Microsoft® Project®
Computer Lab

Lab 2: Project planning and control using Microsoft® Project®

Consider a project with the following activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Immediate Predecessors</th>
<th>Duration (days)</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Build Foundation</td>
<td>-</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>B</td>
<td>Build walls and ceilings</td>
<td>A</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>C</td>
<td>Build roof</td>
<td>B</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>D</td>
<td>Do electrical wiring</td>
<td>B</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>E</td>
<td>Install windows</td>
<td>B</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>F</td>
<td>Install siding</td>
<td>E</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td>G</td>
<td>Paint</td>
<td>C,F</td>
<td>3</td>
<td>0%</td>
</tr>
</tbody>
</table>

Part 1: Input the activity description, time, and predecessor information into MS Project. Find the critical path.

1. Click on ‘Project Information …’ under the ‘Project’ tab in the ribbon. The default project start date is today. Change it to one week from today (November 13.)
2. Click on ‘Change working time …’ in the ‘Project’ tab. Set the following dates to nonworking times: November 22 and 23 (Thanksgiving day and the day after), December 25 (Christmas day), and January 1 (New Year’s day).
3. Click on the first line under ‘Task Name’ in the Gantt chart. Enter the tasks and durations from the table above into the Gantt chart. Create an additional task named ‘Finish’ with duration of 0 (note: this creates a ‘milestone’ that is the end of the job.)
4. To schedule the tasks and create the precedence, select the tasks to be linked and then choose the link symbol under the ‘Task’ tab (note: hold down the control key to link 2 or more tasks not right next to each other.) Link tasks D and G to ‘Finish’.
5. Select ‘Network Diagram’ under ‘Gantt Chart’ (the first option on the left in the ‘Task’ tab) to see the critical path.
6. To see the critical path on the Gantt chart, select ‘More views …’ under ‘Gantt Chart’, then ‘Detail Gantt’. What is the critical path?
7. Click on ‘Project Information …’ under ‘Project’ in the menu bar. Click on the ‘Statistics’ button at the bottom of the dialog box and find the project duration.
Part 2: Update project progress. Identify potential problems.

2. Select ’Tracking Gantt’ from the ‘View’ menu.
3. After you have selected ’Tracking Gantt,’ return to the ‘View’ menu and change the table type from ‘Entry’ to ’Tracking’ by selecting ‘Table: Entry’ and then ‘Tracking.’
4. Scroll over until you can see and enter data into the ‘% Comp’ column. (note: you can adjust the size of the chart frame and/or the columns in the data entry frame in order to view the name and % complete.)
5. Enter the percent complete from the table above into the ‘%Comp’ column.
6. Review the Gantt chart. Is there a potential that the project might fail to finish on time? Which task do you need to concentrate on to get the project back on schedule?

Part 3: Formatting and printing.

1. Return to the network diagram view.
2. Choose ‘Print Preview’ from the ‘File’ menu. How many pages will be required to print the network diagram as is?
3. Select ‘Page Setup’ and ‘Fit to 1 pages wide by 1 tall.’ Select ‘None’ for the Legend. Close print preview.
4. Select ‘Layout …’ from the ‘Format’ window. Select ‘Allow manual box positioning’. If you’d like, you may also choose ‘Straight’ as the link style.
5. Play with the position of the task boxes in the network diagram until you are happy with the way it looks in print preview.
6. Print the network diagram, write your name on it, and turn it in before you leave today.