROBLEM 1. Recall RPGchar example

2. C++ private part

PROBLEM 2. Modify RPGchar example to make data private (standard way)

- 3. Const
 - (a) Qualifier on a method: const member function
 - i. Guarantees that the method does not change internal data
 - ii. const objects can only call const methods
- 4. Declaring Classes and Methods

PROBLEM 3. Modify RPGchar example further to make the declaration and definition separate.

PROBLEM 4. Develop a class for a die by first developing the interface (i.e. declaration) and then the definition.

- 5. <u>"this" and arrow</u>
 - (a) Similar to Python: the object calling the method is passed as first argument to member function.
 - (b) When class member function called, pointer to calling object called