

MODULE 3: Working with Tasks

Exercise 1. Changing Working Time (Start Date 1/3/2025)

- Santa's workshop has two machines for making toys for boys and girls - the first job of the year is to prepare them for work.

ID	TASK NAME	PREDECESSOR	DURATION
1	clean machine		5 days
2	load raw materials	1	3 days
3	prime machine	2	3 days
4	Test run	3	1 day
5	clean machine	4	5 days
6	load raw materials	5	3 days
7	prime machine	6	3 days
8	Test run	7	1 day

Create the summary tasks for series tasks below:

- Summary task name is **Boy's Toy** for tasks 1,2,3,4
- Summary task name is **Girl's Toy** for tasks 5,6,7,8
- Add the **Ready for production task** (0 day) that is the end task of the task list
- Summary Task name is **Workshop** for **Boy's Toy, Girl's Toy, and Ready for production tasks**
- Display the Project Information.
- View Project Timeline, Gantt Chart, view CP, Total Slack and capture the result of them

Exercise 2. Changing Working Time (Start Date 1/3/2025)

- Using the diagram below, create a list of tasks to model this process.

ID	TASK NAME	PREDECESSOR	DURATION
1	Visit estate agents		1 days
2	View properties	1	2 days
3	Decide what to buy	2	5 days
4	Make offer	3	0 day
5	Wait for decision	4	<i>Don't know</i>
6	offer accepted	5	0 days

- Create the summary task is Buy a shop that contains all tasks in the project.
- Establish the duration of **Wait for a decision task** is 7 days.
- Change the duration of **View properties task** to **7 days**.
- Display the Project Information.
- View Project Timeline, Gantt Chart, view CP, Total Slack and capture the result of them.

Exercise 3. Scheduling– Task dependencies

- Create the list of tasks to model this processing (Start date: 1/3/2025)

ID	TASK NAME	Duration
1	Creating architectural plans	3 wks
2	Submit plans for approval	1 mon
3	Order materials	8 days
4	Erect fencing	3 days
5	Erect site building	4 days
6	Clear and level site	3 wks
7	Prepare drainage infrastructure	1 wk
8	Prepare cabling infrastructure	1 wk
9	Pour foundations	4 days
10	Erect steelwork	3 mons
11	Erect wall	2 mons
12	Install roofing superstructure	2 wks
13	Install roofing retracting mechanism	1 wk
14	Erect seating tiers	3 wks
15	Fit all windows and doors	2 wks
16	Install electrical cabling	1 wk
17	Install electrical fittings and fixtures	2 wks
18	Install all plumbing	2 wks
19	Install plumbing fixtures and fittings	1 wk
20	Lay astro turf	1 wk
21	Erect handrails and fencing	2 wks
22	Paint rooms, fixtures, fittings, etc.	1 mon
23	Install PA system	2 days
24	Install video imaging equipment	3 days
25	Fit out control room	1 wk
26	Test roof mechanism	1 wk
27	Test PA system	2 days
28	Test video imaging equipment	2 days
29	Test control room equipment	1 wk
30	Obtain official occupancy	1 day
31	Obtain safety certification	2 days
32	Official opening	1 day

Create the summary tasks for series tasks below:

- Summary task name is **Planning (20 days)** for tasks 1,2,3.
- Summary task name is **Site Works (15 days)** form task 4 to task 8.
- Summary task name is **Building Construction (60 days)** form task 9 to task 14.
- Summary task name is **Fit Out (20 days)** form task 15 to task 25.
- Summary task name is **Commissioning (5 days)** form task 26 to the end task.

Create the milestones for this project below:

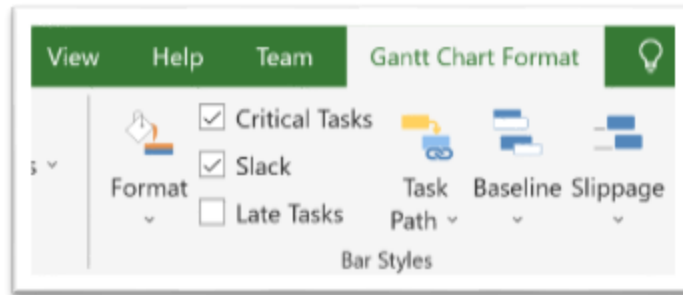
No	Milestone	At End Of phrases
1	Planning Completed	<i>Planning</i>
2	Site Works Completed	<i>Site works</i>
3	Building Construction Completed	<i>Building Construction</i>
4	Fit Out Completed	<i>Fit out</i>
5	Commissioning Completed	<i>Commissioning</i>

Creating Dependencies in Task Entry

ID	TASK NAME	Duration	Dependencies
1	Planning	?????	
2	Creating architectural plans	3 wks	
3	Submit plans for approval	1 mon	2
4	Order materials	8 days	3
5	Planning Completed	0	2,3,4
6	Site works		
7	Erect fencing	3 days	5
8	Erect site building	4 days	7
9	Clear and level site	3 wks	8
10	Prepare drainage infrastructure	1 wk	9
11	Prepare cabling infrastructure	1 wk	9
12	Site works Completed	0	7,8,9,10,11
13	Building Construction		
14	Pour foundations	4 days	12
15	Erect steelwork	3 mons	14
16	Erect wall	2 mons	15
17	Install roofing superstructure	2 wks	16
18	Install roofing retracting mechanism	1 wk	17
19	Erect seating tiers	3 wks	18SS
20	Building Construction Completed	0	14,15,16,17,18,19
21	Fit Out		
22	Fit all windows and doors	2 wks	20
23	Install electrical cabling	1 wk	20
24	Install electrical fittings and fixtures	2 wks	23
25	Install all plumbing	2 wks	20
26	Install plumbing fixtures and fittings	1 wk	25
27	Lay astro turf	1 wk	20
28	Erect handrails and fencing	2 wks	20
29	Paint rooms, fixtures, fittings, etc.	1 mon	28
30	Install PA system	2 days	23
31	Install video imaging equipment	3 days	23
32	Fit out control room	1 wk	29,30,31
33	Fit out Completed	0	22,23,24,25,26,27,28,29,30,31,32
34	Commissioning		
35	Test roof mechanism	1 wk	33
36	Test PA system	2 days	33
37	Test video imaging equipment	2 days	33

38	Test control room equipment	1 wk	35,36,37
39	Obtain official occupancy	1 day	38
40	Obtain safety certification	2 days	39
41	Official opening	1 day	40
42	Commissioning Completed	0	35,36,37,38,39,40,41

- Display the Project Information.
- View the project in Gantt Chart and define CP and Project Slack
- Choose **Gantt Chart Format** tab → check on **Critical Tasks** in **Bar Styles**.



- Check on **Slack** in **Bar Styles** slack lines in non-critical tasks
- On the table data Add column **Late Start**, **Late Finish**, **Total Slack**