Lab report – Project Management

**LAB REPORT**

**Software Project Management**

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**Course: Quản lý dự án CNTT(420300405604)**

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# MODULE 1: MANAGEMENT STUDIO

## Exercise 1. Creating a link

Task:

* Default: start, duration, predescessor
* Summary: gom nhóm các task
* Task lặp đi lặp lại: Chu kỳ,
* Milstone: cột mốc

Creating the following tasks

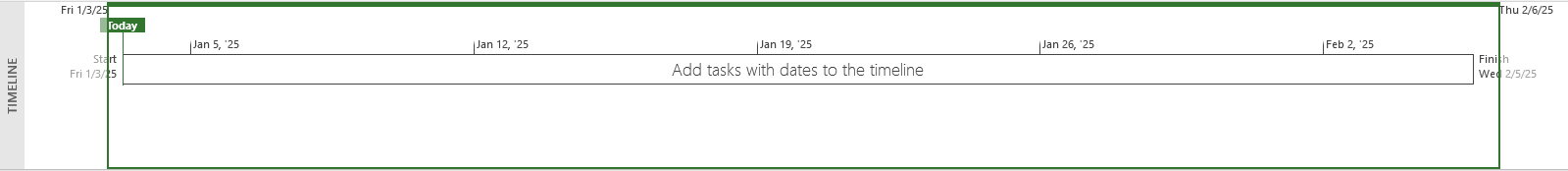
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **DURATION** |
| **1** | Research destinations | - | 2 days |
| **2** | Book flights | 1 | 1 day |
| **3** | Prepare and pack | 2 | 5 days |
| **4** | Fly out | 3 | 1 day |
| **5** | Relax in the sun | 4 | 7 days |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

* Display the Project Information

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result them.



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Description automatically generated

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## Exercise 2. Setting duration

Creating the following tasks

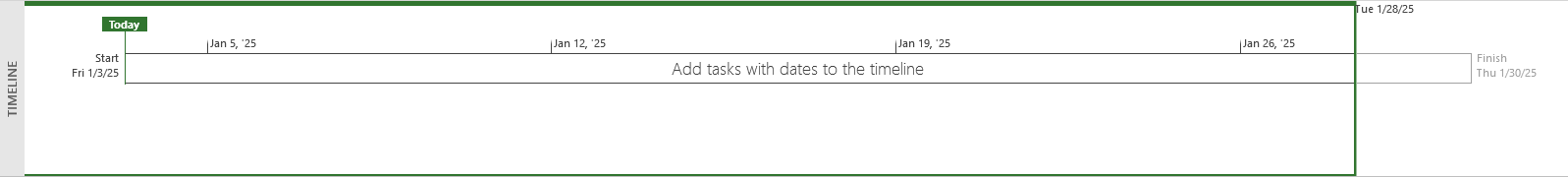
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **DURATION** |
| **1** | Quarry stone | - | 2 days |
| **2** | Transport stone | 1 | 1 days |
| **3** | Prepare stone | 2 | 5 days |
| **4** | Fill foundations | 1,3 | 1 day |
| **5** | Level ground | 2,3 | 1 day |
| **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

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result of them.



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Description automatically generated

A computer screen shot of a diagram

Description automatically generated

## Exercise 3. Creating phases

Creating the following tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **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

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

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Description automatically generated

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Description automatically generated

## Exercise 4. Noah - Linking

Create the following links

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **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

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

**A screenshot of a computer

Description automatically generated**

**A diagram of a computer

Description automatically generated with medium confidence**

## Exercise 5. Pyramid - Multi level grouping

Create the following links

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **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

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

A screenshot of a computer

Description automatically generated

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Description automatically generated with medium confidence

## Exercise 6. Creating a plan for Staff Training

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESSOR** | **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** | *Use employee development plan* | *4* | *1 days?* |
| **6** | Consider an individual employee | 5 | 2 wks |
| **7** | A succession planning template | 6 | 1wks |
| **8** | *Fit the learning opportunity to the training* | *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

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gant Chart, Network Diagram and capture the result of them.

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## Exercise 7. Recurring tasks

Create plan for a software project

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDESCESOR** | **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: 08/01/2025 at 08:00 to end of the project.
* Calendar: Standard
* Display the Project Information

A screenshot of a computer

Description automatically generated

* View Project Timeline, Gantt Chart, Network Diagram and capture the result of them.

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Description automatically generated

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Description automatically generated with medium confidence

## 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. Part Time - creating new calendar

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

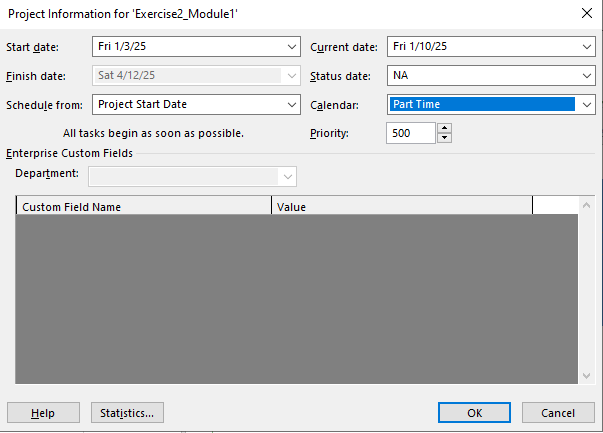
* A part-time worker will be used on this project. Go to the Change Working Time dialog box

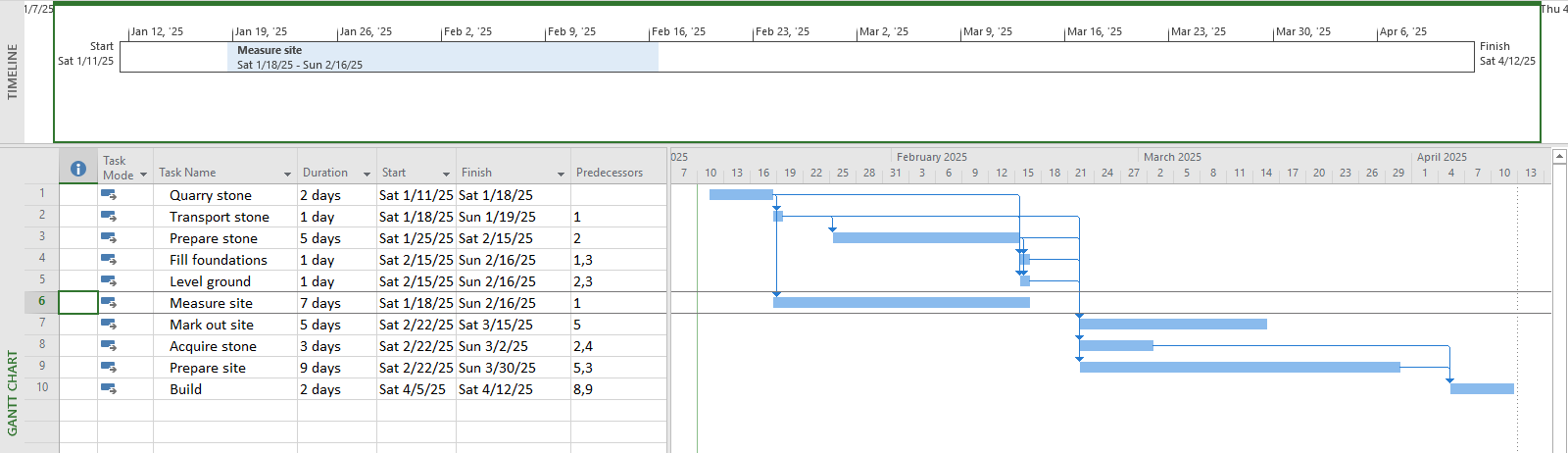
and create a new copy of the Standard calendar, calling it "Part Time".

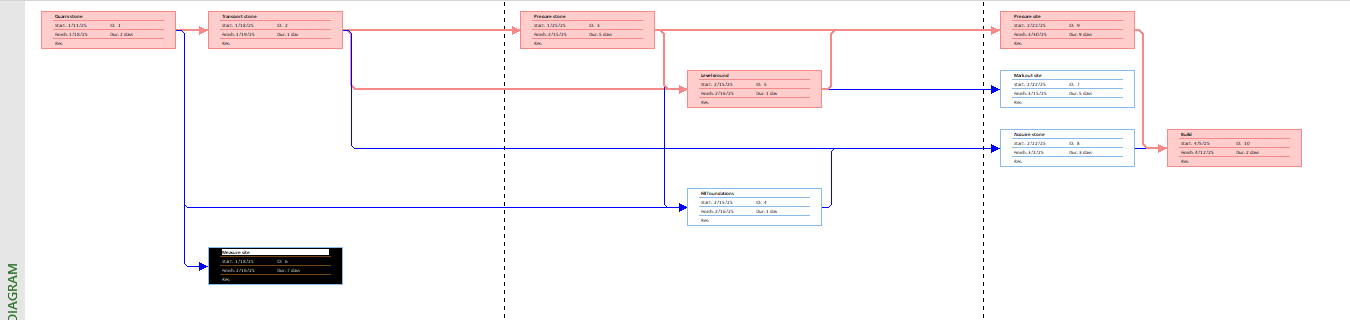
* Update the working time of your new calendar so that:
* Mondays to Fridays are nonworking time
* The remaining 2 weekdays have working time of 10:00 to 16:00 ( no breaks)
* The Part time has also booked a holiday from 1 to 5 Jan. Create an Exception to their calendar

with a Holiday name and these days as nonworking

* Display the Project Information.







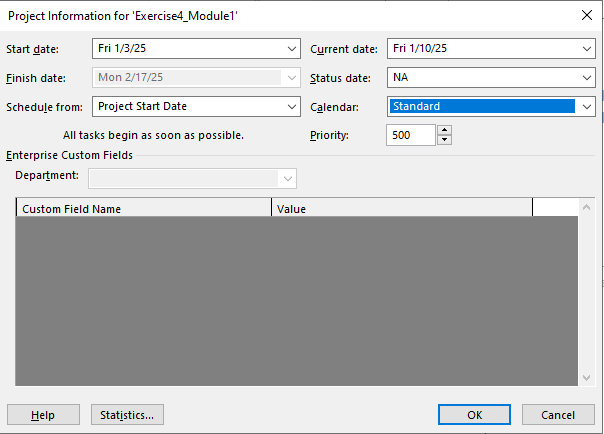
## Exercise 2. Changing Working Time

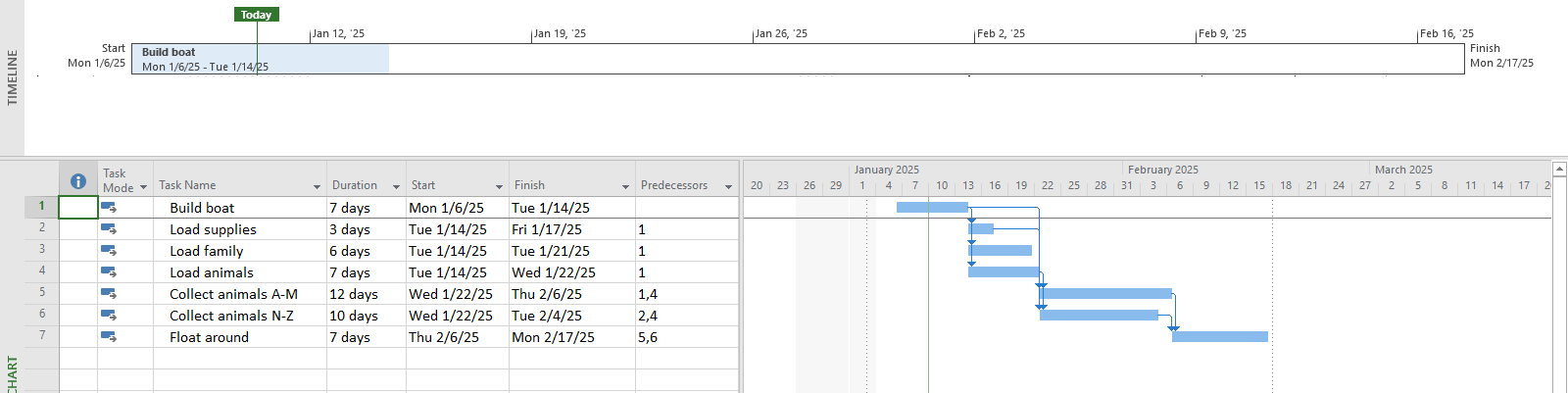
Open project file **Ex4 (Module 1)** Use the Project Information dialog box to:

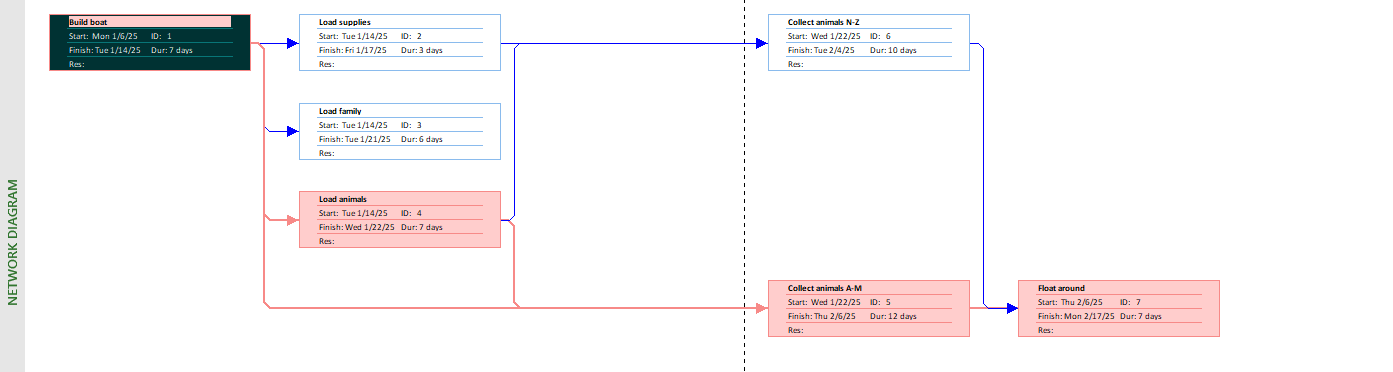
* Go to the Change Working Time dialog box and create an Exception called "Tet Holidays" during from 25 Dec 2024 to 3 Jan 2025 into nonworking time.
* Change Work Weeks time of Standard calendar's default working week. This project's standard working time are:
* 08:30 to 17:30 Monday to Thursday (no 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 23 Dec 2024 to 5 Jan 2025.

* Capture the Work weeks time



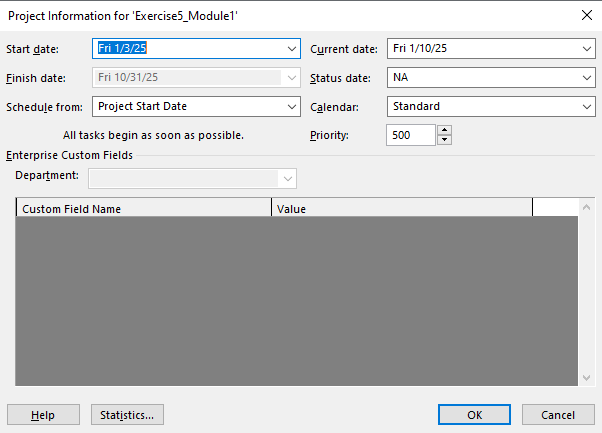


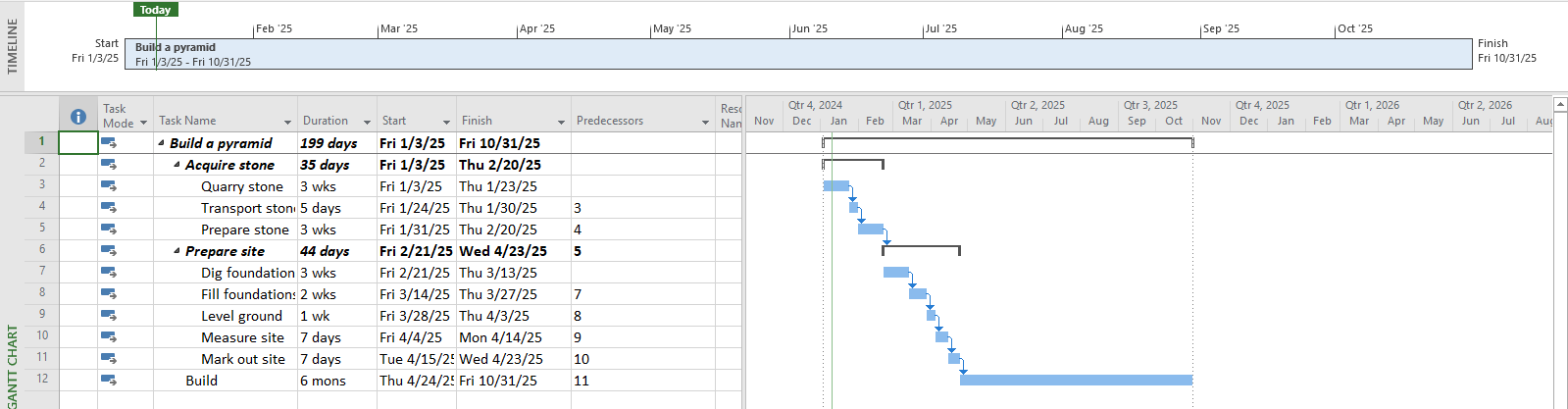


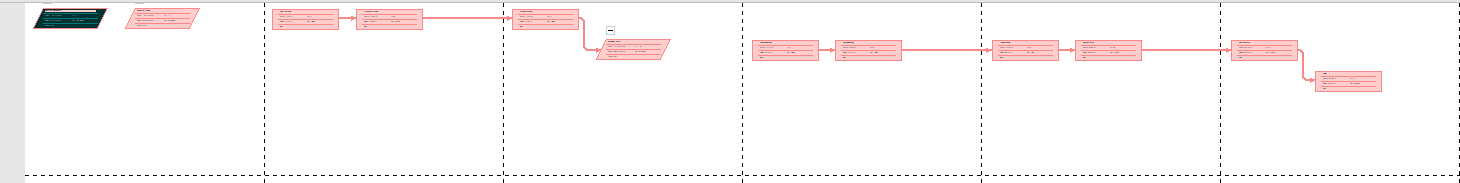
## Exercise 3. Changing Working Time

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

* 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 workdays of August nonworking time
* Create an Exception called “Independence Days” is 2 Sep nonworking time.
* Create an Exception called “International Labor days” is 30 Apr and 1 May nonworking time
* Display the Project Information





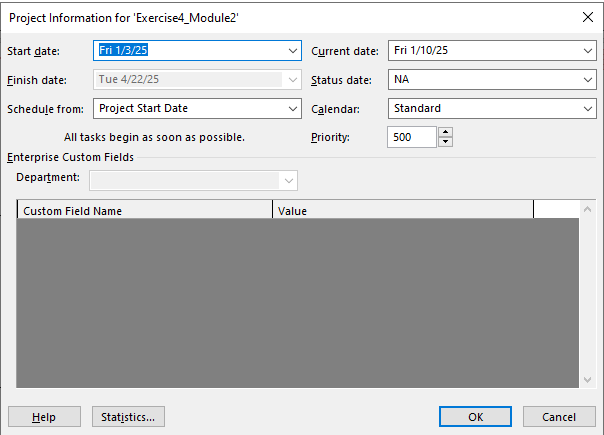


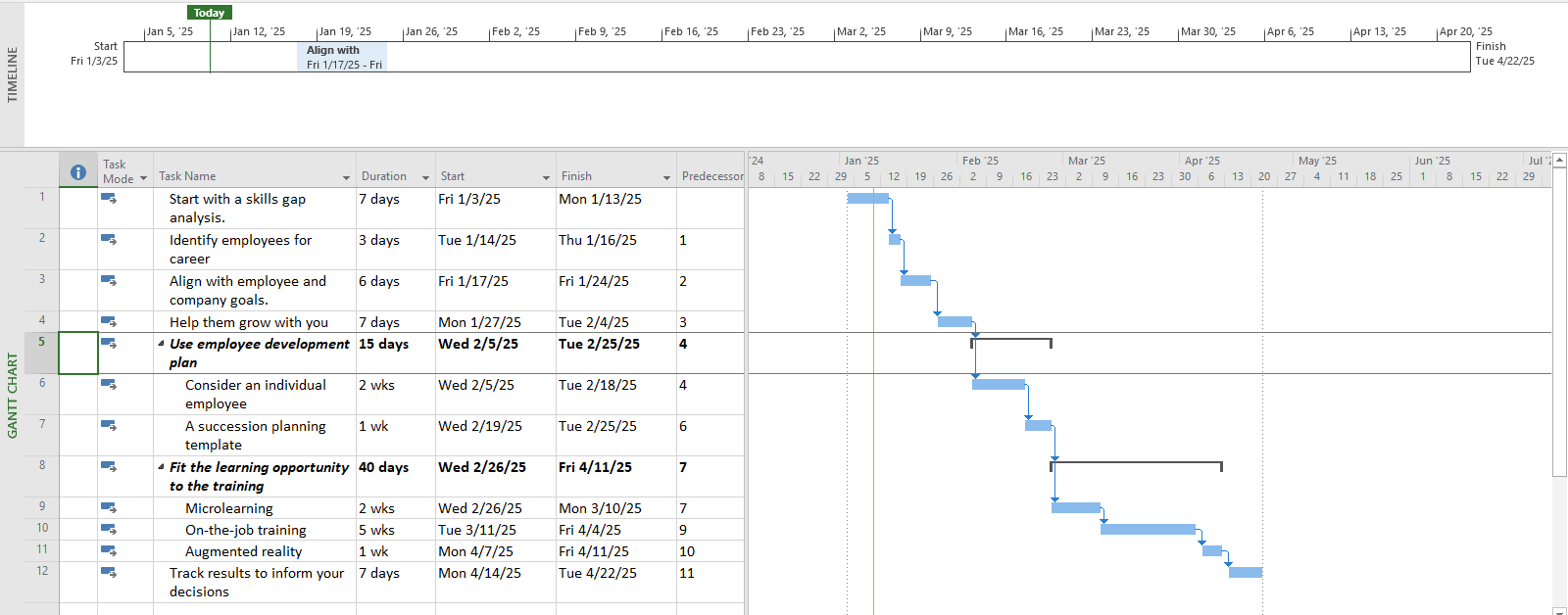
## Exercise 4. Changing Working Time

* 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:



* Add an exception in the Standard calendar called Recovery with in 7 lates workdays of March is non-working days
* Display the Project Information.







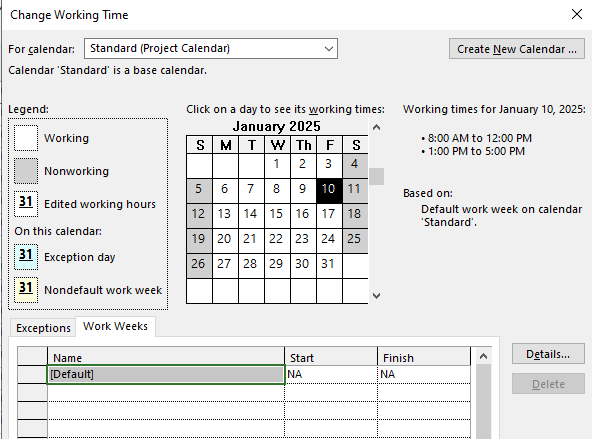
## Exercise 5. Create the private Time for a project

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

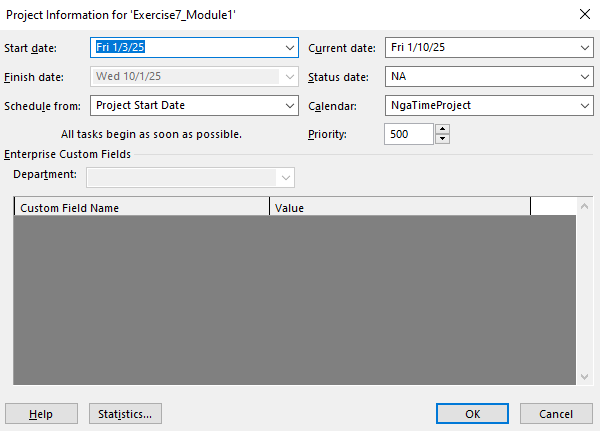
* Create the new Time Work for your project. [NameTimeProject]

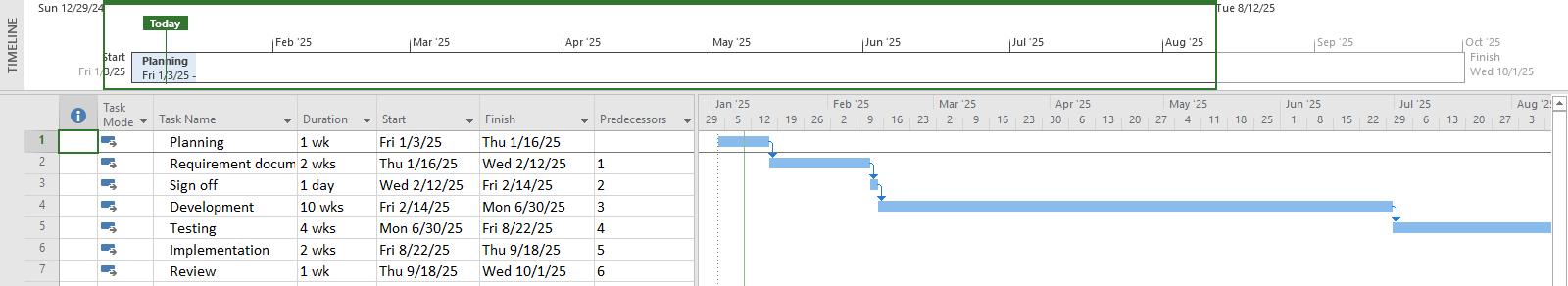
{Name: Your Name - Ex: MinhTimeProject}

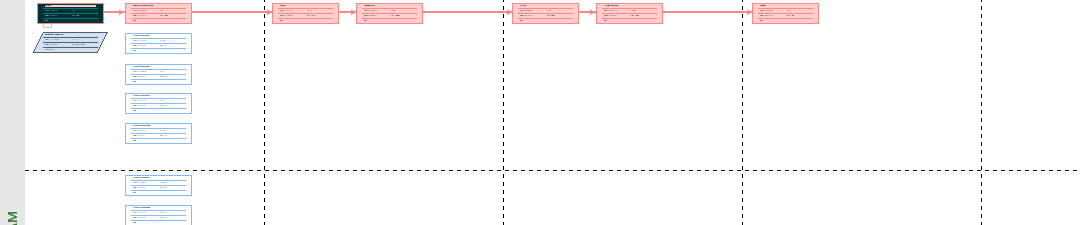
* Change Work Weeks time of Standard calendar's default working week. This project's standard working time are:
* 08:00 to 12:00 on Mon, Wed, Fri
* 13:00 to 16:00 on Tue, Thu, Sat
* Create an Exception called “International Labor days” is 30 Apr and 1 May nonworking time
* Capture the Work weeks time



* 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.

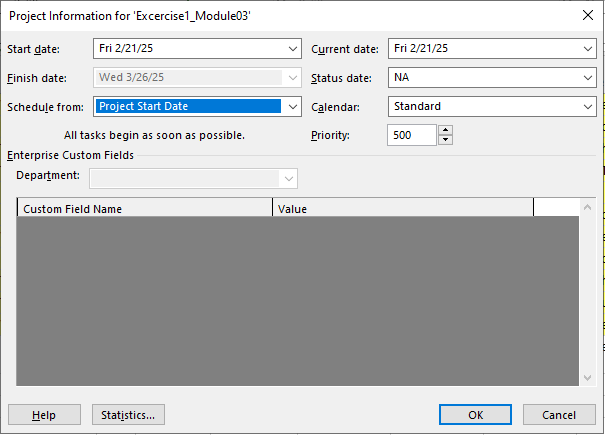
# MODULE 3: WORKING WITH TASKS

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

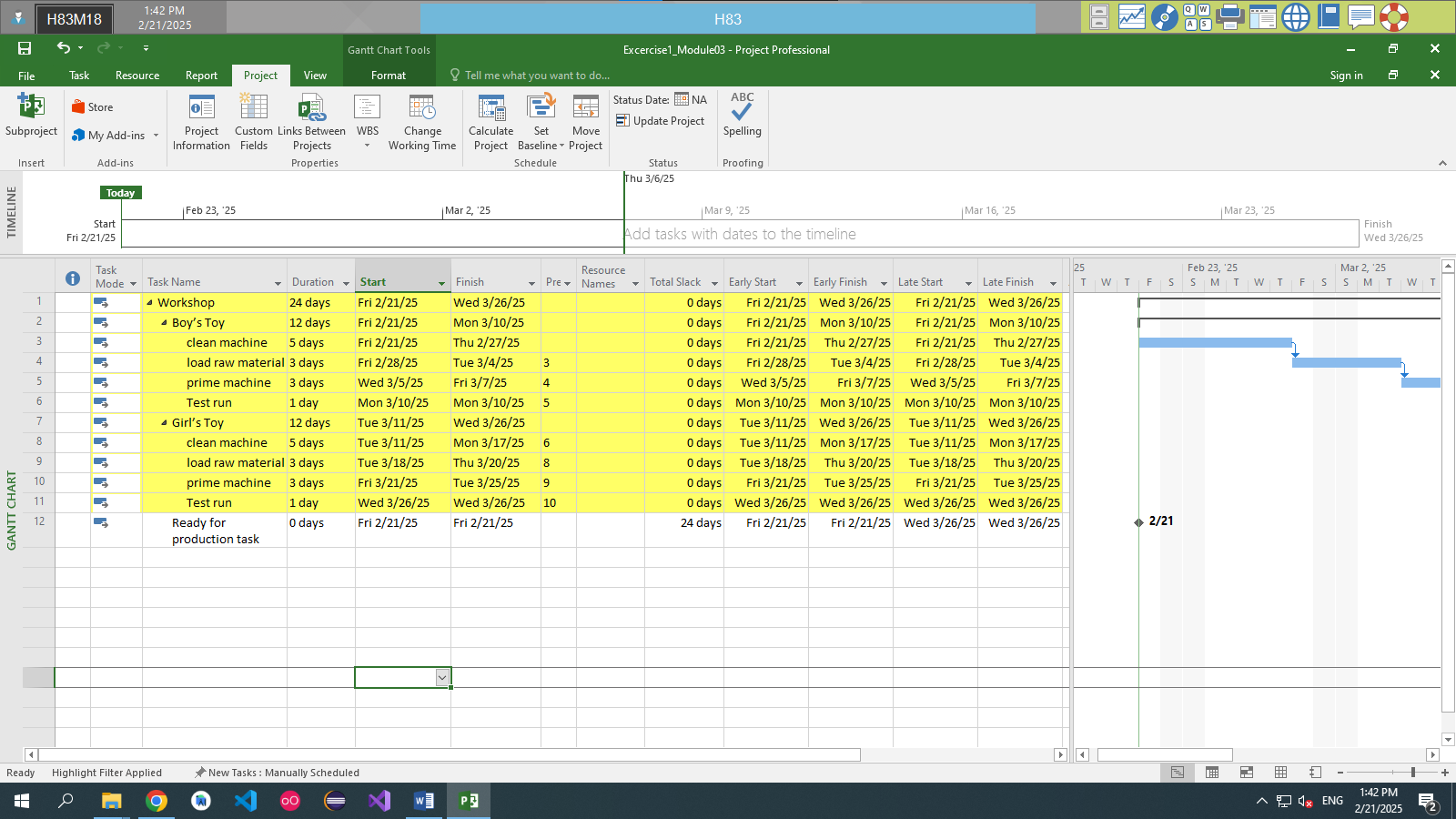
|  |  |  |  |
| --- | --- | --- | --- |
| ID | TASK NAME | PREDECESSOR | DURATION |
| 1 | clean machine | NaN | 5 days |
| 2 | load raw materials | 1 | 3 days |
| 3 | prime machine | 2 | 3 days |
| 4 | Test run | 3 | 1 day |
| 5 | clean machine | 4 | 5 days |
| 6 | load raw materials | 5 | 3 days |
|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

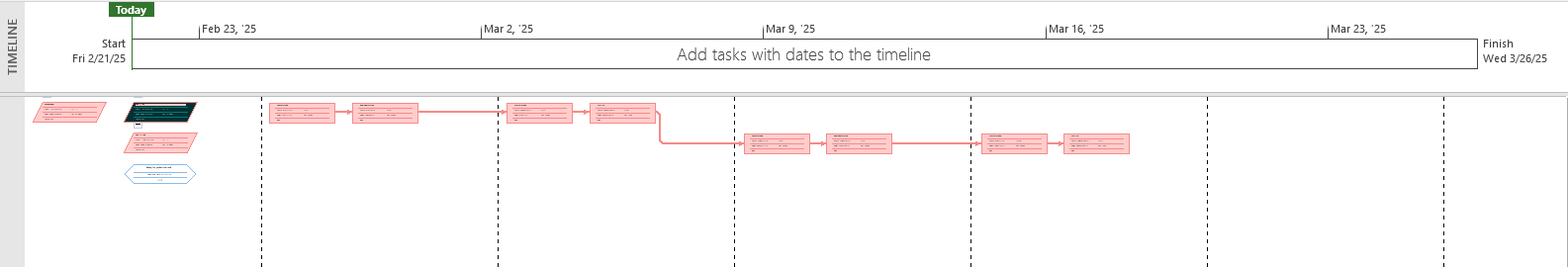
Create the summary tasks for series tasks below:

* 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



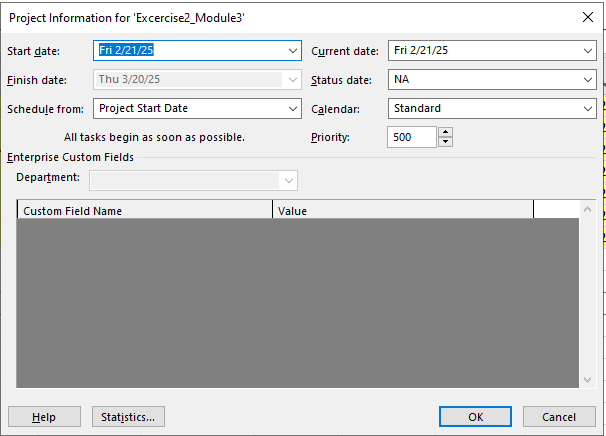


## Exercise 2. Changing Working Time (Start Date 1/03/2025)

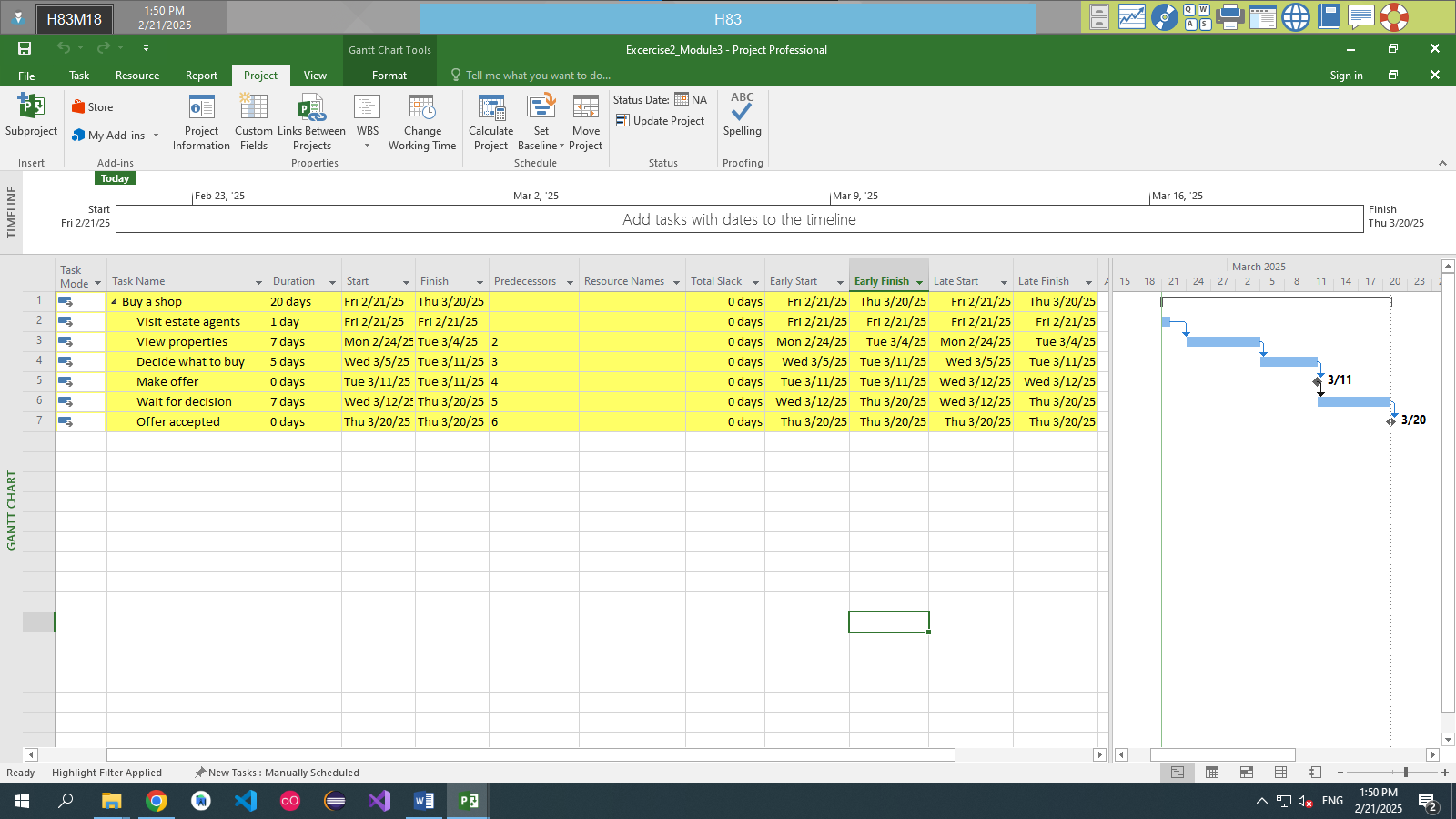
* Using the diagram below, create a list of tasks to model this process.

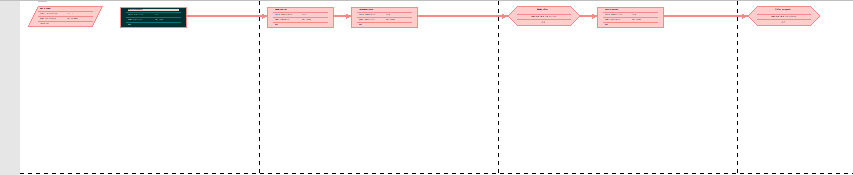
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **PREDECESSOR** | **DURATION** |
| 1 | Visit estate agents |  | 1 days |
| 2 | View properties | 1 | 2 days |
| 3 | Decide what to buy | 2 | 5 days |
| 4 | Make offer | 3 | 0 day |
| 5 | Wait for decision | 4 | Don't know |
| 6 | Offer 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 | Planning |
| 2 | Site Works Completed | Site works |
| 3 | Building Construction Completed | Building Construction |
| 4 | Fit Out Completed | Fit out |
| 5 | Commissioning Completed | Commissioning |

**Creating Dependencies in Task Entry**

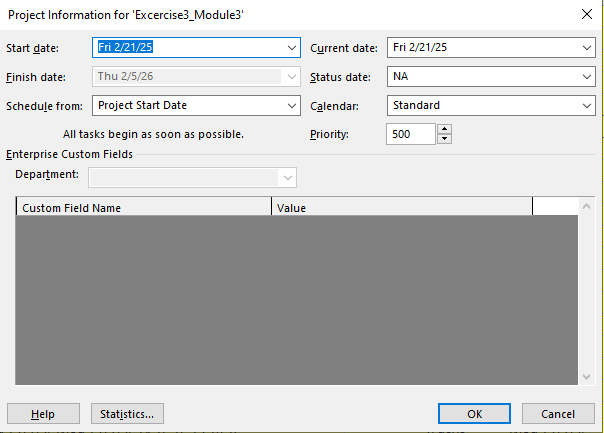
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **Duration** | **Dependencies** |
| **1** | Planning |  |  |
| **2** | Creating architectural plans | 3 wks | 1 |
| **3** | Submit plans for approval | 1 mon | 2 |
| **4** | Order materials | 8 days | 3 |
| **5** | Planning Completed | 0 | 2, 3, 2004 |
| **6** | Site works |  | 5 |
| **7** | Erect fencing | 3 days | 6 |
| **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 |  | 12 |
| **14** | Pour foundations | 4 days | 13 |
| **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 | 18 |
| **20** | Building Construction Completed | 0 | 14, 15, 16, 17, 18, 19 |
| **21** | Fit Out |  | 20 |
| **22** | Fit all windows and doors | 2 wks | 21 |
| **23** | Install electrical cabling | 1 wk | 21 |
| **24** | Install electrical fittings and fixtures | 2 wks | 23 |
| **25** | Install all plumbing | 2 wks | 21 |
| **26** | Install plumbing fixtures and fittings | 1 wk | 25 |
| **27** | Lay astro turf | 1 wk | 21 |
| **28** | Erect handrails and fencing | 2 wks | 21 |
| **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 |  | 33 |
| **35** | Test roof mechanism | 1 wk | 34 |
| **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 |

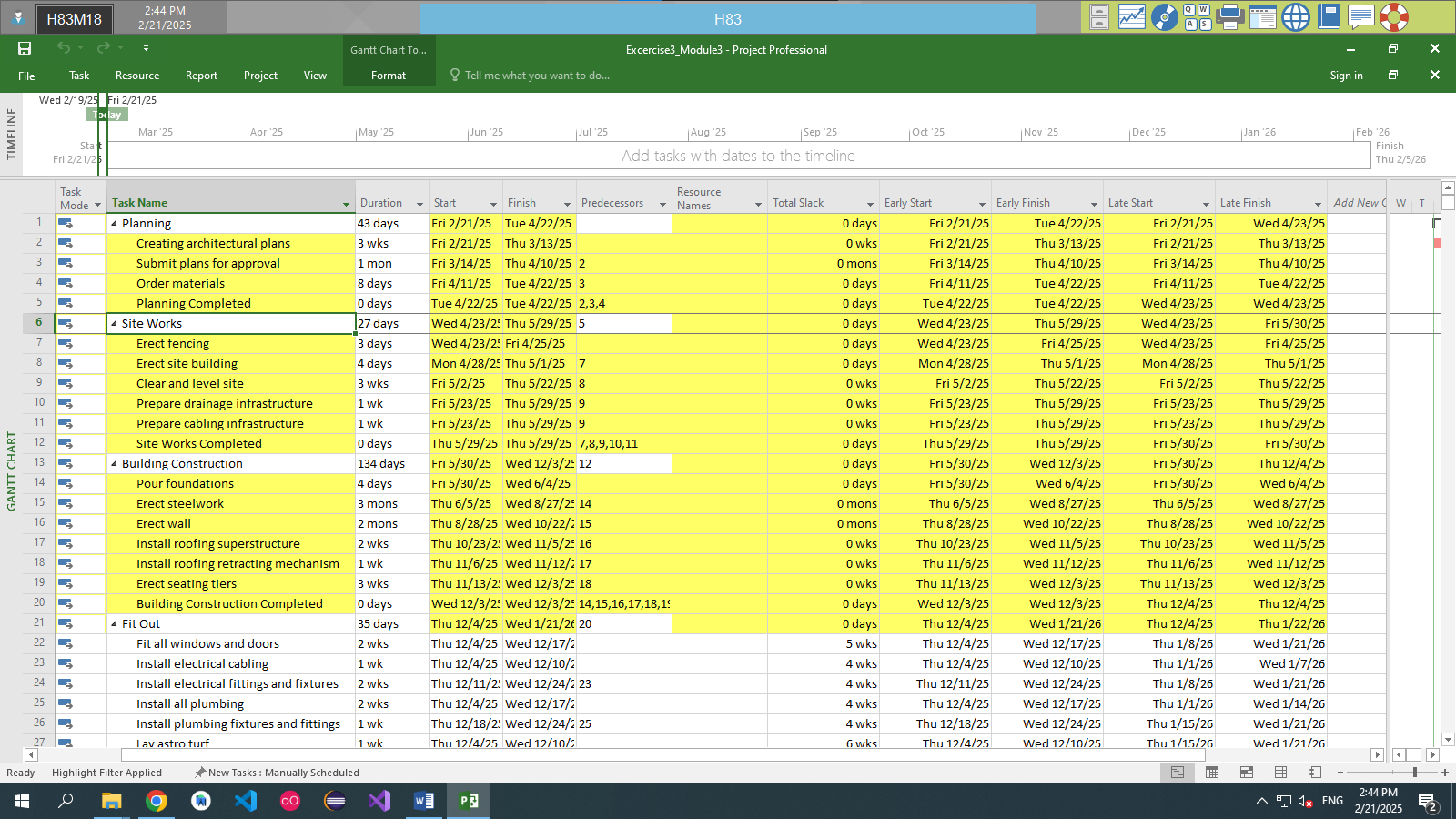
Display the Project Information.

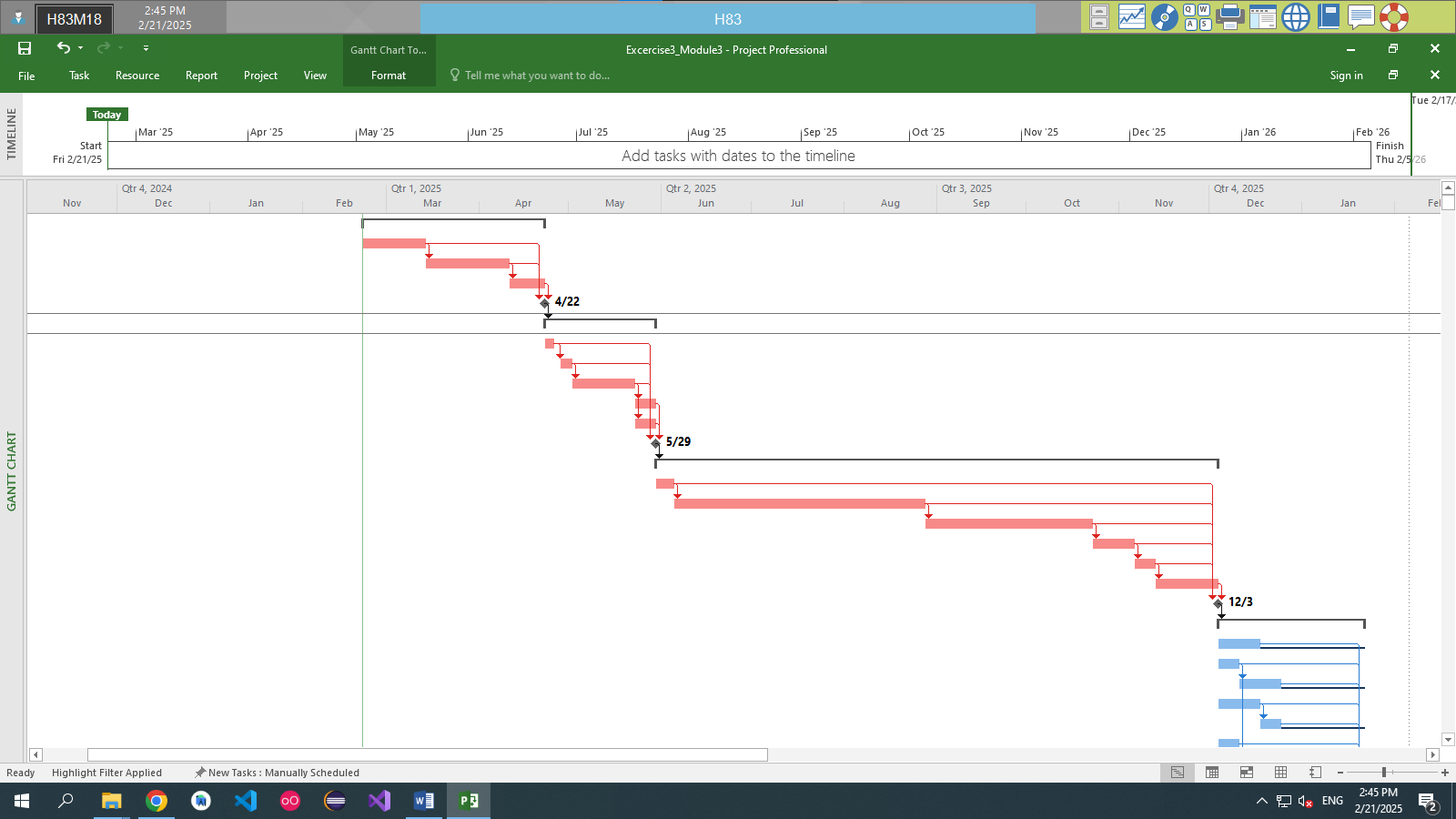
* View the project in Gantt Chart and define CP and Project Slack
* Choose **Gantt Chart Format** tab => check on ***Critical Tasks*** in ***Bar Styles.***

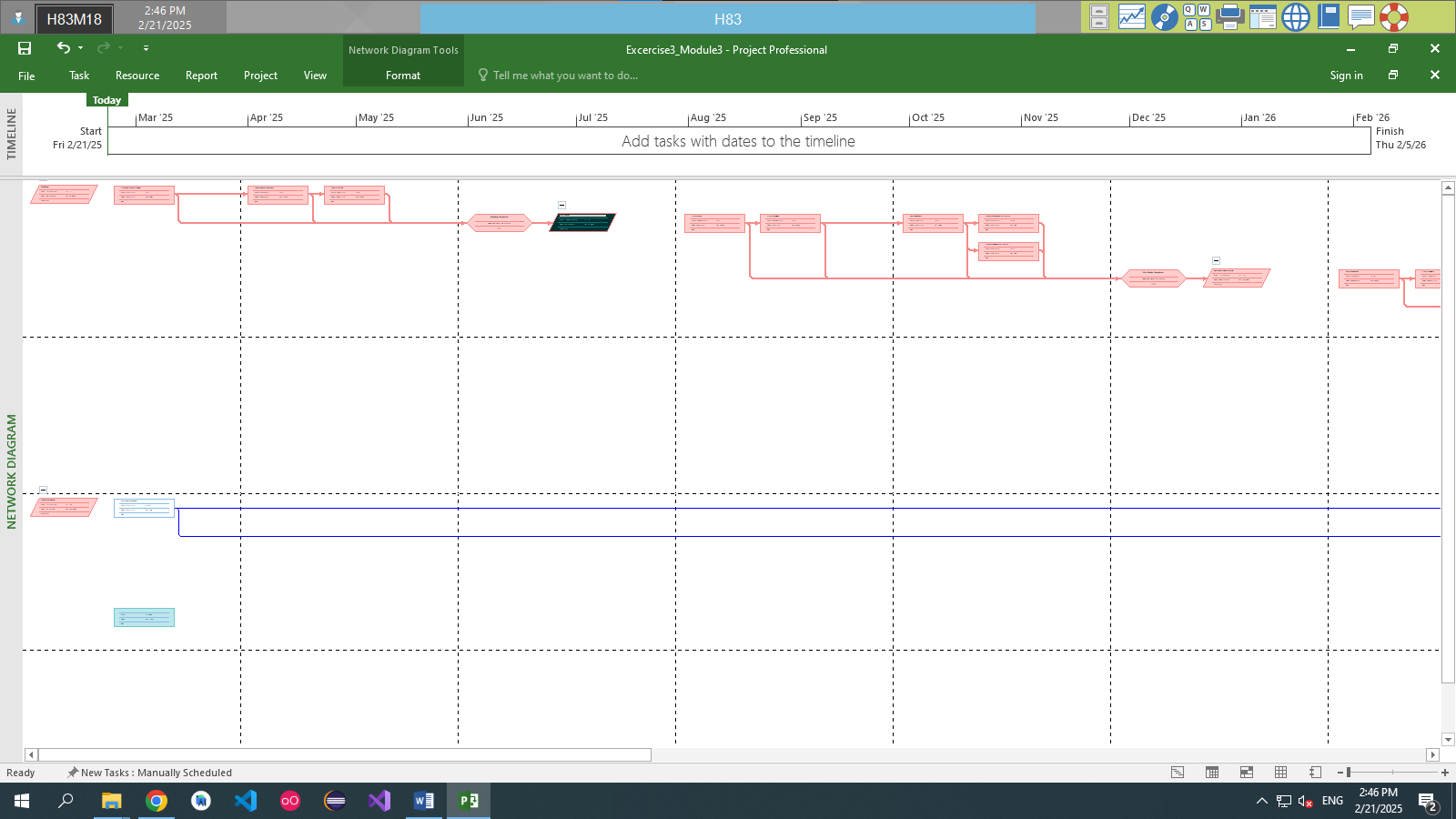


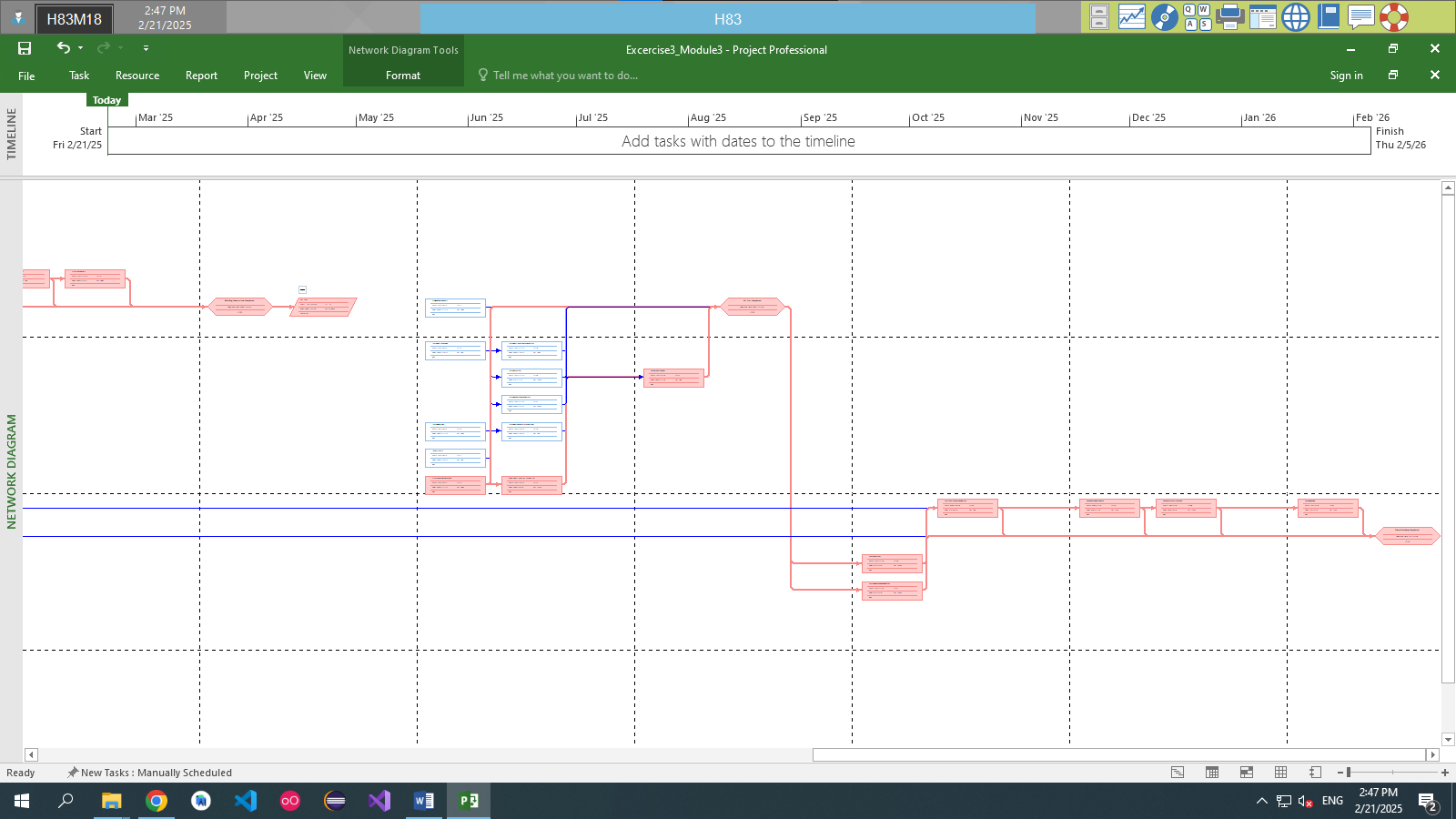
* *Check on* ***Slack*** in ***Bar Styles*** slack lines in non-critical tasks
* On the table data Add column **Late Start**, **Late Finish**, **Total Slack**











# 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 bellow: 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

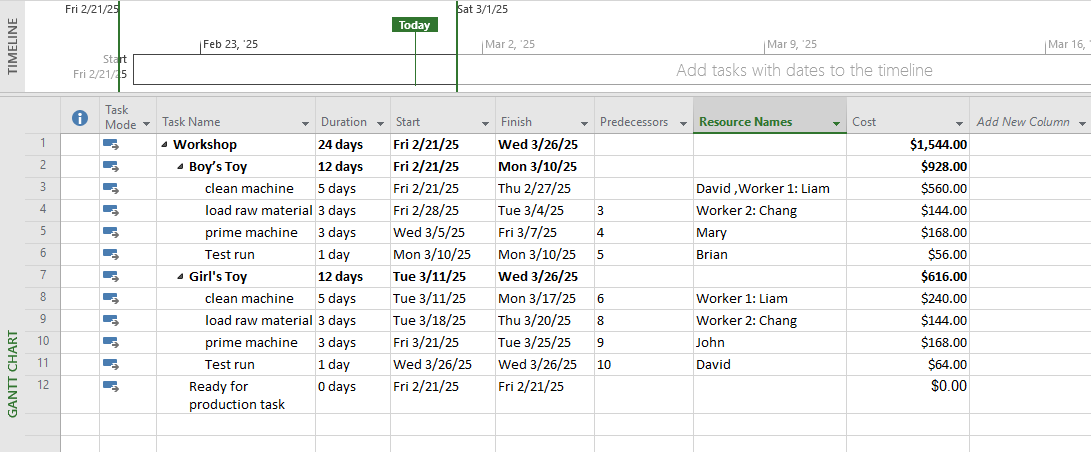
Tab Task **=>** Gantt Chart **=>** Add Column Resource Name, Cost

Select the task that you want to assign the resource

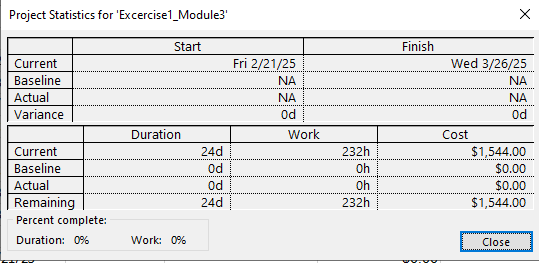
|  |  |  |
| --- | --- | --- |
| **ID** | **TASK NAME** | **RESOURCE** |
| 1 | clean machine | Worker 1, David |
| 2 | load raw materials | Worker 2 |
| 3 | prime machine | Mary |
| 4 | Test run | Brian |
| 5 | clean machine | Worker 1 |
| 6 | load raw materials | Worker 2 |
| 7 | prime machine | John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

Capture images:

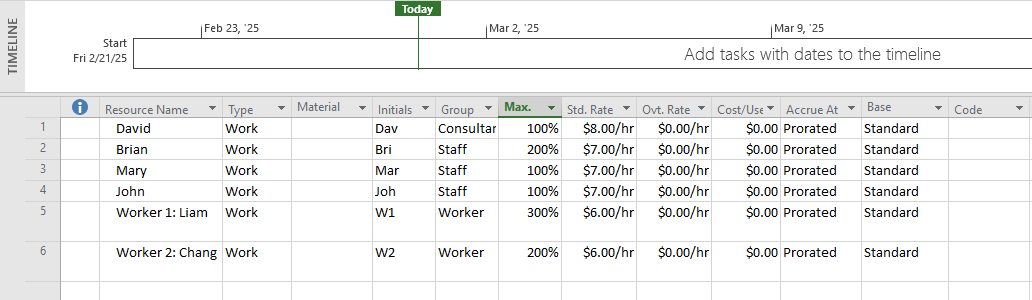
- Gantt Chart (Resource Name, Cost Column)



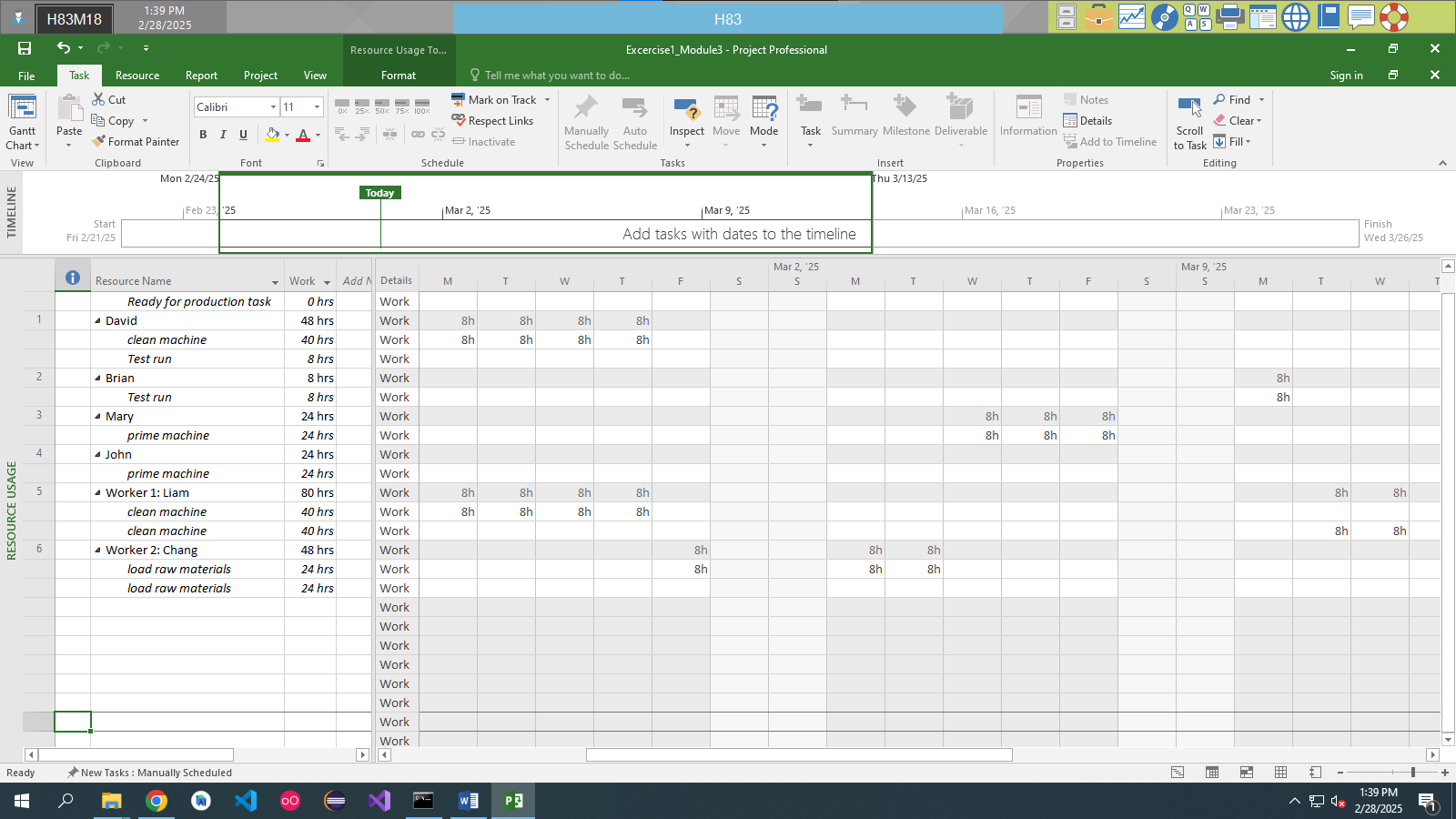
- Display the Project Information (Statics): Duration, Hours, Cost



- Resource Sheet



- Resource Usage



## Exercise 2. Changing Working Time (Start Date 1/11/2024)\

* Open the Exercise 2 (Module 3)
* Tab View => Resource Sheet
* Add the resource for this project bellow: 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 => Add Column Resource Name, Cost

Select the task that you want to assign the resource

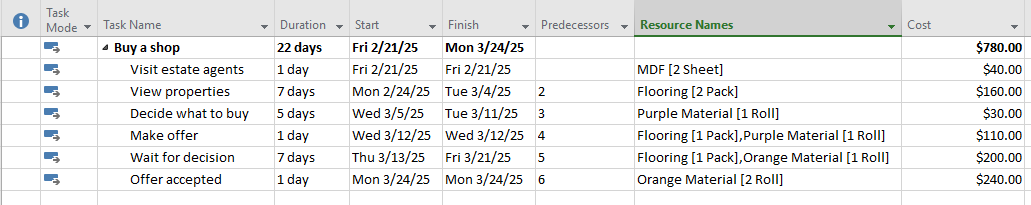
Select Tab Resource => Assign Resource

The information of resource that will assign for the task

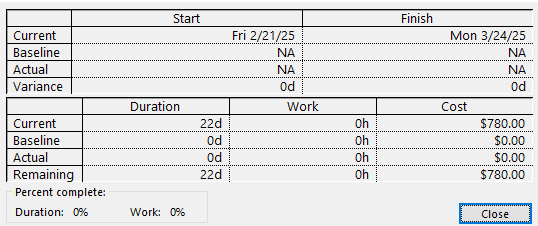
|  |  |  |
| --- | --- | --- |
| **ID** | **TASK NAME** | **RESOURCE** |
| 1 | Visit estate agents | MDF [2] |
| 2 | View properties | Flooring [2] |
| 3 | Decide what to buy | Purple Material [1] |
| 4 | Make offer | Flooring [1], Purple Material [1] |
| 5 | Wait for decision | Flooring [1], Orange Material [1] |
| 6 | offer a accepted | Orange Material [2] |

Capture images:

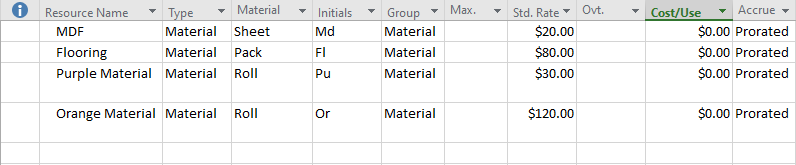
- Gantt Chart (Resource Name, Cost Column)



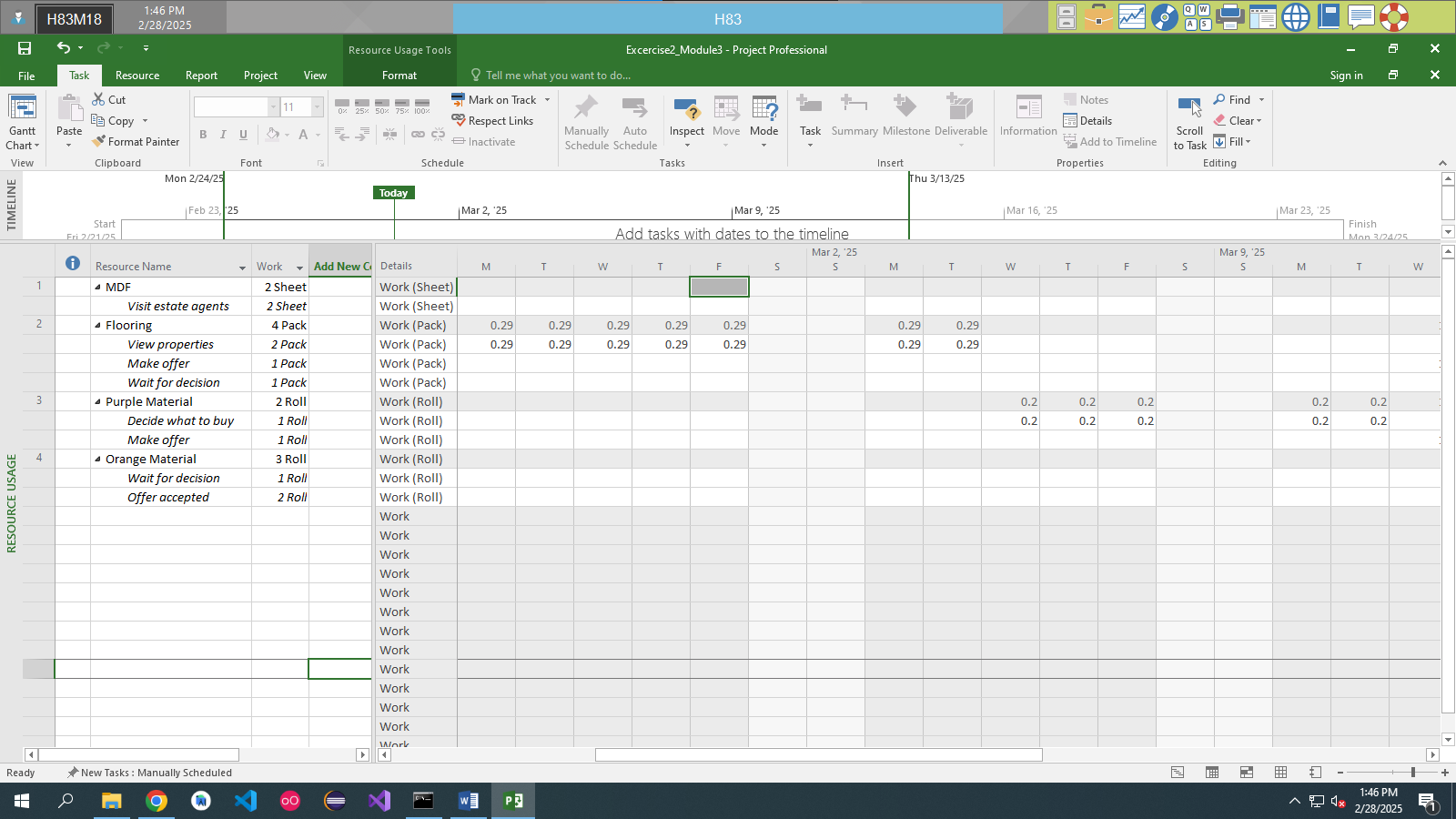
- Display the Project Information (Statics): Duration, Hours, Cost



- Resource Sheet



- Resource Usage



## 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 |

* **Tab View => Resource Sheet / Tab Task => Resource Sheet**
* **Add the resource for this project bellow: Type Work/Material**

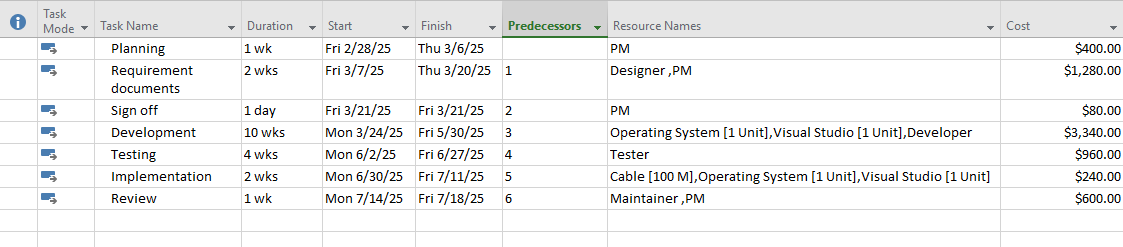
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **STT** | **Name** | **Type** | **Materials** | **Initials** | **Groups** | **Std. Rate** |
| **1.** | PM | Work | Sponsor | PM | Staff | 10 |
| **2.** | Designer | Work |  | Ds | Staff | 6 |
| **3.** | Developer | Work |  | Dp | Staff | 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**

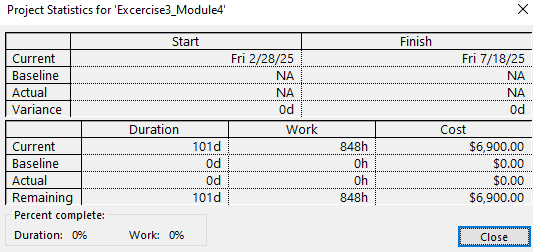
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **TASK NAME** | **WORK** | **MATERIAL** |
| **1** | Planning | PM |  |
| **2** | Requirement documents | PM, Designer |  |
| **3** | Sign off | PM |  |
| **4** | Development | Developer | Operating System [1], Visual Studio [1] |
| **5** | Testing |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

**Capture images:**

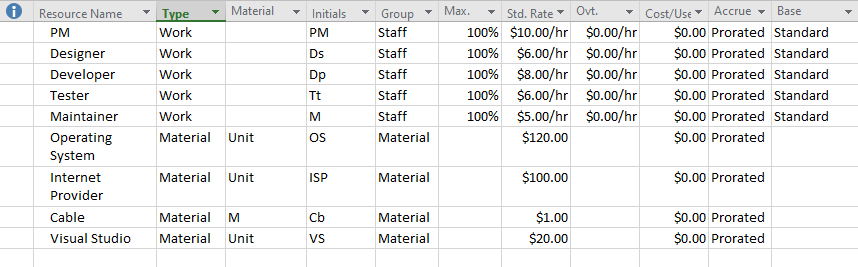
**- Gantt Chart (Resource Name, Cost Column)**

****

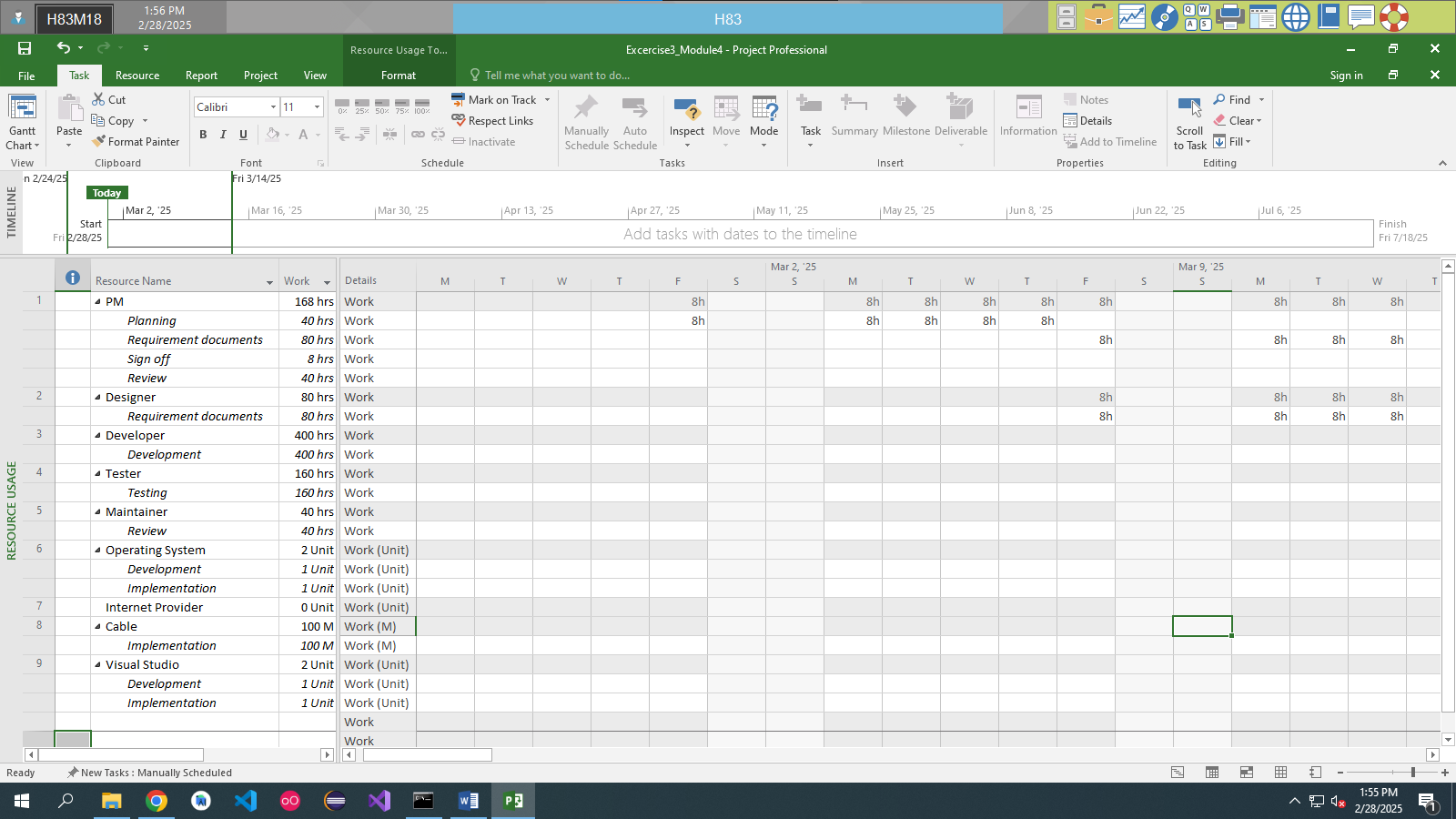
**- Display the Project Information (Statics): Duration, Hours, Cost**

****

**- Resource Sheet**

****

**- Resource Usage**

****

## 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** |
| **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 | 1000% | 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 | 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 Metre | Grass | Material | 12 |
| **25.** | Paint | Material | Ultre | Ute | Paint | 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, Laborer |
| **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%), Laborer (600%), Driver (200%), High Jib Crane, Utility |
| **16** | Erect wall | Supervisor [50%], Carpenter [700%], Laborer [400%], Driver, Grader, Air Compressor, Electrician [75%], Plumber [25%] |
| **17** | Install roofing superstructure | Supervisor [50%], Rigger [500%], Boilermaker [500%], Welder [300%], Laborer [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%], Laborer [500%], Driver, Utility, Air Compressor |
| **20** | Building Construction Completed |  |
| **21** | Fit Out |  |
| **22** | Fit all windows and doors | Carpenter [500%], Laborer [200%] |
| **23** | Install electrical cabling | Electrician [300%], Laborer [200%] |
| **24** | Install electrical fittings and fixtures | Electrician [300%] |
| **25** | Install all plumbing | Plumber [200%], Laborer [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 |  |

**Capture images:**

**- Gantt Chart (Resource Name, Cost Column)**

**A screenshot of a computer

Description automatically generated**

**- Display the Project Information (Statics): Duration, Hours, Cost**

A screenshot of a computer

Description automatically generated

**- Resource Sheet**

**A screenshot of a computer

Description automatically generated**

**- Resource Usage**

**A screenshot of a computer

Description automatically generated**

## Exercise 5. Resources with the private working time

* **Creating the Calendars with working times:**

**PM\_Time:**

1. Working time: Mon – Sat: 7AM – 11AM

2. Nonworking time: Sun

3. Exception: Nonworking time: 30/4, 1/5, 2/9

**Dev\_Time:**

1. Working time: Mon – Fri: 8AM – 11AM, 1PM – 5PM

2. Nonworking time: Sat, Sun

3. Exception: Nonworking time: 30/4, 1/5, 2/9

**Extra\_Time:**

1. Working time: Mon – Fri: 6PM – 9PM

2. Nonworking time: Sat, Sun

3. Exception: Nonworking time: 30/4, 1/5, 2/9

**- Creating the following tasks**

|  |  |  |
| --- | --- | --- |
| **Task Name** | **Duration (days)** | **Dependencies** |
| Requirement Analysis | 5 | - |
| Project Planning | 3 | 1 |
| UI/UX Design | 7 | 1 |
| Database Design | 5 | 1 |
| Backend Development | 14 | 4 |
| Frontend Development | 14 | 3 |
| Frontend & Backend Integration | 5 | 5, 6 |
| Testing & Bug Fixing | 7 | 7 |
| Deployment to Test Environment | 3 | 8 |
| Evaluation & Optimization | 5 | 9 |
| Official Deployment | 2 | 10 |
| Maintenance & Support | Ongoing | 11 |

* **Tab View => Resource Sheet / Tab Task => Resource Sheet**

Add the resources this project bellow: Work/Material/Cost

Each Resource bases on a type of working time:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Name** | **Type** | **Quantity** | **Unit** | **Std.Rate** | **Base** | **Related Tasks** |
| 1 | Project Manager | Work | 1 | Person | 20 | PM\_Time | Project Planning |
| 2 | System Analyst | Work | 3 | Person | 15 | Extra\_Time | Requirement Analysis, Database Design |
| 3 | Backend Developer | Work | 4 | Person | 18 | Dev\_Time | Backend Development, Frontend & Backend Integration |
| 4 | Frontend Developer | Work | 3 | Person | 17 | Dev\_Time | Frontend Development |
| 5 | UI/UX Designer | Work | 2 | Person | 16 | Extra\_Time | UI/UX Design |
| 6 | Tester | Work | 3 | Person | 16 | Dev\_Time | Testing & Bug Fixing |
| 7 | Cloud Server (AWS, Azure) | Cost | 1 | Subscription | 200 |  | Data storage, application deployment |
| 8 | Software Licenses | Cost | 1 | Software Package | 99 |  | Deployment to Test Environment |
| 9 | Developer Workstations | Material | 4 | Units | 1200 |  | Deployment to Test Environment |
| 10 | UI/UX Design Tools | Cost | 1 | Software Package | 200 |  | Official Deployment |
| 11 | Testing Tools (Selenium, JMeter) | Cost | 1 | Software Package | 90 |  | Testing & Bug Fixing, Evaluation & Optimization |

**Capture images:**

* Gantt Chart (Resource Name, Cost Column)

A screenshot of a computer

Description automatically generated

* Display the Project Information (Statics): Duration, Hours, Cost

A screenshot of a computer

Description automatically generated

* Resource Sheet

A screenshot of a computer

Description automatically generated

* Resource Usage

A screenshot of a computer

Description automatically generated

## Exercise 6 :

Creating the following tasks (Project Start Date 6/12/2024)

Establish working time: ***MSSV\_Time***

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

2. Nonworking time: Sun

3. Exception: Nonworking time: 24/12/2024, 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 | Inviations - 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** |
| 1 | Venue Material | Material | V | None | None | £3,000.00 |
| 2 | Photgraphs | Material | V | None | None | £1,000.00 |
| 3 | Flowers | Material | P | None | None | £900.00 |
| 4 | Cars | Material | F | None | None | £500.00 |
| 5 | DJ | Material | C | None | None | £250.00 |
| 6 | Guest | Work | D | None | 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 | Photgraphs[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 | Inviations - 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 |  |