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Developing a Schedule

Exercise

TSP Team Member Training  
Software Engineering Institute

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Developing a Schedule

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| **Objective** | Given historical data on the time required to complete a work process, develop a schedule and earned value plan for completing the work. |

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| **Scenario** | You are to schedule a project that is to begin on March 1. You have estimated that the entire effort required to produce your product is 137 hours. Table one presents percent time-in-phase projections from your historical data.  You intend to spend 20 hours per week of task time on this project. However, you plan to take vacation during the week of April 12. |

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| **Instructions** | Table 1 presents time-in-phase estimates that are based on historical data accumulated during past projects.  Table 1. Project Plan Summary   |  |  |  | | --- | --- | --- | | **Phase** | **Historical %** | **Planned hours** | | Planning | 8% | 10.96 | | Elicit requirements | 18% | 24.66 | | Document requirements | 36% | 49.32 | | Personal review | 13% | 17.81 | | Inspection | 21% | 28.77 | | Postmortem | 4% | 5.48 | | Total | 100% | 137.0 |   On the *Schedule Planning* template:   1. Fill in the cells of the *Plan Task Hours* column based on your estimated task hours per week.  * Don’t forget that you plan to take vacation during the week of  April 12. * Ensure that you schedule a sufficient number of hours to complete the work as it is currently planned.  1. Fill in the cells of the *Plan Cumulative Hours* column for the weeks that you plan to work. 2. Calculate and enter values for the *Cumulative Planned Value* column. |

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| **Instructions, cont.** | On the *Task Planning* template:   1. For each task, determine the week during which the task will complete.[[1]](#footnote-1) Enter this value in the appropriate cell of the *Plan Date* column of the *Task Planning* template. 2. Calculate and enter the planned values and the cumulative planned values for each of the tasks. 3. For each task, compare the cumulative planned value to values in the *Cumulative Planned Value* column of the *Schedule Planning* template. Find a matching value and then select the corresponding date value from the *Schedule Planning template* and enter this date value for the task on the *Task Planning* template.   On the *Earned Value* template:   1. Enter values for the axes of the template. 2. Plot the values of cumulative PV and date. |

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| **Exercise duration** | Take 20 minutes to complete the exercise. |

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| **Need help?** | If you need help,   * refer to the slides in the module that were presented before the exercise * call upon your instructor to answer any questions you have |

Table 2. Schedule Planning Template.

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| --- | --- | --- | --- | --- |
| **Week #** | **Week beginning** | **Task hours** | **Cumulative hours** | **Cumulative Planned Value (PV)** |
| 1 | 1-March |  |  |  |
| 2 | 8-March |  |  |  |
| 3 | 15-March |  |  |  |
| 4 | 22-March |  |  |  |
| 5 | 29-March |  |  |  |
| 6 | 5-April |  |  |  |
| 7 | 12-April |  |  |  |
| 8 | 19-April |  |  |  |

Table 3. Task Planning Template.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Plan** | | | | | **Actual** | | |
| **Task ID** | **Task name** | **Task hours** | **Cumulative hours** | **Planned Value (PV)** | **Cumulative PV** | **Week** | **Date** | **Earned Value** | **Cumulative EV** |
| 1 | Planning |  |  |  |  |  |  |  |  |
| 2 | Elicit requirements |  |  |  |  |  |  |  |  |
| 3 | Document requirements |  |  |  |  |  |  |  |  |
| 4 | Personal review |  |  |  |  |  |  |  |  |
| 5 | Inspection |  |  |  |  |  |  |  |  |
| 6 | Postmortem |  |  |  |  |  |  |  |  |

1. **Hint**: Starting from the top of the *Plan Cumulative Hours* of the *Schedule Planning* template, determine the first week where the cumulative hours exceeds the cumulative hours for the task as listed on the *Task Planning Template.* Schedule the task to complete after this week. [↑](#footnote-ref-1)