PSP1.1 Process Script

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|---------------------|-----------------|--|--|--|
| Phase Numbe r | Purpose | To guide you in developing module-level programs | | |
| | Inputs Required | Problem description PSP1 Project Plan Summary form Size Estimating Template Historical estimate and actual size data Time and Defect Recording Logs Defect Type Standard Stop watch (optional) | | |
| 1 | Planning | Produce or obtain a requirements statement. Use the PROBE method to estimate the total new and changed LOC required. Complete the Size Estimating Template. Use the PROBE method to estimate the required development time. Complete a Task Planning Template. Complete a Schedule Planning Template. Estimate the required development time. Enter the plan data in the Project Plan Summary form. Complete the Time Recording Log. | | |
| 2 | Development | Design the program. Implement the design. Compile the program and fix and log all defects found. Test the program and fix and log all defects found. Complete the Time Recording Log. | | |
| 3 | | | | |
| | Exit Criteria | A thoroughly tested program Completed Project Plan Summary form with estimated and actual data Completed Size Estimating Template Completed Test Report Template Completed PIP forms Completed Defect and Time Recording Logs | | |

PSP1.1 Planning Script

| Phase Numbe r | Purpose | To guide the PSP planning process |
|---------------------|-----------------|---|
| | Inputs Required | Problem description PSP1 Project Plan Summary form Size Estimating, <i>Task Planning, and Schedule Planning Templates</i> Historical estimate and actual size data Time Recording Log Defect Type Standard |

| 1 | Program | - Produce or obtain a requirements statement for the program. | | | |
|---|-------------------|---|--|--|--|
| | Requirements | - Ensure the requirements statement is clear and | | | |
| | | unambiguous. | | | |
| | | - Resolve any questions. | | | |
| 2 | Size Estimate | - Produce a program conceptual design. | | | |
| | | - Use the PROBE method to estimate the total new and | | | |
| | | changed LOC required to develop this program. | | | |
| | | - Estimate the base, added, deleted, modified, and reused | | | |
| | | LOC. | | | |
| | | - Complete the Size Estimating Template and Project Plan | | | |
| | | Summary. | | | |
| 3 | Resource Estimate | - Use the PROBE method to estimate the time required to | | | |
| | | develop this program. | | | |
| | | - Using the To Date % from the most recently developed | | | |
| | | program as a guide, distribute the development time over the | | | |
| | | planned project phases. | | | |
| 4 | Task and Schedule | For projects requiring several days or more of work, | | | |
| | Planning | complete the Task Planning and Schedule Planning | | | |
| | | Templates. | | | |
| | Exit Criteria | - A documented requirements statement | | | |
| | | - The program conceptual design | | | |
| | | - Completed Size Estimating Template | | | |
| | | - For projects of several days' duration, completed Task | | | |
| | | Planning and Schedule Planning Templates | | | |
| | | - A completed Project Plan Summary form with estimated | | | |
| | | program size and development time data | | | |
| | | - Completed Time Recording Log | | | |

PSP1.1 Development Script

| Phase Numbe r | Purpose | To guide the development of small programs | |
|---------------------|----------------|--|--|
| | Entry Criteria | Requirements statement Project Plan Summary with estimated program size and development time For projects of several days' duration, completed Task Planning and Schedule Planning Templates Time and Defect Recording Logs Defect Type Standard and Coding Standard | |
| 1 | Design | - Review the requirements and produce a design to meet them. - Record time in the Time Recording Log. | |
| 2 | Code | Implement the design following the Coding Standard. Record in the Defect Recording Log any requirements or design defects found. Record time in the Time Recording Log. | |
| 3 | Compile | - Compile the program until error free Fix all defects found Record defects in the Defect Recording Log Record time in the Time Recording Log. | |

| 4 | Test | - Test until all tests run without error. | | | |
|---|---------------|---|--|--|--|
| | | - Fix all defects found. | | | |
| | | - Record defects in the Defect Recording Log. | | | |
| | | - Record time in the Time Recording Log. | | | |
| | | - Complete a Test Report Template on the tests conducted | | | |
| | | and results obtained. | | | |
| | Exit Criteria | - A thoroughly tested program that conforms to the Coding | | | |
| | | Standard | | | |
| | | - Completed Test Report Template | | | |
| | | - Completed Defect Recording Log | | | |
| | | - Completed Time Recording Log | | | |

PSP1.1 Postmortem Script

| Phase Numbe r | Purpose | To guide the postmortem process | | |
|---------------------|------------------|--|--|--|
| | Entry Criteria | Problem description and requirements statement Project Plan Summary with estimated program size and development time data For projects of several days' duration, completed Task Planning and Schedule Planning Templates Completed Test Report Template Completed Defect Recording Log Completed Time Recording Log A tested and running program that conforms to the Coding Standard | | |
| 1 | Defects Injected | Determine from the Defect Recording Log the number of defects injected in each PSP0.1 phase. Enter this number under Defects Injected – Actual on the Project Plan Summary. | | |
| 2 | Defects Removed | Determine from the Defect Recording Log the number of defects removed in each PSP0.1 phase. Enter this number under Defects Removed – Actual on the Project Plan Summary. | | |
| 3 | Size | Count the LOC in the completed program. Determine the base, reused, deleted, modified, added, total, total new and changed, any new reused LOC. Enter these data on the Project Plan Summary. | | |
| 4 | Time | Review the completed Time Recording Log. Enter the total time spent in each PSP0.1 phase Actual on the Project Plan Summary. | | |
| | Exit Criteria | A fully tested program that conforms to the Coding Standard A completed Test Report Template Completed Project Plan Summary form Completed PIP forms describing process problems, improvement suggestions, and lessons learned Completed Defect and Time Recording Logs | | |