

Data Structures Assignment 3

Bike-A-Thon Fundraising

You are the captain of a Bike-a-Thon team. You will use ArrayLists to track your team members and their donations.

Create a new ~~Class~~ called Asn3_ **Bikethon** in Eclipse.

Step 0

Set up 3 parallel ArrayLists of 10 students:

1. Their **names**
2. The **amounts** they raised for the Bike-a-thon.
 - Hard code in the values so that each person has raised a different amount of money.
3. A Boolean ArrayList stating whether or not they have returned their **permission forms**
 - Set half to be true and half to be false

Step 1

Print out of all three ArrayLists using a single For Loop so that each student's name appears with his/her dollar amount and true/false value beside it.

Step 2 - First 80%

Using for loops and whatever number of additional variables you need, calculate and print the following. Make sure your printouts are well labeled:

- a. The total amount raised by your team. (20%)
- b. The average amount raised per student (20%)
 - Hint: You do not need a new for loop for this. The average is just the total divided by the number of items in the ArrayList (and you just found the total in part a). Use `____.size()` in the average calculation.
- c. If you have more than 2 students who have not raised the minimum amount, your team gets the worst living room locations.
 - Count the number of students who raised less than \$120 and print that number.
 - IF that number is greater than 2, print "Living Room Location: Closet". (20%)
- d. The names of students who have not yet turned in their forms. (20%)

Step 3 - Final 20%

- a) Print the highest amount raised and that person's name (10%) - their team will for sure get a power outlet.
- b) To win a Golden Fan (10%), you need some big donors. - TOTAL the amount raised by only those students who have raised more than \$500.