



LAB 2.0 & JAVA BASICS



Things to be covered

- General Java Topics
- Edit(update) Functionality
- Q&A

General Java Topics

- Classes & Objects
- Constructors
- Access Modifiers
- Associations

Classes

```
public class Supplier {  
  
    private String supplierName;  
    private String address;  
  
    public Supplier(){  
        supplierName = "Default Name";  
        address = "Default Address";  
    }  
}
```

- Template/Blueprint to create objects
- Have Attributes and methods
- Have Constructors for instantiation

Objects

```
private Supplier supplier;  
  
public Product(){  
    supplier = new Supplier();  
}
```

- Similar to real-world Object
- Instance of a Class
- Attributes(state)/
methods(behavior)
- Declaration
- instantiation

Access Modifiers

- Set the accessibility of classes, methods, and other members.
- Private – Class only
- Public – Entire World
- Protected – Package and Subclasses
- Default – Package, no modifier needed

Constructors

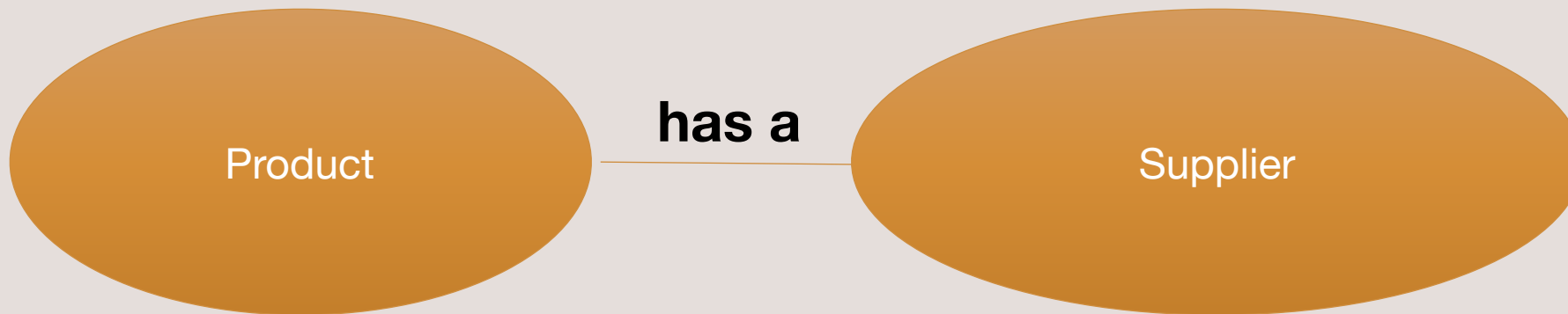
- Used to instantiate Objects
- Default Constructor:
 - *<Access Modifier> ClassName () {}*
- Parameterized Constructor:
 - *<Access Modifier> ClassName (String attrbName,) {}*

Edit Functionality

- Add an **UPDATE** button on the Left Panel
- Render new panel on right for updating
- On Save, update the values in same object

Class Associations

- Create a new Entity **Supplier**
- Add a class object of Supplier in Product as an attribute
- Instantiate the object in Constructor
- The relation between classes has been established



Example

```
public class Product {  
    private String name;  
    private String price;  
    private String availNum;  
    private String description;  
    private Supplier supplier;  
  
    public Product(){  
        supplier = new Supplier();  
    }  
  
    public Supplier getSuplier() {  
        return supplier;  
    }  
  
    public void setSuplier(Supplier supplier) {  
        this.supplier = supplier;  
    }  
}
```

Lab Homework

- Add an additional Entity **Supplier**
- **Supplier** should be related to **product** by: (every **product** has a **supplier**)
- Add fields for **Supplier** in the **UPDATE** panel
- Add **Supplier** info in View panel

Submission on 21st Sept,2018 Friday
- on BitBucket