Software Re-Engineering

Midterm-1 Revision

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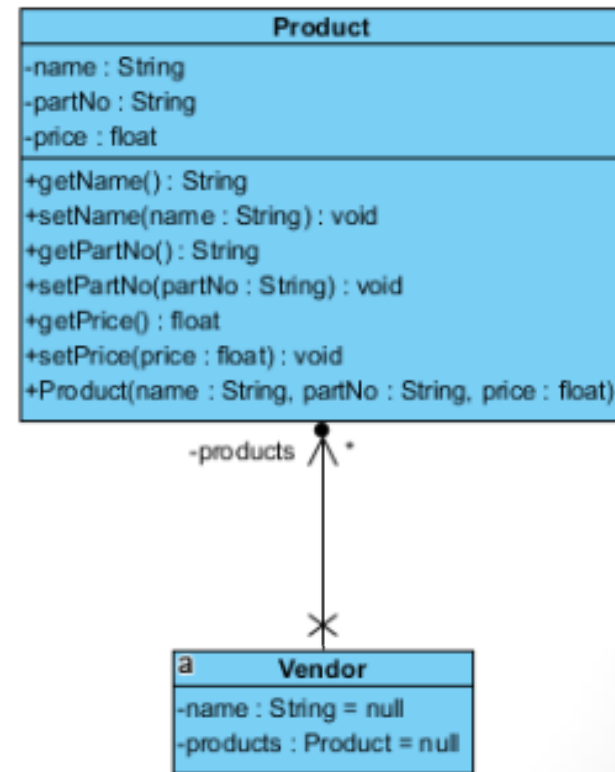
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Reverse Engineering - Convert Source Code to Class Diagram

```java
class Product {
    private String name;
    private String partNo;
    private float price;

    public Product(String name, String partNo,
        float price){
        this.name = name;
        this.partNo = partNo;
        this.price = price;
    }

    public void setName (String name){
        this.name = name;
    }
    public String getName(){
        return name;
    }

    public void setPartNo(String partNo){
        this.partNo = partNo;
    }
    public String getPartNo(){
        return partNo;
    }

    public void setPrice(float price){
        this.price = price;
    }
    public fload getPrice(){
        return price;
    }

}
import java.util.vector

public class Vendor{
    private vector<product> products = null;
    private string name = null;
}
```


Product
-name : String
-partNo : String
-price : float

+getName() : String
+setName(name : String) : void
+getPartNo() : String
+setPartNo(partNo : String) : void
+getPrice() : float
+setPrice(price : float) : void
+Product(name : String, partNo : String, price : float)

-products   *

Vendor
-name : String = null
-products : Product = null

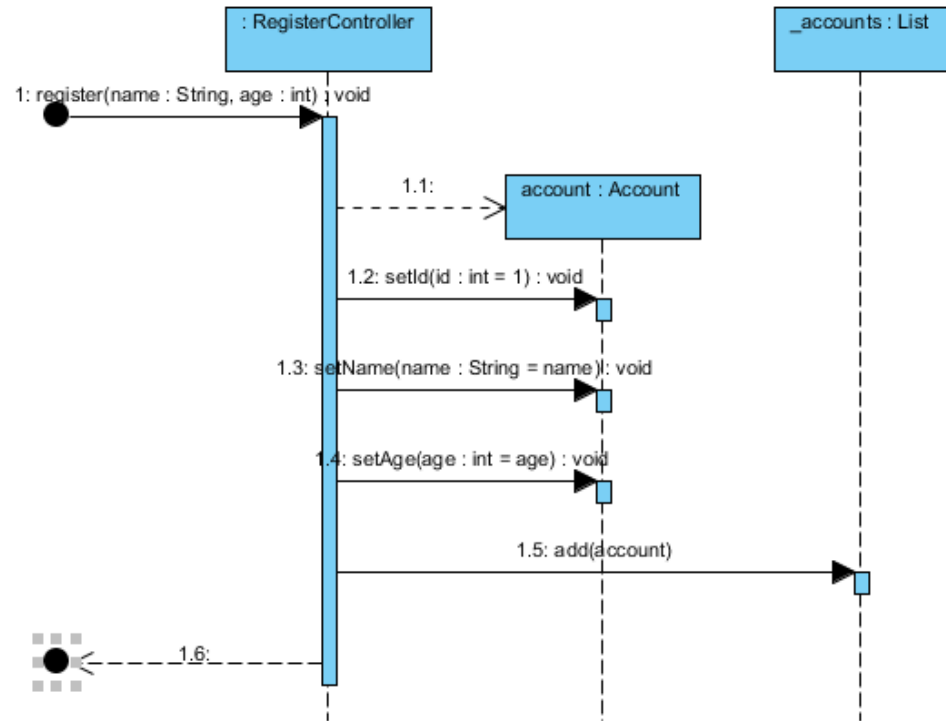# Reverse Engineering - Convert Source Code to Sequence Diagram

```java
import java.util.*;

public class RegisterController{

    private List _accounts = new ArrayList();

    public void register(String name, int age){
        Account account = new Account();
        account.setId(1);
        account.setName(name);
        account.setAge(age);
        _acconts.add(account);
    }

    public List getAccounts(){
        return _accounts;
    }
}
```

Thank You!