Logic Specification Template

|  |  |  |  |
| --- | --- | --- | --- |
| Student | Rashad Hill | **Date** | 22-Nov-2016 |
| Program | LOC Counter | **Program #** |  |
| Instructor | OneFire | **Language** | PHP |

|  |  |
| --- | --- |
| **Design** | Java LOC Counter program |
| **References** | Loc\_counter\_conceptual\_design |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Parameters** | $functionList |
|  | $locFile |
|  | $functionLOC |
|  | $isPHP |
|  | $isMultComment |

|  |
| --- |
| Function isPhysicalLine($line, $isMultComment) – A function that determines if the line is a physical line or can be discarded, and not counted towards the total LOC   * IF: $line === “{“ OR “}” OR “(“ OR “)” OR “\*” OR “” OR “//” OR “/\*” OR “\*/” OR “/\*\*” OR “<!--“ OR “-->” OR “<?php” OR “?>” OR $isMultComment == true   + Return false * ELSE:   + Return true * END IF |
| Function countFunctions() – Function that navigates through a file and reads each line and uses the isPhysicalLine to determine if each line is physical or not and assigns it to the appropriate function name or HTML header. An associate array of the functions and their number of loc including html will be returned   * IF: $\_FILE is set with the appropriate incoming file   + Create and set $file equal to null   + TRY     - Set $file equal to fopen($\_FILES[‘file’][‘tmp\_name’], ‘r’)   + CATCH Exception     - Display “FILE READ ERROR!”   + ENDTRY   + Create and set $totalLOC equal to 0   + Create and set $htmlLOC equal to 0   + Create an empty associate array called $functionList   + WHILE: NOT end of file for $file - !feof($file)     - IF: $line contains “?>” AND $isPHP is equal to true       * Create and set $isPHP equal to false     - ENDIF     - IF: $line contains “\*/” OR “-->” AND $isMultComment is equal to true       * Create and set $isMultComment equal to false     - ENDIF     - Create and set $line equal to the current scanned, and trimmed line of the file.     - IF: $line contains “<?php”       * Set $isPHP equal to true     - ENDIF     - ----------------------------------------------     - IF: $line contains “/\*\*” OR “/\*” OR “<!--“       * Set $isMultComment equal to true     - ENDIF     - ----------------------------------------------     - IF: $line contains “//\*Start”       * Create and set $functionLOC equal to 0       * Create and set $functionName equal to substring of $line starting at index 9 and going the length of the string       * WHILE: $line DOES NOT contain “//\*End”         + IF: $line contains “/\*\*” OR “/\*” OR “<!--“   Set $isMultComment equal to true   * + - * + ENDIF         + IF: $line is a physical line   $functionLOC++   * + - * + ENDIF         + IF: $line contains “/\*\*” OR “/\*” OR “<!--“   Set $isMultComment equal to true   * + - * + ENDIF       * ENDWHILE       * $totalLOC += $functionLOC       * Add $functionName to $functionList as a key and $functionLOC to $functionList as value     - ELSE       * IF: $line is a physical line AND $isPHP is true         + $totalLOC++       * ELSEIF: $line is a physical line AND $isPHP is false         + $htmlLOC++       * ENDIF     - ENDIF   + ENDWHILE   + $totalLOC += $htmlLOC   + Add element “HTML” to $functionList and update its value to $htmlLOC   + Add element “Total” to $functionList and update its value to $totalLOC   + Return $functionList |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |