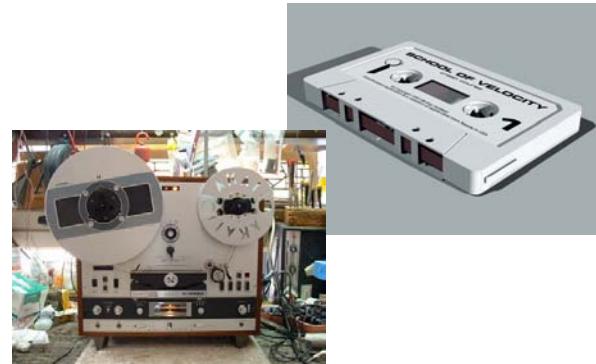


## What is the Object Concept?

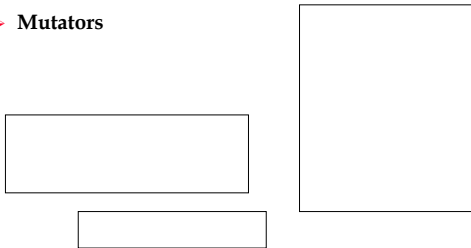
- Ask not what you can do to an object, ask what an object can do to itself
  - Object has internal state, data
  - Operations on the object affect the internal state
    - Can expose state to client programs
    - Can change state in some ways
- An object's state is stored in its *instance fields*
  - 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?