99 little bugs in the code.
99 little bugs in the code.
Take one down, patch it around.

127 little bugs in the code...

CS61B DISCUSSION 6

TA: SHERDIL NIYAZ

Updates:

* Evaluation is *still* out! If more than 70% of you fill out the evaluation I send out, there will be food. Again.

* Sorry extra worksheets haven't been put on the section site. I'll push them once my hell week ends. T_T

* Asking for more Lab Assistants. Crossing fingers.

* Start Project 2!!!!!!! Also, HW due Friday.

Access Control and Security

* We want to prevent something like this from happening:

  TA sherdil = new TA();
  sherdil.salary = Integer.MAX_VALUE;
  /*This is a security problem. Also, we've just bankrupted the EECS department…*/

ASSUME YOUR USER IS STUPID. FAITH IN HUMANITY IS OVERRATED.

Fun reading for home: https://en.wikipedia.org/wiki/Wikipedia:Assume_stupidity

Other reasons: protect users from themselves

* Some users aren't ill-intentioned: they just legitimately **don't know better** and might hurt themselves if you let them.

* Solution: **Encapsulate** your objects, and only let users interact through well defined methods.

* Or, just make them **immutable:** they can't be changed after they're made.

* Example: **final** keyword means that a variable in a class can **never** be changed after the first value is set.

How: Access Modifiers.

* Change policies on when instance variables can be accessed and modified!

* Handy chart from Oracle (https://docs.oracle.com/javase/tutorial/java/javaOO/accesscontrol.html)

Access Levels

Modifier	Class	Package	Subclass	World
public	Y	Y	Y	Y
protected	Y	Y	Y	N
no modifier	Y	Y	N	N
private	Y	N	N	N

QUESTIONS?

BY THE WAY, IF YOU LIKE THIS STUFF, TAKE CS 161 (THE SECURITY CLASS)