What is the Object Concept?

- **Ask not what you can do to an object, ask what an object can do to itself**
  - **Object has internal state, data**
  - **Operations on the object affect the internal state**
    - **Can expose state to client programs**
    - **Can change state in some ways**
- **An object's state is stored in its *instance fields***
  - **Aka state variables, object data, instance variables**
  - **Compare instance (object) with class**
  - **State is typically private: change how we implement something without changing how outside world interacts with the something**

How is one thing like the other?

Object concept: rectangle in 2D space

- **What state do we need to specify a rectangle?**
- **What methods/behavior operate on rectangles?**
  - ➢ **Accessors**
  - ➢ **Mutators**
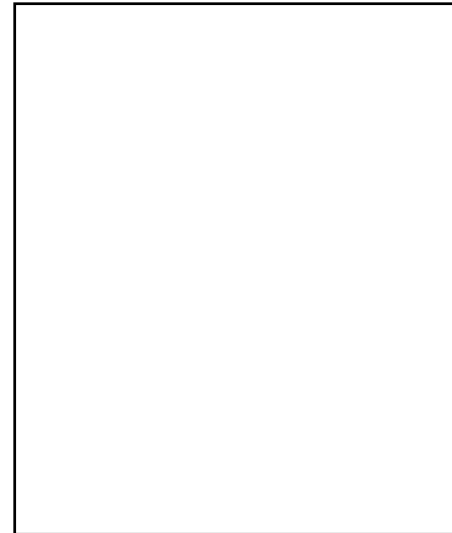
From Object to Objects: data access

- **Where does data come from?**
  - Arrays
  - Files
  - Internet
  - Streaming video

- **How do we access data without knowing it's source?**
  - Why would we want to do this?
  - What is the data?
    - Who knows: source or receiver?