Class announcements
- For Next Class
  - Read: MySQL Database Case
- For next Tuesday
  - Assignment 4
- Database tutorials

Student Presentations

Implementation

Encapsulation
- The designer of B might take measures to hide "SUM" from A so that A is not able to violate the agreed interface.
  - Example: B does not declare "SUM" as a global variable.
  - Making a modules implementation details inaccessible to other modules is called encapsulation.

Interfaces
- This simple interface example allows for only one action of module B.
  - Action is "Compute mean and variance."
- Other examples are possible.
Possible software interface

Menu of actions

- action-1
- action-2
- action-3
- ...

Example:
Action 1: Compute mean
Action 2: Compute variance
Action 3: Compute mode
Etc..

Protocol

In addition to atomic actions, an interface may define protocols

- Protocol == finite sequence of actions required to achieve a higher level function
- One action can be shared by multiple protocols
- Multiple modules may participate in a protocol

Protocol Example

Hello: I'm the HHC of Airplane#1234
Hello: I'm the gate 32 server
These were the unruly passengers on last flight:
"Passengers noted"
Tell me about the passengers of my next flight
Return Passenger Data
(Might be passed as an array of a compound data type "passenger," which in turn is composed of standard types like integer, and string)