Step 0: Add test files

0.1. Add DTT1.txt with expected valid data

0.2. Add test.xml with dummy data

SET final\_html\_data = array(

'File name' => file\_name,

'Code' => module\_code,

'  
Module Title' => module\_title,

'Tutor' => tutor,

'Marked date' => 08/04/2016,

)

Step 1: Define order of processing

First, define a function to structure how to get, process and exhibit data.

FUNCTION display\_student\_grades()

// 1.1 Get all data files found in the 'data' directory that we should read

SET data\_files: array[string] = get\_data\_files()

// For each file, validate and process the data, then return to the user

// TODO: write files with the HTML, then display them back to the user

FOR file IN data\_files

get\_data\_from\_file(file)

process\_file\_data

// 1. echo the HTML back to the user with errors found

build\_and\_display\_html\_from\_file\_data(data)

ENDFOR

ENDFUNCTION

Step 2: Get all '.txt' files from the '/data' directory

// 2.1. Get the files in the directory

FUNCTION get\_data\_files()

DEFINE data\_files: array[string]

SET directory\_name: String = 'data'

SET directory = get\_directory\_from\_name(directory\_name)

// 2.2. Iterate through all the files in the directory and store the .txt ones

FOR file IN directory DO

SET file\_extension: string = get\_file\_extension(file)

SET count = 0

IF file\_extension == '.txt'

SET data\_files[count] = file

SET count += 1

ENDIF

ENDFOR

RETURN data\_files

ENDFUNCTION

Step 3

1. for loop that will call a function to perform processing for every

file encountered.

- files must be .txt

FUNCTION get\_data\_from\_file(file)

DEFINE file\_contents: array[string]

OPEN file

SET count = 0

FOR line IN file

SET line\_contents = READ line

SET file\_contents[count] = line\_contents

SET count += 1

CLOSE file

RETURN file\_contents

ENDFUNCTION

FUNCTION get\_file\_header(file\_data: array)

SET header = file\_data[0]

RETURN header

ENDFUNCTION

FUNCTION get\_file\_body(file\_data: array)

SET n: integer = length(file\_data)

SET body = file\_data[1:n]

RETURN body

ENDFUNCTION

functionality

2. Read file

We want to read all data, store it in the right format,

then close the file not to waste processing resources neither

mix the data read step with validation and data write.

- Read

- Store two arrays: 1 for the header, 1 array of arrays with the grades

- Close file

2. Validate header

3. Validate grades

- Display invalid data?

4. Calculate statistics

5. Classify grades

6. Display to user

- Format file into html for display (table?)