CS 1073

FR04A

Assignment 2

Ebrahim Arefi

3621326

I) Downloading, Compiling, and Running a Sample Application

```
session1: Group Fitness Session: Yoga Flow
     Instructor: Anuja
     Intensity Level: 3
     Participants: 0
session2: Group Fitness Session: Aquafit Express
     Instructor: Wendy
     Intensity Level: 1
     Participants: 0
session3: Group Fitness Session: Mat Pilates
     Instructor: Chinasa
     Intensity Level: 6
     Participants: 0
```

II)   Modifying the Application

```java
/**
 * This class represents a group fitness session.
 *
 * @author Leah Bidlake
 * @author Ebrahim Arefi, 3621326
 */
public class GroupFitnessSession {

    // Instance variables:
    // For each GroupFitnessSession object, store the name of the group fitness
    // session,
    // the instructor, the intensity level,
    // and the number of participants signed up for the session so far.
    private String sessionName;
    private String instructor;
    private int intensityLevel;
    private int participants;
    private String location;

    // The constructor creates a new GroupFitnessSession object and
    // initializes the instance variables.
    public GroupFitnessSession(String sessionNameIn, String instructorIn, int intensityLevelIn, String locationIn) {
        sessionName = sessionNameIn;
        instructor = instructorIn;
        intensityLevel = intensityLevelIn;
        participants = 0; // the class initially has no participants
        location = locationIn;
    }

    public String getLocation() {
        return location;
    }

    public void setLocation(String locationIn) {
        location = locationIn;
    }

    public void addParticipants(int participantsIn) {
        participants += participantsIn;

    }

    // This is a method that we can call on a GroupFitnessSession object
    // (Specifically, it is an accessor method). This method
    // creates and returns a String containing all the information
    // about the state of the object.
    public String toString() {
        return "Group Fitness Session: " + sessionName +
                "\n\tIntensity Level: " + intensityLevel +
                "\n\tParticipants: " + participants +
                "\n\tlocation: " + location;
    }

}
```

GroupFitnessSessionDriver.java:

```java
/**
 * This is an example of a driver class; its purpose
 * is to try out the GroupFitnessSession class.
 *
 * @author Leah Bidlake
 * @author Ebrahim Arefi, 3621326
 */
public class GroupFitnessSessionDriver {

    public static void main(String[] args) {

        // Create some GroupFitnessSession objects
        GroupFitnessSession session1 = new GroupFitnessSession("Yoga Flow", "Anuja", 3,
"Head Hall");
        GroupFitnessSession session2 = new GroupFitnessSession("Aquafit Express",
"Wendy", 1, "China Town");
        GroupFitnessSession session3 = new GroupFitnessSession("Mat Pilates", "Chinasa",
6, "Windsor Hall");
        GroupFitnessSession session4 = new GroupFitnessSession("007", "James Bond", 10,
"United Kingdom");

        System.out.println("Sign ups: ");
        session1.addParticipants(14);
        session2.addParticipants(8);
        session3.addParticipants(21);
        // later in the week
        session2.addParticipants(10);

        // Now I can print out my session to confirm they
        // were created properly
        System.out.println("session1: " + session1.toString());
        System.out.println("session2: " + session2.toString());
        System.out.println("session3: " + session3.toString());
        System.out.println("session4: " + session4.toString());

    }

}
```

OutPut:

Sign ups:

session1: Group Fitness Session: Yoga Flow

    Intensity Level: 3

    Participants: 14

    location: Head Hall

session2: Group Fitness Session: Aquafit Express

    Intensity Level: 1

    Participants: 18

    location: China Town

session3: Group Fitness Session: Mat Pilates

    Intensity Level: 6

    Participants: 21

    location: Windsor Hall

session4: Group Fitness Session: 007

    Intensity Level: 10

    Participants: 0

    location: United Kingdom

III)   Creating a New Driver

```java
import java.util.Scanner;

/**
 * A driver class that collects information about the Fitness Sessions.
 *
 * @author Ebrahim Arefi, 3621326
 */

public class GroupFitnessSessionCreator {
    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter name of the session: ");
        String sessionName = scanner.nextLine();

        System.out.print("Enter instructor's name: ");
        String instructorName = scanner.nextLine();

        System.out.print("Enter the locatoin: ");
        String location = scanner.nextLine();

        System.out.print("Enter the intensity level: ");
        int level = scanner.nextInt();

        System.out.print("Enter the number of Participants: ");
        int participantsNum = scanner.nextInt();



        GroupFitnessSession session5 = new GroupFitnessSession(sessionName,
instructorName, level, location);


        session5.addParticipants(participantsNum);

        System.out.println("session5: " + session5.toString());

    }
}
```

OutPut:

```
ebi@TeddyLaptop A2_Files % javac GroupFitnessSessionCreator.java
ebi@TeddyLaptop A2_Files % java GroupFitnessSessionCreator
Enter name of the session: fast and slow
Enter instructor's name: Jacki chan
Enter the locatoin: Earth
Enter the intensity level: 9999
Enter the number of Participants: 3
session5: Group Fitness Session: fast and slow
    Intensity Level: 9999
    Participants: 3
    location: Earth

ebi@TeddyLaptop A2_Files %
```