

# CSE 333 Section 7

Thursday, May 10, 2012

[katelin@cs.washington.edu](mailto:katelin@cs.washington.edu)

# Let's talk classes...

- What's an abstract class?
- What's a virtual function?
- How about a pure virtual function?
- Why are these useful?

# Now for some code...

- I'll give you a pretty fuzzy class hierarchy (you get to decide what each class is "for")
- You need to fill in sufficient functions so that...
- Your main "test" function can demonstrate dynamic/static dispatch and I know you understand abstract classes
- Turn in to the catalyst dropbox at the end of section (no extra time allowed!)

# Programming Exercise: Class Hierarchy

- Create an `Animal` abstract class
- You must include the following in your `Animal` class (you should include others):  

```
virtual void makeNoise() = 0;
```
- Create a `Dog` and `Bird` subclasses for `Animal`
- Create subclasses for `Dog`: a `Laborador` subclass and a `Chihuahua` subclass

# Programming Exercise: Test Function

- Write a main function that
  - demonstrates that you know when static and dynamic dispatch are being used: add a comment to tell me when you're using each
  - shows me that birds and dogs (and labs and chihuahuas?) make different noises.