Program Design – PP11.10

## Input

1. In detail indicate what the inputs to this program are?

* The input is a formatted text document

1. How do you validate the input

* Internally, we check it by following a format of
* Name;Category;Units;MonthDayYear -> MMDDYYYY

1. Pseudocode: Briefly explain how this section will look like

First check if the file name is valid, then begin to obtain data line by line. Next, we have to detect the character ‘;’, then we assume the inputs match, or else the internal exceptions will notify the user that it is an invalid input.

## Processing

1. What is this program calculating?

* The Sum of all Units within 1 category

1. Can we divide the calculations to the smaller “modules”

* No

1. Pseudocode: Briefly explain how this section will look like – Each module should have its own section.

* Run through the sales, separate the categories, then calculate the sum of every category

## Output

1. What will this program display to the users?

* The sums of all categories’ Sales

1. What kind of formatting this output will use (Currency with $ …)?

* N/A

1. Pseudocode: Briefly explain how this section will look like

* We run a for loop through the 2 arraylists and display the sum to the console

## Library

What Libraries do you need for this program?

import java.io.File;

import java.io.FileNotFoundException;

import java.util.ArrayList;

import java.util.Scanner;

import java.util.Date;

## Initialization and constant variables

1. What variables need to be initialized?

private String \_name;

private int \_unit;

private String \_category;

private Date \_date;

private ArrayList<Sale> \_sales = new ArrayList<Sale>();

private File \_record;

1. What variables need to be defined as constant

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