

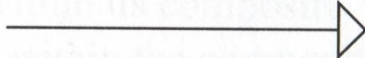

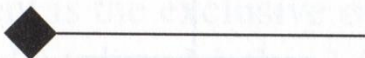
COP 3330, Spring 2013

Recap: UML Relationships among Classes

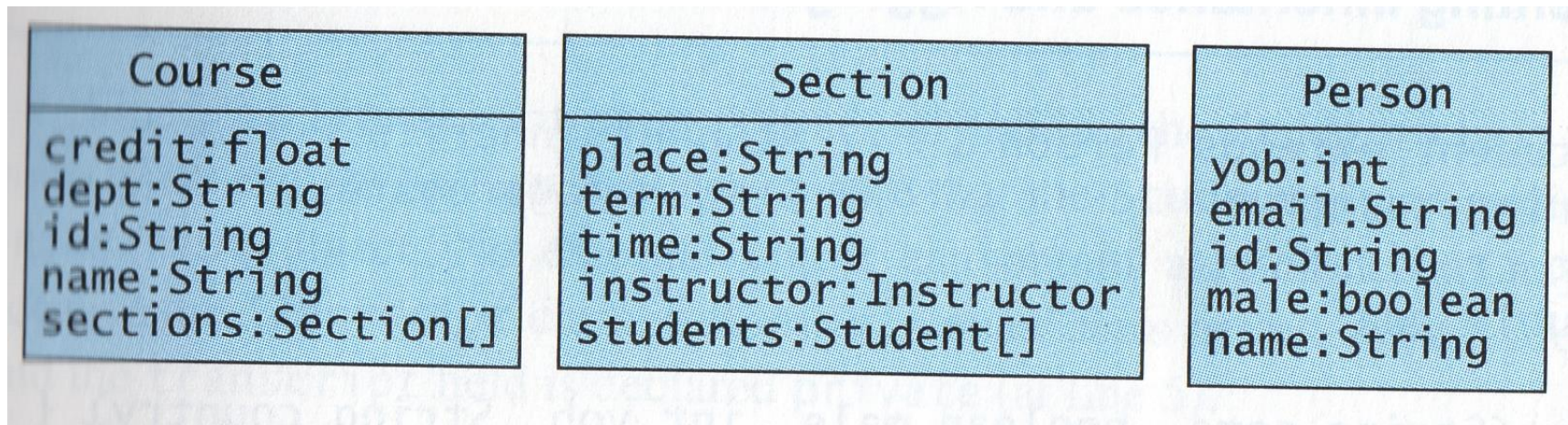
Instructor : Arup Ghosh
03-18-13

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University of Central Florida

UML Symbols for Relationships among Classes

Relationship	UML Symbol	Meaning	Example
inheritance		<i>is-a</i>	A book <i>is a</i> printed resource.
aggregation		<i>has-a</i>	A book <i>has a</i> publisher.
composition		<i>contains-a</i>	A book <i>contains a</i> chapter.

Example 1: Classes for University Registration System

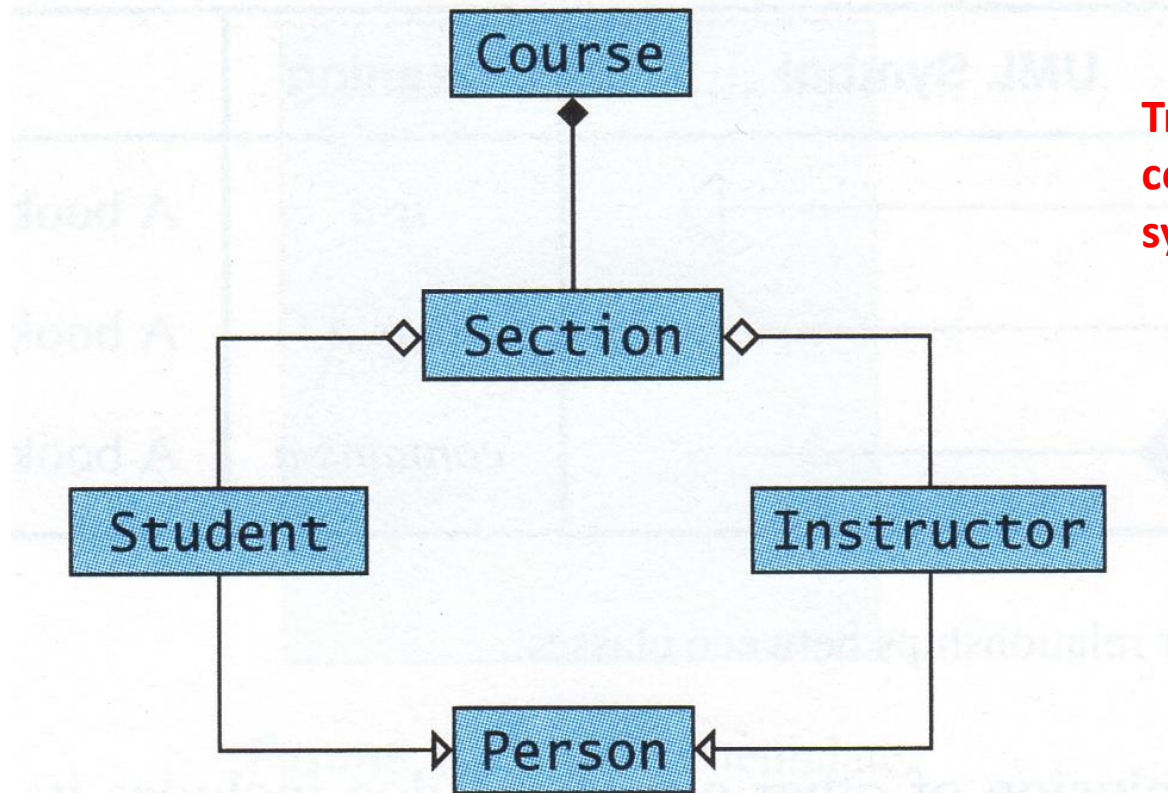


Classes for University Registration System

Student
credits:int gpa:double country:String

Instructor
dept:String office:String tel:String

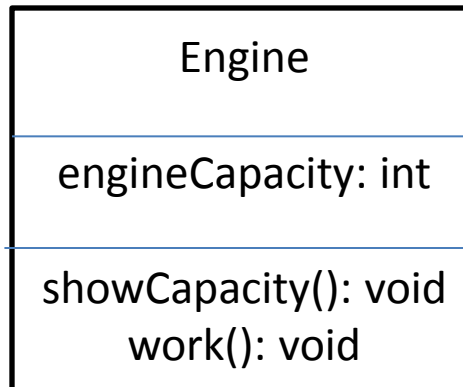
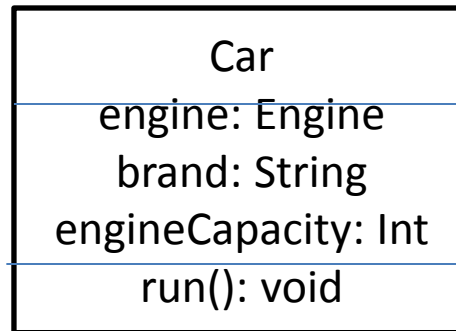
Relationships among Classes



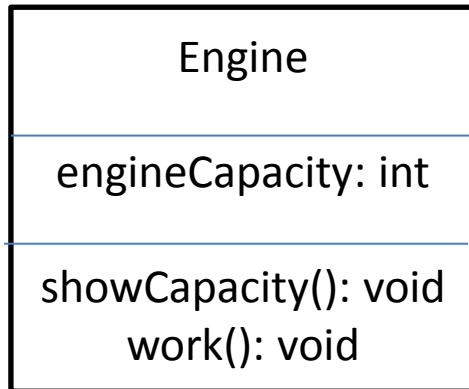
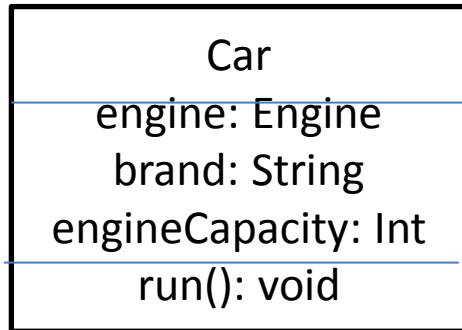
Try to write
code for this
system.

Relationship	UML Symbol	Meaning	Example
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Example 2: Car and Engine Classes



Relationship between Car and Engine



Relationship	UML Symbol	Meaning	Example
inheritance		<i>is-a</i>	A book <i>is a</i> printed resource.
aggregation		<i>has-a</i>	A book <i>has a</i> publisher.
composition		<i>contains-a</i>	A book <i>contains a</i> chapter.

