

MODULE 1: Management Studio

Exercise 1. Creating a link

Creating the following tasks (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Research destinations	-	2 days
2	Book flights	1	1 day
3	Prepare and pack	2	5 days
4	Fly out	3	1 day
5	Relax in the sun	4	7 days
6	Fly home	5	1 day
7	Peel	6	7 days

- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result them.

Exercise 2. Setting duration

Creating the following tasks (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Quarry stone	-	2 days
2	Transport stone	1	1 days
3	Prepare stone	2	5 days
4	Fill foundations	1,3	1 day
5	Level ground	2,3	1 day
6	Measure site	1	7 days
7	Mark out site	5	5 days
8	Acquire stone	2,4	3 days
9	Prepare site	5,3	9 days
10	Build	8,9	2 days

- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

Exercise 3. Creating phases

Creating the following tasks (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Pre-heat oven	-	5 mins
2	Prepare meat	1	5 mins
3	Prepare veg	2	5 mins
4	Heat pan	3	5 mins
5	Fry veg	4	5 mins
6	Brown meat	5	5 mins
7	Add stock and bring to a simmer	6	5 mins
8	Cook in oven	7	45 mins

- Group the eight tasks so that the first task becomes a summary task (Make a casserole 1 day?)
- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

Exercise 4. Noah - Linking

Create the following links (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Build boat	-	7 days
2	Load supplies	1	3 days
3	Load family	1	6 days
4	Load animals	1	7 days
5	Collect animals A-M	1,4	12 days
6	Collect animals N-Z	2,4	10 days
7	Float around	5,6	7 days

- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

Exercise 5. Pyramid - Multi level grouping

Create the following links (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Build a pyramid	-	1 day?
2	Acquire stone	1	1 day?
3	Quarry stone	2	3 wks
4	Transport stone	3	5 days
5	Prepare stone	4	3 wks
6	Prepare site	5	1 day?
7	Dig foundations	6	3 wks
8	Fill foundations	7	2wks
9	Level ground	8	1wk
10	Measure site	9	7 days
11	Mark out site	10	7 days
12	Build	11	6 mons

- Group the tasks as indicated above with 3 levels:
 - Level 1 at task 1 includes task 2,6,12
 - Level 2 at task 2 includes task 3,4,5, task 6 includes task 7,8,9,10,11
- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

Exercise 6. Creating a plan for Staff Training

(Project Start Date 1/10/2021)

ID	TASK NAME	PREDECESSOR	DURATION
1	Start with a skills gap analysis.	-	7 days
2	Identify employees for career	1	3 days

3	Align with employee and company goals.	2	6 days
4	Help them grow with you	3	7 days
5	<i>Use employee development plan</i>	4	1 days?
6	Consider an individual employee	5	2 wks
7	A succession planning template	6	1wks
8	<i>Fit the learning opportunity to the training</i>	7	1 days?
9	Microlearning	8	2 wks
10	On-the-job training	9	5wks
11	Augmented reality	10	1wks
12	Track results to inform your decisions	11	7 days

- Group the tasks as indicated above with 3 levels:
 - Level 1 at task 1,2,3,4,5,8,12.
 - Level 2 at task 5 includes task 6,7 and task 8 includes task 9,10,11
- Display the Project Information
- View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

Exercise 7. Recurring task

Create plan for a software project (*Project Start Date 1/10/2021*)

ID	TASK NAME	PREDECESSOR	DURATION
1	Planning	-	1 wk
2	Requirement documents	1	2 wks
3	Sign off	2	1 day
4	Development	3	10 wks
5	Testing	4	4 wks
6	Implementation	5	2 wks
7	Review	6	1 wk

- Add in a weekly meeting to run throughout the project with the following settings
 - Name: Breakfast Meeting
 - Duration: 1 hour
 - Recurrence: Weekly
 - Day: Monday
 - Range: 08/11/2021 at 07:00 to end of the project.
 - Calendar: Standard
- Display the Project Information
- View Project Timeline, Gantt Chart, Network Diagram and capture the result of them.

Exercise 8. Travelling – task calendar

You intend to travel from HCM to Kuala Lumpur, Bangkok and then, come back to HCM. Creating a plan for your trip.

MODULE 2: CALENDARS AND SCHEDULING

Exercise 1. Changing Working Time

Open project file Ex5 (Module 1), Use the **Project Information** dialog box to:

- Schedule the project from a Project Start Date of **1 June 2022**;
- Choose an overall project calendar of **Standard**
- The office will shut down for 2 weeks in the summer. Use the **Change Working Time** dialog box to create an **Exception** called "**Summer Shutdown**" and make the first 14 days of **August** nonworking time
- Display the Project Information

Exercise 2. Changing Working Time

Open project file Ex4 (Module 1) Use the **Project Information** dialog box to:

- Schedule it to start on **1 Dec 2021**. The project will be based upon the **Standard** calendar.
- Go to the **Change Working Time** dialog box and create an **Exception** to the **Standard** calendar called "**Xmas Bank Holidays**". This needs to make 25 and 26 December 2021 into nonworking time.
- Use the **Work Weeks** tab to change the **Standard** calendar's default working week. This project's standard working time is:
 - 08:30 to 17:30 Monday to Thursday (no lunch break)
 - 08:30 to 16:00 on Fridays (no lunch break)
 - Add a new Work Week to the **Standard** calendar named "**Xmas Slowdown**". Use this to model a 12:30 finish on every weekday from 15 to 31 December 2021.
 - Display the Project Information.

Exercise 3. Part Time - creating new calendar

Open project file Ex2 (Module 1), Use the **Project Information** dialog box to:

- Schedule it to start on **11 March 2022**. This project should be based upon the **Standard** calendar.
- A part-time worker will be used on this project. Go to the **Change Working Time** dialog box and create a new copy of the **Standard** calendar, calling it "Part Timer".
- Update the working time of your new calendar so that:
 - Mondays to Fridays are nonworking time
 - The remaining 2 weekdays have working time of 10:00 to 15:00 (with no breaks)

- The part timer has also booked a holiday to US from 2 to 11 September. Create an **Exception** to their calendar with a sensible name and model these days as nonworking
- Although the overall project will be based upon the Standard calendar (as per the Project Information dialog box), feel free to format the Gantt Chart to show the nonworking time for your new Part Timer calendar.
- Display the Project Information.

Exercise 4. Changing Working Time

- Open project file Ex6 (Module 1), Use the **Project Information** dialog box to schedule it to start on **Nov 1st** of next year.
- Modify the **Standard** calendar and change the **[Default]** work week to use the hours shown below:

Details for '[Default]'

Set working time for this work week

Select day(s):

- ☐ Use Project default times for these days.
- ☐ Set days to nonworking time.
- ☒ Set day(s) to these specific working times:

	From	To
1	8:00 SA	12:00 CH
2	1:00 CH	5:00 CH

Help OK Cancel

- Add an exception in the **Standard** calendar called **Recovery**. This exception should make **December 26th to 31st** non-working days.

Exceptions Work Weeks

	Name	Start	Finish
1	Recovery	26/12/2022	31/12/2022

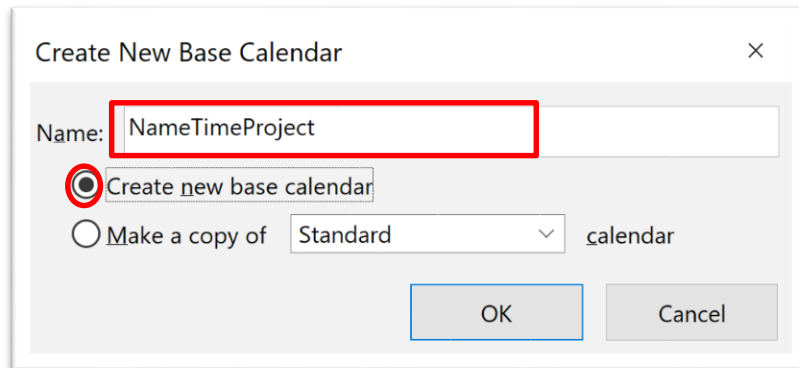
- Display the Project Information.

Exercise 5. Create the private Time for a project

Open project file Ex7 (Module 1), Use the **Project Information** dialog box to:

- Schedule this project to begin on **January 1st** of next year.
- Create the new Time Work for your project. [NameTimeProject]

{Name: Your Name - Ex: MinhTimeProject}



NameTimeProject have **Work Time** form Monday to Saturday as the following:

- Monday to Friday: 7:30-11:30, 13:30-16:30
- Saturday: 7:30-11:30

NameTimeProject have two important religious holidays when they **don't work (Exception)**

- Calendar 1 - on the last Monday (off 13:00-16:00) of every month. ****
- Holiday Day - on April 30th, and May 1st in this year.

- Assign the NameTimeProject to your Project and display the Project Information.

Exercise 6. Your project

- Create your plan from Monday to Sunday. It will list all of your activities, your time you spend and resources joining in each task.
- Create a new calendar called **Student** based on the **Standard** calendar.
- Change the **[Default]** work week so that the hours match to your calendar everyday
- Using Note function in MP 2010 to take note for important tasks in your plan.

MODULE 3: Working with Tasks

Exercise 1. Changing Working Time (Start Date 1/11/2021)

- 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 1/11/2021)

- 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 a 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: 11/05/2022)

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:

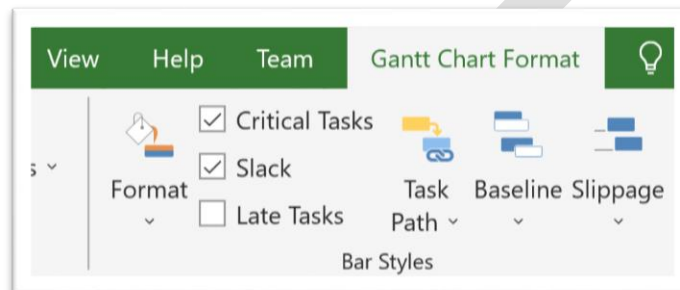
No	Milestone	At End Of phrases
1	Planning Completed	<i>Planning</i>
2	Site Works Completed	<i>Site works</i>
3	Building Construction Completed	<i>Building Construction</i>
4	Fit Out Completed	<i>Fit out</i>
5	Commissioning Completed	<i>Commissioning</i>

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**

MODULE 4: Assigning the Resource for a Project

Capture the Project Information before and after assigning the resource.

Exercise 1. Entering work resource

- Open the Exercise 1 (Module 3)
- Tab View → Resource Sheet
- Add the resource for this project below: Type Work (person)

STT	Name	Initials	Groups	Max. Units	Std. Rate
1.	David	Dav	Consultant	100%	8
2.	Brian	Bri	Staff	200%	7
3.	Mary	Mar	Staff	100%	7
4.	John	Joh	Staff	100%	7
5.	Worker 1: Liam	W1	Worker	300%	6
6.	Worker 2: Chang	W2	Worker	200%	6

- Assign the resource for each task

Tab Task → Gantt Chart → Select the task that you want to assign the resource

ID	TASK NAME	RESOURCE
1	clean machine	Worker 1, David
2	load raw materials	Worker 2
3	prime machine	Mary
4	Test run	Brian
5	clean machine	Worker 1
6	load raw materials	Worker 2
7	prime machine	John
8	Test run	David

Exercise 2. Entering work resource

- Open the Exercise 2 (Module 3)
- Tab View → Resource Sheet
- Add the resource for this project below: Type Material

STT	Name	Type	Materials	Initials	Groups	Std. Rate
1.	MDF	Material	Sheet	Md	Material	20
2.	Flooring	Material	Pack	Fl	Material	80
3.	Purple Material	Material	Roll	Pu	Material	30
4.	Orange Material	Material	Roll	Or	Material	120

- Assign the resource for each task

Tab Task → Gantt Chart → Select the task that you want to assign the resource

Select Tab Resource → Assign Resource

The information of resource that will assign for the task

ID	TASK NAME	RESOURCE
1	Visit estate agents	MDF [2]

2	View properties	Flooring [2]
3	Decide what to buy	Purple Material [1]
4	Make offer	Flooring [1], Purple Material [1]
5	Wait for decision	Flooring [1], Orange Material [1]
6	offer a accepted	Orange Material [2]

Exercise 3. Entering work resource

- Create the project bellowing:

ID	TASK NAME	PREDECESSOR	DURATION
1	Planning	-	1 wk
2	Requirement documents	1	2 wks
3	Sign off	2	1 day
4	Development	3	10 wks
5	Testing	4	4 wks
6	Implementation	5	2 wks
7	Review	6	1 wk

- Add the resource for this project below: Type Work/Material

STT	Name	Type	Materials	Initials	Groups	Std. Rate
1.	PM	Work		PM	Sponsor	10
2.	Designer	Work		Ds	Staff	6
3.	Developer	Work		Dp	Staff	8
4.	Tester	Work		Tt	Staff	6
5.	Maintainer	Work		M	Staff	5
6.	Operating System	Material	Unit	OS	Material	120
7.	Internet Provider	Material	Unit	ISP	Material	100
8.	Cable	Material	M	Cb	Material	1
9.	Visual Studio	Material	Unit	VS	Material	20

- Assign the resource for each task

ID	TASK NAME	Work	Material
1	Planning	PM	
2	Requirement documents	PM, Designer	
3	Sign off	PM	
4	Development	Developer	Operating System[1] , Visual Studio [1]
5	Testing	Tester	
6	Implementation	Maintainer	Operating System , Visual Studio, Cable [100]
7	Review	PM, Maintainer	

Exercise 4. Entering work resource

- Capture the Project Information before and after assigning the the source.**
- Open the Exercise 3 (Module 3)
- Tab View → Resource Sheet → Resource Views
- Establish the resource that type is work (default) for the project below:

STT	Name	Initials	Groups	Max. Units	Std. Rate
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1.	Architect	Arc	Consultant	100%	9
2.	Draftsperson	Dft	Staff	200%	7
3.	Building Clerk	BC	Staff	100%	8
4.	Supervisor	Sup	Staff	100%	12
5.	Rigger	Rig	Wages	600%	5
6.	Boilermaker	BM	Wages	600%	5
7.	Welder	Weld	Wages	500%	6
8.	Carpenter	Car	Wages	800%	7
9.	Painter	Ptr	Wages	500%	6
10.	Labourer	Lab	Wages	1,000%	6
11.	Driver	Drv	Wages	300%	8
12.	No Barrier Fencing	NBF	Contractor	100%	3
13.	Rock Solid Concrete	RSC	Contractor	100%	4
14.	Listen Ear Audio	LEA	Contractor	100%	5
15.	In Focus Video	IFV	Contractor	100%	5
16.	Pure Grass Turf	PGT	Contractor	100%	5
17.	Building Inspector	BI	Government	100%	5
18.	High Jib Crane	HJC	Equipment	100%	7
19.	Grader	Grd	Equipment	200%	6
20.	Air Compressor	AC	Equipment	100%	7
21.	Utility	Ute	Equipment	200%	5
22.	Electrician	Cap	Staff	400%	7
23.	Plumber	Plu	Staff	400%	5

- Establish the resource that type is material for the project below at the of Resource list above:

STT	Name	Type	Materials	Initials	Groups	Std. Rate
24.	Astro Turf	Material	Square Matre	Grass	Material	12
25.	Paint	Material	Ultre	Paint	Ute	20

- Assign the resource for each task in the project

ID	TASK NAME	RESOURCE
1	Planning	
2	Creating architectural plans	Architect, Draftsperson (200%), Building Clerk (25%)
3	Submit plans for approval	Architect
4	Order materials	Draftsperson, Building Clerk
5	Planning Completed	
6	Site works	
7	Erect fencing	No Barrier Fencing
8	Erect site building	Carpenter (400%), Supervisor, Labourer
9	Clear and level site	Supervisor, Grader(200%), Driver(200%)
10	Prepare drainage infrastructure	Supervisor(50%), Plumber(200%)
11	Prepare cabling infrastructure	Supervisor(50%), Electrician(300%)
12	Site works Completed	
13	Building Construction	
14	Pour foundations	Rock Solid Concrete
15	Erect steelwork	Supervisor [50%], Rigger [600%], Boilermaker [600%], Welder [500%], Labourer [600%], Driver [200%], High Jib Crane, Utility

16	Erect wall	Supervisor [50%], Carpenter [700%], Labourer [400%], Driver, Grader, Air Compressor, Electrician [75%], Plumber [25%]
17	Install roofing superstructure	Supervisor [50%], Rigger [500%], Boilermaker [500%], Welder [300%], Labourer [500%], Driver [200%], High Jib Crane, Utility, Air Compressor, Plumber [50%]
18	Install roofing retracting mechanism	Supervisor [50%], Welder, Boilermaker [200%], Rigger [200%], Electrician [200%], Driver, High Jib Crane
19	Erect seating tiers	Supervisor [50%], Carpenter [800%], Welder [200%], Boilermaker [200%], Labourer [500%], Driver, Utility, Air Compressor
20	Building Construction Completed	
21	Fit Out	
22	Fit all windows and doors	Carpenter [500%], Labourer [200%]
23	Install electrical cabling	Electrician [300%], Labourer [200%]
24	Install electrical fittings and fixtures	Electrician [300%]
25	Install all plumbing	Plumber [200%], Labourer [200%]
26	Install plumbing fixtures and fittings	Plumber [200%]
27	Lay astro turf	Pure Grass Turf
28	Erect handrails and fencing	Welder [400%], Boilermaker [200%]
29	Paint rooms, fixtures, fittings, etc.	Painter [500%]
30	Install PA system	Listen Ear Audio
31	Install video imaging equipment	In Focus Video
32	Fit out control room	Electrician [200%], Listen Ear Audio, In Focus Video
33	Fit out Completed	
34	Commissioning	
35	Test roof mechanism	Supervisor, Electrician [200%], Rigger
36	Test PA system	Listen Ear Audio
37	Test video imaging equipment	In Focus Video
38	Test control room equipment	Supervisor, Listen Ear Audio [20%], In Focus Video [20%], Architect, Electrician [200%]
39	Obtain official occupancy	Architect, Building Clerk, Supervisor
40	Obtain safety certification	Supervisor
41	Official opening	Supervisor[200%]
42	Commissioning Completed	

Exercise 5.

Capture the Project Information before and after assigning the resource.

Creating the following tasks (Project Start Date 6/12/2021)

- Establish working time: **MSSV_Time**

1. Working time: Mon – Fri: 8AM – 11AM, Sat: 11AM-9PM

2. Nonworking time: Sun
3. Exception: Nonworking time: 24/12/2021, 1/1/2022

STT	Name	Duration	Dependencies
1.	The Engagement	1 day	
2.	The Venue - Confirm Dates	4 wks	1
3.	The Photographer	3 wks	2
4.	The Cars	4 wks	2
5.	The DJ	1 wk	2
6.	The Dress - Find the Perfect Dress	3 wks	2
7.	The Venue - Confirm Menu	4 wks	2
8.	The Venue - Pay Deposit	2 hrs	7
9.	The Dress - Pay for Dress	1 hr	6
10.	Invitations - Confirm Design	2 wks	6
11.	The Flowers	2 wks	6
12.	Invitations - Confirm Numbers	1 wk	10
13.	Invitations - Invites Produced	2 mons	12
14.	Review progress	4 wks	3,4,5,8,9,11,12,13
15.	Invitations - Send Out	1 wk	13
16.	The Dress - First Fitting	2 hrs	9
17.	Invitations - Review RSVP's	1 wk	15
18.	The Venue - Confirm Numbers	2 hrs	17
19.	The Venue - Confirm Timings	2 hrs	18
20.	The Venue - Pay Balance	1 hr	19
21.	The Dress- Final Fitting	2hr	20

- Create a milestone task at the end: The Big day (P) (Dependencies: 19,21)
- Creating the summary tasks :
 - Before 6 month to go (Task 2,3,4,5,6,7)
 - 6 month to go (Task 8,9,10,11)
 - 5 month to go (Task 12,13)
 - 4 month to go (Task 14)
 - 3 month to go (Task 15)
 - 2 month to go (Task 16,17)
 - 1 month to go (Task 18,19,20,21)
- Establish the resource table:

STT	Name	Type	Initials	Groups	Max. Units	Std. Rate
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1.	Venue	Material	Initials			£3,000.00
2.	Photographs	Material	V			£1,000.00
3.	Flowers	Material	P			£900.00
4.	Cars	Material	F			£500.00
5.	DJ	Material	C			£250.00
6.	Guest	Work	D		8000%	£25/1hr

- Assign the resource for each task in the project

STT	Name	Resource
1.		
2.	The Engagement	
3.	The Venue - Confirm Dates	Venue[1]
4.	The Photographer	Photographs[1]
5.	The Cars	Cars[1]
6.	The DJ	DJ[1]
7.	The Dress - Find the Perfect Dress	
8.	The Venue - Confirm Menu	
9.	The Venue - Pay Deposit	
10.	The Dress - Pay for Dress	
11.	Invitations - Confirm Design	
12.	The Flowers	Flowers[1]
13.	Invitations - Confirm Numbers	
14.	Invitations - Invites Produced	
15.	Review progress	
16.	Invitations - Send Out	
17.	The Dress - First Fitting	
18.	Invitations - Review RSVP's	
19.	The Venue - Confirm Numbers	
20.	The Venue - Confirm Timings	
21.	The Venue - Pay Balance	Guests[7,000%]
22.	The Dress- Final Fitting	

MODULE 5: COST, CONSTRAINS, DEADLINE for TASKs

Resource: work, material, cost

Work: [person] – max, std rate, ovt rate, cost/use

Material: - unit (kg, m, unit, GB,...), Std rate, Ex: 20\$/1kg, 120\$/1 hard disk, cost/use

Cost: [text] – not value

Assigning to the tasks (set value)

Total Cost/taks₁ = work + material + cost + fixed cost

Total Cost/ project = Total Cost/taks₁ + Total Cost/taks₂ +....

Actual Cost= current/time

Variance=

%completed (work, duration)

Update Status of Project: time

Constraints: FS(As soon as possible: default????)

Deadline: NA

Exercise 1. Entering Cost

- Open the Exercise 1 (Module 4) [Cost: \$1.984]
- Tab View → Resource Sheet
- Add the resource for this project below: Type Cost (Not set value, Rate)

STT	Name	Type
11.	Cost Tax	Cost
12.	Logistic Cost	Cost

Assign Cost for task **Ready for preproduction task (Cost Task: 10\$, Logistic Cost: 10\$)**

- Cost of project?
- Update Project after 5 days? Cost of Project?

Exercise 2.

- Exercise 2 (Module 4) Cost: ?
- Tab View → Resource Sheet
- Add the resource for this project below: Type Cost (Not set value, Rate)

STT	Name	Type
-----	------	------

5.	Cost Tax	Cost
6.	Logistic Cost	Cost
7.	OT Cost	Cost
8.	Bonus	Cost
9.	Punishment	Cost

- Assign Cost for these tasks:

ID	TASK NAME	RESOURCE
1	Visit estate agents	MDF [2], OT Cost[50]
2	View properties	Flooring [2], Cost Task[3]
3	Decide what to buy	Purple Material [1], Bonus[12]
4	Make offer	Flooring [1], Purple Material [1], OT Cost[8], Punish[5]
5	Wait for decision	Flooring [1], Orange Material [1], Logistic Cost[75]
6	offer a accepted	Orange Material [2], Cost Tax [4], Bonus[10]

- Cost of project?
- Update Project after 3 days? Cost of Project?

Exercise 3.

- Exercise 3 (Module 4) Cost: ?
- Tab View → Resource Sheet
- Add the resource for this project below: Type Cost (Not set value, Rate)

STT	Name	Type
10.	Tax	Cost
11.	Upgrade Fee	Cost
12.	Maintain Fee	Cost
13.	Bonus	Cost
14.	Part Time Fee	Cost

- Assign the resource for each task

ID	TASK NAME	Resource
1	Planning	PM, Tax[4]
2	Requirement documents	PM, Designer, Part Time Fee[10]
3	Sign off	PM
4	Development	Developer, Operating System[1] , Visual Studio [1], Upgrade Fee[21]
5	Testing	Tester, Part Time Fee[10], Bonus[18]
6	Implementation	Maintainer, Operating System , Visual Studio, Cable [100], Maintain Fee[18], Bonus[23]
7	Review	PM, Maintainer

- Cost of project?
- Update Project after 2 weeks? Cost of Project?

Exercise 4.

- Exercise 4 (Module 4) Cost: ?
- Tab View → Resource Sheet
- Add the resource for this project below: Type Cost (Not set value, Rate)

STT	Name	Type
-----	------	------

26.	Tax	Cost
27.	Bonus	Cost
28.	Part Time Fee	Cost
29.	Logictis Cost	Cost

- Assign the resource for each task

ID	TASK NAME	RESOURCE
5	Planning Completed	Part Time Fee[150], Bonus[70]
12	Site works Completed	Logictis Cost[240]
20	Building Construction Completed	Logictis Cost[1004], Bonus[210]
33	Fit out Completed	Tax[50]
42	Commissioning Completed	Bonus[180]

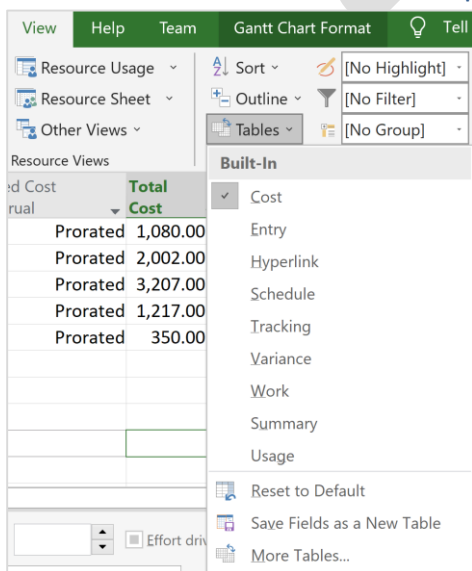
- Cost of project?
- Update Project after 1 month? Cost of Project?
- Update Project after 4,5 month? Cost of Project?
- Update Project after 6 month? Cost of Project?

MODULE 6: Hiện thị dự án theo một số yêu cầu- Report

- MS Project cho phép hiển thị các task trong dự với các cách khác nhau như:

Calendar	Lịch hàng tháng chỉ ra các công việc và khả năng hoàn thành nó.
Gantt Chart	Diễn tả các công việc và các thông tin có liên quan, một biểu đồ (biểu đồ ngang) thể hiện các công việc và thời gian hoàn thành chúng.
Network Diagram	Thể hiện dưới dạng lưới các công tác (sơ đồ mạng) và sự phụ thuộc giữa chúng. Dùng khung nhìn này để có một cái nhìn bao quát về các công việc.
Task Usage	Thể hiện danh sách các công việc đã được gán tài nguyên. Dùng khung nhìn này để thấy nguồn nguồn lực nào đã được gán cho một công việc cụ thể
Tracking Gantt	Thể hiện danh sách của công việc và thông tin có liên quan. Dùng khung nhìn này để theo dõi tiến trình của dự án.
Resource Graph	Thể hiện biểu đồ phân phối tài nguyên. Dùng khung nhìn này để thể hiện thông tin về một nguồn lực dưới các tiêu chí khác nhau.
Resource Sheet	Danh sách nguồn lực và thông tin liên quan. Dùng khung nhìn này để nhập và hiệu chỉnh các thông tin về tài nguyên.

- Tab View: Hiển thị và cho phép lọc theo các tham số khác nhau



Thể hiện các giá trị cần lọc

Hiển thị dự án theo chi phí

Hiển thị dự án toàn bộ dự án

Hiển thị dự án theo lịch thực hiện

Theo dõi toàn dự án

Hiển thị dự án theo tổng các work thực hiện

- So sánh các giá trị Cost, Baseline, Variance, Actual

Work: Thời gian thực hiện theo các tham số hiện tại.

Baseline: Thời gian thực hiện công việc theo kế hoạch.

Variance: Khoảng thời gian thay đổi giữa thực tế và kế hoạch.

Actual: Thời gian thực tế đã thực hiện được theo các tham số hiện tại.

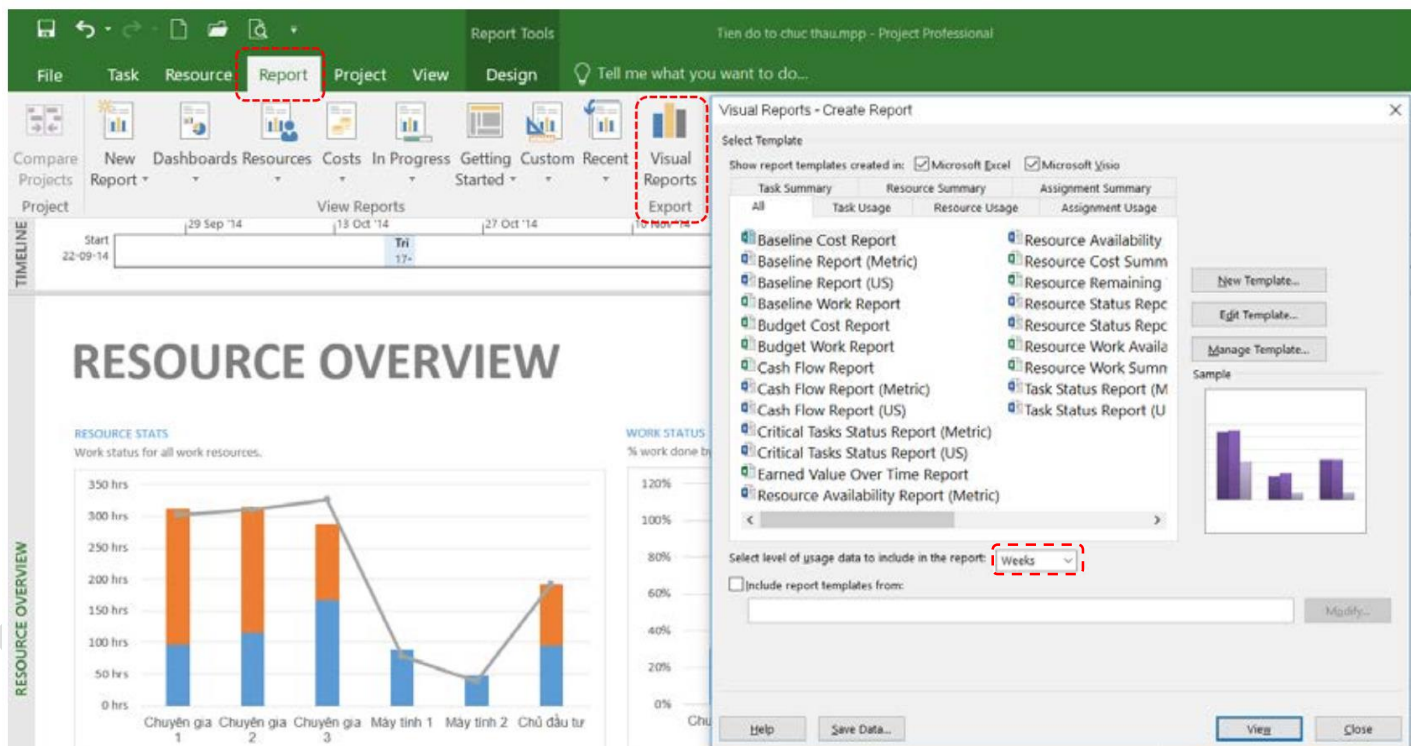
Remaining: Thời gian thực tế còn lại.

%W. Coml: Số phần trăm công việc đã thực hiện.

- Xuất các báo cáo (Report) cho dự án

1. Báo cáo theo đồ thị:

Tab Report → Visual Reports



2. Báo cáo cơ bản dạng số liệu

Tab Report → View Group

Báo cáo:

- Toàn bộ DA(Project overview)
- Chi phí (Tasks Cost overview)

Resource	Report	Project	View	Help	Team	Gantt Chart Format	Tell me what you want to do
	Dashboards	Resources	Costs	In Progress	Getting Started	Custom Recent	Visual Reports
							Export
Task Name	Start	Finish	Baseline Start	Baseline Finish	Start Var.	Finish Var.	Add New
Thu thập yêu cầu	18/10/2021	25/10/2021	NA	NA	0 days	0 days	
Phân tích thiết kế	26/10/2021	16/11/2021	NA	NA	0 days	0 days	
Viết chương trình	05/11/2021	25/11/2021	NA	NA	0 days	0 days	
Kiểm thử	26/11/2021	03/12/2021	NA	NA	0 days	0 days	
Triển khai	06/12/2021	06/12/2021	NA	NA	0 days	0 days	

Task Name	Duration	
Khảo sát	2 days	Bùi Hoàng Quyên, Thuế[20.00 đ]
Phân tích	4 days	Framework[1], Lê Lan Phương[200%], Chi phí đi lại[5.00 đ]
Thiết kế	7 days	OS[2], Trần Ngọc Hà
Xây dựng	0.5 mons	Trần Ngọc Hà, Hardisk[0.5]
Kiểm thử	1 wk	Hoàng Mạnh Quân (PM), Thuế[10.00 đ]
Chuyển Giao	4 days	Lê Hoàng Minh (TV)[50%], Mai Hà Linh, Chi phí công tác[100.00 đ]
Hướng dẫn sử dụng	3 days	Phạm Minh Vương (TV), Chi phí đi lại[10.00 đ]

Resource Name	Type	Material Label	Initials	Group	Max. Units	Std. Rate	Ovt. Rate	Cost/Use
Hoàng Mạnh Quân (PM)	Work		H		100%	10.00 đ/hr	0.00 đ/hr	20.00 đ
Lê Hoàng Minh (TV)	Work		L		50%	20.00 đ/hr	0.00 đ/hr	10.00 đ
Phạm Minh Vương (TV)	Work		P		200%	15.00 đ/hr	0.00 đ/hr	30.00 đ
Lê Lan Phương	Work		L		100%	15.00 đ/hr	0.00 đ/hr	10.00 đ
Hoàng Lê Minh	Work		H		100%	10.00 đ/hr	0.00 đ/hr	0.00 đ
Mai Hà Linh	Work		M		100%	15.00 đ/hr	0.00 đ/hr	10.00 đ
Trần Ngọc Hà	Work		T		200%	15.00 đ/hr	0.00 đ/hr	10.00 đ
Bùi Hoàng Quyên	Work		B		100%	15.00 đ/hr	0.00 đ/hr	10.00 đ
OS	Material		O			250.00 đ		0.00 đ

Hardisk	Material	H			120.00 đ		0.00 đ
USB	Material	U			1.00 đ		0.00 đ
Framework	Material	F			80.00 đ		2.00 đ
Chi phí đi lại	Cost	C					
Chi phí công tác	Cost	C					
Thuế	Cost	T					