

EASY GUIDE!

MANAGING A PROJECT USING MS PROJECT

Version 1

Manage your project wisely



A book for users who wish to learn how to use Ms Project for plan and manage projects

ASMARIZAN | ZAREENA

STANDARD CURRICULUM POLITEKNIK MALAYSIA

Managing Project using Ms Project

A book for users who wish to learn how to use Ms Project to
plan and manage projects

By Asmarizan & Zareena

POLITEKNIK MERLIMAU, MELAKA (2021)

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Published in 2021

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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Asmarizan

Managing A Project Using Ms Project: A book for users who wish to learn how to use Ms Project for planning and managing projects / By Asmarizan & Zareena.

Mode of access: Internet

eISBN 978-967-2241-94-2

1. Microsoft Project.
2. Project management--Computer programs.
3. Government publications--Malaysia.
4. Electronic books.

I. Zareena. II. Title.

658.4040285536

Published by:

Politeknik Merlimau, Melaka

77300 Merlimau Melaka

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ACKNOWLEDGEMENT

All praises to Allah and His blessing for the completion of this e-book. We thank God for all the opportunities, trials, and strength showered on us to finish writing the e-book. We experienced so much during this process, not only from the academic aspect but also from personality.

First, we would like to sincerely thank our Head of Department, Cik Hajjah Intanku Salwa Binti Shamsuddin, for her understanding and positive encouragement to finish this e-book.

Our deepest gratitude goes to our family members and academic staff in the Department of Mathematics, Science and Computer, Politeknik Merlimau Melaka. It would not be possible to write this e-book without support from them.

Asmarizan

Zareena

PREFACE

Project planning is critical in guiding stakeholders, sponsors, teams, and the project manager through the many phases of the project. Planning is required to establish desired goals, reduce risks, avoid missed deadlines, and produce the agreed-upon product, service, or outcome. This book introduces students to project planning and management through the use of project management software.

A statement of task, a resource list, a task breakdown structure, a project timetable, and a risk plan are all standard components. The business needs and problems and the project objectives, deliverables, and critical milestones are all included in the scope. The baselines for the project are set in the project plan.

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1.

INTRODUCTION

What is a project?

A project is usually considered a one-time activity that is done to produce something new, such as a product, service, or outcome. That is to state, a project should have a definite start and finish date.

Projects are created in all types of industries. Sometimes to understand what is considered a project we need a set of examples.



Some examples of project:

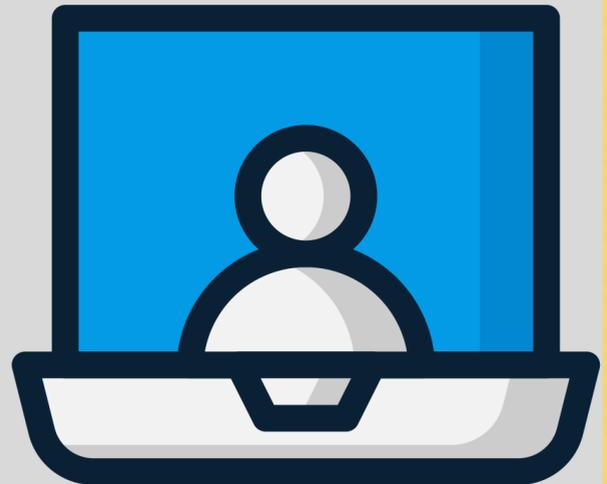
Education Projects

- Research, create and test new courseware
- Organize training workshops
- Organize an educational conference



Event Projects

- Organizing a press conference
- Organizing a corporate party
- Planning annual budget reports
- Office relocation



Construction Projects

- Building a new house
- Designing and constructing new roads
- Creating a new manufacturing assembly line



Why project plan matter?



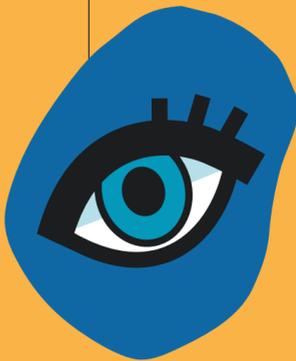
Clarify the process & activities

1



Gives you information

2



Visualize entire project

3

4

Forecast resources requirement



Provide milestone

5

6

Track project progress



Enables the agreement

7

What is Microsoft Project?

Microsoft Project is a project management application. Project management application is a computer software that aids project team in the management of activities and plans, as well as the tracking of progress, resource allocation, and budgeting.



Who uses MS Project?

This product is for project managers and anybody else involved in a project. It is one of the most widely used project management software since it allows managers to do most of their planning tasks.



What can you do in MS Project?

The following features are commonly seen in project management software:

1 *Planning*

In terms of project management fundamentals, we should begin by planning our major tasks and activities. Deadlines, due dates, time frames, durations, and priorities must all be planned.

2 *Tracking*

Once the main tasks have been planned, it is time to track the tasks. Tracking is a task monitoring and control activity. The project management application software will allow you to use tracking tools to keep track of and control your work, as well as guarantee that the project stays on track.

3 *Measuring*

We can't be confident that our project is going as planned if we don't measure it. We may utilise formulae to build and apply key performance indicators (KPIs) and measurements using project management application software.

4 *Reporting*

We must create reports at the end of our project that reflect the present condition of the project and the status of its tasks. We will be able to create project reports and assess percent completion for each job and objective using the project management application system

What you will learn?

For the contents of this edition , we will learn the foundation of knowledge in Microsoft Project to:

01

Create tasks

Create tasks that represent the steps to complete the project.

02

Assign resources

Assign resources such as the people, materials, or equipment needed to deliver the project.

03

Track project performance

Track project performance by comparing the current state of completion to the original baseline plan.

04

Create reports

Create reports to visualize the project's progress and share them with your project team, stakeholders, and sponsors.

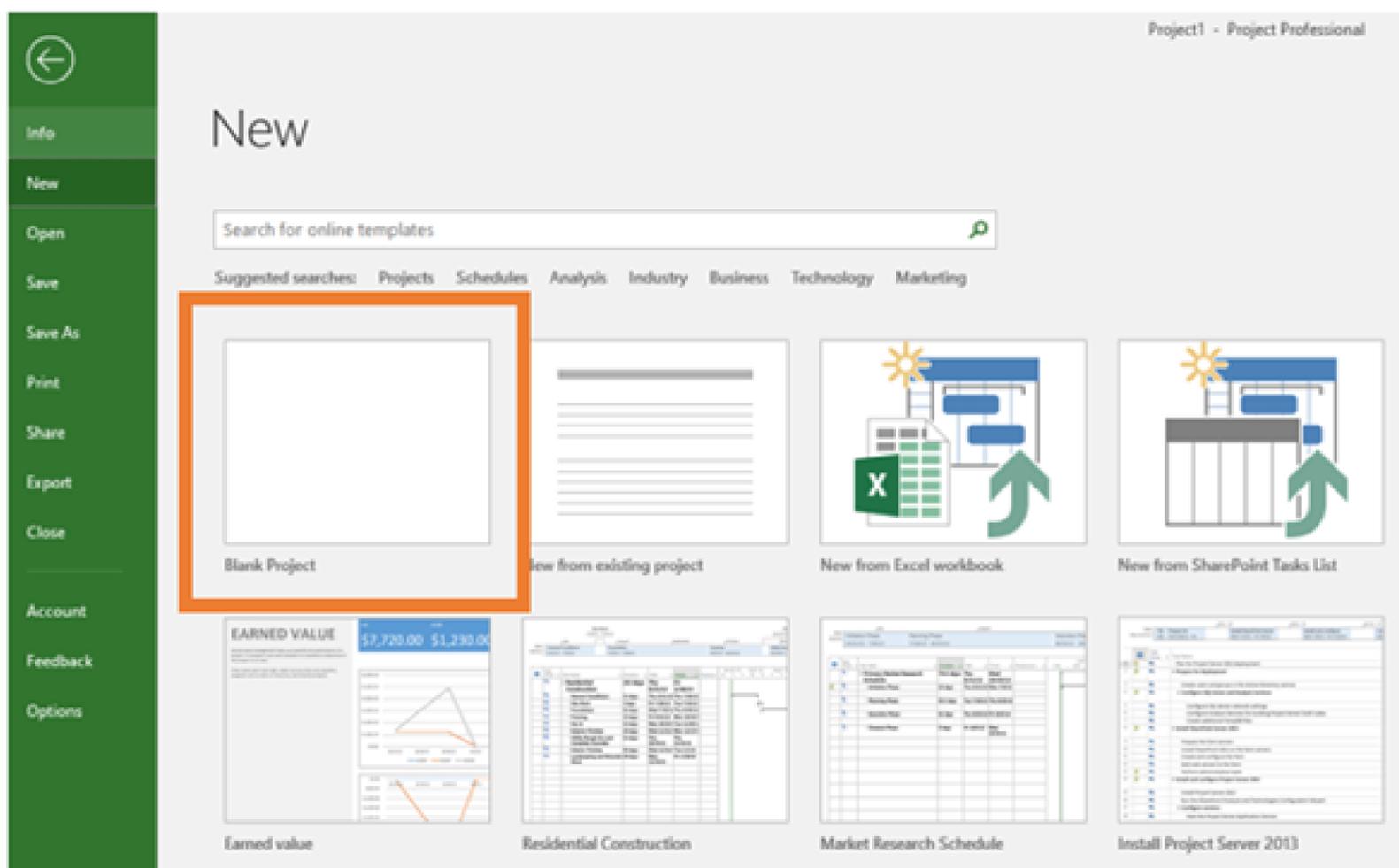
2.

MS PROJECT INTERFACE

Interface Tour

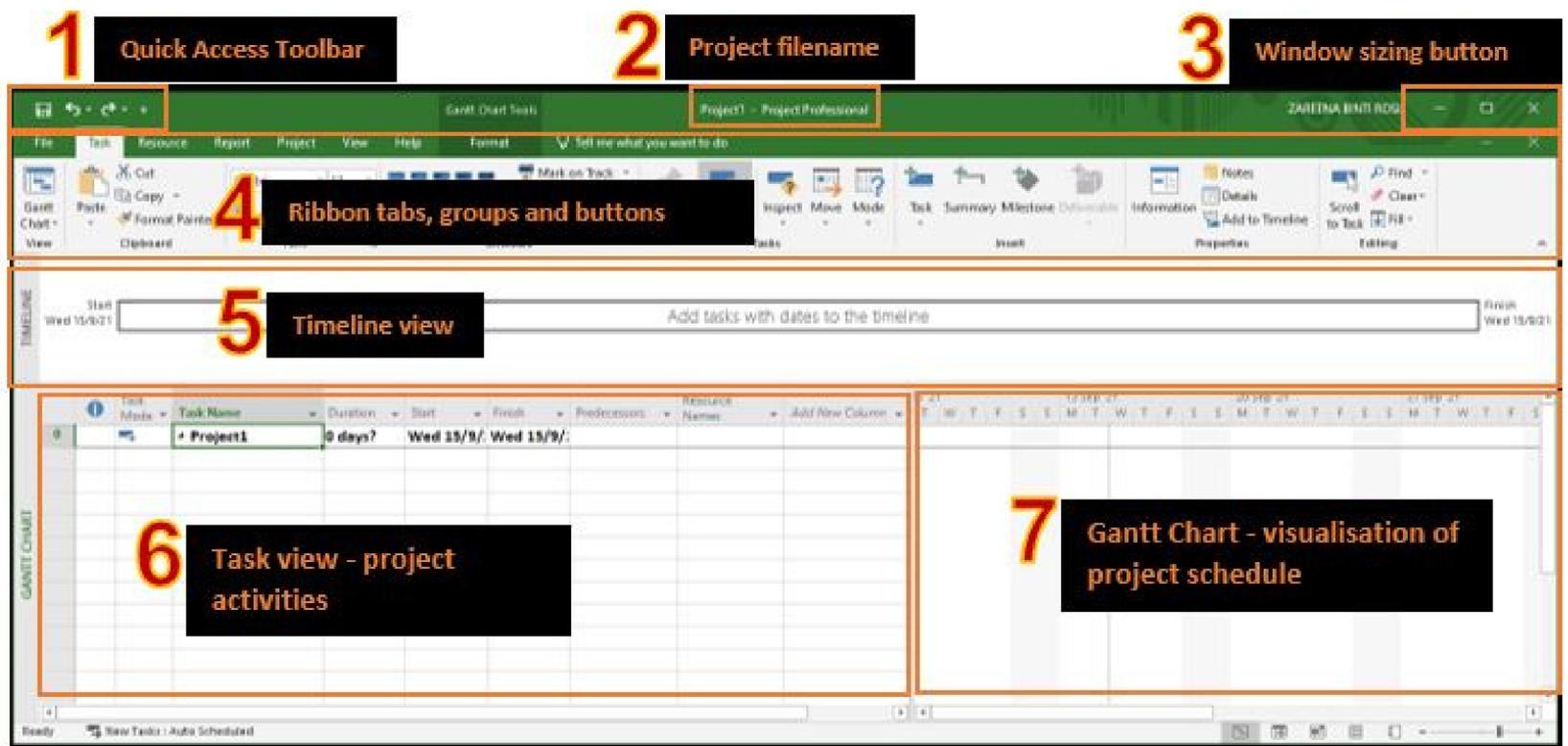
Get to know Ms Project environment

1. Start a new project with creating a blank project.
2. Go to File menu, click New > Blank Project



MS PROJECT INTERFACE

3. Click on each label for the explanation



1 Most commonly used command in the application and it can be customized

2 Your project file name and the version of the software

3 Button for minimize, maximize and close application window

4 Ribbon tabs, groups and icon. Each tab contains several groupings of buttons and drop-down lists which are related to one another.

5 The Timeline View displays the timelines of all your active projects in a visual format.

6 Task view shows list of activities contained in the project

7 Gantt chart can be either time-phased work or Gantt chart

Ribbon tabs

Microsoft Project Ribbon Tabs consists of:

	
Info	Info - view project information and the Organizer
New	New - create a new file
Open	Open - open any MS Project file
Save	Save - save any changes to the current file
Save As	Save As - create a new copy of the project file
Print	Print - adjust print settings and print the current file
Share	Share - share project file by through email
Export	Export - create a new copy of the project file or export as PDF
Close	Close - closes the current project file
<hr/>	
Account	Account - account a product information
Feedback	Feedback - give feedback to Microsoft
Options	Options - adjust any MS Project settings

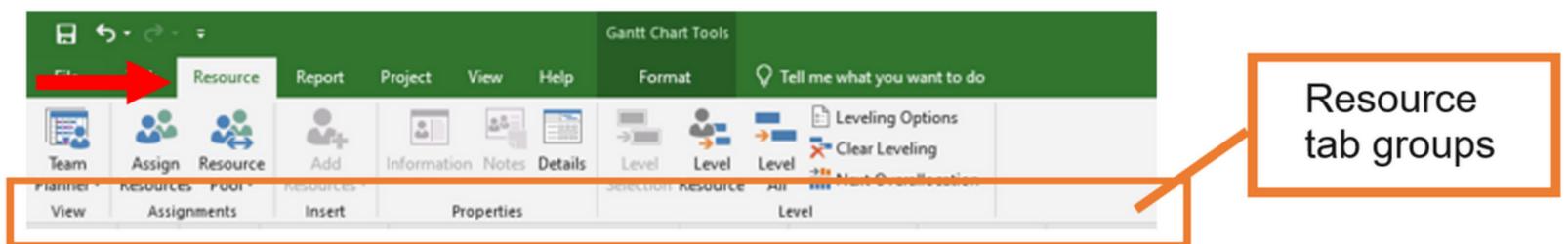
MS PROJECT INTERFACE

Task tabs



provides buttons for adding, formatting, and working with tasks.

Resource tabs



View

The View group is a drop-down menu where we can choose any custom view. The default view that is available to select is the Resource Sheet view.

Assignment

The Assignments group has an option to assign resources to the task in the project. It also has an option to create a resource pool to be able to share resources between different projects. It also has an option to refresh and update the resource pool.

Insert

The Insert group has a drop-down menu where we get to choose where to add resources from such as the address book or Active Directory. It also has options for adding resources that are work, material, or cost resources.

Properties

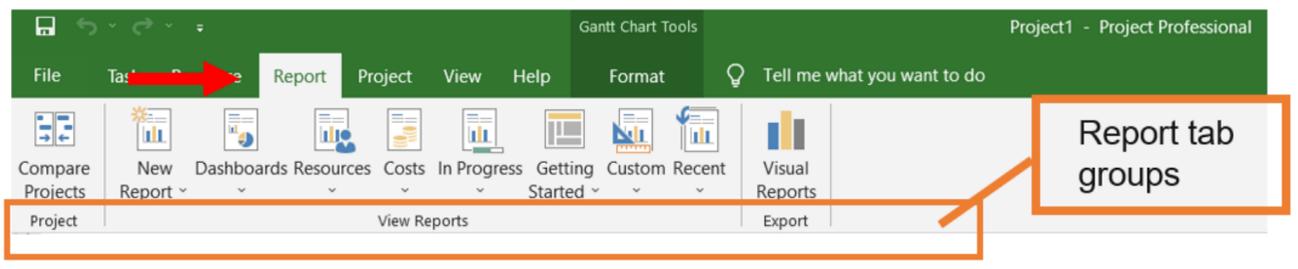
The Properties group is where we can easily access resource information. We can also access resource notes, and resource details.

Level

The Level group is where you can access many options to level resources in Microsoft Project.

MS PROJECT INTERFACE

Report Tab



Compare

The Compare Projects group compares two versions of the same project. A comparison report is created to show any differences between the two project schedules.

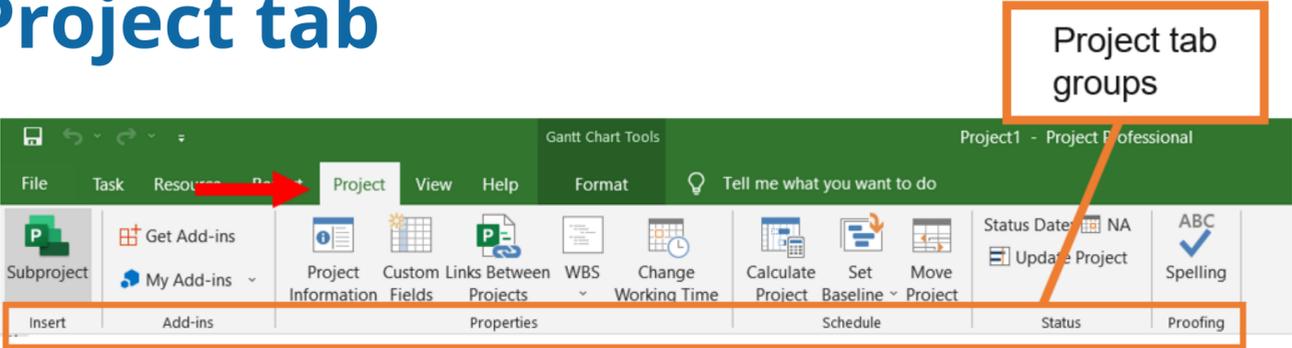
View Reports

The View Reports tab is where we can view any new reports, dashboards, resources, cost, in progress, getting started, custom, and recent reports. This is where we can create new reports and view already existing reports.

Export

The Export group is where we can find visual reports that can be exported either to MS Excel or MS Visio.

Project tab



Insert

The Insert group helps insert a related project as a subproject to the current project file. This will make the current project file a master project file with subprojects.

Add-ins

The Add-ins group is where we can find new add-ins using the Get Add-ins options.

Properties

The Properties group is where we can find project information, create or modify custom fields, add links between projects, create a WBS structure, or modify calendars and working times.

Schedule

The Schedule group is where we can quickly recalculate our project by using the Calculate Project option.

Status

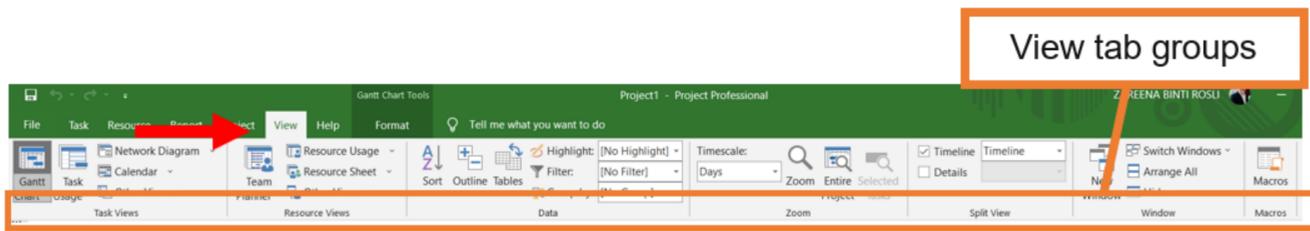
The Status group gives us the ability to quickly change the status date and also update the project file.

Proofing

The Proofing group is where we can check spelling in Microsoft Project.

MS PROJECT INTERFACE

View Tab



Task Views

The Task Views group is where we can access different task views such as the Gantt Chart, Task Usage, Network Diagram, Calendar, Timeline view, and any other out of the box views

Resource Views

The Resource Views group is where we can access different resource views such as the Resource Sheet, and Resource Usage or any customized views

Data

The Data group is where we can access information in our schedules such as sort, show different outline levels, and access any tables.

Zoom

The Zoom group is where we can zoom our schedule any way we want. We can quickly use the dropdown to filter by day, month, or year.

Split View

The Split View group is where we can split the current view we are on into multiple panes

Window

The Window group is where we can have multiple new windows to work on different parts of the schedule.

Macros

The Macros group is where we can access any macro information.

MS PROJECT INTERFACE

Format Tab



Format

The Format group has Text Styles, Gridlines and Layout option that can be customized.

Columns

The Columns group is where the column settings can be managed.

Bar Styles

The Bar Styles group is where the bars on the Gantt Chart can be modified and managed.

Gantt Chart

The Gantt Chart Style group has predefined Gantt bar styles to quickly change the color of the Gantt bar

Show/Hide

The Show/Hide group is where the outline number, project summary task, and summary tasks can be easily shown or hidden.

Drawings

The Drawings group is where a drawing can be chosen to use on the project file.

3.

CREATING YOUR FIRST SCHEDULE

Project Schedule

A project schedule outlines the tasks that must be completed, the resources that must be utilised, and the deadline for completion.

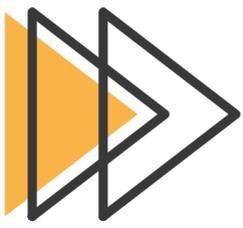
Description	Resource Names	Duration	Start	Finish	Work	Predecessors	17 May '21								
							F	S	S	M	T	W	T	F	S
Intiation		5 days?	Mon 17/5/21	Fri 21/5/21	48 hrs										
Defining Team Organization	Ilham Ahmad	1 day	Mon 17/5/21	Mon 17/5/21	8 hrs										
Establish Intial contact	Adam Daniel	1 day?	Tue 18/5/21	Tue 18/5/21	8 hrs	2									
Conduct intial interview	Nadia Helmy	2 days	Tue 18/5/21	Wed 19/5/21	16 hrs	2									
Define problem/opportunity	Jeffry Muhammad	2 days	Thu 20/5/21	Fri 21/5/21	16 hrs	3,4									
Problem ID Statement	Adam Daniel	0 days	Fri 21/5/21	Fri 21/5/21	0 hrs	5									
Planning		6 days?	Mon 17/5/21	Mon 24/5/21	64 hrs										
Describe project scope	Jeffry Muhammad	1 day?	Mon 24/5/21	Mon 24/5/21	8 hrs	6									
Conduct feasibility analysis	Nadia Helmy	2 days	Mon 17/5/21	Tue 18/5/21	16 hrs										
Define tasks and schedule	Adam Daniel	2 days	Mon 17/5/21	Tue 18/5/21	16 hrs										
Refine project scope	Ilham Ahmad	3 days	Mon 17/5/21	Wed 19/5/21	24 hrs										
Select baseline project plan	Jeffry Muhammad	0 days	Wed 19/5/21	Wed 19/5/21	0 hrs	10,11									
Analysis		12 days?	Thu 20/5/21	Fri 4/6/21	72 hrs										
Data needs analysis	Nadia Helmy	2 days	Thu 20/5/21	Fri 21/5/21	16 hrs	12									
Resource identification	Adam Daniel	3 days	Mon 24/5/21	Wed 26/5/21	24 hrs	14									
Define major processes	Ilham Ahmad	2 days	Mon 24/5/21	Tue 25/5/21	16 hrs	14									
Design preliminary models	Jeffry Muhammad	2 days	Wed 26/5/21	Thu 27/5/21	16 hrs	16									
Deliver preliminary models	Adam Daniel	0 days	Thu 27/5/21	Thu 27/5/21	0 hrs	15,17									

It's a timetable that outlines start and end dates and milestones that must be met for the project to be completed on time.

It is often used in conjunction with a work breakdown structure (WBS) to distribute work among team members.

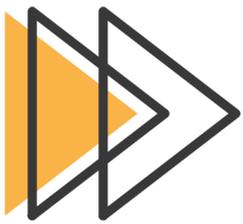
CREATING YOUR FIRST SCHEDULE

Before beginning a project, there are some questions to ask yourself and your project team on the project schedule as follows.



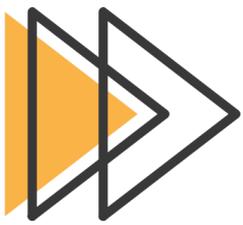
What needs to be done in the project?

Every project must create a task list and deliverables. Before entering the information into the scheduling application, such as Microsoft Project, you can brainstorm this on a spreadsheet. If we like, we may even enter them straight into the scheduling tool.



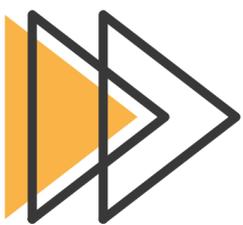
How long will the project take?

This is where we begin to look at work estimates and duration.



What is the order of the tasks?

This is where we plan how to integrate network logic and dependencies across activities.



When should the work be done?

Asking this question may bring up a discussion about task dependencies, calendars, deadlines, constraints, and baselines.



Who is going to do the work?

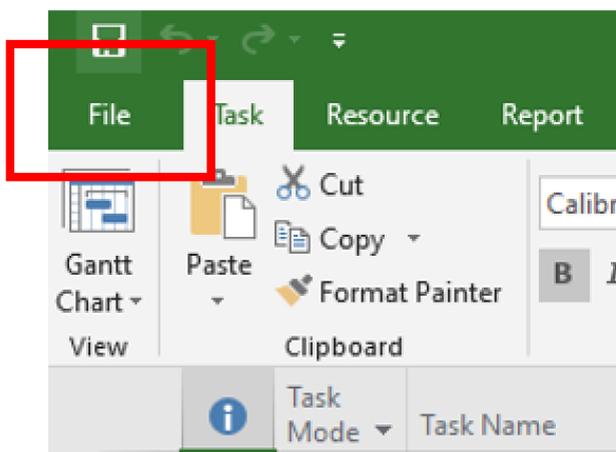
A discussion about resources and how they should be assigned to tasks may be part of this conversation.

**Let's get started on your
first project in just a few
steps.**

CREATING OUR FIRST SCHEDULE

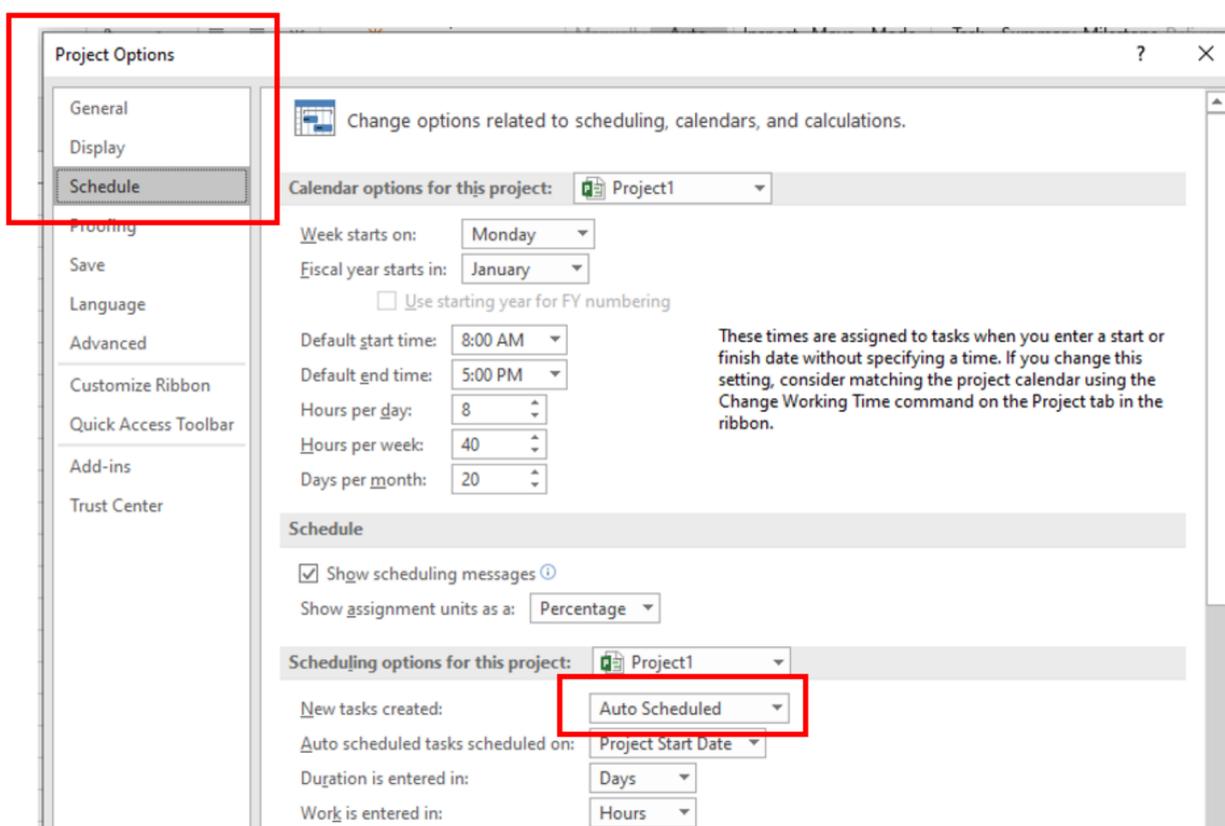
Let's do some basic configuration before you create your schedule

Set Auto Scheduling as the default option.



Go to File -> Options -> Schedule

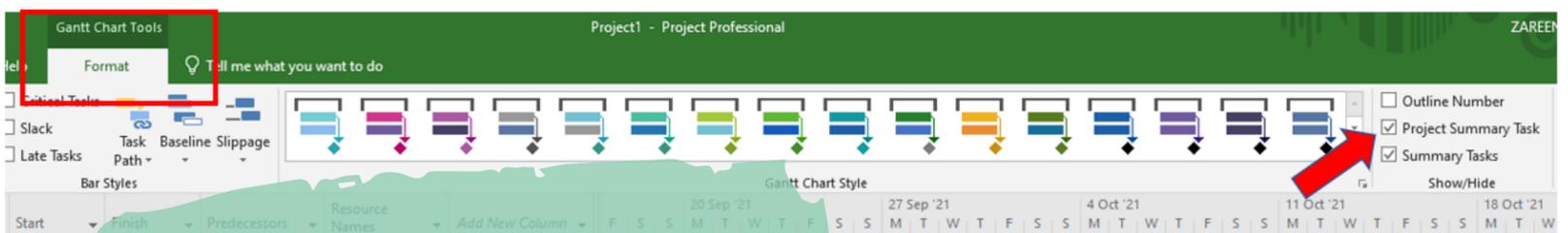
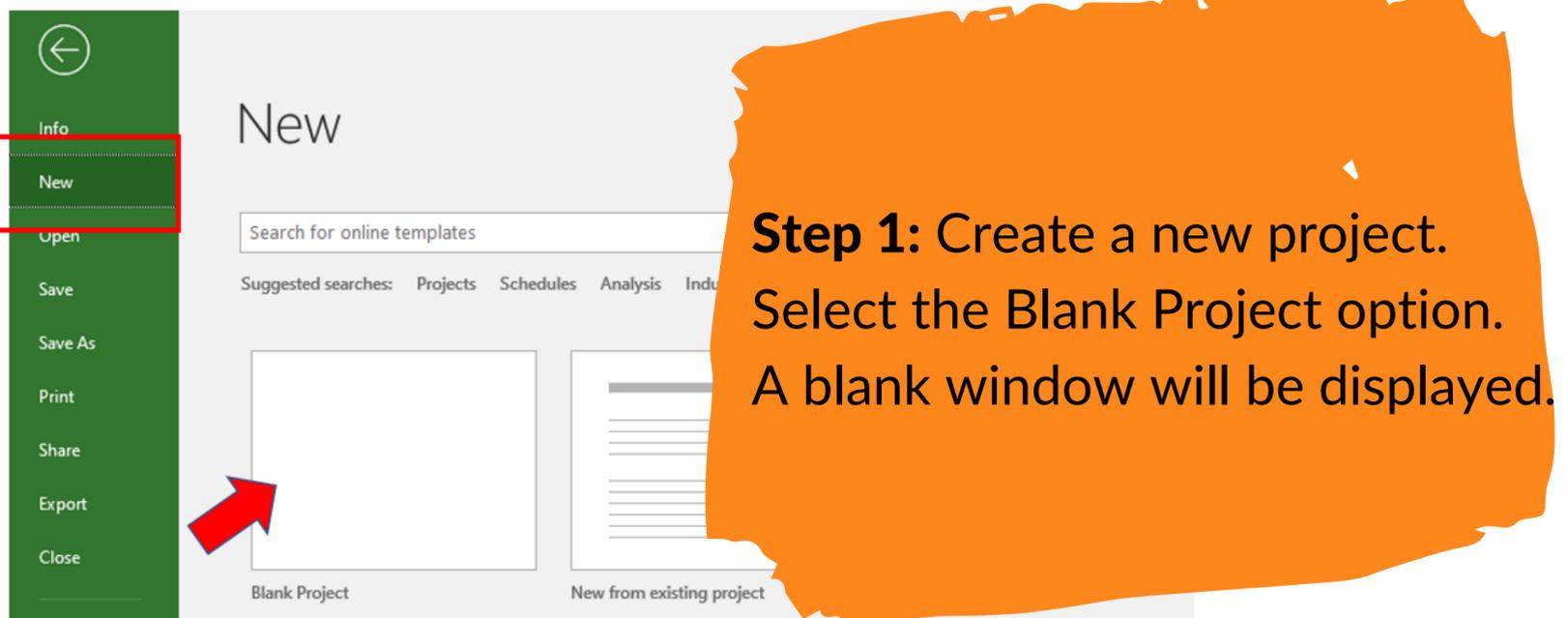
For new tasks, make sure to use Auto-Schedule. The term "auto-schedule" refers to the automatic scheduling of new activities based on the commencement date of your project (or end date).



CREATING OUR FIRST SCHEDULE

Now, let's schedule a simple project!

To make a project plan, follow the steps below.



Here's what you should see:

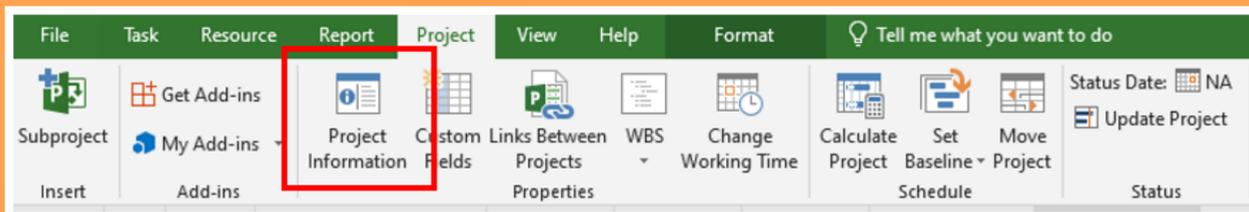
	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
0		Project1	0 days?	Tue 28/9/2	Tue 28/9/2		

Choose a suitable name for your project.

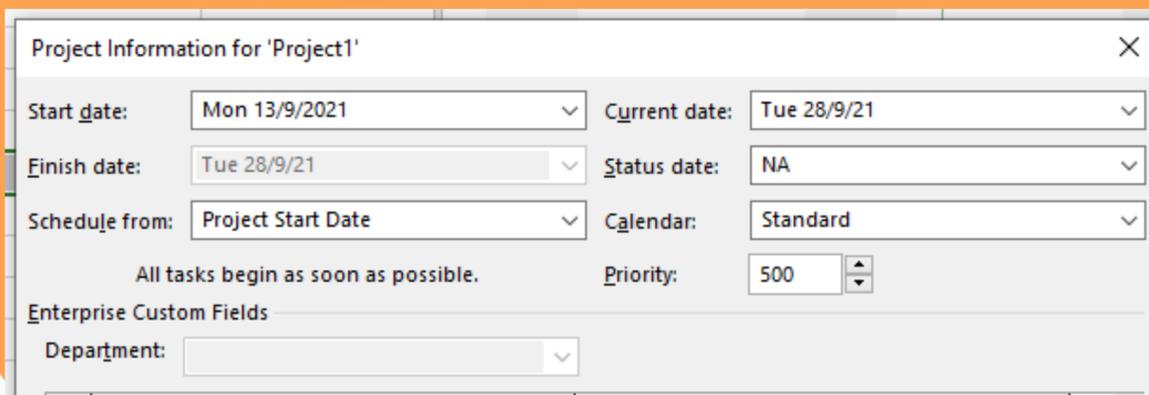
	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
0		Min Café Project	0 days?	Tue 28/9/2	Tue 28/9/2		

CREATING OUR FIRST SCHEDULE

Step 2: Set a start date for the project.
Navigate to the Project tab >>Project Information



Enter the project's start date
(in this case, September 13th, 2021):



Step 3: Create a task list.

The following tasks must be completed as part of this project:

- Make a business plan.
- Obtain a business license.
- Open up a bank account.
- Funding
- Choose a location for your business
- Set up office
- Recruit a team
- Make a promotion.

CREATING OUR FIRST SCHEDULE

Let's complete Microsoft Project with those tasks. Fill up the Task Name column with the tasks.

	i	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Predecessors ▾
0		→	Min Café Project	1 day?	Mon 13/9/21	Mon 13/9/21	
1		→	Make a business plan	1 day?	Mon 13/9/21	Mon 13/9/21	
2		→	Get a business license	1 day?	Mon 13/9/21	Mon 13/9/21	
3		→	Create a bank account	1 day?	Mon 13/9/21	Mon 13/9/21	
4		→	Get funding	1 day?	Mon 13/9/21	Mon 13/9/21	
5		→	Select business location	1 day?	Mon 13/9/21	Mon 13/9/21	
6		→	Set up office	1 day?	Mon 13/9/21	Mon 13/9/21	
7		→	Hire crew	1 day?	Mon 13/9/21	Mon 13/9/21	
8		→	Run promotion	1 day?	Mon 13/9/21	Mon 13/9/21	

Step 4: Enter task durations

At this point, the Project has no estimate of how long each task will take. As a result, there is a question mark in the duration column, and the start and end dates are not yet valid.

CREATING OUR FIRST SCHEDULE

Now we'll update the Project about the duration of each work. Fill in the estimated time in the duration column.



For example, you can type "3d" to select 3 days or "2w" to designate 2 weeks.



		Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾
0			Min Café Project	21 days?	Mon 13/9/21	Mon 11/10/21
1			Make a business plan	5 days	Mon 13/9/21	Fri 17/9/21
2			Get a business license	1 day?	Mon 13/9/21	Mon 13/9/21
3			Create a bank account	1 day?	Mon 13/9/21	Mon 13/9/21
4			Get funding	21 days	Mon 13/9/21	Mon 11/10/21
5			Select business location	5 days	Mon 13/9/21	Fri 17/9/21
6			Set up office	2 days	Mon 13/9/21	Tue 14/9/21
7			Hire crew	10 days	Mon 13/9/21	Fri 24/9/21
8			Run promotion	4 days	Mon 13/9/21	Thu 16/9/21

You'll see from the list that the tasks must be completed in a specified order. The tasks are linked in several ways. For example, we can't get funding without a business license.

It's now time to "link" all tasks and enter the estimated durations

CREATING OUR FIRST SCHEDULE

Step 5: Link tasks in the right sequence

Each task should be completed in a particular order. To carry out the order, let's link the tasks sequentially.

For example, we want a business license should follow after creating a business plan.

	Task Mode	Task Name	Duration	Start	Finish	Predecessors
0		Min Café Project	21 days?	Mon 13/9/21	Mon 11/10/21	
1		Make a business plan	5 days	Mon 13/9/21	Fri 17/9/21	
2		Get a business license	1 day?	Mon 20/9/21	Mon 20/9/21	1
3		Create a bank account	1 day?	Mon 13/9/21	Mon 13/9/21	
4		Get funding	21 days	Mon 13/9/21	Mon 11/10/21	
5		Select business location	5 days	Mon 13/9/21	Fri 17/9/21	

Enter Task 1 as a predecessor of task 2 in the Predecessor column

Task "Get a business license" has been moved to the right of the task "Create business strategy" (refer to blue taskbars).

Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Add New Co	13 Sep '21							20 Sep '21							27 S			
0	Min Café Project	21 days?	Mon 13/9/21	Mon 11/10/21				F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
1	Make a business plan	5 days	Mon 13/9/21	Fri 17/9/21																					
2	Get a business license	1 day?	Mon 20/9/21	Mon 20/9/21	1																				
3	Create a bank account	1 day?	Mon 13/9/21	Mon 13/9/21																					
4	Get funding	21 days	Mon 13/9/21	Mon 11/10/21																					
5	Select business location	5 days	Mon 13/9/21	Fri 17/9/21																					
6	Set up office	2 days	Mon 13/9/21	Tue 14/9/21																					
7	Hire crew	10 days	Mon 13/9/21	Fri 24/9/21																					
8	Run promotion	4 days	Mon 13/9/21	Thu 16/9/21																					

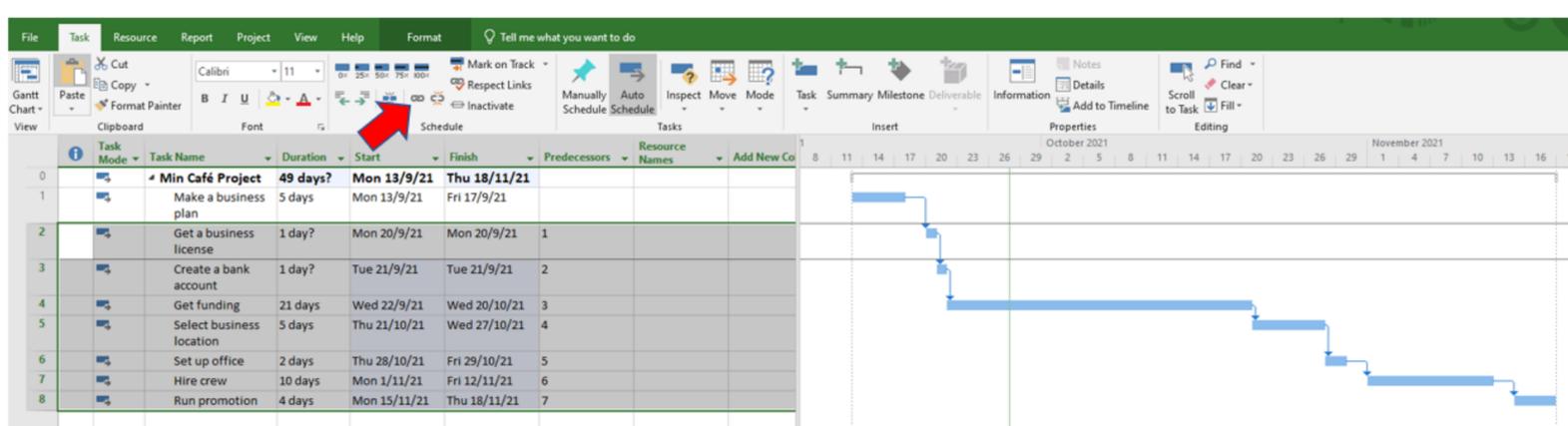
CREATING OUR FIRST SCHEDULE

The next step is to put the remaining tasks in the correct order. To do this, we can use the alternate method of linking dependent activities.

Select the remaining tasks in rows 2-8

		Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Predecessors ▾	Resource Names ▾
0			Min Café Project	21 days?	Mon 13/9/21	Mon 11/10/21		
1			Make a business plan	5 days	Mon 13/9/21	Fri 17/9/21		
2			Get a business license	1 day?	Mon 20/9/21	Mon 20/9/21	1	
3			Create a bank account	1 day?	Mon 13/9/21	Mon 13/9/21		
4			Get funding	21 days	Mon 13/9/21	Mon 11/10/21		
5			Select business location	5 days	Mon 13/9/21	Fri 17/9/21		
6			Set up office	2 days	Mon 13/9/21	Tue 14/9/21		
7			Hire crew	10 days	Mon 13/9/21	Fri 24/9/21		
8			Run promotion	4 days	Mon 13/9/21	Thu 16/9/21		

Click the link button on the Task tab.



Our tasks are now in the correct order, and the Gantt chart has been updated.

Step 6: Adding Resources

To complete the project's tasks, you'll need resources. They can be people, equipment, facilities, financing, or anything else (excluding labor) required to finish a project assignment. The key to successful project management is optimal resource scheduling.



Work resources

People and equipment to execute the tasks.



Cost resources

A task's financial cost. Expenses for travel, food, and other items.



Material resources

Consumable items that are used to complete tasks in a project.

Work Resource Names

You can name your resource according to your convenience.

Resource	Example
Identified person.	Christ, Amy
A job or group	Engineer, Trainer, Typist
Equipment	Photostat machine, Printer

Step 7: Add a milestone to your schedule

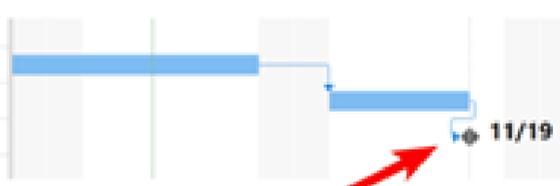
You have certain milestones to work towards across every project. Milestones are specific points in time whenever a goal must be fulfilled. We haven't yet included any milestones, so let's do that right now.

Create a new milestone called 'Business fully set up' to mark the completion of our business setup.

By setting a task's duration to zero, you can establish a milestone (zero days).

Grey diamonds represent milestones:

	furniture					
7	Hire team	10 days	11/2/2020	11/13/2020	6	
8	Run promotion	4 days	11/16/2020	11/19/2020	7	
9	Business fully set up	0 days	11/19/2020	11/19/2020	8	11/19



The milestone we entered also represents the project's estimated completion date.

4.

PRACTISE A PROJECT PLANNING

Practicing planning a project based on the scenario given

Scenario

Mr. Shahril wants to build a new house for their family. To make sure the new home is ready on time, a project has been defined to contains the following list of activities along with their required times for completion. The most important stage in managing the construction project is planning. Parts of project planning include accounting for and gathering the tools and supplies needed for the job. He found 8 things for him to consider before building a new house as follow:-

PRACTISE A PROJECT PLANNING

Things to consider before building a house



After assessing the needs that have been considered, he met with the manager construction company to discuss the design plan of the house, the estimated construction cost, and the facilities that will be obtained before the agreement is made by both parties. A contract for new home construction will describe in details and include a listing of all the parts to be included in the house

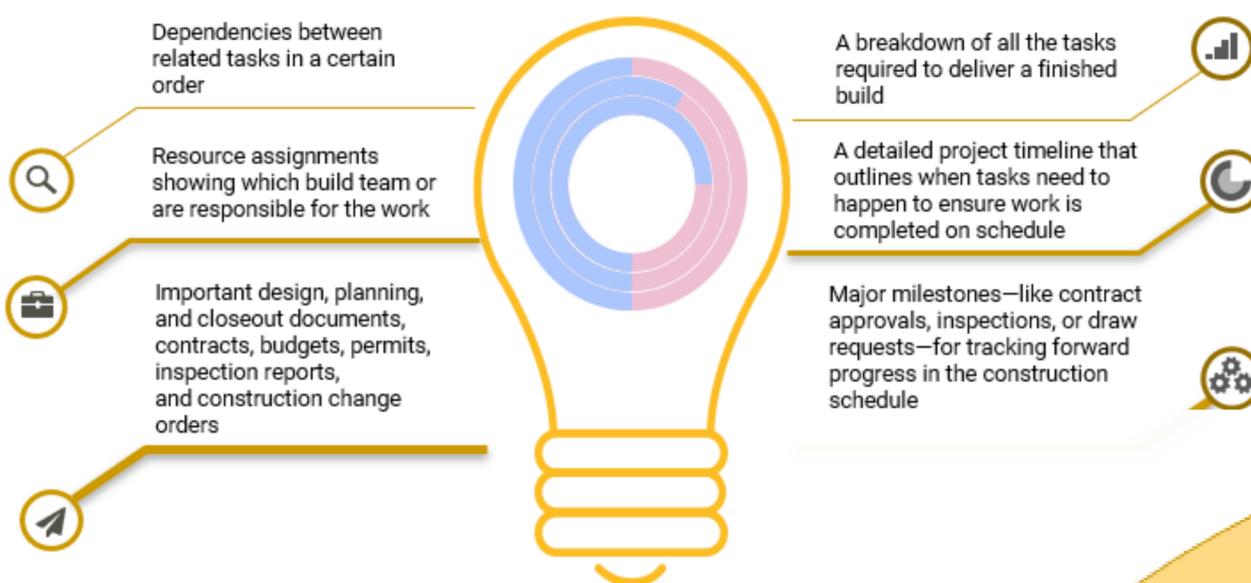
Construction Planning & Timeline

Finishing a construction project on time and on budget is every builder's goal. So how do you set yourself up for success? Whether you're renovating a bathroom or building a new home from the ground up, every construction project starts with a plan.

What is a construction plan?

A construction plan is a document that outlines the tasks, resources, and requirements needed to complete a build on time and budget.

What is a construction plan?



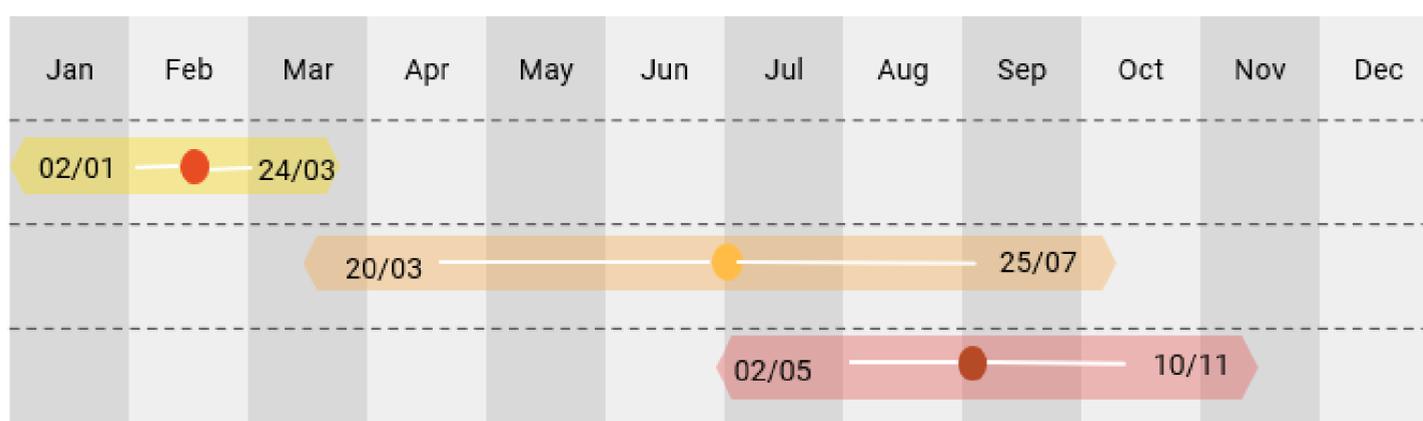
PRACTISE A PROJECT PLANNING

Construction Planning & Timeline

P-D-C-A Flow



Construction planning roughly



● Milestone 1
12/02

Pre-Construction

Floor Design
Approval
Permit

● Milestone 2
30/06

Construction

Site work and
foundation

● Milestone 3
05/09

Closeout

Final inspections
Client walk-through

PRACTISE A PROJECT PLANNING

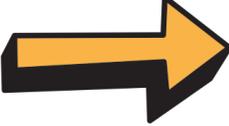
Construction Planning & Timeline

Steps Activity the Home Building Process

Activity No	Activity	Duration	Dependency
1.0	Pre-Construction		
1.1	Design and planning	1 month	
1.2	Sample approval	1 week	2
1.3	Bids and Contracts	2 weeks	3
1.4	Contract Execution	0	4
2.0	Prepare the site for construction and Pour Foundation:		
2.1	Obtaining Permits and Applying for Permits	7	5
2.2	A construction crew levels the ground.	8	7
2.3	Installs temporary foundation forms made of wood.	9	8
2.4	The Footings Have Been Installed	10	8,9
	Draw #1	0	10
3.0	Complete the Rough Framing		
3.1	The floor, wall, and roof systems have all been completed.	7	11
3.2	Exterior Walls are sheathed and protected with protective wrap.	5	13
	Draw #2	0	14
4.0	Rough Plumbing, Electrical, and HVAC		
4.1	Pipes Wires	12	15
4.2	Vents and Sewer Lines	10	17,15FS + 2 days
4.3	Lines of Water Supply	15	18

PRACTISE A PROJECT PLANNING

Construction Planning & Timeline

 *continue*

Activity No	Activity	Duration	Dependency
4.4	Shower Units and Bathtubs	3	19FF+3 days
4.5	Ductwork for a Heating and Air Conditioning System	7	20
4.6	Vent Pipes in the HVAC System	13	21
	Draw #3	0	22
5.0	Install Insulation		
5.1	Fiberglass	8	23
5.2	Cellulose	4	25
5.3	Mineral Wool Foam	5	26
5.4	Blocks of Concrete	7	27FS+5 days
5.5	Concrete Forms for Insulation	10	28
5.6	Foam Spray	7	29
5.7	Insulated Panels for Structural Use	15	30
5.8	Ridged Foam vs. Foam Board	12	31
	Draw #4	0	32
6.0	Complete the Drywall and Interior Fixtures, Start Exterior Finishes		
6.1	Drywall is Hung and Taped	20	33
6.2	The texturing has been completed.	7	35FF+4 days
6.3	Paint is applied to the first coat.	1 week	36
6.4	The exterior finishes (brick, stucco, and stone) are applied.	1 month	37SS+5 days

PRACTISE A PROJECT PLANNING

Construction Planning & Timeline



Activity No	Activity	Duration	Dependency
7.0	Finish Interior Trim, Install Exterior Walkways and Driveway		
7.1	Installed doors, windowsills, and decorative trim	10	38
7.2	Installed cabinets, vanities, and fireplace mantles	15	40
7.3	The Last Coat of Paint	7	41
	Draw #5	0	42
8.0	Install Hard Surface Flooring, Countertops; Complete Exterior Grading	3 weeks	43
9.0	Finish Mechanical Trims; Install Bathroom Fixtures	2 weeks	44
10.0	Install Mirrors, Shower Doors; Finish Flooring, Exterior Landscaping	1 month	45
11.0	Final Walk-Through	2 weeks	46
12.0	Move - in	0	47

PRACTISE A PROJECT PLANNING

Plan the Project:

1. Start New Project File

- Change Working time before start the planning task

Click on the date for setting nonworking day (public holiday)

Name	Start	Finish
1 New Year's Day	01/01/2021	01/01/2021
2 Chinese New Year's	12/02/2021	13/02/2021
3 First Day of Ramadan	13/04/2021	13/04/2021
4 Declaration of Malacca	15/04/2021	15/04/2021
5 Labour Day	01/05/2021	01/05/2021
6 Hari Raya Aidilfitri	13/05/2021	14/05/2021

2. Project start Date: 01 Jan 2021

Project Information for 'Project1'

Start date: Fri 01/01/21 Current date: Tue 21/09/21

Finish date: Thu 23/09/21 Status date: NA

Schedule from: Project Start Date Calendar: Standard

All tasks begin as soon as possible. Priority: 500

Enterprise Custom Fields

Custom Field Name	Value
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3. Show the Project Summary

Format

Outline Number

Project Summary Task

Summary Tasks

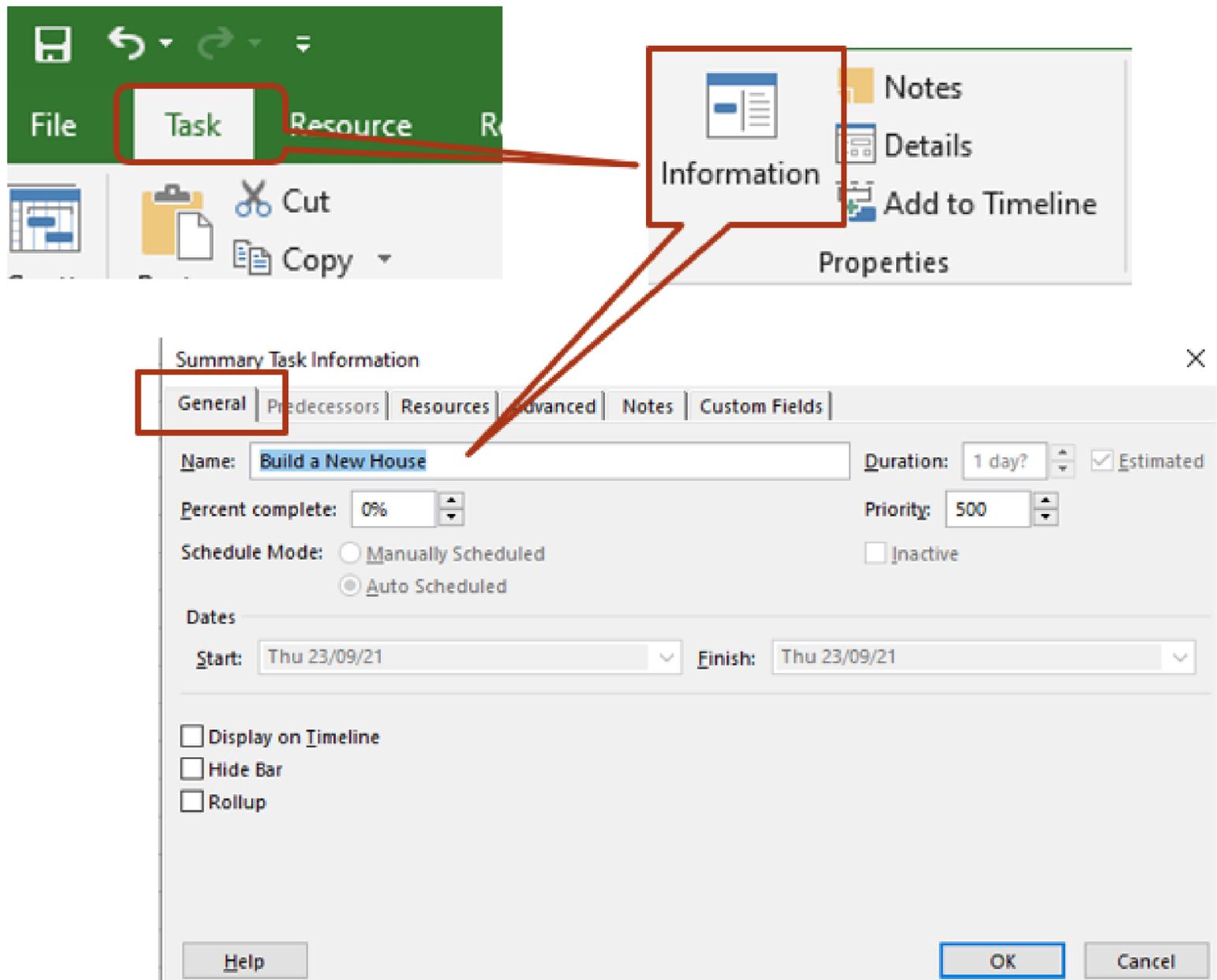
Show/Hide

Drawing

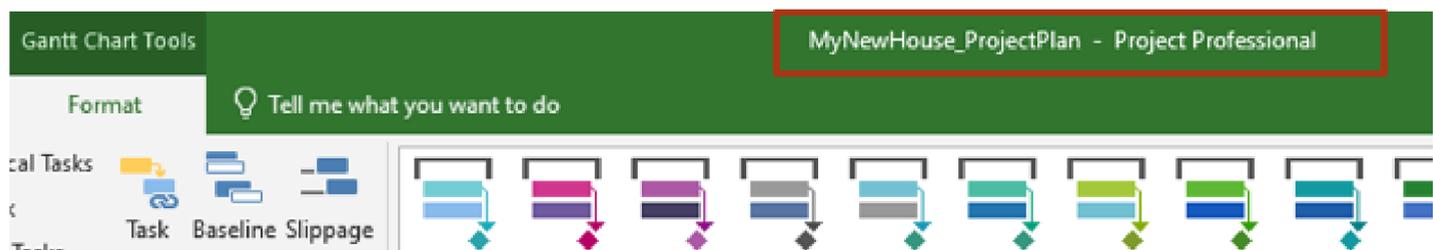
Drawings

PRACTISE A PROJECT PLANNING

4. Project Title “**Build a New House**”



5. Save your New Project File as “MyNewHouse_ProjectPlan.mpp”



PRACTISE A PROJECT PLANNING

6. Enter Task with Details as listed in the table below :
7. Set WBS for :

a. Pre-Construction:

Design and Planning:

Sample approval

Bids and Contracts

Contract Execution

b. Prepare the site for construction and Pour Foundation:

Obtaining Permits and Applying for Permits

A construction crew levels the ground.

Installs temporary foundation forms made of wood.

The Footings Have Been Installed.

c. Complete the Rough Framing

The floor, wall, and roof systems have all been completed.

Exterior Walls are sheathed and protected with protective wrap.

d. Rough Plumbing, Electrical, and HVAC

Pipes and Wires

Sewer Lines and Vents

Lines of Water Supply

Shower Units and Bathtubs

Ductwork for a Heating and Air Conditioning System

Vent Pipes in the HVAC System

e. Install Insulation

Fiberglass

Cellulose

Mineral Wool Foam

Blocks of Concrete

Concrete Forms for Insulation

Spray Foam

Insulated Panels for Structural Use

Ridged Foam vs. Foam Board

f. Complete the Drywall and Interior Fixtures, Start Exterior Finishes

Drywall is Hung and Taped

The texturing has been completed.

Paint is applied to the first coat.

The exterior finishes (brick, stucco, and stone) are applied.

g. Finish Interior Trim, Install Exterior Walkways and Driveway

Installed doors, windowsills, and decorative trim.

Installed cabinets, vanities, and fireplace mantles.

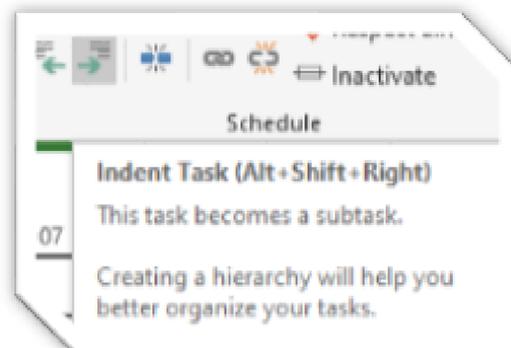
The Last Coat of Paint.

PRACTISE A PROJECT PLANNING



Create sub-task

Click the **Indent Task** in the **Schedule Group** on the **Task** tab
(Alt+Shift+Right) to create subtask

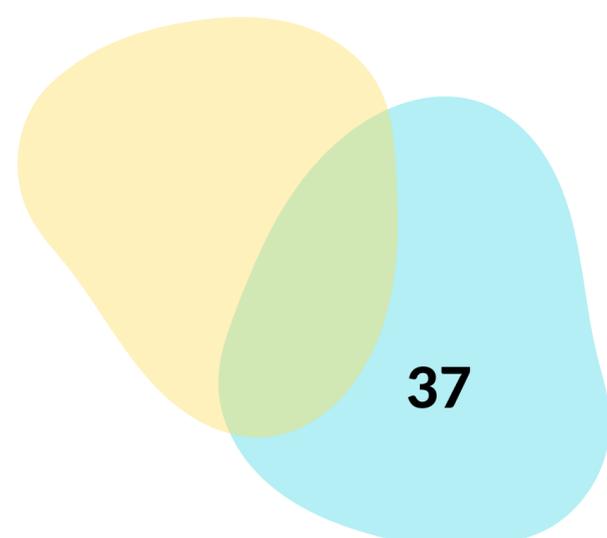


Task Mode	Task Name	Duration	Start	Finish	Predecessors
	MyNewHouse_Pro	190 days?	Fri 01/01/21	Thu 23/09/21	
	Pre-Construction	35 days	Fri 01/01/21	Thu 18/02/21	
	Design and planning	1 mon	Fri 01/01/21	Thu 28/01/21	
	Sample approvals	1 wk	Fri 29/01/21	Thu 04/02/21	4
	Bids and Contracts	2 wks	Fri 05/02/21	Thu 18/02/21	5
	Contract Execution	0 days	Thu 18/02/21	Thu 18/02/21	6
	Prepare Construction Site and Pour Foundation	42 days	Fri 19/02/21	Mon 19/04/21	
	Apply for and Acquire	7 days	Fri 19/02/21		
	Construction Crew Levels	15 days	Tue 02/03/21		
	Puts Up Wooden Forms for the Temporary	10 days	Tue 23/03/21		
	Footings Are Installed	10 days	Tue 06/04/21		
	Draw #1	0 days	Mon 19/04/21		

Task Name	Duration	Start	Finish	Predecessors
Prepare Construction Site and Pour Foundation	69 days	Wed 22/09/21	Wed 29/12/21	
Sheathing Applied to Exterior Walls, Covered With Protective V	5 days	Wed 22/09/21	Tue 28/09/21	

Sample output

Press key **O** or Click on
 1. Dropdown arrow
 2. Checkbox
 To set Predecessors



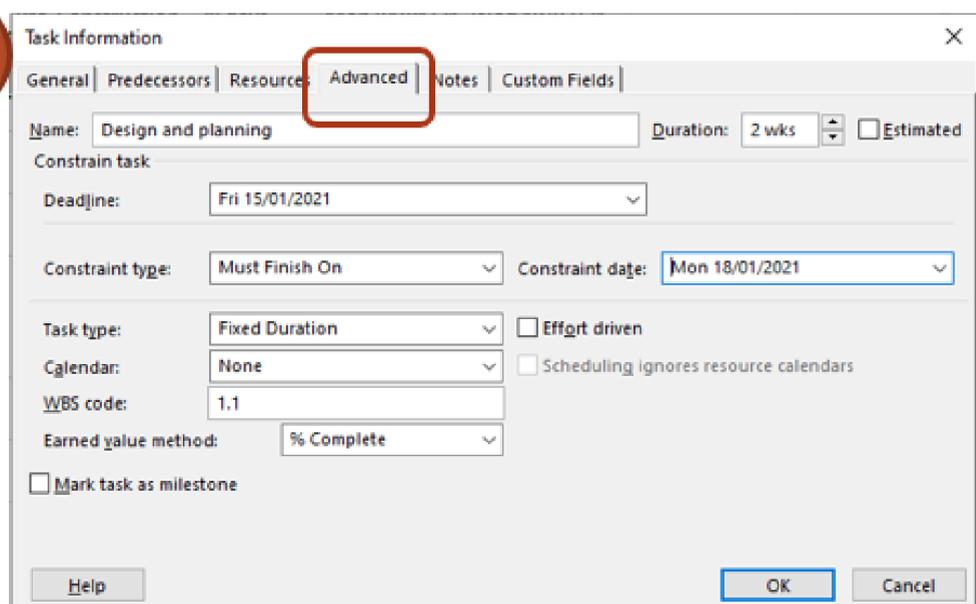
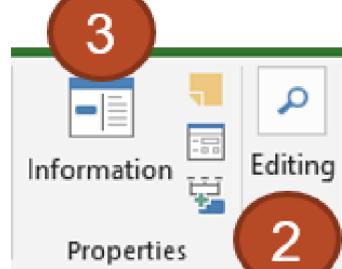
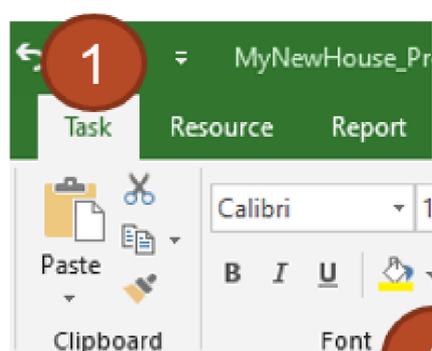
PRACTISE A PROJECT PLANNING

8. Set Constraint for:

Task Name	Constraint Type	Constraint Date
Design and planning	MFO	18/01/2021
The Footings Have Been Installed	SNET	26/03/2021
Ductwork for a Heating and Air Conditioning System	MFO	25/06/2021
Fiberglass	SNLT	16/07/2021
Move-in	ASAP	26/04/2022

Constraint setting:

On Task Tab **1**, in Properties Group **2**, click Information view **3**, Information windows popup **4**, go to Advanced tab and setting constraint



PRACTISE A PROJECT PLANNING

Sample output

	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
0		MyNewHouse_Pro	319 days	Tue 05/01/21	Thu 14/04/22		
1		Pre-Construction	28 days	Tue 05/01/21	Thu 11/02/21		
2		Design and planning	2 wks	Tue 05/01/21	Mon 18/01/21		

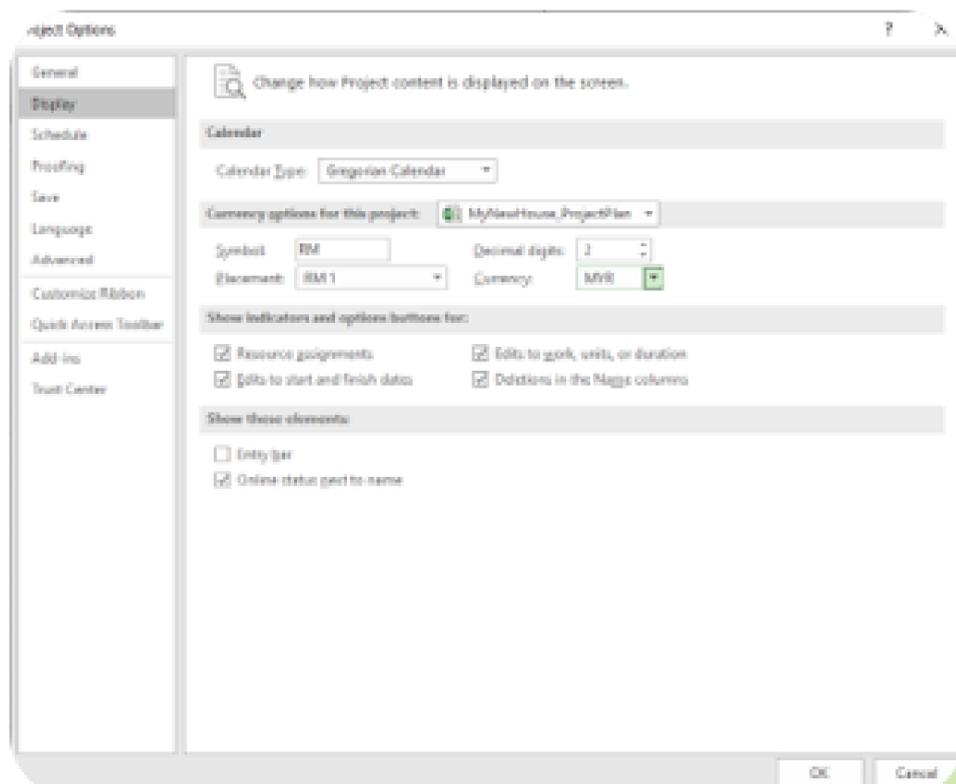
This task has a 'Must Finish On' constraint on Mon 18/01/21.

This task goes past its deadline on Fri 15/01/21

9. Set Constraint for:

Resource Name	Type	Max.	Std. Rate (RM)	Cost/use (RM)
Zakwan Ahmad	Work	100%	2500.00/week	0.00
Color Setting Services	Work	100%	100.00/hour	0.00
Electrical Setting Services	Work	100%	500.00/day	0.00
Plumbing Services	Work	100%	150.00/hour	0.00
Alvin Sean	Work	100%	2000.00/week	0.00
Johny Evans	Work	100%	65.00/hour	
Mr. Shahril	Work	100%	0.00/hour	
Interior Design	Work	100%	200.00/hour	
Exterior Design	Work	100%	200.00/hour	

Tips: How to change Currency Format
On File tab -> Option view -> Display -> Currency option -> OK



PRACTISE A PROJECT PLANNING

	Resource Name	Type	Material Label	Initial	Gr	Ma Un	Std. Rate	Ovt. Rate	Cost/Use	Accrue At	Base Calendar
1	Zakwan Ahmad	Work		Z		1	RM 2,500.00/wk	RM 0.00/hr	RM 0.00	Prorated	Standard
2	Color Setting Services	Work		C		1	RM 100.00/hr	RM 0.00/hr	RM 0.00	Prorated	Standard
3	Electrical Setting Services	Work		E		1	RM 500.00/day	RM 0.00/hr	RM 0.00	Prorated	Standard
4	Plumbing Services	Work		P		1	RM 150.00/hr	RM 0.00/hr	RM 0.00	Prorated	Standard
5	Alvin Sean	Work		A		1	RM 2,000.00/wk	RM 0.00/hr	RM 0.00	Prorated	Standard
6	Johny Evans	Work		J		1	RM 65.00/hr	RM 0.00/hr	RM 0.00	Prorated	Standard

Sample Output

10. Assign Resources to :

Resource Name	Assigned to task
Zakwan Ahmad	Draw #1, Final Walk-Through
Color Setting Services	The Last Coat of Paint, Draw #5
Electrical Setting Services	Fiberglass, Draw #4
Plumbing Services	Draw # 3, Pipes and Wires
Alvin Sean	Design and planning, Draw # 2, Final Walk-Through
Johny Evans	Draw # 3, Draw #4, Final Walk-Through
Interior Design	Draw #5
Exterior Design	The exterior finishes (brick, stucco, and stone) are applied.
Mr. Shahril	Move - in

Sample Assign Resources to:

Task ID	Task Name	Duration	Start Date	End Date	Resources
15	Draw #2	0 days	Thu 29/04/21	Thu 29/04/21	14
16	Complete Rough Plumbing, Electrical HVAC	50 days	Fri 30/04/21	Wed 14/07/21	
17	Pipes and Wires	7 days	Fri 30/04/21	Mon 10/05/21	15
18	Sewer Lines and Vents	5 days	Tue 11/05/21	Wed 19/05/21	17,15FS+2 days
19	Water Supply Lines	15 days	Thu 20/05/21	Fri 11/06/21	18
20	Bathtubs, Shower Units	3 days	Mon 14/06/21	Wed 16/06/21	19FF+3 days
21	Ductwork for HVAC System	7 days	Thu 17/06/21	Fri 25/06/21	20

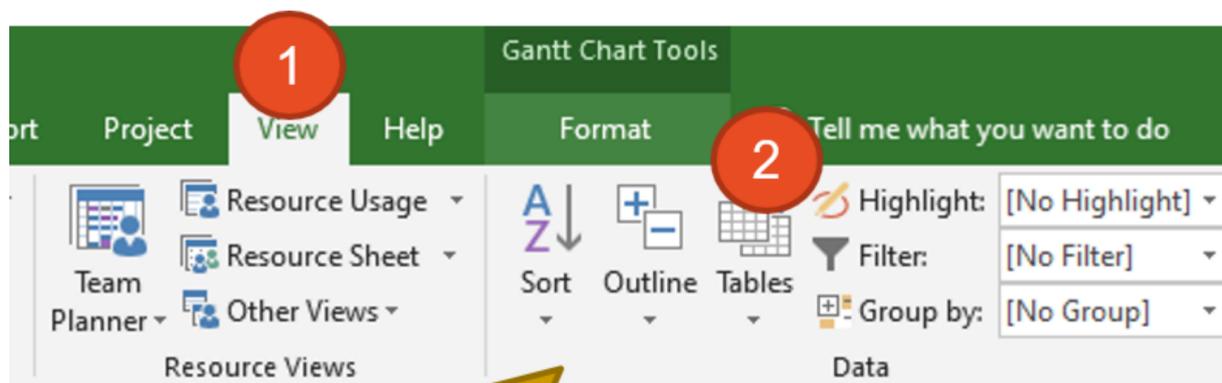
Resource Selection List:

- Alvin Sean
- Color Setting Services
- Electrical Setting Services
- Johny Evans
- Plumbing Services
- Zakwan Ahmad

PRACTISE A PROJECT PLANNING

11. Enter fixed cost for: (Table Cost. Gantt Chart View)

Task Name	Fixed Cost
Footings Are Installed	RM7,000.00
Floor System, Walls, Roof Systems Are Completed	RM20,000.00
Doors, Windowsills, Decorative Trim Installed	RM15,000.00
Cabinets, Vanities, Fireplace Mantles Installed	RM25,000.00
Install Hard Surface Flooring, Countertops; Complete Exterior Grading	RM10,000.00



On View tab, in Data group, click on Tables

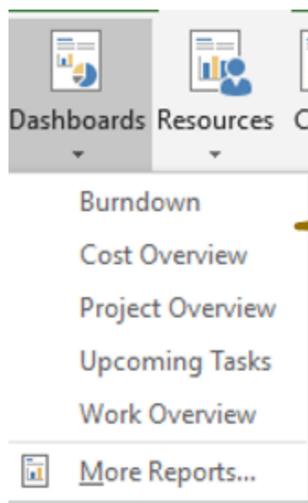
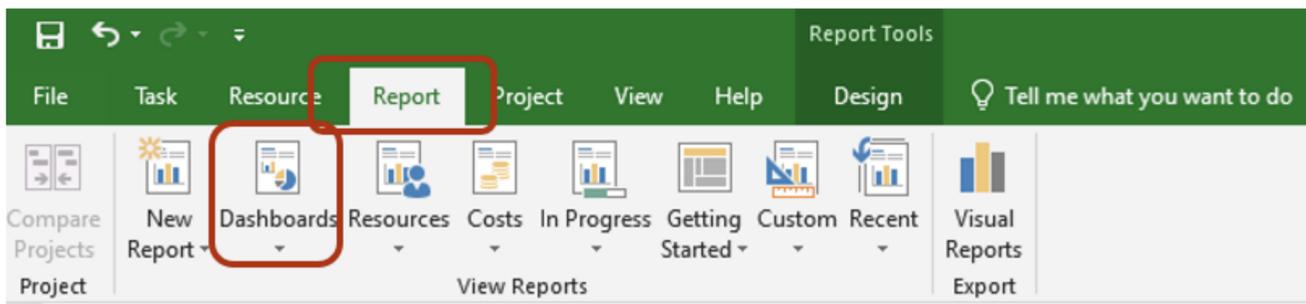
Task Name	Fixed Cost	Fixed Cost Accrual	Total Cost	Baseline	Variance
0 MyNewHouse_ProjectPlan	RM 0.00	Prorated	RM 145,200.00	RM 0.00	145,200.00
1 Pre-Construction	RM 0.00	Prorated	RM 4,000.00	RM 0.00	RM 4,000.00
2 Design and planning	RM 0.00	Prorated	RM 4,000.00	RM 0.00	RM 4,000.00
3 Sample approval	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
4 Bids and Contracts	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
5 Contract Execution	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
6 Prepare Construction Site and Pour Foundation	RM 0.00	Prorated	RM 7,000.00	RM 0.00	RM 7,000.00
7 Apply for and Acquire Permits	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
8 Construction Crew Levels Site	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
9 Puts Up Wooden Forms for the Temporary Foundation	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
10 Footings Are Installed	RM 7,000.00	Prorated	RM 7,000.00	RM 0.00	RM 7,000.00
11 Draw #1	RM 0.00	Prorated	RM 0.00	RM 0.00	RM 0.00
12 Complete Rough Framing	RM 0.00	Prorated	RM 20,000.00	RM 0.00	RM 20,000.00
13 Floor System, Walls, Roof Systems Are Completed	RM 20,000.00	Prorated	RM 20,000.00	RM 0.00	RM 20,000.00

Sample Output

PRACTISE A PROJECT PLANNING

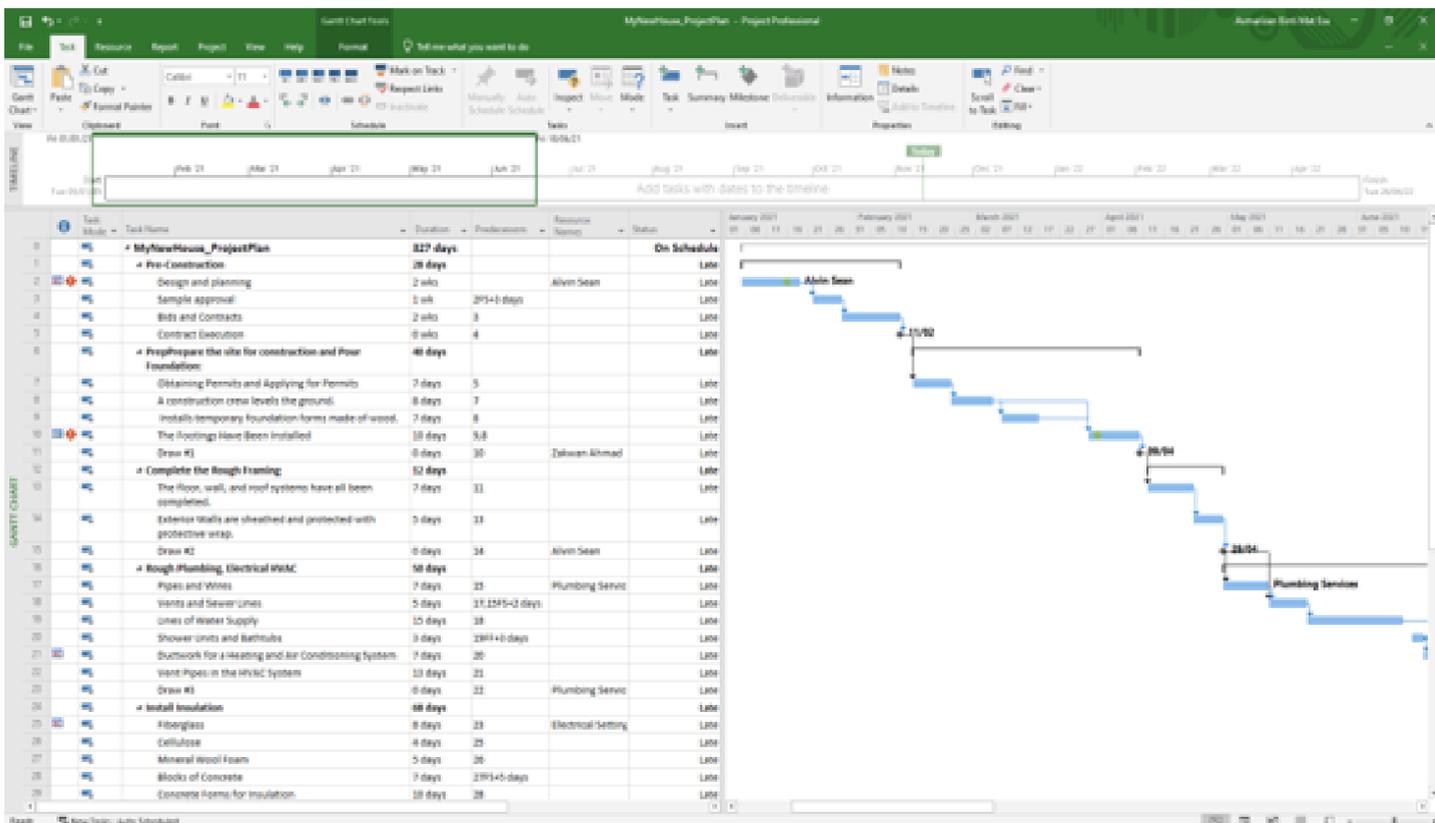
12. View a Dashboard

On Report Tab, in View Reports Group, Click Dashboard



Types of report can be choose

13. Save file and Close



PRACTISE A PROJECT PLANNING

Do more with Gantt chart

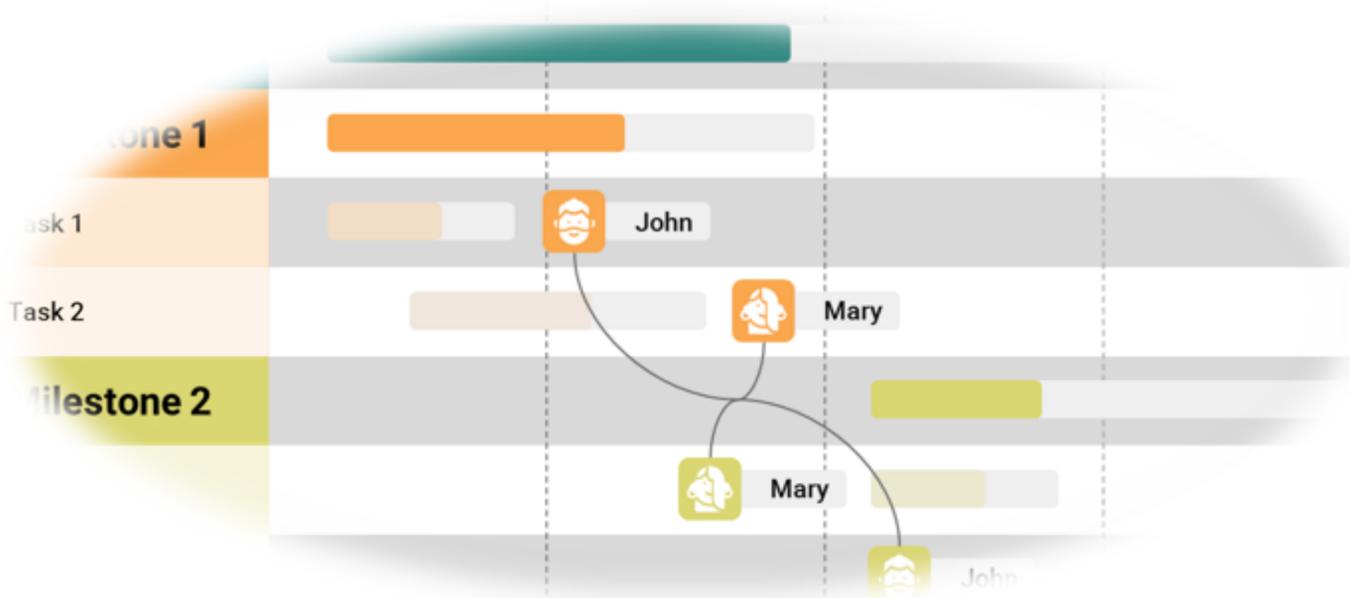


Benefits of Using Gantt Chart in Project Management

	Improved cohesion and improved communication
	Measure project progress
	Time management
	Look at task dependencies
	Motivate remote team members
	Avoid overload

Conclusion

Gantt charts are an ideal option for project teams to use to organize different tasks, monitor project progress, and get an overview of project implementation. Nowadays, Gantt charts are widely available in development teams as well as in IT project management. Gantt charts can be extended to other areas to plan tasks, especially in large teams.



References:

1. Chatfield, C., & Johnson, T. (2016). Microsoft Project 2016 Step by Step (1st ed.). Microsoft Press.
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4. Raymond, B. (2016, November 2020). Tutorial: Build a simple project plan with Microsoft Project. TechGenix.
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5. GanttPRO. (2021, September 29). GanttPRO. Gantt ChartGanttPRO Blog. <https://blog.ganttpro.com/en/>

Managing a Project using Ms Project

A book for users who wish to learn how to use Ms Project to plan and manage projects

WRITERS

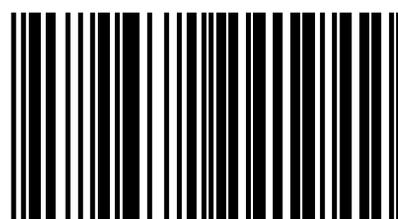


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