

Programming Test C1002

You need to generate a Web Application:

It should have two pages as shown below:

1

☐ Numeric

☐ Alphanumeric

☐ Float

Size of the output file (KB)

Start

Stop

Counter 1 (Numeric)

Counter 2 (Alphanumeric)

Counter 3 (Float)

Generate Report

2

Distribution of the data types in the file

% Numeric	% Alphanumeric	% Float

1- The first page should be able to generate 3 types of "printable" random objects and store them in a single file, each object will be separated by a ",". These are the 3 possible types of objects: float, numeric (integer), alphanumerics.

The alphanumerics should contain a random number of spaces before and after it (not exceeding 10 spaces).

Sample data :

Numeric (Integer)	alphanumeric	Float
12737123	a1d12a48fas	13123.123

2- The program starts to work when user clicks on the "Start" button and stops either when the user clicks on the stops button or the size of the output file reaches to the size specified by the user.

3- During the execution of the program the three counters should be updated in real time and show the number of generated random data based on the type of the data.

4-Finally, when the program stops, user should be able to click on the "Generate Report" button to see the report in page 2 which shows the distribution of the data types in the file.

Note1: The buttons should be exactly look like the buttons in the pictures (rounded button).

Note2: The counters must be update in real time without page refresh.

Note3: Extra marks will be given for a clean and beautiful UI implementation.

5- In second page, you need to read the data file generated from the first file and parse it. You need to print on the page the object and its type (for the first 20 objects found in the file only). Spaces before and after the alphanumeric object must be stripped.

Also you need to calculate the percentage of each of the data type found in the file.

Second page sample output will be as below

% Numeric	% Alphanumeric	% Float
% 30	% 15	% 55

2343434 – numeric

78734 – numeric

3.52 – float

7265 – numeric

saf625925 – alphanumeric

245.45 – float

j347823sdfsd – alphanumeric

6- Bonus point

- On the first page, add an option to influence the distribution of data. The data generated still need to be random but for example 10% numeric, 10% float, and 80% alphanumeric. So the setting for the distribution should be configurable on the page, i.e. the user can specify the % for each of the data type.