Objects and APIs

GWU Pre-College Summer Robotics July 18th, 2011 James Marshall

Objects

- Java is Object Oriented
- Data int, String, other objects
- Behavior methods
- public
 - Can be seen by any other part of program
- static
 - Does not need to be instantiated

LightSensor

- It's a class
- LightSensor x = new LightSensor(SensorPort.P2);
- Behavior
 - x.getNormalizedLightValue();
 - x.setFloodlight(true);
- Data mostly hidden from us
- Hiding this data and some behavior is great!

ColorSensor

- How do we use the new ColorSensor?
- http://lejos.sourceforge.net/nxt/nxj/api/index.html
- How do we create a new ColorSensor object?
- How do we read from it?

Application Programming Interface

- An API lets programmers use each other's code
- You are reading the LeJOS API
- Tells you how to use their application
- Supplement with tutorials

Javadoc

- Java has tools to give consistent APIs
- Learn how to read APIs!
- http://download.oracle.com/javase/6/docs/api/
- There is a ton of stuff there
- Don't Panic