CS225

Data Structures and Software Principles
Introductions:

Me:  Cinda Heeren - CS PhD, 2004, UIUC

Research interests: data mining, computational geometry, computer science education.

More recently: new course “Visualizing Literature”, newer course cs126.

Course staff:

You:
All you need to know is here:

http://cs.illinois.edu/class/cs225

Info on:
- Staff
- Communications
- Lab sections
- MPs
- Exams
- Grading
- Academic Integrity
Today’s announcements:

HW0 available, due 8/29, in class AND svn.

MP1 available soon, due 9/2, 11:59p.

DYB (Debug your brain):
  – Every MWF, 1-2p, at Bevande for now

Sections DO meet this week (and are very important).
What’s this course about?
Where’s Bill Bindi?
What’s this course like?

• A programming and “thinking” course
  – Not an easy course
  – Expect to work hard
• A fundamental computer science course
  – Must know if you claim to be a computer scientist
  – Must know if you want to be a good programmer and designer
  – Essential for many follow up courses
Where did you come from?

Java (cs125)

C (ece190)

C++ (cs225)
Classes in C++:
Every variable has ______, ______, __________, __________

Primitive types:

```cpp
int myFavoInt;
char rating = ‘E’;
double u = 37.;
```

User defined types:

```cpp
sphere myFavoSphere;

_____ is a group of _______ and ___________
```
Structure of a class defn:

how do we implement sphere myFavoSphere; ?

class sphere{
    //member declarations
    ...
};
Structure of a class defn (cont):

```cpp
class sphere{
public:

private:
};
```

**sphere representation:**

```cpp
sphere
```

**sphere functionality:**

1.
2.
3.

```cpp
int main(){

};
```
Class Definition… where are we?