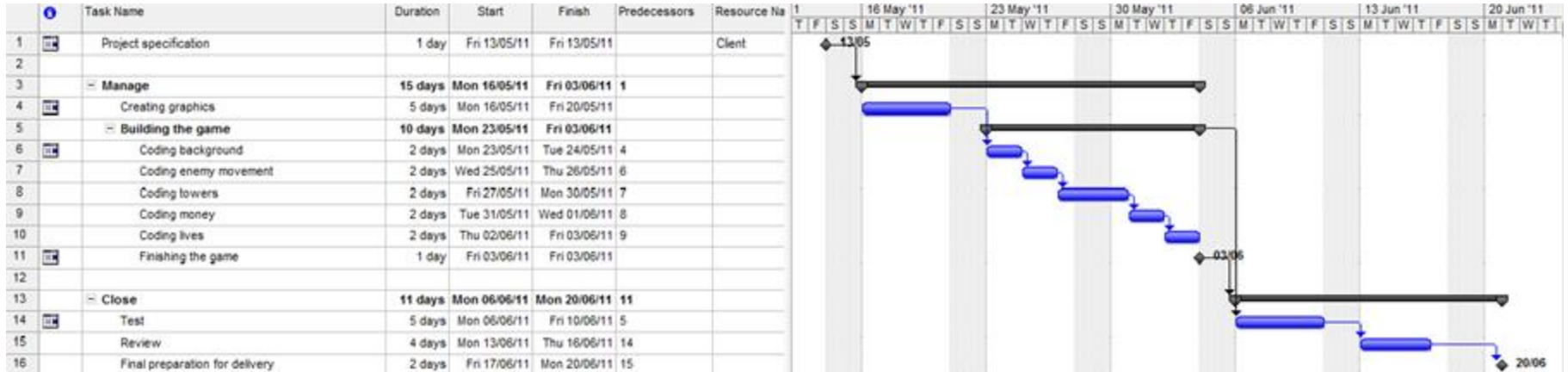# Gantt Chart & Network Diagram

DUM 11

Gantt Chart

Gantt chart is a striped diagram named after H.L.Gantt, industrial engineer who pioneered using this diagram during WW1

Gantt chart is used in project management for graphic representation of planning sequence of activities over time
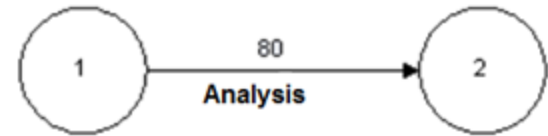
Original Gantt chart does not reflect relationships between activities but modern PM software tools usually implement them

Gantt Chart

ACTIVITY	WEEKS									
	1	2	3	4	5	6	7	8	9	10
Initiate Project	▓									
Collect Facts	▓									
Analyze & Develop		▓▓								
Test			▓							
Proposal & Approval			▓							
Prepare Installation				▓						
Forms Conversion				▓▓▓						
Programming				▓▓▓						
Equipment				▓						
Procedures Written							▓▓			
Training								▓		
Change Over								▓		
Check Out									▓▓	
Sign Off										▓

Gantt Chart with multiple levels, WBS, Milestones and dependencies between activities

	ⓘ	Task Name	Duration	Start	Finish	Predecessors	Resource Na
1		Project specification	1 day	Fri 13/05/11	Fri 13/05/11		Client
2							
3		− Manage	15 days	Mon 16/05/11	Fri 03/06/11	1	
4		Creating graphics	5 days	Mon 16/05/11	Fri 20/05/11		
5		− Building the game	10 days	Mon 23/05/11	Fri 03/06/11		
6		Coding background	2 days	Mon 23/05/11	Tue 24/05/11	4	
7		Coding enemy movement	2 days	Wed 25/05/11	Thu 26/05/11	6	
8		Coding towers	2 days	Fri 27/05/11	Mon 30/05/11	7	
9		Coding money	2 days	Tue 31/05/11	Wed 01/06/11	8	
10		Coding lives	2 days	Thu 02/06/11	Fri 03/06/11	9	
11		Finishing the game	1 day	Fri 03/06/11	Fri 03/06/11		
12							
13		− Close	11 days	Mon 06/06/11	Mon 20/06/11	11	
14		Test	5 days	Mon 06/06/11	Fri 10/06/11	5	
15		Review	4 days	Mon 13/06/11	Thu 16/06/11	14	
16		Final preparation for delivery	2 days	Fri 17/06/11	Mon 20/06/11	15	

Network Diagram

1) AoA - Activity on Arrow - nods represent milestones between project phases, transition between them is illustrated by arrow. AoA variant is less frequently used.

1) AoN - Activity on Nod - Here are milestones represented by the transitions between nods, meanwhile individual activities are represented as nods. Transitions has zero lenght of duration.

Activity relations

- **Finish-to-Start (FS)**
  - B can't start until A ends.
  - A: build a fence; B: paint the fence.
- **Start-to-Start (SS)**
  - B cant start until A starts.
  - A: grass mowing; B: grass raking.
- **Finish-to-Finish (FF)**
  - B can't end until A ends.
  - A: add vinegar; B: blend mayonnaise.
- **Start-to-Finish (SF)**
  - B can't end until A starts.
  - Rarely used.