Isaac Ray Shoebottom

CS 1073 (FR02A)

Assignment 2

3429069

# Section A

## Source Code (Bunk.java):

/\*\*

@author Isaac Shoebottom (3429069)

\*\*/

public class Bunk {

private String cabinName;

private long bedNumber;

private double bedCost;

/\*\*

\* Bunk Object, constructor has 3 variables

\* @param cabinNameIn The cabin name constructor parameter

\* @param bedNumberIn The bed number constructor parameter

\* @param bedCostIn The bed cost constructor parameter

\*/

public Bunk(String cabinNameIn, long bedNumberIn, double bedCostIn) {

this.cabinName = cabinNameIn;

this.bedNumber = bedNumberIn;

this.bedCost = bedCostIn;

}

/\*\*

\* Gets the cost of the bed for the bunk

\* @return (double) The cost of the bed

\*/

public double getBedCost() {

return bedCost;

}

/\*\*

\* Gets the bed number of the bed

\* @return (long) The number of the bed

\*/

public long getBedNumber() {

return bedNumber;

}

/\*\*

\* Gets the cabin name

\* @return (String) The cabin's name

\*/

public String getCabinName() {

return cabinName;

}

}

# Section B

## Source Code (Camper.java):

/\*\*

@author Isaac Shoebottom (3429069)

\*\*/

public class Camper {

private String camperName;

private double campFees;

private double excursionFees;

private double fundingSupport;

private Bunk bunk;

/\*\*

\* Camper object, constructor has 5 parameters

\* @param camperNameIn The camper's name

\* @param campFeesIn The camper's fees

\* @param excursionFeesIn The camper's external excursion fees

\* @param fundingSupportIn The camper's funding

\* @param bunkIn The camper's bunk they are staying in

\*/

public Camper(String camperNameIn, double campFeesIn, double excursionFeesIn, double fundingSupportIn, Bunk bunkIn) {

this.camperName = camperNameIn;

this.campFees = campFeesIn;

this.excursionFees = excursionFeesIn;

this.fundingSupport = fundingSupportIn;

this.bunk = bunkIn;

}

/\*\*

\* Method to set the camper's name

\* @param camperName The camper's name

\*/

public void setCamperName(String camperName) {

this.camperName = camperName;

}

/\*\*

\* Method to set the camper's fees

\* @param campFees The fees the camper owes

\*/

public void setCampFees(double campFees) {

this.campFees = campFees;

}

/\*\*

\* Method to set the excursion fees

\* @param excursionFees The camper's excursion fees

\*/

public void setExcursionFees(double excursionFees) {

this.excursionFees = excursionFees;

}

/\*\*

\* Method to set the funding support

\* @param fundingSupport The camper's funding they have received

\*/

public void setFundingSupport(double fundingSupport) {

this.fundingSupport = fundingSupport;

}

/\*\*

\* Method to set the bunk the camper is staying in

\* @param bunkIn The bunk the camper is staying in

\*/

public void setBunk(Bunk bunkIn) {

this.bunk = bunkIn;

}

/\*\*

\* Method to get the combined fees of all the campers

\* @return (double) The total amount owed which is all the costs incurred minus funding

\*/

public double getTotalWeeklyFeesOwing() {

return ((this.campFees + this.excursionFees + bunk.getBedCost()) - this.fundingSupport);

}

/\*\*

\* Method to get a mailing label for a camper

\* @return (String) The campers name and bed number in the format of a combined string

\*/

public String getOnSiteMailLabel() {

return (this.camperName + "\n" + bunk.getCabinName() + ", bed " + bunk.getBedNumber());

}

}

# Section C

## Source Code (As4TestDriver.java)

/\*\*

@author Isaac Shoebottom (3429069)

\*\*/

public class As4TestDriver {

public static void main(String[] args) {

Bunk bunk1 = new Bunk("Chickadee Lodge", 7, 155.75);

Camper camper1 = new Camper("Anna Marie Sullivan", 250.00, 148.30, 150.00, bunk1);

Bunk bunk2 = new Bunk("Moose Hall", 16, 131.25);

Camper camper2 = new Camper("Porter Smith", 340.00, 277.88, 0.00, bunk2);

Bunk bunk3 = new Bunk("Brookside Cabin", 11, 385.00);

Camper camper3 = new Camper("Kathrine Doucet", 565.30, 0.00, 175.00, bunk3);

camper1.setExcursionFees(178.80);

Bunk bunk4 = new Bunk("Wolf Lodge", 9, 147.00);

camper2.setBunk(bunk4);

camper3.setCampFees(525.00);

System.out.println(camper1.getOnSiteMailLabel() + "\nOwed Fees: " + camper1.getTotalWeeklyFeesOwing() + "$");

System.out.println();

System.out.println(camper2.getOnSiteMailLabel() + "\nOwed Fees: " + camper2.getTotalWeeklyFeesOwing() + "$");

System.out.println();

System.out.println(camper3.getOnSiteMailLabel() + "\nOwed Fees: " + camper3.getTotalWeeklyFeesOwing() + "$");

}

}

# Section D

## Output:

Anna Marie Sullivan

Chickadee Lodge, bed 7

Owed Fees: 434.54999999999995$

Porter Smith

Wolf Lodge, bed 9

Owed Fees: 764.88$

Kathrine Doucet

Brookside Cabin, bed 11

Owed Fees: 735.0$