PSP1.1 Project Plan Summary

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| Student | Sebastian Cardona Correa | Date | 03/03/2015 |
| Program | PSP 2.1 | Program # | 6 |
| Instructor | Luis Daniel Benavides Navarro | Language | Java |

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| Summary | Plan | | |  | Actual | | |  | To Date | | |
| Size/Hour | 290/5 | | |  | 290/5.11 | | |  | /21.4 | | |
| ***Planned Time*** | 300 | | |  |  | | |  | 1280 | | |
| ***Actual Time*** |  | | |  | 290 | | |  | 1284 | | |
| ***CPI (Cost-Performance Index)*** | | | |  |  | | |  | 1 | | |
|  |  | | |  |  | | |  | (Planned/Actual) | | |
| ***% Reused*** |  | | |  |  | | |  |  | | |
| ***% New Reusable*** |  | | |  |  | | |  |  | | |
|  |  | | |  |  | | |  |  | | |
| Program Size | Plan | | |  | Actual | | |  | To Date | | |
| Base (B) | 160 | | |  | 160 | | |  |  | | |
|  | (Measured) | | |  | (Measured) | | |  |  | | |
| Deleted (D) | 0 | | |  | 0 | | |  |  | | |
|  | (Estimated) | | |  | (Counted) | | |  |  | | |
| Modified (M) | 10 | | |  | 70 | | |  |  | | |
|  | (Estimated) | | |  | (Counted) | | |  |  | | |
| Added (A) | 130 | | |  | 200 | | |  |  | | |
|  | (A+M − M) | | |  | (T − B + D − R) | | |  |  | | |
| Reused (R) | 0 | | |  |  | | |  |  | | |
|  | (Estimated) | | |  | (Counted) | | |  |  | | |
| Added and Modified (A+M) | 140 | | |  | 270 | | |  |  | | |
|  | (Projected) | | |  | (A + M) | | |  |  | | |
| Total Size (T) | 290 | | |  |  | | |  |  | | |
|  | (A+M + B − M − D + R) | | |  | (Measured) | | |  |  | | |
| Total New Reusable | 0 | | |  |  | | |  |  | | |
|  |  | | |  |  | | |  |  | | |
| Estimated Proxy Size (E) | 130 | | |  |  | | |  |  | | |
|  |  | | |  |  | | |  |  | | |
| Time in Phase (min.) | Plan |  | Actual | | |  | To Date | | |  | To Date % |
| Planning | 5 |  | 10 | | |  | 48 | | |  | 16.90 |
| Design | 10 |  | 28 | | |  | 87 | | |  | 6.78 |
| Code | 200 |  | 161 | | |  | 565 | | |  | 44 |
| Compile | 0 |  | 0 | | |  | 0 | | |  | 0 |
| Test | 15 |  | 33 | | |  | 227 | | |  | 20.12 |
| Postmortem | 75 |  | 75 | | |  | 357 | | |  | 26.60 |
| Total | 304 |  | 307 | | |  | 1284 | | |  |  |
|  |  | | |  |  | | |  |  | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Defects Injected |  |  | Actual | | |  | To Date | | |  | To Date % |
| Planning |  |  | 0 | | |  | 0 | | |  | 0 |
| Design |  |  | 1 | | |  | 1 | | |  | 100 |
| Code |  |  | 4 | | |  | 11 | | |  | 36.37 |
| Compile |  |  | 0 | | |  | 0 | | |  | 0 |
| Test |  |  | 4 | | |  | 6 | | |  | 66.67 |
| Total Development |  |  | 9 | | |  | 18 | | |  |  |
|  |  | | |  |  | | |  |  | | |
| Defects Removed |  |  | Actual | | |  | To Date | | |  | To Date % |
| Planning |  |  | 0 | | |  | 0 | | |  | 0 |
| Design |  |  | 1 | | |  | 1 | | |  | 100 |
| Code |  |  | 4 | | |  | 11 | | |  | 36.37 |
| Compile |  |  | 0 | | |  | 0 | | |  | 0 |
| Test |  |  | 4 | | |  | 6 | | |  | 66.67 |
| Total Development |  |  | 9 | | |  | 18 | | |  |  |
| After Development |  |  |  | | |  |  | | |  |  |

Size Estimating Template

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Estimated | | | | | | | | | | | |
| Base Parts |  | Base | |  | Deleted | |  | Modified | | |  | Added | |
| Calculos |  | 160 | |  |  | |  | 10 | | |  | 30 | |
| MainView |  | 40 | |  |  | |  | 7 | | |  |  | |
| MainConsola |  | 20 | |  |  | |  | 7 | | |  |  | |
| Total | B | | 160 | D | |  | M | | 24 | BA | | | 184 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Actual | | | | | | | | | | |
| Base Parts |  | Base | |  | Deleted | |  | Modified | |  | Added | |
|  |  |  | |  |  | |  |  | |  |  | |
|  |  |  | |  |  | |  |  | |  |  | |
| Total |  | |  |  | |  |  | |  |  | |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Estimated | | | | | | | |  | Actual | | |
| Parts Additions |  | Type |  | Items |  | Rel. Size | |  | Size\* |  | Size\* |  | Items |
| Main |  | Control |  | 1 |  | M | |  | 40 |  | 0 |  | 0 |
|  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Total |  |  |  |  |  |  | PA | | 40 |  | 0 |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | |  | Estimated | |  | Actual | |
|  | Reused Parts | |  | Size | |  | Size | |
|  |  | |  |  | |  |  | |
|  |  | |  |  | |  |  | |
|  |  | |  |  | |  |  | |
|  | Total | R | |  | |  |  | |
|  | | |  | |  |  | |  |
| PROBE Calculation Worksheet (Added and Modified) | | |  | | Size |  | | Time |
| Added size (A): A = BA+PA | | |  | | 224 |  | |  |
| Estimated Proxy Size (E): E = BA+PA+M | | |  | | 224 |  | |  |
| PROBE estimating basis used: (A, B, C, or D) | | |  | |  |  | |  |
| Correlation: (R2) | | |  | | N/A |  | |  |
| Regression Parameters: β0 Size and Time | | |  | | 0 |  | | 0 |
| Regression Parameters: β1 Size and Time | | |  | | 0.88 |  | | 2.48 |
| Projected Added and Modified Size (P): P = β0size + β1size\*E | | |  | | 197,12 |  | |  |
| Estimated Total Size (T): T = P + B - D - M + R | | |  | | 290 |  | |  |
| Estimated Total New Reusable (NR): sum of \* items | | |  | | 4 |  | |  |
| Estimated Total Development Time: Time = β0time + β1time\*E | | |  | |  |  | | 555.52 |
| Prediction Range: Range | | |  | |  |  | |  |
| Upper Prediction Interval: UPI = P + Range | | |  | |  |  | |  |
| Lower Prediction Interval: LPI = P - Range | | |  | |  |  | |  |
| Prediction Interval Percent: | | |  | | 70% |  | | 70% |

**PSP2 Design Review Checklist**

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| --- | --- |
| Purpose | To guide you in conducting an effective design review |
| General | * Review the entire program for each checklist category; do not attempt to review for more than one category at a time! * As you complete each review step, check off that item in the box at the right. * Complete the checklist for one program or program unit before reviewing the next. |

|  |  |  |
| --- | --- | --- |
| Complete | Verify that the design covers all of the applicable requirements.   * All specified outputs are produced. * All needed inputs are furnished. * All required includes are stated. | x |
| External Limits | Where the design assumes or relies upon external limits, determine if behavior is correct at nominal values, at limits, and beyond limits. | x |
| Logic | * Verify that program sequencing is proper.   Stacks, lists, and so on are in the proper order.  Recursion unwinds properly.   * Verify that all loops are properly initiated, incremented, and terminated. * Examine each conditional statement and verify all cases. | x |
| Internal Limits | Where the design assumes or relies upon internal limits, determine if behavior is correct at nominal values, at limits, and beyond limits. | x |
| Special Cases | * Check all special cases. * Ensure proper operation with empty, full, minimum, maximum, negative, and ero values for all variables. * Protect against out-of-limits, overflow, and underflow conditions. * Ensure “impossible” conditions are absolutely impossible. * Handle all possible incorrect or error conditions. | x |
| Functional Use | * Verify that all functions, procedures, or methods are fully understood and properly used. * Verify that all externally referenced abstractions are precisely defined. | x |
| System Considerations | * Verify that the program does not cause system limits to be exceeded. * Verify that all security-sensitive data are from trusted sources. * Verify that all safety conditions conform to the safety specifications. | x |
| Names | Verify that   * all special names are clear, defined, and authenticated * the scopes of all variables and parameters are self-evident or defined * all named items are used within their declared scopes | x |
| Standards | Ensure that the design conforms to all applicable design standards. | x |

**Code Review Checklist**

|  |  |  |
| --- | --- | --- |
| Complete | Verify that the code covers all of the design. | x |
| Includes | Verify that the includes are complete. | x |
| Initialization | Check variable and parameter initialization.   * at program initiation * at start of every loop * at class/function/procedure entry | x |
| Names | Check name spelling and use.   * Is it consistent? * Is it within the declared scope? * Do all structures and classes use ‘.’ reference? | x |
| Strings | Check that all strings are   * identified by pointers * terminated by NULL | x |
| Pointers | Check that all   * pointers are initialized NULL * pointers are deleted only after new * new pointers are always deleted after use | x |
| () Pairs | Ensure that () are proper and matched. | x |
| Logic Operators | * Verify the proper use of ==, =, ||, and so on. * Check every logic function for (). | x |
| Line-by-line check | Check every line of code for   * instruction syntax * proper punctuation | x |
| Standards | Ensure that the code conforms to the coding standards. | x |

PSP Process Improvement Proposal (PIP)

|  |
| --- |
| Problem Description |
| Briefly describe the problems that you encountered. |
| Es un ejercicio en el cual se debe usar la formula desarrollada en psp2.0, pero despejando la variable X, |
| Siguiendo los pasos enunciados en el proyecto |
|  |
|  |
|  |
| Proposal Description |
| Briefly describe the process improvements that you propose. |
| Planeo modificar en la capa de modelo, la clase Calcular, de tal forma que en un constructor nuevo , |
| sea ingresado lo necesario para hacer el despeje de la formula. |
|  |
|  |
| Other Notes and Comments |
| Note any other comments or observations that describe your experiences or improvement ideas. |
| No se modificará demasiado la vista. |
|  |
|  |

PSP Time Recording Log

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Project | Phase | Start Date and Time | Int. Time | Stop Date and Time | Delta  Time | Comments |
| PSP1.1 | Plan | 13:00 | 30 | 14:00 | 30 | En casa |
|  | Diseño | 14:00 | 10 | 14:20 | 10 | En casa |
|  | Dev | 14:30 | 30 | 16:30 | 90 | En casa (logica) |
|  | Dev | 16:30 | 15 | 17:00 | 15 | En casa (Integracion) |
|  | Dev | 08:00 | 5 | 09:00 | 55 | En casa (web) |
|  | UTest | 10:00 | 5 | 10:20 | 15 | En casa |
|  | PosM | 21:30 | 15 | 23:00 | 75 | En casa |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |