Recap

COMP 524: Programming Language Concepts
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Explain early and late binding in the context of object-oriented languages.

With early binding, the method being invoked is determined at compile time based on the type of the reference.

With late binding, the method being invoked is determined at run time based on the type of the value (i.e., the object).

Thursday, April 22, 2010

Name two advantages of delegation.

1) Avoids the fragile base class problem.
2) Facilitates the use of "fat" interfaces, i.e., interfaces that require many methods to be implemented.

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What's "monkey patching?"

Modification of classes at runtime (adding / removing / replacing methods and attributes).

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Can classes be modified at runtime in Python?

Only those not implemented in C.

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The class concept is fundamental to all object-oriented languages. True or false? (Why?)

No, prototype-based languages do not require classes.

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Are prototype-based languages as general as class-based languages?

(How would you model classes and inheritance?)

Yes.
Each class becomes an object, instances of a class simply use the class object as their prototype.

Single inheritance can be resolved similarly: the derived class simply uses the super class as its prototype.

(Multiple inheritance is more complicated.)

Thursday, April 22, 2010