FREQUENTLY ASKED QUESTIONS

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(courtesy of previous years' students)

Assignment 1 - CSE 6329

Personal Work Breakdown Structure

1) At jobs I’ve held over the years I generally do not have to account for my time to this level of detail, and I am having difficulty tracking how much time I spend on each different task that I split out in my WBS. Do you have any recommendations as to a good method to keep an accurate account?

A) This method is widely used in organizations that do project work on contracts, such as government contracts, where it is important for people to keep track of their time. Accurate records of time spent on a project are needed so the organization can do accurate accounting and accurate estimating of future contracts.

Here are several methods for recording your time when working on a project:

1. At the end of the day, roughly at the same time each day (on days when you actually work on the project), you recall what you did that day and estimate how much time (in tenths of an hour) you spent on which tasks. Add the daily total to the totals from prior days that week.
2. Same as above but at the end of each week (this takes less time but requires a more accurate memory).
3. Record hours whenever you work on a task for the project, adding to the prior number for the same task and same week
4. Mix up the above (one approach one week, another approach the next, devising variants if that helps) until you find what works best for you.

2) What if the template does not match the number of weeks in the course?

A) With breaks and schedules differing every semester, the template is set up for the most common situation. If the actual course has fewer weeks than the template, just leave the later weeks blank. This also applies if you get done before the end of the course. Conversely, if you are unable to finish the course on time or if, for any other reason, you need more weeks, just place your cursor on the blank column to the left of the **Total** column on the right (“**insert column here**”) and insert new columns as needed, copying over and perhaps adjusting formulas as needed. It is always good management practice to provide for possible extensions of the project schedule, since so many factors can result in a schedule change. That’s why this “spare” column is provided.

3) When I turn in the workbook at the end of the semester, do I keep the file name “A1 CSE6329 …”?

A) Yes, but use the word “DRAFT” in the file name for the week 1 submission, INTERIM for the week 3 submission and FINAL for the end of the course submission.

4) Will this assignment be evaluated more than once?

A) It is evaluated without a grade at the end of week 1 (DRAFT). The INTERIM and FINAL versions are evaluated and a grade is assigned. Each of these grades counts 5% toward your final course grade. The assignment is evaluated after you turn it in the first time (DRAFT) to help make sure you are doing it correctly. If you have concerns later in the semester, you may show it to the instructor or grader, either of whom can check to see if you are doing it properly.

5) I’m at a loss regarding how to estimate what tasks I will perform. Can you give me any suggestions? Should I use the tasks in the template?

A) The template is just a starting point. It contains a fairly reasonable set of tasks for assignment 1 (although you may change this if you wish), but contains little or nothing for the remaining assignments and exams. I expect you to insert many tasks for those assignments. In other words, **in order to do assignment 1, you must read over the SOWs for all of the course assignments and perhaps some of the other materials for the later assignments.** Here is how to decide what tasks to use:

i) The template provides a top level task for each assignment. Read the SOW for each assignment. Each SOW will include a section called **work to be performed.** Each task listed there might become a sub-task of the top level task for that assignment.

ii) Plan out in your mind (or on paper) how you will perform each task you have identified. If the task is large, break it into smaller pieces that will become lower level sub-tasks in your WBS. Continue breaking things down until you are comfortable that the bottom level tasks are of a reasonable size (I recommend no smaller than 0.1 hour and most tasks should be no larger than 2 hours) and that they represent a reasonable list of tasks to perform.

iii) Now look at the list of deliverables in the SOW. (Each SOW will contain a list of **deliverables**.) Assess how you will produce each deliverable. Compare with the tasks you have already identified. Is anything else needed to produce the deliverables? If so, a corresponding task (or group of tasks) should be added to your WBS.

In the DRAFT version of this assignment, you should make a sincere attempt to identify a reasonable set of tasks, but don’t worry if you’re imperfect. One advantage of the WBS structure is that you can add tasks later by simply inserting new rows into to your WBS spreadsheet. There are “spare” rows at the bottom for each possible type of row you might wish to insert, so all you need to do is insert one of these into the designated position, assign a number in the **task #** column, make sure the formulas are correct, and estimate the hours of effort (and set that equal to “estimated hours remaining”). But it is important to do as complete a job as you can for the DRAFT version – this is what project planning is all about.

6) OK, I have my tasks, but how do I estimate how long each will take?

A) Make your best estimate (guess if necessary) and use that. It’s OK if you are wrong, but I expect you to do a sincere estimate. The more experienced you are, the better your estimates will be. But the WBS is flexible - it allows you to make estimation mistakes. **Grading is not based on how accurate your estimates are**. It is based on whether you have made a sincere attempt, whether you set up the spreadsheet correctly, and whether you track things correctly. As a guideline, the bottom level tasks should usually be no more than 2 hours in length. If a task is larger than that, you should consider breaking it down into smaller tasks.

7) You said 3-5 pages for the complete WBS, but I’m going to need 6. Is that OK?

A) 3-5 is a general guideline, based on what students have done in the past. 2 pages is a little skimpy and suggests that you didn’t make a very sincere effort to identify the tasks. 6 pages would be a little more detail than most students do, but is perfectly acceptable.

8) Do real projects actually do this? It seems like a lot of work.

A) Yes, because most real projects have schedule deadlines, budgets, and accounting rules. Some are required to report hours worked to customers or auditors. It is the project leader’s responsibility to make sure they know how the project is doing relative to the schedule and budget. Also, on a real project, there are usually higher-level managers who want to know “how are things going and when will you be finished?”. It is their job to know this and to help the development team meet schedule deadlines and budgets. So they must have a way of tracking progress. The WBS is one of the most commonly used methods of identifying the work to be done and measuring and tracking progress. Burn down and burn up charts are key tools used in most agile development processes, and are increasingly popular with non-agile projects, especially those that are not very big. Earned value is widely used on larger projects, including many agile ones. The PWBS assignment combines all of these things so you can learn how they work, what each of them shows, and how to construct and use each of them. On a real project you might only use one or two of them. For example, earned value tells you more than the burnup chart but requires more information.

9) I’m curious about where the lines on the graph come from. How do I find out?

We will discuss some of this in class, but it’s fairly easy to figure this out in Excel. The SOW also explains where most of them come from. I recommend that, once you’ve set up your WBS, you examine the data for each of the three charts to see where the various lines come from. Then examine the formulas and determine how that information is derived from the basic data you entered on your plan and in your weekly actual records. To do this, select a chart, right click and “select data”. That will show you where each line comes from. From there you can examine the spreadsheet, the formulas used, and ultimately where the data values come from.