

Object Oriented Concepts

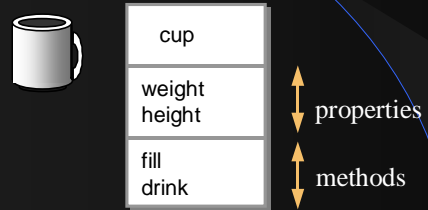
Modeling

- Analysis, Design, Program : Models
- Goal is to understand a system- we develop something that represents the system:
 - Mock-up
 - Mathematical functions
- Main question: how much detail?

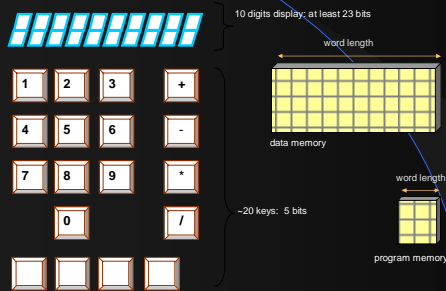
Fundamental Object Oriented Concepts

- Encapsulation: Data and function packed together
 - Inheritance: Acquiring the data functions from the base class
 - Polymorphism: A function with the same name can act different for different classes
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- Messages
 - relations
 - Object Based ?

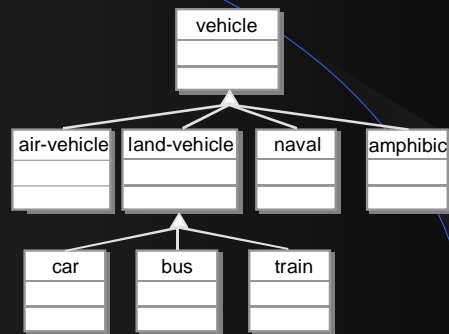
Encapsulation

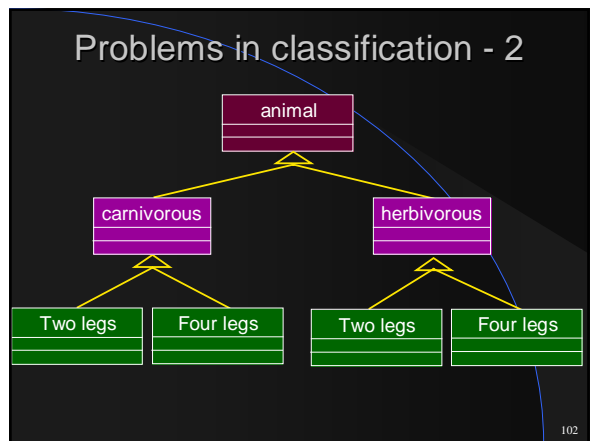
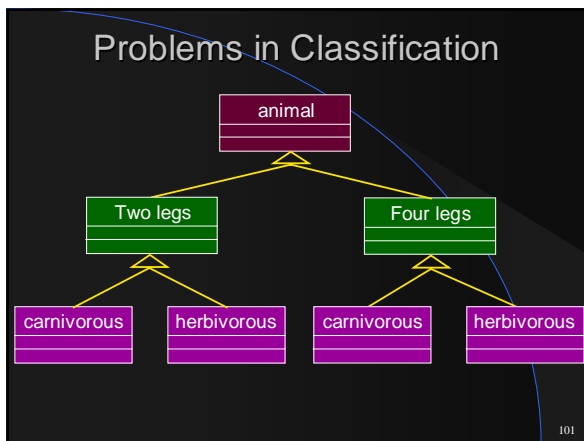
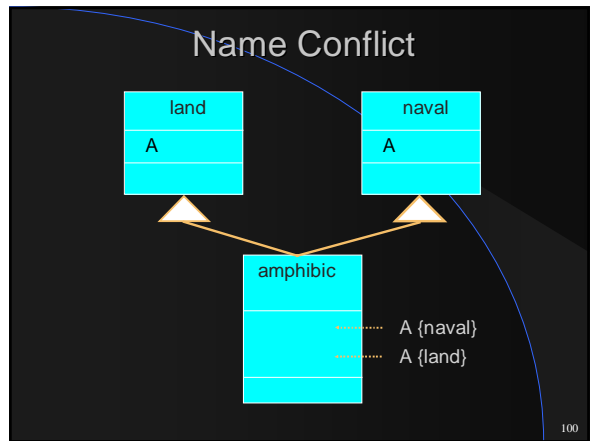
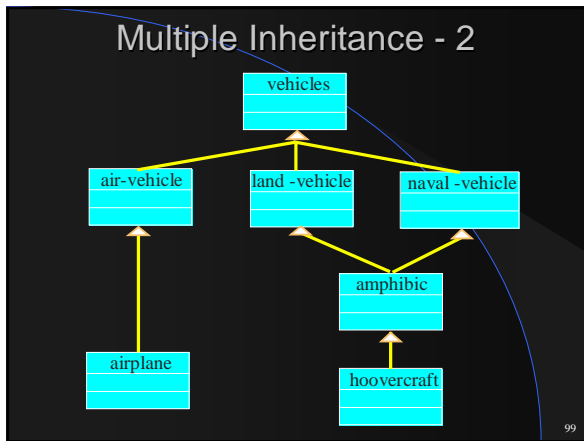
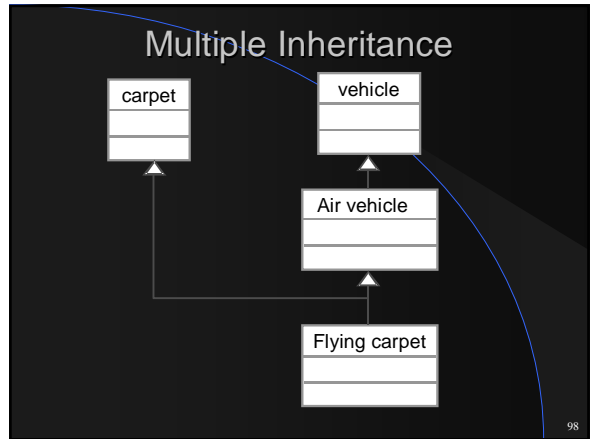
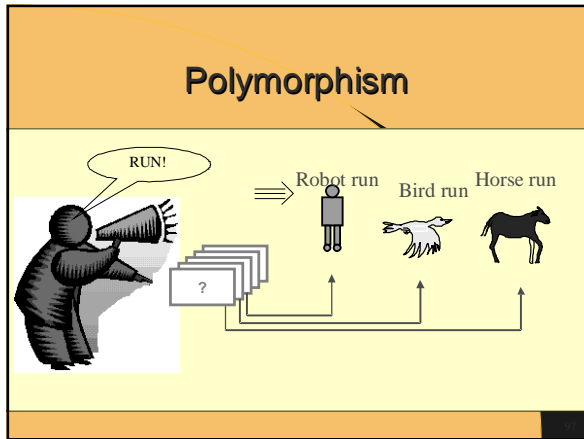


Data / Function Separation

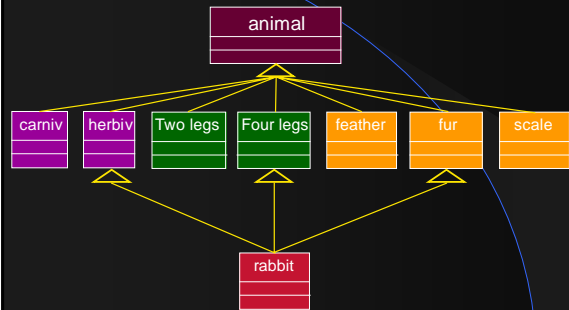


Inheritance





Non-prioritized Classification Criteria



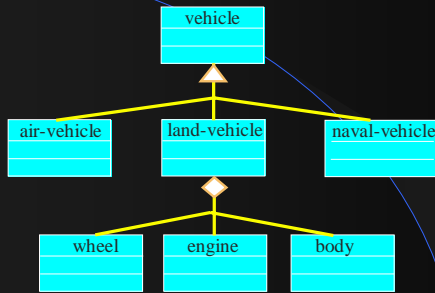
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Object Based Media

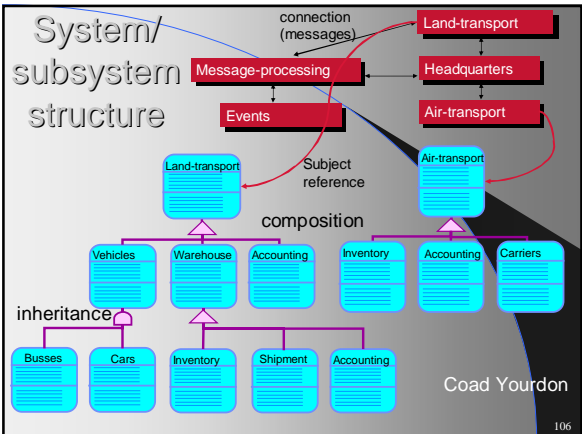
- Visual BASIC (initial versions)
- Ada
- ...

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Inheritance / Composition

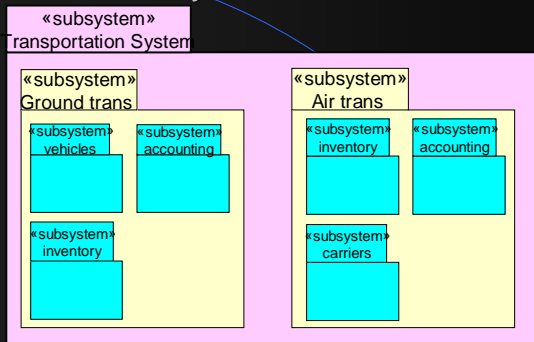


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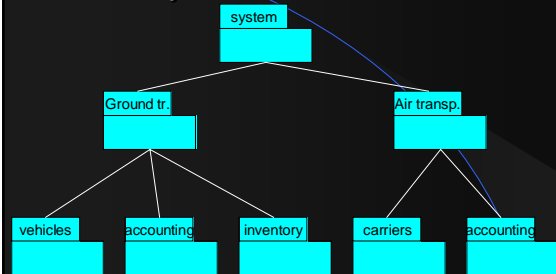
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Subsystems in UML



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Subsystems in COSEML



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Language Dependency

- Similar Models from Requirements to Coding
- Modeling should consider the coding language, since the beginning !

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