Pattern Book Week 5

# Class format

<import statements>  
public class <class name> {  
 <fields>  
 <constructors>  
 <methods>  
 <toString>  
 <getters / setters>

# 3 constructors approaches

**Default Values**  
Public class Account {  
…  
 public Account () {  
 name = …;  
 type = …;  
 balance = …;  
 }  
}  
  
**Read Values**public class Account {  
…  
 public Account () {  
 name = readName ();  
 type = readType ();  
 balance = readBalance ():  
 }  
}

**Parameter Values**public class Account {  
…  
 public Account (String name, String type, double balance) {  
 this.name = name;  
 this.type = type;  
 this.balance = balance;  
 }  
}

# toString method

public class Account {  
…  
@Override  
public String toString () {  
 return “The account had $” + balance;  
 }  
}

# Format to 2 decimal places Pattern

@overide  
public String formatted (double value) {  
 DesimalFormat f = new DesimalFormat(“###,##0.00”);  
 return f.format (value);  
}

# Getter and setter methods

Public class Account {  
 private String name;  
 …  
 public String getName() {  
 return name;  
}  
  
public void setNmae (String name) {  
 this.name = name;  
 }  
}

# Menu pattern

Public class Account {  
…  
 public void use() {  
 char choice;  
 while ((choice = readChoice() ) != ‘x’) {  
 switch (choice) {  
 case ‘d’ : deposit(); break;  
 case ‘w’ : withdraw(); break;  
 case ‘s’ : show() break;  
 default: help(); break;  
 }  
 }

private char readChoice () {  
 System.out.print (“choice (d/w/s/x): “);  
 return In.nextChar();  
}

private voice help() {  
 System.out.println (“the menu choices are:”);  
 System.out.println (“d: deposit”);  
 System.out.println (“w: withdraw”);  
 System.out.println (“s: show”);  
 System.out.println (“x: exit”);  
}  
}