

# Lecture 13

## Introduction to MS Project

**Ferdinand Fassa**

# Outline

- Review lecture 12
- What is Microsoft Project?
- Short History of MSP
- TUTORIAL MS Project

# What is Microsoft Project?

- Microsoft Project (or MSP) is a project management software program
- It is designed to assist project managers in:
  - developing plans
  - assigning resources to tasks
  - tracking progress
  - managing budgets
  - analyzing workloads

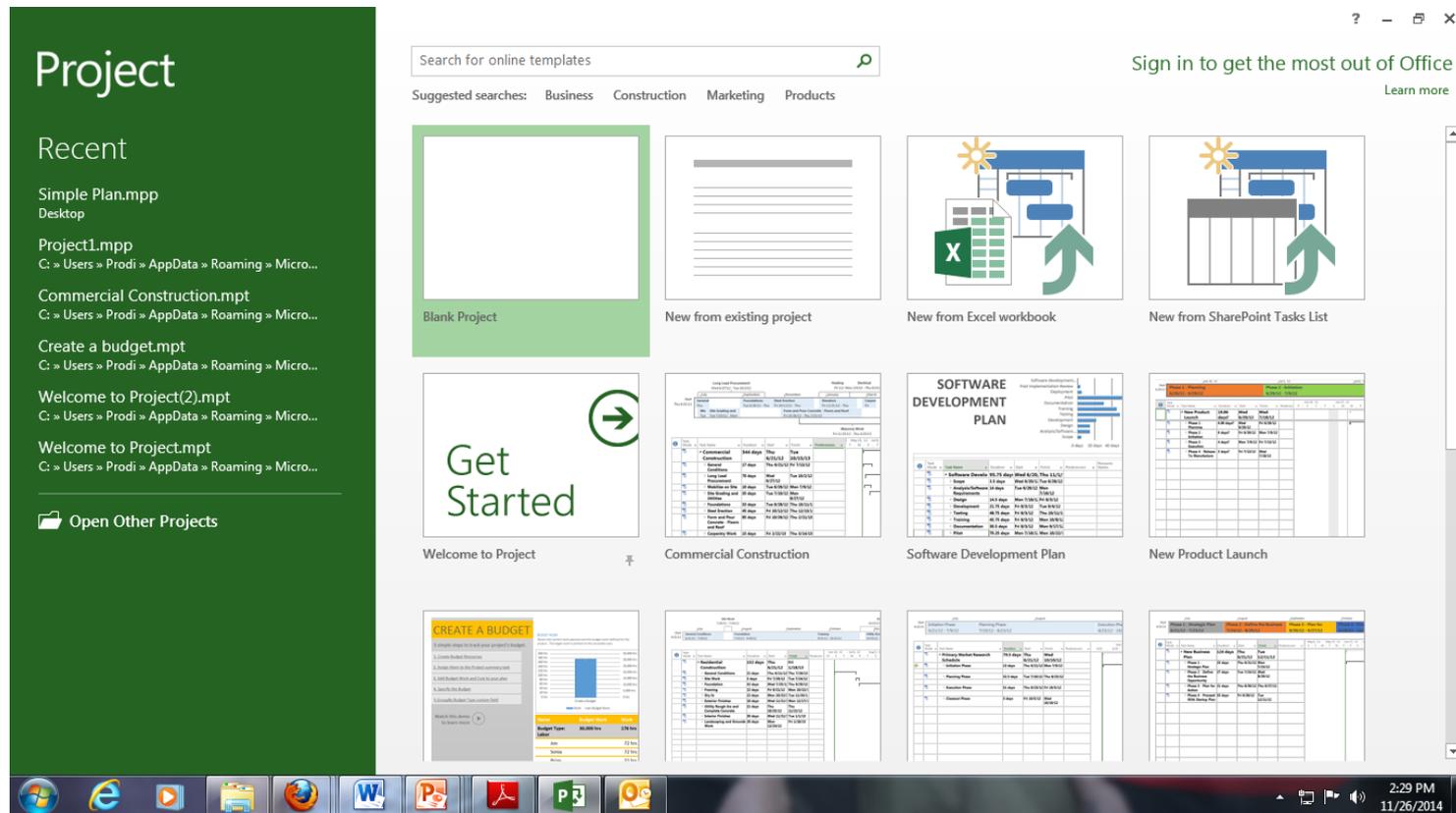
# Short History of MSP

- The first Windows version in 1990
- During 1990's there were also versions for Mac
- The latest version for Windows is Microsoft Office

Project 2013

# TUTORIAL

## 1. Go to file, select Blank Project.



# TUTORIAL

1. Set all criteria.
2. Click File, then Project Option

The screenshot displays the Microsoft Project interface with the 'Project Options' dialog box open. The background shows a Gantt chart with a task list. The 'FILE' menu is circled in blue, and an arrow points to the 'Project Options' dialog box. The dialog box is titled 'Project Options' and has the 'General' tab selected. The 'General' tab contains the following sections and settings:

- General options for working with Project.**
- User Interface options:** ScreenTip style: Show feature descriptions in ScreenTips
- Project view:** Default view: Gantt with Timeline; Date format: Wed 1/28/09
- Personalize your copy of Microsoft Office:** User name: Prodi T. Sipil-UPJ; Initials: PTS;  Always use these values regardless of sign in to Office.; Office Theme: Light Gray
- Start up options:**  Show the Start screen when this application starts

The Gantt chart in the background shows a task list with the following items:

Task Name
1 1 Pendahuluan
2 1.1 Pengukuran dan Pa
3 1.2 Air kerja + Listrik K
4 1.3 Gudang Material
5 1.4 Buangan sampah
6 2 Pekerjaan Tanah
7 2.1 Galian Pondasi & S
8 2.2 Urugan pasir bawah T=100 mm
9 2.3 Pondasi batu kali, a
10 2.4 Lantai kerja bawah
11 2.5 Urugan tanah kemb
12 2.6 Urugan tanah untuk
13 2.7 Rabat beton dibawa
14 2.8 Urugan pasir bawah
15 2.9 Anti rayap
16 3 Pekerjaan Struktur La
17 3.1 Beton
18 3.1.1 Sloof
19 3.1.2 Kolom 1

# TUTORIAL

1. Click Schedule, Change week start, and change new task created into auto schedule

The screenshot displays the Microsoft Project software interface with the 'Project Options' dialog box open. The 'Schedule' tab is selected in the dialog box. The 'Calendar options for this project' section shows 'Project1' selected, with 'Week starts on' set to 'Sunday', 'Fiscal year starts in' set to 'January', and 'Use starting year for F numbering' unchecked. The 'Default start time' is '8:00 AM' and the 'Default end time' is '5:00 PM'. The 'Hours per day' is '8', 'Hours per week' is '40', and 'Days per month' is '20'. The 'Schedule' section has 'Show scheduling messages' checked and 'Show assignment units as a' set to 'Percentage'. The 'Scheduling options for this project' section shows 'Project1' selected, with 'New tasks created' set to 'Project Start Date', 'Auto scheduled tasks scheduled on' set to 'Project Start Date', 'Duration is entered in' set to 'Days', and 'Work is entered in' set to 'Hours'. The 'Default task type' is 'Fixed Units'. There are several checkboxes at the bottom: 'New tasks are effort driven' (unchecked), 'Autolink inserted or moved tasks' (unchecked), 'Split in-progress tasks' (checked), 'Tasks will always honor their constraint dates' (checked), 'Show that scheduled tasks have estimated durations' (checked), and 'New scheduled tasks have estimated durations' (checked). The main software interface shows a Gantt chart and a task list with the following tasks:

Task Name
1 1 Pendahuluan
2 1.1 Pengukuran dan Pa
3 1.2 Air kerja + Listrik K
4 1.3 Gudang Material
5 1.4 Buangan sampah
6 2 Pekerjaan Tanah
7 2.1 Galian Pondasi & S
8 2.2 Urugan pasir bawah T=100 mm
9 2.3 Pondasi batu kali, a
10 2.4 Lantai kerja bawah
11 2.5 Urugan tanah kemb
12 2.6 Urugan tanah untuk
13 2.7 Rabat beton dibawa
14 2.8 Urugan pasir bawah
15 2.9 Anti rayap
16 3 Pekerjaan Struktur La
17 3.1 Beton
18 3.1.1 Sloof
19 3.1.2 Kolom 1



# Insert the WBS

Project1 - Project Professional

FILE TASK RESOURCE REPORT PROJECT VIEW FORMAT

Clipboard: Cut, Copy, Paste, Format Painter  
Font: Arial, 10  
Schedule: Mark on Track, Respect Links, Inactivate  
Tasks: Manually Schedule, Auto Schedule, Inspect, Move, Mode  
Insert: Task, Summary, Milestone, Deliverable  
Properties: Information, Notes, Details, Add to Timeline  
Editing: Find, Clear, Scroll to Task, Fill

TIMELINE

Today

Start: Wed 11/26/14 8:00 AM

Finish: Wed 11/26/14 4:00 PM

Add tasks with dates to the timeline

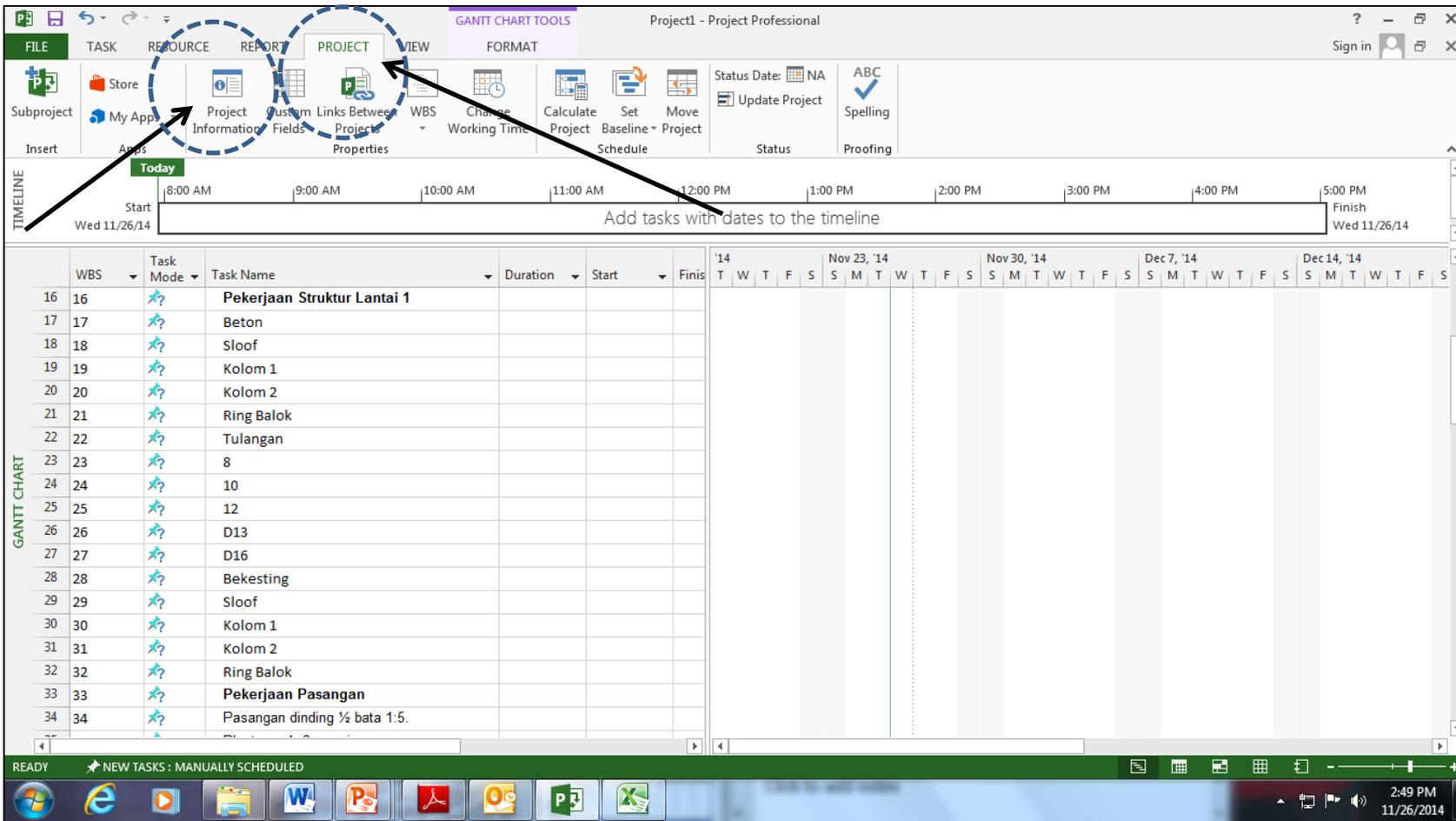
	WBS	Task Mode	Task Name	Duration	Start	Finis	'14							Nov 23, '14							Nov 30, '14							Dec 7, '14							Dec 14, '14						
							T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S									
1	1		<b>Pendahuluan</b>																																						
2	2		Pengukuran dan Pasang Bowplank																																						
3	3		Air kerja + Listrik Kerja																																						
4	4		Gudang Material																																						
5	5		Buangan sampah																																						
6	6		<b>Pekerjaan Tanah</b>																																						
7	7		Galian Pondasi & Sloof																																						
8	8		Urugan pasir bawah pondasi & Sloof, T=100 mm																																						
9	9		Pondasi batu kali, adukan 1:5																																						
10	10		Lantai kerja bawah pondasi, T=50 mm																																						
11	11		Urugan tanah kembali samping pondasi																																						
12	12		Urugan tanah untuk peninggian lantai																																						
13	13		Rabat beton dibawah lantai, T=100 mm																																						
14	14		Urugan pasir bawah lantai, T 100 mm																																						
15	15		Anti rayap																																						
16	16		<b>Pekerjaan Struktur Lantai 1</b>																																						
17	17		Beton																																						
18	18		Sloof																																						
19	19		Kolom 1																																						

READY NEW TASKS : MANUALLY SCHEDULED

2:43 PM 11/26/2014

# Basic Project Information

- From the “Project” menu select “Project Information” and enter the project start date.



The screenshot displays the Microsoft Project Professional interface. The 'PROJECT' menu is highlighted with a dashed blue circle, and the 'Project Information' option is selected, indicated by a black arrow. The 'Project Information' dialog box is open, showing the 'Project Information' tab. The 'Start' date is set to 'Wed 11/26/14'. The 'Timeline' section shows a scale from 8:00 AM to 5:00 PM. The 'GANTT CHART' section shows a list of tasks with their WBS, Task Mode, Task Name, Duration, Start, and Finish dates. The tasks are:

WBS	Task Mode	Task Name	Duration	Start	Finish
16		Pekerjaan Struktur Lantai 1			
17		Beton			
18		Sloof			
19		Kolom 1			
20		Kolom 2			
21		Ring Balok			
22		Tulangan			
23		8			
24		10			
25		12			
26		D13			
27		D16			
28		Bekesting			
29		Sloof			
30		Kolom 1			
31		Kolom 2			
32		Ring Balok			
33		Pekerjaan Pasangan			
34		Pasangan dinding 1/2 bata 1:5.			

# Basic Project Information

- From the “Project” menu select “Project Information” and enter the project start date.
- Double click on “task mode” then choose “WBS” name OR
- You can delete the two left-most columns, “i” and “task mode” by highlighting these columns and pressing the “delete” key (not needed by us)

The screenshot displays the Microsoft Project Professional interface. The 'PROJECT' tab is active, and the 'Project Information' dialog box is open. The dialog box shows the following settings:

- Start date: Wed 11/26/14
- Current date: Wed 11/26/14
- Finish date: Wed 11/26/14
- Status date: NA
- Schedule from: Project Start Date
- Calendar: Standard
- Priority: 500
- Enterprise Custom Fields: Department (empty)

The background Gantt chart shows a task list with columns for WBS, Task Mode, and Task Name. The task list includes:

WBS	Task Mode	Task Name
16	16	Pekerjaan Struktural
17	17	Beton
18	18	Sloof
19	19	Kolom 1
20	20	Kolom 2
21	21	Ring Balok
22	22	Tulangan
23	23	8
24	24	10
25	25	12
26	26	D13
27	27	D16
28	28	Bekisting
29	29	Sloof
30	30	Kolom 1
31	31	Kolom 2
32	32	Ring Balok
33	33	Pekerjaan Pasangan
34	34	Pasangan dinding 1/2 bata 1:5.

# Enter the major tasks

- Type in the major tasks (WBS level 1) in the “Task Name” box.

The screenshot displays the Microsoft Project Professional interface. The ribbon is set to 'GANTT CHART TOOLS' with the 'PROJECT' tab selected. The 'Task Name' column in the task list is highlighted with a dashed blue circle, and an arrow points to the first task, 'Pekerjaan Struktur Lantai 1'. The timeline shows a start date of Wednesday, 11/26/14, and a finish date of Wednesday, 11/26/14. The task list includes columns for WBS, Task Mode, Task Name, Duration, Start, and Finish. The task list is as follows:

	WBS	Task Mode	Task Name	Duration	Start	Finish
16	16	?	Pekerjaan Struktur Lantai 1			
17	17	?				
18	18	?				
19	19	?				
20	20	?				
21	21	?				
22	22	?				
23	23	?				
24	24	?				
25	25	?				
26	26	?				
27	27	?				
28	28	?				
29	29	?				
30	30	?				
31	31	?				
32	32	?				
33	33	?				
34	34	?				

# Enter the subunit task names

- Type in the name of the subunit task in the “Task Name” field
- Subunits are “indented” with the right arrow on the task bar
- When subunits are so “indented” the major unit will become bold and the Gantt chart bar will change shape
- Choose auto schedule

The screenshot displays the Microsoft Project Professional interface. The ribbon is set to 'GANTT CHART TOOLS' with the 'TASKS' group selected. The 'Auto Schedule' button is circled in blue. Below the ribbon, the 'TIMELINE' section shows a task bar for 'Pekerjaan Struktur Lanta' starting on Wed 11/26/14 and ending on Wed 11/26/14. The 'GANTT CHART' section shows a task list with the following entries:

WBS	Task Mode	Task Name	Duration	Start	Finish
16		<b>Pekerjaan Struktur Lanta</b>	1 day?	Wed 11/26/14	Wed 11/26/14
17		<b>Beton</b>	1 day?	Wed 11/26/14	Wed 11/26/14
18		Sloof			
19		Kolom 1			
20		Kolom 2			
21		Ring Balok			
22		Tulangan			
23		8			
24		10			
25		12			
26		D13			
27		D16			
28		Bekesting			
29		Sloof			
30		Kolom 1			
31		Kolom 2			
32		Ring Balok			
33		<b>Pekerjaan Pasangan</b>			
34		Pasangan dinding ½ bata 1:5.			

# Complete entering WBS

- Process of inserting rows, typing in the task name and indenting the subunit continues until all tasks in the WBS are entered
- Enter predecessor task number(s) in the “Predecessors” field. You need to use the row number, not the WBS code.

The screenshot displays the Microsoft Project Professional interface. The ribbon is set to 'GANTT CHART TOOLS' > 'FORMAT'. The main window is divided into a 'TIMELINE' view at the top and a 'GANTT CHART' view below. The Gantt chart shows a task bar for 'TESSSS' from Thu 04/12/14 to Tue 11/12/14, with a red bar indicating a predecessor relationship. The task list table below is as follows:

WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	TESSSS	6 days?	Thu 04/12/14	Thu 11/12/14		
1.1	1	4 days	Thu 04/12/14	Tue 09/12/14		
1.2	2	4 days	Wed 10/12/14	Mon 15/12/14	2	
1.3	3	6 days	Tue 16/12/14	Tue 23/12/14	3	
1.4	4					

Annotations in the image include a dashed circle around the task list rows 1-5, an arrow pointing to row 1, and a dashed circle around the 'Predecessors' field for task 1.3, which contains the value '3'. The Gantt chart shows a red bar for task 1 and a blue bar for task 1.3, with a red arrow indicating the predecessor relationship from task 1.3 to task 1.

# Display the WBS code

- choose “format bar” and change bar the color.

The screenshot displays the Microsoft Project Professional interface. The 'GANTT CHART TOOLS' ribbon is active, with the 'FORMAT' tab selected. The 'Format Bar Styles' task is highlighted in the ribbon, and a tooltip is visible. The Gantt chart shows a project schedule with tasks and their dependencies. The task list table is visible on the left side of the Gantt chart.

	WBS	Task Name	Duration	Start	Finish	Predecessors
1	1	Fassa	6 days	Thu 04/12/14	Thu 11/12/14	
2	1.1	1	1 day	Thu 04/12/14	Thu 04/12/14	
3	1.2	2	1 day	Fri 05/12/14	Fri 05/12/14	2
4	1.3	3	1 day	Mon 08/12/14	Mon 08/12/14	3
5	1.4	4	1 day	Tue 09/12/14	Tue 09/12/14	4
6	1.5	5	1 day	Wed 10/12/14	Wed 10/12/14	5
7	1.6	6	1 day	Thu 11/12/14	Thu 11/12/14	6
8	2	Fassa 2	6 days	Fri 12/12/14	Fri 19/12/14	
9	2.1	1	1 day	Fri 12/12/14	Fri 12/12/14	7
10	2.2	2	1 day	Mon 15/12/14	Mon 15/12/14	9
11	2.3	3	1 day	Tue 16/12/14	Tue 16/12/14	10
12	2.4	4	1 day	Wed 17/12/14	Wed 17/12/14	11
13	2.5	5	1 day	Thu 18/12/14	Thu 18/12/14	12
14	2.6	6	1 day	Fri 19/12/14	Fri 19/12/14	13
15	3	fassa 3	5 days	Wed 10/12/14	Wed 17/12/14	4
16	3.1	1	1 day	Wed 10/12/14	Wed 10/12/14	
17	3.2	2	1 day	Thu 11/12/14	Thu 11/12/14	16
18	3.3	3	1 day	Fri 12/12/14	Fri 12/12/14	17
19	3.4	4	1 day	Mon 15/12/14	Mon 15/12/14	18

# Set working time

- choose “change working time” on Project menu

The screenshot shows the Microsoft Project Professional interface. The 'PROJECT' menu is open, and the 'Change Working Time' option is highlighted with a blue dashed circle and an arrow. The 'GANTT CHART TOOLS' ribbon is also visible, with the 'FORMAT' tab selected. The Gantt chart shows a project schedule with tasks and dependencies. The status bar at the bottom indicates 'READY' and 'NEW TASKS: MANUALLY SCHEDULED'.

WBS	Task Name	Duration	Start	Finish	Predecessors
1	Fassa	8 days	Thu 04/12/14	Thu 11/12/14	
1.1	1	1 day	Thu 04/12/14	Thu 04/12/14	
1.2	2	1 day	Fri 05/12/14	Fri 05/12/14	2
1.3	3	1 day	Mon 08/12/14	Mon 08/12/14	3
1.4	4	1 day	Tue 09/12/14	Tue 09/12/14	4
1.5	5	1 day	Wed 10/12/14	Wed 10/12/14	5
1.6	6	1 day	Thu 11/12/14	Thu 11/12/14	6
2	Fassa 2	6 days	Fri 12/12/14	Fri 19/12/14	
2.1	1	1 day	Fri 12/12/14	Fri 12/12/14	7
2.2	2	1 day	Mon 15/12/14	Mon 15/12/14	9
2.3	3	1 day	Tue 16/12/14	Tue 16/12/14	10
2.4	4	1 day	Wed 17/12/14	Wed 17/12/14	11
2.5	5	1 day	Thu 18/12/14	Thu 18/12/14	12
2.6	6	1 day	Fri 19/12/14	Fri 19/12/14	13
3	fassa 3	5 days	Wed 10/12/14	Wed 17/12/14	4
3.1	1	1 day	Wed 10/12/14	Wed 10/12/14	
3.2	2	1 day	Thu 11/12/14	Thu 11/12/14	16
3.3	3	1 day	Fri 12/12/14	Fri 12/12/14	17
3.4	4	1 day	Mon 15/12/14	Mon 15/12/14	18
3.5	5	1 day	Tue 16/12/14	Tue 16/12/14	19
3.6	6	0 days	Wed 17/12/14	Wed 17/12/14	

# Set working time

- Setv"work week"
- Double click on "default"
- Set "Saturday" to "use project default time" or "set days to specific working time"

The screenshot displays the Microsoft Project Professional interface. The 'Change Working Time' dialog box is open, showing the 'Standard (Project Calendar)' selected. The calendar for December 2014 is visible, with the 3rd day highlighted. The 'Details for [Default]' sub-dialog is also open, showing the 'Set working time for this work week' options. The 'Set day(s) to these specific working times' option is selected, and the 'Saturday' day is highlighted in the list. The 'From' time is 8:00 and the 'To' time is 15:00. The 'Details...' button is visible in the sub-dialog. The main dialog shows a list of exceptions, with the 'Default' exception selected. The Gantt chart in the background shows a project schedule with a task duration of 17/12.

WBS	Task Name	Duration
1	Fassa	6,88 days
1.1	1	1 day
1.2	2	1 day
1.3	3	1 day
1.4	4	1 day
1.5	5	1 day
1.6	6	1 day
2	Fassa 2	6,88 days
2.1	1	1 day
2.2	2	1 day
2.3	3	1 day
2.4	4	1 day
2.5	5	1 day
2.6	6	1 day
3	fassa 3	5,88 days
3.1	1	1 day
3.2	2	1 day
3.3	3	1 day
3.4	4	1 day
3.5	5	1 day
3.6	6	0 days

# Set the timescale of the chart

- Choose View menu then time scale: days/week

The screenshot shows the Microsoft Project Professional interface. The 'VIEW' tab is selected in the ribbon, and the 'Timescale' dropdown menu is open, showing options: Days, Hours, Quarter Days, Weeks, Thirds of Months, Months, Quarters, Half Years, and Years. The 'Days' option is selected. The Gantt chart on the right shows a project schedule with tasks and their durations. The task list on the left is as follows:

WBS	Task Name	Duration	Start	Finish	Predecessors
1	Fassa	6,88 days	Thu 04/12/14	Thu 11/12/14	
1.1	1	1 day	Thu 04/12/14	Thu 04/12/14	
1.2	2	1 day	Fri 05/12/14	Fri 05/12/14	2
1.3	3	1 day	Mon 08/12/14	Mon 08/12/14	3
1.4	4	1 day	Tue 09/12/14	Tue 09/12/14	4
1.5	5	1 day	Wed 10/12/14	Wed 10/12/14	5
1.6	6	1 day	Thu 11/12/14	Thu 11/12/14	6
2	Fassa 2	6,88 days	Fri 12/12/14	Fri 19/12/14	
2.1	1	1 day	Fri 12/12/14	Fri 12/12/14	7
2.2	2	1 day	Mon 15/12/14	Mon 15/12/14	9
2.3	3	1 day	Tue 16/12/14	Tue 16/12/14	10
2.4	4	1 day	Wed 17/12/14	Wed 17/12/14	11
2.5	5	1 day	Thu 18/12/14	Thu 18/12/14	12
2.6	6	1 day	Fri 19/12/14	Fri 19/12/14	13
3	fassa 3	5,88 days	Wed 10/12/14	Wed 17/12/14	4
3.1	1	1 day	Wed 10/12/14	Wed 10/12/14	
3.2	2	1 day	Thu 11/12/14	Thu 11/12/14	16
3.3	3	1 day	Fri 12/12/14	Fri 12/12/14	17
3.4	4	1 day	Mon 15/12/14	Mon 15/12/14	18
3.5	5	1 day	Tue 16/12/14	Tue 16/12/14	19
3.6	6	0 days	Wed 17/12/14	Wed 17/12/14	

# Change view from gantt chart to Network Diagram

- Select View menu then choose Network diagram

The screenshot displays the Microsoft Project Professional interface. The 'VIEW' menu is highlighted with a dashed blue circle, and the 'Network Diagram' option is selected. A black arrow points from the 'Network Diagram' option in the menu to the corresponding view in the main workspace. The workspace is split into two panes: the left pane shows a 'Calendar' view with a task bar chart, and the right pane shows a 'Network Diagram' view with a task dependency network. A text box in the calendar view reads: 'View the tasks from the project in a calendar view.' The network diagram shows tasks 1 through 6 connected by arrows, with task 6 being a milestone. The task details for 'Task 2' are visible in a tooltip on the left side of the network diagram.

**Task 2 Details:**

Task 2
Start: 01/12/2014
Finish: 01/12/2014
Duration: 1 day
Completion: 0%

# Change info Lead or Lag time

- numberFS – xx (lead time)
- Number FS +xx days (lag time)

