**PSP1 Project Plan Summary**

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| --- | --- | --- | --- |
| Student | Deivis Enrique Vergel Arenas | Date | 22/02/2015 |
| Program | ECOS | Program # | 4 |
| Instructor | Luis Daniel Benavides Navarro | Language | JAVA |

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| ***Summary*** | ***Plan*** | | |  | ***Actual*** | | |  | ***To Date*** | | |
| ***Size/Hour*** |  | | |  |  | | |  |  | | |
|  |  | | |  |  | | |  |  | | |
| **Program Size** | ***Plan*** | | |  | **Actual** | | |  | **To Date** | | |
| Base (B) | 0 | | |  | 0 | | |  |  | | |
|  | ***(Measured)*** | | |  | (Measured) | | |  |  | | |
| Deleted (D) | ***5*** | | |  | 2 | | |  |  | | |
|  | ***(Estimated)*** | | |  | (Counted) | | |  |  | | |
| Modified (M) | ***10*** | | |  | 4 | | |  |  | | |
|  | ***(Estimated)*** | | |  | (Counted) | | |  |  | | |
| Added (A) | 320 | | |  | 321 | | |  |  | | |
|  | ***(A+M − M)*** | | |  | (T − B + D − R) | | |  |  | | |
| Reused (R) | ***42*** | | |  | 42 | | |  | 42 | | |
|  | ***(Estimated)*** | | |  | (Counted) | | |  |  | | |
| Added and Modified (A+M) | ***330*** | | |  | 365 | | |  | 567 | | |
|  | ***(Projected)*** | | |  | (A + M) | | |  |  | | |
| Total Size (T) | ***367*** | | |  | 361 | | |  | 727 | | |
|  | ***(A+M + B − M − D + R)*** | | |  | (Measured) | | |  |  | | |
| Total New Reusable | 80 | | |  | 137 | | |  | 137 | | |
|  |  | | |  |  | | |  |  | | |
| ***Estimated Proxy Size (E)*** | 367 | | |  |  | | |  |  | | |
|  |  | | |  |  | | |  |  | | |
| **Time in Phase (min.)** | **Plan** |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning | 50,3433476 |  | 33 | | |  | 135 | | |  | 10,23502654 |
| Design | 119,9356224 |  | 48 | | |  | 291 | | |  | 22,06216831 |
| Code | 230 |  | 171 | | |  | 637 | | |  | 48,29416224 |
| Compile |  |  |  | | |  |  | | |  |  |
| Test | 20.2360515 |  | 74 | | |  | 115 | | |  | 8,718726308 |
| Postmortem | 39,48497855 |  | 61 | | |  | 141 | | |  | 10,6899166 |
| Total | 460 |  | 387 | | |  | 1319 | | |  | 100 |
|  |  |  |  | | |  |  | | |  |  |
| **Defects Injected** |  |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  | 1 | | |  | 7,692307692 |
| Design |  |  |  | | |  | 2 | | |  | 15,38461538 |
| Code |  |  | 4 | | |  | 10 | | |  | 76,92307693 |
| Compile |  |  |  | | |  |  | | |  |  |
| Test |  |  |  | | |  |  | | |  |  |
| Total Development |  |  |  | | |  | 13 | | |  | 100 |
|  |  |  |  | | |  |  | | |  |  |
| **Defects Removed** |  |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  | 1 | | |  | 7,692307693 |
| Design |  |  |  | | |  |  | | |  |  |
| Code |  |  |  | | |  | 6 | | |  | 46,15384615 |
| Compile |  |  |  | | |  |  | | |  |  |
| Test |  |  | 4 | | |  | 6 | | |  | 46,15384615 |
| Total Development |  |  |  | | |  | 13 | | |  | 100 |
| After Development |  |  |  | | |  |  | | |  |  |

PSP Time Recording Log

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| --- | --- | --- | --- |
| Student | Deivis Enrique Vergel Arenas | Date | 22/02/2015 |
| Program | ECOS | Program # | 4 |
| Instructor | Luis Daniel Benavides Navarro | Language | JAVA |

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| --- | --- | --- | --- | --- | --- | --- |
| **Project** | **Phase** | **Start Date and Time** | **Int. Time** | **Stop Date and Time** | **Delta**  **Time** | **Comments** |
| PSP1 | Plan | 08/02/15 10:06 AM |  | 08/02/15 11:39 AM | 33 |  |
| PSP1 | Desing | 08/02/15 12:06 PM |  | 08/02/15 12:54 PM | 48 | Herencia de clase CalcularMediaDesviacion, diseño de la clase CalcularProbe y disieño de MVC |
| PSP1 | Code | 08/02/15 01:24 PM | 30 | 08/02/15 04:45 PM | 171 | desarrollo de tabla con filas dinamicas , calculo de variables de regrecion entre otras y codificacion de MVC |
| PSP1 | Test | 08/02/15 04:46 PM | 12 | 08/02/15 06:12 PM | 74 | Comprobacion de formulas y datos de salida con casos de prueba y pruebas libres |
| PSP1 | Postmortem | 08/02/15 06:13 PM | 26 | 08/02/15 07:40 PM | 61 |  |

PSP Defect Recording Log

|  |  |
| --- | --- |
| Defect Types |  |
| 10 Documentation | 60 Checking |
| 20 Syntax | 70 Data |
| 30 Build, Package | 80 Function |
| 40 Assignment | 90 System |
| 50 Interface | 100 Environment |

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| --- | --- | --- | --- |
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| Program | ECOS | Program # | 4 |
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| Project |  | | Date |  | Number |  | Type |  | Inject |  | Remove |  | Fix Time |  | Fix Ref. |
| PSP1 |  | | 08/02/2015 |  | 01 |  | 80 |  | Code |  | Test |  | 12 |  |  |
| Description: | | | Inicializacion de todas las variables nesesarias para los calculos para los objetos que contenienen los arrays numericos CalcularProbe | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| Project |  | | Date |  | Number |  | Type |  | Inject |  | Remove |  | Fix Time |  | Fix Ref. |
| PSP1 |  | | 08/02/2015 |  | 02 |  | 60 |  | Code |  | Test |  | 8 |  |  |
| Description: | | | Errores de mensajes repetidos de error y con mensajes poco descriptivos | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| Project |  | | Date |  | Number |  | Type |  | Inject |  | Remove |  | Fix Time |  | Fix Ref. |
| PSP1 |  | | 08/02/2015 |  | 03 |  | 70 |  | Code |  | Test |  | 5 |  |  |
| Description: | | | Error en clase heredada CalcularMediaDesviacion en el calculo de media para valores muy grandes no redondeaba correctamente la precision de decimales | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| Project |  | | Date |  | Number |  | Type |  | Inject |  | Remove |  | Fix Time |  | Fix Ref. |
| PSP1 |  | | 08/02/2015 |  | 04 |  | 80 |  | Code |  | Test |  | 10 |  |  |
| Description: | | | Error al calcular la variable b1 usando variable de acumulacion incorrecta | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |

PSP Defect Type Standard

|  |  |  |
| --- | --- | --- |
| **Type Number** | **Type Name** | **Description** |
| 10 | Documentation | Comments, messages |
| 20 | Syntax | Spelling, punctuation, typos, instruction formats |
| 30 | Build, Package | Change management, library, version control |
| 40 | Assignment | Declaration, duplicate names, scope, limits |
| 50 | Interface | Procedure calls and references, I/O, user formats |
| 60 | Checking | Error messages, inadequate checks |
| 70 | Data | Structure, content |
| 80 | Function | Logic, pointers, loops, recursion, computation, function defects |
| 90 | System | Configuration, timing, memory |
| 100 | Environment | Design, compile, test, or other support system problems |

PSP Process Improvement Proposal (PIP)

|  |  |  |  |
| --- | --- | --- | --- |
| Student | Deivis Enrique Vergel Arenas | Date | 22/02/2015 |
| Program | ECOS | Program # | 4 |
| Instructor | Luis Daniel Benavides Navarro | Language | JAVA |

|  |
| --- |
| Problem Description |
| Briefly describe the problems that you encountered. |
| Se produjeron problemas relacionados con la complejidad de los cálculos relacionados con las regresiones |
| Y en general por la complejidad de procesamiento de los datos |
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| Proposal Description |
| Briefly describe the process improvements that you propose. |
| Se revise detenidamente los formulas implementadas y que estas generaran los datos esperados segun |
| los casos de prueba propuestos o las pruebas libres que cualquier usuario pudiera realizar sobre la |
| funcionalidad |
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| Other Notes and Comments |
| Note any other comments or observations that describe your experiences or improvement ideas. |
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Test Report Template

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| --- | --- | --- | --- |
| Student | Deivis Enrique Vergel Arenas | Date | 22/02/2015 |
| Program | ECOS | Program # | 4 |
| Instructor | Luis Daniel Benavides Navarro | Language | JAVA |

|  |  |
| --- | --- |
| Test Name/Number | Casos Propuestos /01 |
| Test Objective | la solucion debe cumplir con los casos de prueba propuestos por el ejercicio |
|  |  |
| Test Description | Calcular los datos expuestos en la tabla 2 del ejercicio con los datos |
|  | proporcionados en a tabla 1 |
|  |  |
|  |  |
|  |  |
| Test Conditions | Cargar automaticamente los datos de la tabla 1 |
|  |  |
|  |  |
|  |  |
|  |  |
| Expected Results | Generar la salida esperada en la tabla2 |
|  |  |
|  |  |
|  |  |
| Actual Results | Generara los datos de salida esperada en la tabla2 |
|  |  |
|  |  |
|  |  |
|  |  |
| Test Name/Number | Caso Libre/02 |
| Test Objective | La solucion debe permitir ingresar datos de prueba y calcular las variables |
|  | solicitadas por el ejercicio |
| Test Description | Se debe permitir ingresar dos colecciones de datos X y Y respectivamente |
|  | para realizar los calculos del metodo PROBE seleccionado de manera libre |
|  |  |
|  |  |
|  |  |
| Test Conditions | Ingresar collecciones de datos para X y Y |
|  |  |
|  |  |
|  |  |
|  |  |
| Expected Results | Generar la salida con el calculo de todas las variables del metodo PROBE |
|  | seleccionado |
|  |  |
|  |  |
| Actual Results | Generara la salida con el calculo de todas las variables del metodo PROBE |
|  | seleccionado |
|  |  |
|  |  |
|  |  |

**Size Counting Standard Template**

|  |  |  |  |
| --- | --- | --- | --- |
| Definition Name: | LOC java estandar | Language: | JAVA |
| Author: | Deivis Vergel | Date: | 04/02/2015 |

|  |  |  |
| --- | --- | --- |
| **Count Type** | **Type** | **Comments** |
| Physical/Logical | logical |  |
| **Statement Type** | **Included** | **Comments** |
| Executable | si |  |
| Nonexecutable: |  |  |
| Declarations | Si, Nota 1 | Private String var1; |
| Compiler Directives | No, Nota 3 | Import package |
| Comments | No,Nota 2 | // /\* \*/ |
| Blank lines | no |  |
| Other elements |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **Clarifications** |  | **Examples/Cases** |
| Espacios en blanco | no |  |
| Inicios de deciciones ,ciclos , o metodos | si | Se incluyen los inicios de ciclo CASE, DO, ELSE, ENUM, FOR, IF, SWITCH, WHILE etc, el inicio debe estar en la misma línea “{” en caso contrario se contaran los dos como inicio |
| fin de decisiones o ciclos | no | No se contaran los finales de ciclo que estén solos en una línea así “}” |
| Sentencias multilineas | si | Un métodos o sentencia multilinea será contada individualmente |
| Clases Embebidas | no | Se debe crear una clase por archivo .java |
|  |  |  |
|  |  |  |
| Note 1 |  | Se identifica como atributo de una clase una declaración por línea , si son del mismo tipo se deberá hacer en una línea independiente |
| Note 2 |  | Se excluyen los comentarios realizados en una linea completa con los símbolos “//” y los comentarios multilinea con los símbolos “/\*” y “\*/”, y las líneas comentarías intermedias siempre que comiencen por el símbolo “\*” |
| Note 3 |  | No se incluyen las lineas de imports y package |
| Note |  |  |

Size Estimating Template

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Student | | Deivis Enrique Vergel Arenas | | | Date | | 22/02/2015 | |
| Program | | ECOS | | | Program # | | 4 | |
| Instructor | | Luis Daniel Benavides Navarro | | | Language | | JAVA | |
| Size Measure | |  |  | |  | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Estimated | | | | | | | | | | | |
| Base Parts |  | Base | |  | Deleted | |  | Modified | | |  | Added | |
| App |  | 0 | |  | 2 | |  | 2 | | |  | 20 | |
| MainView |  | 0 | |  | 0 | |  | 0 | | |  | 100 | |
| CalcularMediaDesviacion\* |  | 42 | |  | 0 | |  | 2 | | |  | 0 | |
| CalcularProbe |  | 0 | |  | 0 | |  | 6 | | |  | 200 | |
| Total | B | | 42 | D | | 2 | M | | 10 | **BA** | | | 320 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Actual | | | | | | | | | | |
| Base Parts |  | Base | |  | Deleted | |  | Modified | |  | Added | |
| App |  |  | |  |  | |  |  | |  | 60 | |
| MainView |  |  | |  | 2 | |  | 4 | |  | 120 | |
| CalcularMediaDesviacion\* |  | 42 | |  |  | |  |  | |  | 0 | |
| CalcularProbe |  |  | |  |  | |  |  | |  | 137 | |
| Total |  | | 42 |  | | 2 |  | | 4 |  | | 317 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Estimated | | | | | | | |  | Actual | | |
| Parts Additions |  | Type |  | Items |  | Rel. Size | |  | Size\* |  | Size\* |  | Items |
|  |  |  |  |  |  |  | |  |  |  |  |  |  |
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| Total |  |  |  |  |  |  | PA | |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | |  | Estimated |  | Actual |
| Reused Parts | |  | Size |  | Size |
| CalcularMediaDesviacion | |  | 42 |  | 42 |
|  | |  |  |  |  |
|  | |  |  |  |  |
|  | |  |  |  |  |
|  | |  |  |  |  |
|  | |  |  |  |  |
|  | |  |  |  |  |
| Total | R | | 42 |  | 42 |

Size Estimating Template

|  |  |  |  |
| --- | --- | --- | --- |
| Student | Deivis Enrique Vergel Arenas | Program | JAVA |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PROBE Calculation Worksheet (Added and Modified) |  | Size |  | Time |
| Added size (A): A = BA+P A |  | 321 |  |  |
| Estimated Proxy Size (E): E = BA+PA+M |  | 325 |  |  |
| PROBE estimating basis used: (A, B, C, or D) |  | D |  |  |
| Correlation: (R2) |  | 0.9111 |  |  |
| Regression Parameters: β0 Size and Time |  | -22.55 |  |  |
| Regression Parameters: β1 Size and Time |  | 1.7279 |  |  |
| Projected Added and Modified Size (P): P = β0size + β1size\*E |  | 644.429 |  |  |
| Estimated Total Size (T): T = P + B - D - M + R |  |  |  |  |
| Estimated Total New Reusable (NR): sum of \* items |  |  |  |  |
| Estimated Total Development Time: Time = β0time + β1time\*E |  |  |  |  |
| Prediction Range: Range |  |  |  |  |
| Upper Prediction Interval: UPI = P + Range |  |  |  |  |
| Lower Prediction Interval: LPI = P - Range |  |  |  |  |
| Prediction Interval Percent: |  |  |  |  |