**PSP2 Project Plan Summary**

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| --- | --- | --- | --- |
| Student |  | Date |  |
| Program |  | Program # |  |
| Instructor |  | Language |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Summary** | **Plan** | | |  | | | **Actual** | | | |  | | **To Date** | | | |
| Size/Hour |  | | |  | | |  | | | |  | |  | | | |
| Planned Time |  | | |  | | |  | | | |  | |  | | | |
| Actual Time |  | | |  | | |  | | | |  | |  | | | |
| CPI (Cost-Performance Index) |  | | |  | | |  | | | |  | |  | | | |
|  |  | | |  | | |  | | | |  | | (Planned/Actual) | | | |
| % Reuse |  | | |  | | |  | | | |  | |  | | | |
| % New Reusable |  | | |  | | |  | | | |  | |  | | | |
| ***Test Defects/KLOC or equivalent*** |  | | |  | | |  | | | |  | |  | | | |
| ***Total Defects/KLOC or equivalent*** |  | | |  | | |  | | | |  | |  | | | |
| ***Yield %*** |  | | |  | | |  | | | |  | |  | | | |
|  |  | | |  | | |  | | | |  | |  | | | |
| **Program Size** | **Plan** | | |  | | | **Actual** | | | |  | | **To Date** | | | |
| Base (B) |  | | |  | | |  | | | |  | |  | | | |
|  | (Measured) | | |  | | | (Measured) | | | |  | |  | | | |
| Deleted (D) |  | | |  | | |  | | | |  | |  | | | |
|  | (Estimated) | | |  | | | (Counted) | | | |  | |  | | | |
| Modified (M) |  | | |  | | |  | | | |  | |  | | | |
|  | (Estimated) | | |  | | | (Counted) | | | |  | |  | | | |
| Added (A) |  | | | |  |  | | | |  | |  | | | |
|  | (A+M − M) | | | |  | (T − B + D − R) | | | |  | |  | | | |
| Reused (R) |  | | | |  |  | | | |  | |  | | | |
|  | (Estimated) | | | |  | (Counted) | | | |  | |  | | | |
| Added and Modified (A+M) |  | | | |  |  | | | |  | |  | | | |
|  | (Projected) | | | |  | (A + M) | | | |  | |  | | | |
| Total Size (T) |  | | | |  |  | | | |  | |  | | | |
|  | (A+M + B − M − D + R) | | | |  | (Measured) | | | |  | |  | | | |
| Total New Reusable |  | | | |  |  | | | |  | |  | | | |
|  |  | | | |  |  | | | |  | |  | | | |
| Estimated Proxy Size (E) |  | | | |  |  | | | |  | |  | | | |
|  |  | | | |  |  | | | |  | |  | | | |
| **Time in Phase (min.)** | **Plan** |  | **Actual** | | | | |  | **To Date** | | | | |  | **To Date %** |
| Planning |  |  |  | | | | |  |  | | | | |  |  |
| Design |  |  |  | | | | |  |  | | | | |  |  |
| ***Design Review*** |  |  |  | | | | |  |  | | | | |  |  |
| Code |  |  |  | | | | |  |  | | | | |  |  |
| ***Code Review*** |  |  |  | | | | |  |  | | | | |  |  |
| Compile |  |  |  | | | | |  |  | | | | |  |  |
| Test |  |  |  | | | | |  |  | | | | |  |  |
| Postmortem |  |  |  | | | | |  |  | | | | |  |  |
| Total |  |  |  | | | | |  |  | | | | |  |  |

**(continued)**

**PSP2 Project Plan Summary (continued)**

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| Student |  | Program # |  |

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| **Defects Injected** | ***Plan*** |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  |  | | |  |  |
| Design |  |  |  | | |  |  | | |  |  |
| ***Design Review*** |  |  |  | | |  |  | | |  |  |
| Code |  |  |  | | |  |  | | |  |  |
| ***Code Review*** |  |  |  | | |  |  | | |  |  |
| Compile |  |  |  | | |  |  | | |  |  |
| Test |  |  |  | | |  |  | | |  |  |
| Total Development |  |  |  | | |  |  | | |  |  |
|  |  |  |  | | |  |  | | |  |  |
| **Defects Removed** | ***Plan*** |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  |  | | |  |  |
| Design |  |  |  | | |  |  | | |  |  |
| ***Design Review*** |  |  |  | | |  |  | | |  |  |
| Code |  |  |  | | |  |  | | |  |  |
| ***Code Review*** |  |  |  | | |  |  | | |  |  |
| Compile |  |  |  | | |  |  | | |  |  |
| Test |  |  |  | | |  |  | | |  |  |
| Total Development |  |  |  | | |  |  | | |  |  |
| After Development |  |  |  | | |  |  | | |  |  |
|  |  | | |  |  | | |  |  | | |
| ***Defect Removal Efficiency*** | ***Plan*** | | |  | ***Actual*** | | |  | ***To Date*** | | |
| ***Defects/Hour − Design Review*** |  | | |  |  | | |  |  | | |
| ***Defects/Hour − Code Review*** |  | | |  |  | | |  |  | | |
| ***Defects/Hour − Compile*** |  | | |  |  | | |  |  | | |
| ***Defects/Hour − Test*** |  | | |  |  | | |  |  | | |
| ***DRL (DLDR/UT)*** |  | | |  |  | | |  |  | | |
| ***DRL (Code Review/UT)*** |  | | |  |  | | |  |  | | |
| ***DRL (Compile/UT)*** |  | | |  |  | | |  |  | | |

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| PSP2 Plan Summary Instructions | |  |
| Purpose | To hold the plan and actual data for programs or program parts | |
| General | * Use the most appropriate size measure, either LOC or element count. * “To Date” is the total actual to-date values for all products developed. * A part could be a module, component, product, or system. | |
| Header | * Enter your name and the date. * Enter the program name and number. * Enter the instructor’s name and the programming language you are using. | |
| Summary | * Enter the added and modified size per hour planned, actual, and to-date. * Enter the planned and actual times for this program and prior programs. * For planned time to date, use the sum of the current planned time and the ***to-date*** planned time for the ***most recent*** prior program. * CPI = (To Date Planned Time)/(To Date Actual Time). * Reused % is reused size as a percentage of total program size. * New Reusable % is new reusable size as a percentage of added and modified size. * ***Enter the test and total defects/KLOC or other appropriate measure.*** * ***Enter the planned, actual, and to-date yield before compile.*** | |
| Program Size | * Enter plan base, deleted, modified, reused, new reusable, and total size from the Size Estimating template. * Enter the plan added and modified size value (A+M) from projected added and modified size (P) on the Size Estimating template. * Calculate plan added size as A+M – M. * Enter estimated proxy size (E) from the Size Estimating template. * Enter actual base, deleted, modified, reused, total, and new reusable size from the Size Estimating template. * Calculate actual added size as T-B+D-R and actual added and modified size as A+M. * Enter to-date reused, added and modified, total, and new reusable size. | |
| Time in Phase | * Enter plan total time in phase from the estimated total development time on the Size Estimating template. * Distribute the estimated total time across the development phases according to the To Date % for the most recently developed program. * Enter the actual time by phase and the total time. * To Date: Enter the sum of the actual times for this program plus the to-date times from the most recently developed program. * To Date %: Enter the percentage of to-date time in each phase. | |

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| PSP2 Plan Summary Instructions (continued) | |  |
| Defects Injected | * ***Enter the total estimated defects injected.*** * ***Distribute the estimated total defects across the development phases according to the To Date % for the most recently developed program.*** * Enter the actual defects by phase and the total actual defects. * To Date: Enter the sum of the actual defects injected by phase and the to-date values for the most recent previously developed program. * To Date %: Enter the percentage of the to-date defects injected by phase. | |
| Defects Removed | * ***Enter the estimated total defects removed.*** * ***Distribute the estimated total defects across the development phases according to the To Date % for the most recently developed program.*** * To Date: Enter the actual defects removed by phase plus the to-date values for the most recent previously developed program. * To Date %: Enter the percentage of the to-date defects removed by phase. * After development, record any defects subsequently found during program testing, use, reuse, or modification. | |
| *Defect-Removal Efficiency* | * ***Calculate and enter the defects removed per hour in design review, code review, compile, and test.*** * ***For DRL, take the ratio of the review and compile rates with test.*** * ***Where there were no test defects, use the to-date test defect/hour value.*** | |