Getting Started with Microsoft Project

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This is intended to provide a quick introduction to the use of Microsoft Project, which will allow you to build and manage your project schedule.

1. Open MS Project. The application should be in the start menu with the other Microsoft Office tools on your capstone station. Note that by default it opens to the Gantt Chart view. Take a few moments to click through the menus to see the different available commands.
2. Customize your calendar. Unless you are planning on working on your project through holidays and spring break, you should start by adding holidays to your calendar.
    a. Go to the "Project" tab, and select "Change Working Time"
    b. Look at the 3 calendar options (Standard, 24 Hours, and Night Shift). Note that days without working hours (weekends on the standard calendar) are gray in the calendar display. Furthermore, the working days have hours designated for them, displayed on the side.
    c. Pick "Create New Calendar…", make your new calendar off of the base of "Standard" and name your calendar "USNA"
    d. Now we're going to enter in a bunch of exceptions for days when you won't be able to work on your project.
        i. In the "Name" column, under exceptions, enter "Thanksgiving" and give this the dates of 11/22- 11/25. Note that the blocked off days appear in blue in the calendar.
        ii. Repeat for "Christmas" (12/19 - 1/7)
        iii. Repeat for Spring Break (3/9 – 3/17)
        iv. Repeat for any other weekends or large blocks of time that you know you aren't available. (MLK Day is 1/21 and President's Day is 2/18)
3. Start a new project.
    a. Select the "File" tab and use "Save As" to name and save your project file.
    b. Under "Project" select "Project Information" and set the start date for your project to Tuesday, Nov. 13 (this is the first work day after you will turn in your complete proposal draft). Set the Calendar to "USNA". And then hit "OK"
4. Now you're ready to enter some tasks
    a. To learn the software, we'll start with some generic tasks (you can modify these to represent your own project later)
    b. In the "Task Name" column, enter "Select Parts" and then give this task one week by entering "1w" in the duration column. A bar should appear in the graph on the right. Note that the "task mode" is manual by default. We'll come back to the meaning of the task mode later.

c. Repeat until your tasks include the following (which is quite optimistic).

Task Name	Duration
Select Parts	1 week
Order Parts	3 weeks
Model	2 weeks
Build	2 weeks
Test	2 weeks
Prepare final report and presentation	2 weeks

5. Link the tasks
    a. Clearly you can't do these tasks simultaneously. Highlight all of the tasks and under the "Task" tab, select the little chain symbol. Notice how the activities then become linked—spreading out on the calendar.
    b. Notice the "timeline" display above the Gantt Chart window. Adjust the window in the timeline view, and observe the effect on the Gantt Chart.
    c. Note also that MS Project has accommodated your vacation time over Thanksgiving and Christmas in how it has laid out the tasks.
6. Now let's observe the difference between "Manual" and "Automatic" task mode.
    a. You are currently on the "manual" task mode. Pick the trailing edge of the "Model" block in the Gantt Chart view, and drag it to the right, observe that the duration is changed but that the other activities aren't shifted.
    b. Undo that.
    c. Now , one by one, change the "Task Mode" for each task to "Auto Scheduled"
    d. Now pick the trailing edge of the "Model" block and shift it. Observe that now the other tasks are all automatically adjusted.
    e. Undo the change to the duration of "Order Parts" but keep the tasks in automatic mode.
7. Let's adjust some of your task links.
    a. Let's suppose that upon further reflection, you realize that you can work on your models while the parts are on order. Highlight "Order Parts" and "Model" and select the broken link symbol to break the link between these two tasks. Note that the tasks from Model onward shift back.
    b. But that isn't perfect either, because you still want Model to follow Select Parts. Highlight "Select Parts" and then use CTRL to select "Model" without selecting "Order Parts" and hit the link to link these tasks.
    c. Now Model is starting where you want it, but you are starting "Build" before you get your parts! "Build" has two predecessors. You can enter this by double clicking on the "Build" task to pull up the Task Information window. Then under "Predecessors" add "Order Parts" to the predecessor list. Now your chart should look better.
8. Now we will add some sub-tasks.
    a. Highlight the row under "Model" and under the "Task" tab, select the "Task" button in the right. Name the New Task "Model Subsystem A," make its duration 1 week.

   b. Add another New Task under it called “Model Subsystem B” and make its duration 3 days.
   c. Highlight “Model Subsystem A” and “Model Subsystem B” and link them. Note how the duration for “Model” automatically extends to include both systems.
   d. Now highlight both of these tasks and select the “Indent Task” button (on the Task tab, it’s a little symbol with a green arrow pointing right), to make these tasks sub-tasks of “Model”. Note how “Model” changes to a black bar (indicating that it has become a “Summary” task).
9. Now we will add some milestones. Select “Insert Milestone” and enter the due date for the final proposal (Dec. 12) and the capstone conference (April 24).
10. Note that as you go through your project you can also update your status.
   a. Highlight “Select Parts” and select the little 100% bar in the Task tab.
   b. Highlight “Model Subsystem A” and select the little 25% bar in the Task tab.
   c. Now imagine that given your good progress, you have moved up the start date for “Order Parts”. Highlight “Order Parts” bring down the “Mark on Track” menu and select “Update Tasks”. Then change the start date for Order Parts to November 14. Note how the figure changes to indicate that you are ahead of schedule.
11. Finally, apply what you’ve learned to the schedule for your own project. MS Project has a lot of interesting features that you may want to explore, including ways to assign tasks to particular team members for larger project groups. You should use project to plan the schedule for your project and you should update the chart periodically as the project progresses. Include your Gantt Chart in your proposal.