setTotal(total)

publishPropertyEvent("sale.total", total)

s:Sale

onPropertyEvent(s, "sale.total", total)

propertyListeners[i]:PropertyListener

**Communication Diagram
21 CST H3Art**

Object-Oriented Methodology HW 07

2024 Fall Semester

21 CST H3Art

```java
public class Sale {
    private double total;
    private List<PropertyListener> propertyListeners;

    public Sale() {
        propertyListeners = new ArrayList<>();
    }

    public void addPropertyListener(PropertyListener listener) {
        propertyListeners.add(listener);
    }

    public void removePropertyListener(PropertyListener listener) {
        propertyListeners.remove(listener);
    }

    public void setTotal(double total) {
        this.total = total;
        publishPropertyEvent("sale.total", total);
    }

    public void publishPropertyEvent(String propertyName, double newValue) {
        for (PropertyListener listener : propertyListeners) {
            listener.onPropertyEvent(this, propertyName, newValue);
        }
    }
}

public interface PropertyListener {
    void onPropertyEvent(Sale sale, String propertyName, double newValue);
}
```