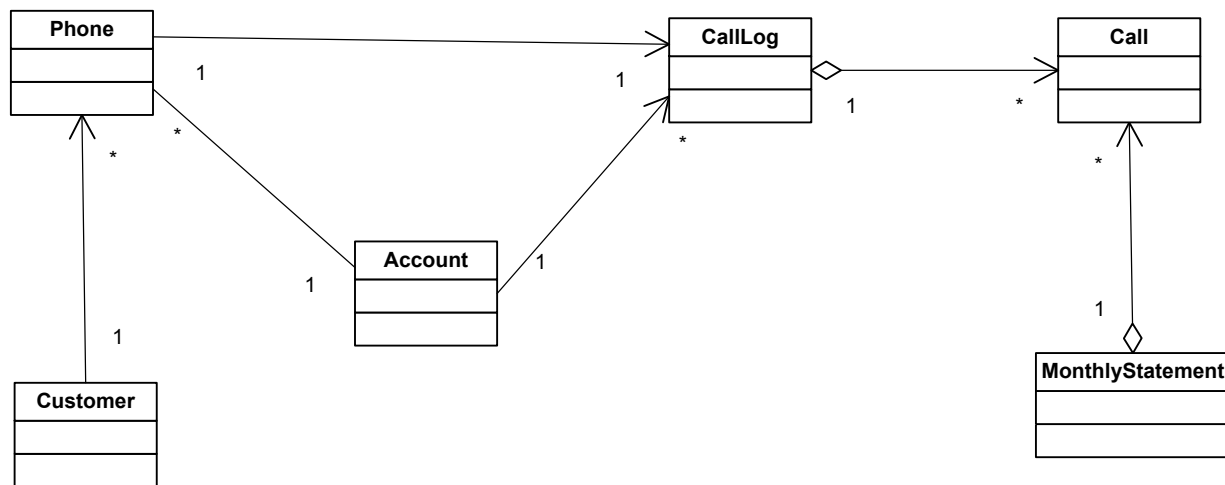


CPSC 210
Design Principles Lecture/Lab
Coupling and Cohesion

AceCell is a cellular phone network company that needs a software system to manage their customer accounts and to support billing those customers. The company provides a family plan that allows multiple phones to be billed to one account. Each phone is assigned to a single customer, but multiple phones can be under the same account. For each account the company needs to know the customer who is responsible for paying the bill. Billing is done by month and is based on the call log (all calls made by a phone) for each phone that belongs to the account. Each month, one statement is sent to the customer contact for each account.

- 1) You come up with the following design. Is there too much coupling? If so, where?



- 2) Can you find other problems in this design?
- 3) You want to improve the statement so that long distance calls are displayed in a different section of the statement. What changes would you need to make? Have the changes you've made kept the design cohesive? What negative consequences could arise if your design becomes less cohesive over time?