

## Programming Two

### Tutorial 3: Inheritance

#### Code

See the inheritance.zip file online

#### Inheritance

New classes created from existing classes

Absorb attributes(data members) and behaviors (member functions)

##### **Derived class**

- Class that inherits data members and member functions from a previously defined base class

Single inheritance

- Class inherits from one base class

Multiple inheritance

- Class inherits from multiple base classes

Types of inheritance - (access rights)

- public: Derived objects are accessible by the base class objects
- private: Derived objects are inaccessible by the base class
- protected: Derived classes can access protected members of the base class

Base and derived classes

- Often an object from a derived class (subclass) is also an object of a base class (superclass)

#### A quick wake me up

Fill in the table below with yes and no's. Yes if the members on the right have access to data/functions defined on the left.

Access	public	protected	private
members of the same class			
members of derived classes			
not-members			

#### Continuation

After you have filled in the above table – please continue with the previous tutorials and attempt to produce a working pontoon game that uses your card class and STL vectors.