

2810ICT/7810ICT Software Technologies

Workshop 3 – Project Management

<i>When</i>	Week 3
<i>Goal</i>	In this workshop you will create a simple time estimate plan for a small project and based on this time estimate, create a precedence diagram.

1. Preparation

Before your lab class:

- Read all of this document.
- Review the lecture notes for week 3.

2. Workshop activities

Task 1. You have been asked to determine a rough schedule for a nine-week Billing System Conversion project, as part of your job as a consultant to a Fortune 500 firm. The firm's old system was written in COBOL on a mainframe computer, and the maintenance costs are prohibitive. The new system will run on an off-the-shelf application. You have identified several high-level activities that must be done in order to initiate, plan, execute, control and close the project. The table (**workshop3_task1.xlsx**, download from the course website) shows your analysis of the project's tasks and schedule so far.

- a) Using the information in the table, draw horizontal bars (or **highlight the cells**) to illustrate when you think each task would logically start and end. Remember, some tasks can be concurrent.
- b) Use the Precedence Diagramming Method (PDM), to create a network diagram for the Billing System Conversion project. Based on the provided template (**workshop3_task1.drawio**, download from the course website), construct the PDM based on your answer to part a using the free online drawer (<https://app.diagrams.net/>). You will need to make some sensible decisions on what activities are dependent on others being started/finished. Assume all durations are in days. Answer the following questions:
 - How many paths are on this network diagram? How long is each path?
 - Which is the critical path? What is the shortest amount of time needed to complete this project?

Task 2. Your next job is to develop, plan and deliver a “Project Management Workshop”. Create a cost estimate for this project. The duration of this project is **six months**. Below are some of the assumptions:

- Each 2-day workshop will cost \$700 per person.
- Estimates indicate that approximately **30** people will attend.
- Fixed costs include
 - \$600 to rent a room for both days,
 - setup fees of \$450 for enrolment, and
 - \$300 for designing a flyer for advertising.
- No labour costs will be included in the estimate; however, you note that you will spend at least 150 hours developing the materials, managing the project, and delivering the class. You would like to know what your time is worth given the different scenarios.
- You order 6,000 flyers, post 4,500 and distribute the rest to friends and colleagues.
- Variable costs include:
 - \$6 per person for enrolment
 - \$0.50 per flyer if your order 6,000 or more
 - \$0.55 per flyer for mailing and postage
 - \$30 per person for drinks and lunch
 - \$50 per person for class manuals

Use the table (**workshop3_task2.xlsx**, download from the course website) as a guide to developing an excel spreadsheet that will automatically calculate your projected total costs, projected total revenues, and projected profit given the Scenario Inputs.

Now calculate projected profits for the cases of 10 and 50 people, respectively. How does each of these enrolment numbers affect your personal time value per hour?