Practical 3

AIM: To use MS Project similar tools to show critical path, subtask, set non working time, network diagrams, resource usage sheet.

Critical path

It is the longest path through the schedule of various activities of a project => It is important because the longest path actually determines the shortest time that it will take us to complete the project

Float Time/slack time: it is the time through which we can adjust aur activity according to the requirement

Eg: Activity 1 can take 3 days

Activity 2: 8 days

Critical path is possessed by Activity-2 in the above activities, because it is longest path in the given schedule

Float activity 1 will get completed in three days but the whole schedule will take 8 days to get completed so there is float/slack time of 3 days for activity 1 within which activity 1 can be adjusted according to the requirement

Critical method / distinct operations

Operation

1 forward pass: for each task we will find out early start and early finish ES and EF date

EF= ES +duration -1

2 backward pass: late start and late finish for each task we will find out LS and LF

LS = LF - duration +1

3 float/slack time: it can be calculated from LS,ES or LF,EF

It is equal to LS -ES or LF-EF

NOTE:If difference is 0 float means its a critical task

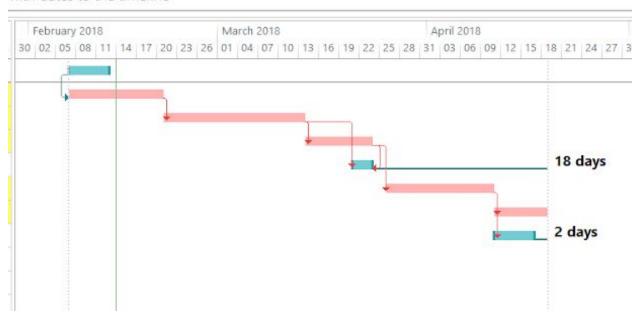
Critical path

Taking tasks A to H to show critical path Highlighted critical tasks

	0	Task Mode →	Name	Leveling Delay •	Duration -	Start -	Finish +	Predecessors
1		*	Task A	0 edays	4 days	Wed 07-02-18	Mon 12-02-18	
2		*	Task B	0 edays	10 days	Wed 07-02-18	Tue 20-02-18	1SS
3		*	Task C	0 edays	15 days	Wed 21-02-18	Tue 13-03-18	2
4		*	Task E	0 edays	8 days	Wed 14-03-18	Fri 23-03-18	3
5		*	Task D	0 edays	3 days	Wed 21-03-18	Fri 23-03-18	3,4FF
6		*	Task F	0 edays	12 days	Mon 26-03-18	Tue 10-04-18	4
7		*	Task G	0 edays	6 days	Wed 11-04-18	Wed 18-04-18	6
8		*	Task H	0 edays	4 days	Wed 11-04-18	Mon 16-04-18	6

Showing critical path

with dates to the timeline

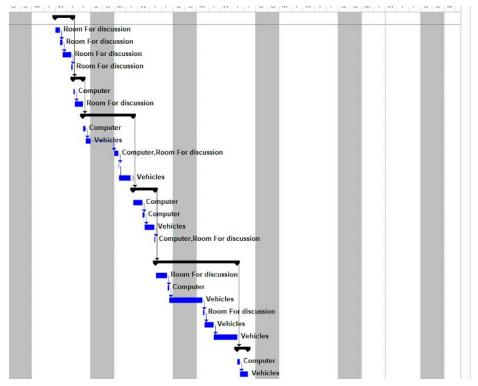


Subtask

In Project, an indented task becomes a subtask of the task above it, which becomes a summary task. A summary task is made up of subtasks, and it shows their combined information.

Project Plan for Farewell party organisation using subtasks

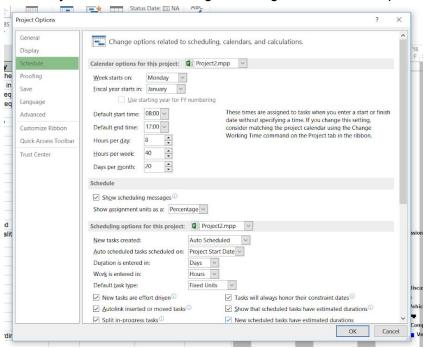
	Task Name	Duration 🕶	Start -	Finish +	Names •
1	Making the budget for the farewell party	1.5 days	Wed 24-01-18	Thu 25-01-18	
2	Finalise the total amount to be spent on the party	2 hrs	Wed 24-01-18	Wed 24-01-18	Room For disc
3	Make list of the things or events required in the party	4 hrs	Wed 24-01-18	Wed 24-01-18	Room For disc
4	Distribute the budget accordingly to the requirements	3 hrs	Wed 24-01-18	Thu 25-01-18	Room For disc
5	Increase or decrease the budget as per requirement	3 hrs	Thu 25-01-18	Thu 25-01-18	Room For disc
6	⁴ Theme selection	.63 days	Thu 25-01-18	Fri 26-01-18	
7	Make list of possible themes for the party	3 hrs	Thu 25-01-18	Thu 25-01-18	Computer
8	Finalise the theme for the party	2 hrs	Thu 25-01-18	Fri 26-01-18	Room For disc
9	₄ Select Venue	1.63 days	Fri 26-01-18	Tue 30-01-18	
10	Make list of nearby Venue	4 hrs	Fri 26-01-18	Fri 26-01-18	Computer
11	Get quotations from venue owners	3 hrs	Fri 26-01-18	Fri 26-01-18	Vehicles
12	Compare and finalise venue	1 hr	Mon 29-01-18	Mon 29-01-18	Computer,Roo
13	Finalise the date	1 hr	Mon 29-01-18	Mon 29-01-18	
14	Book the venue	9 hrs	Mon 29-01-18	Tue 30-01-18	Vehicles
15		.75 days	Tue 30-01-18	Thu 01-02-18	
16	Make list of type of food	4 hrs	Tue 30-01-18	Wed 31-01-18	Computer
17	Make the menu of the food items	3 hrs	Wed 31-01-18	Wed 31-01-18	Computer
18	Make list of caterers that provide that food	5 hrs	Wed 31-01-18	Thu 01-02-18	Vehicles
19	Finalise the caterer according to food quality and budget	2 hrs	Thu 01-02-18	Thu 01-02-18	Computer, Room For
20	⁴ Invitations printing and distibution	.88 days	Thu 01-02-18	Thu 08-02-18	
21	Make list of people to be invited	1 day	Thu 01-02-18	Fri 02-02-18	Room For disc
22	Make list of nearby printing companies	3 hrs	Fri 02-02-18	Fri 02-02-18	Computer
23	Get prices for various desings	5 hrs	Fri 02-02-18	Mon 05-02-18	Vehicles
24	Select best design under the budget	3 hrs	Mon 05-02-18	Mon 05-02-18	Room For disc
25	Get the invitations printed	0.5 days	Mon 05-02-18	Tue 06-02-18	Vehicles
26	Distribute the invitations	2 days	Tue 06-02-18	Thu 08-02-18	Vehicles
27	△ Decorations	1.75 days	Thu 08-02-18	Fri 09-02-18	
28	Make list of available decorators	4 hrs	Thu 08-02-18	Thu 08-02-18	Computer
29	Select decorator for the decoration according to theme	2 hrs	Thu 08-02-18	Fri 09-02-18	Vehicles



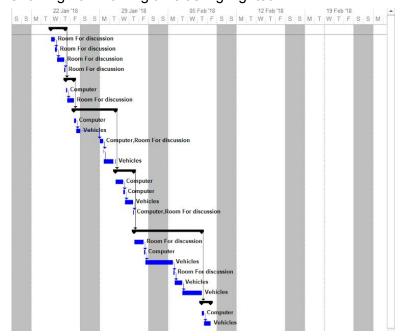
Non-Working Time

To set non-working time

Goto Project tab > Select Change Working Time > Select Options at bottom



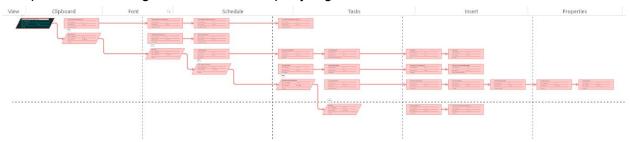
Showing non-working time as highlighted



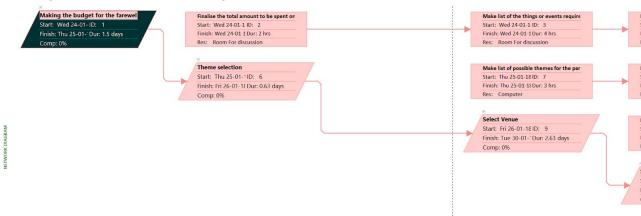
Network Diagram

The Network Diagram view shows dependencies between project tasks by using boxes, or nodes, that are linked with lines. You can adjust the layout of the boxes, the style of the link lines, and the information that is displayed in the view.

Complete network diagram of the farewell party organisation



Showing some part of network diagram



Resource Usage

The Resource Sheet is a view within Project that allows the user to view, create, and edit resources and resource information.

Resource sheet



Resource usage sheet

