CS1073
FR03B
Lab#3

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a. Source Code for TentSite.java:

```java
/**
This class represents a Tent Site
@author Daniyal Khan 3765942
*/

public class TentSite {

    /**
    Name of the field.
    */
    private String fieldName;

    /**
    Site Number
    */
    private int siteNum;

    /**
    Cost per week of the site
    */
    private double costPerWeek;

    /**
    Constructs a Tent Site given the field name, site number and cost per week.
    @param fieldName name of the field
    @param siteNum Number of the site
    @param costPerWeek Cost per week of the camp site
    */
    public TentSite (String fieldName, int siteNum, double costPerWeek) {
        this.fieldName = fieldName;
        this.siteNum = siteNum;
        this.costPerWeek = costPerWeek;
    }

    /**
    Returns the field name.
    @return fieldName the field name.
    */
    public String getFieldName() {
        return fieldName;
    }

    /**
    Returns the siteNumber
    @return siteNum the site number.
    */
```

```java
    public int getSiteNum() {
            return siteNum;
    }

    /**
    Returns the cost per week of the site.
    @return costPerWeek the cost per week of the site
    */
    public double getCostPerWeek() {
            return costPerWeek;
    }
}
```

b. Source code for Camper.java:

```java
/**
This class represents a camper
@author Daniyal Khan 3765942
*/

public class Camper {
    /**
    The name of the camper.
    */
    private String name;

    /**
    The amount that the camper will pay per week for the camp
    */
    private double campFee;

    /**
    The amount that the camper will pay per week for the activities
    */
    private double activityFee;

    /**
    The amount of bursary money awarded to this camper for the week of camp
    */
    private double bursaryAmount;

    /**
    The tent site at the camp where the camper is currently camping
    */
    private TentSite site;
```

```java
/**
Contructs a Camper object given the name, camp fees, activity fees,
bursary amount and Tent Site
@param name name of the camper
@param campFee price per week for the camp
@param activityFee price per week for the activities
@param bursaryAmount bursary money awarded to the camper
@param site tent site at the camp where the camper is staying
*/
public Camper(String name, double campFee, double activityFee, double
bursaryAmount, TentSite site) {
        this.name = name;
        this.campFee = campFee;
        this.activityFee = activityFee;
        this.bursaryAmount = bursaryAmount;
        this.site = site;
}

/**
Changes the name
@param name name for the camper
*/
public void setName(String name) {
        this.name = name;
}

/**
Changes the camp fees
@param campFee price per week for the camp
*/
public void setCampFee(double campFee) {
        this.campFee = campFee;
}

/**
Changes the activity fees
@param activityFee price per week for the activities
*/
public void setActivityFee(double activityFee) {
        this.activityFee = activityFee;
}

/**
Changes the bursary amount
@param bursaryAmount bursary that will be granted to the camper
*/
public void setBursaryFee(double bursaryAmount) {
        this.bursaryAmount = bursaryAmount;
```

```java
        }

        /**
        Changes the tent site
        @param site the tentsite the camper will be staying at
        */
        public void setSite(TentSite site) {
                this.site = site;
        }

        /**
        Returns the total fees the customer owes
        @return totalFeesOwed the amount of fees the customer owes
        */
        public double getTotalFeesOwing() {
                double totalFeesOwed = (campFee + activityFee +
site.getCostPerWeek()) - bursaryAmount;
                return totalFeesOwed;
        }

        /**
        Returns the details of the camper
        @return camperDetails the details about the camper
        */
        public String getCamperDetails() {
                String camperDetails = name + "\n" + site.getFieldName() + ", " +
site.getSiteNum();
                return camperDetails;
        }
}
```

c. Source code for Lab3TestDriver.java:

```java
/**
This class is a test driver for lab3 of CS1073
@author Daniyal Khan 3765942
*/

public class Lab3TestDriver {

        public static void main(String[] args) {
                TentSite site7 = new TentSite("Coyote Field", 7, 86.75);
                Camper camper1 = new Camper("Monika Schulz", 550.00, 58.30,
250.00, site7);
```

```
        TentSite site14 = new TentSite("Eagle Field", 14, 108.50);
        Camper camper2 = new Camper("Miguel Florez", 425.00, 75.85, 0,
site14);

        TentSite site25 = new TentSite("Salmon Field", 25, 97.50);
        Camper camper3 = new Camper("Katharine Doucet", 375.50, 46.60,
175.00, site25);

        camper1.setActivityFee(105.45);

        TentSite site42 = new TentSite("Raven Field", 42, 97.65);
        camper2.setSite(site42);

        camper3.setCampFee(475.00);

        System.out.println(camper1.getCamperDetails());
        System.out.println();
        System.out.println(camper2.getCamperDetails());
        System.out.println();
        System.out.println(camper3.getCamperDetails());
        System.out.println();

        System.out.println("Amount owed by Monika Schulz: " +
camper1.getTotalFeesOwing());

        System.out.println("Amount owed by Miguel Florez: "
+camper2.getTotalFeesOwing());

        System.out.println("Amount owed by Katharine Doucet: "
+camper3.getTotalFeesOwing());
    }
}
```

d. Sample Output:

Monika Schulz
Coyote Field, 7

Miguel Florez
Raven Field, 42

Katharine Doucet
Salmon Field, 25

Amount owed by Monika Schulz: 492.20000000000005
Amount owed by Miguel Florez: 598.5
Amount owed by Katharine Doucet: 444.1