

Project Planning

Preview

Characteristics of a Project

RFP (Request For Proposal)

Project Planning Tools

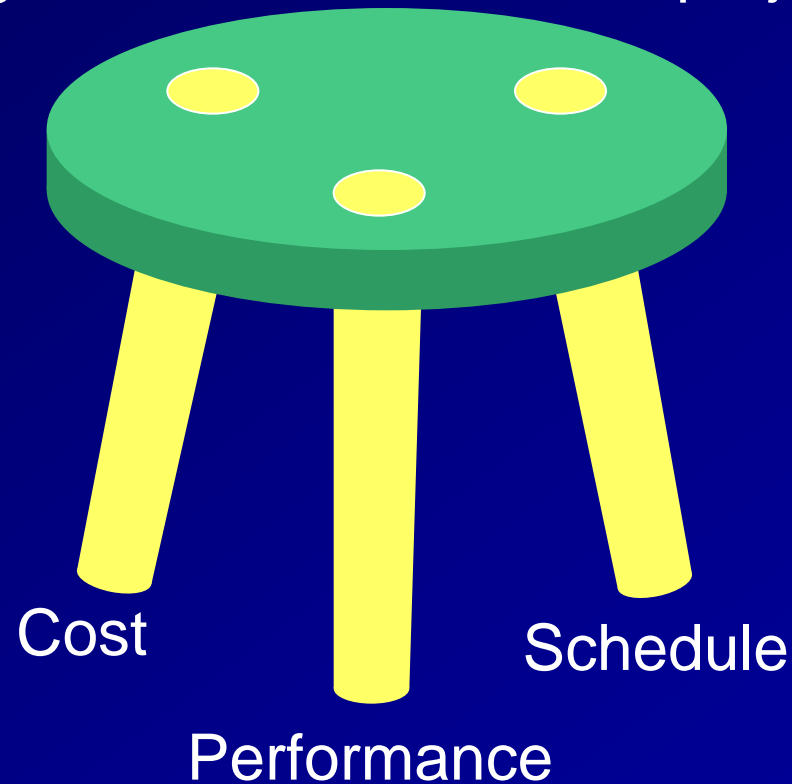
Gantt (Bar) Charts

Network Scheduling Systems (PERT Charts)

Project Planning

Characteristics of a Project

Three Legged Stool for successful project management



Project Planning

Request For Proposals (RFP)

Management part of Proposal: Discusses company, its relevant experience, its management methods and control systems, and describes the personnel proposed to lead the project

Technical part of Proposal: Outlines the design concept proposed to meet the needs, emphasizing the difference of the method with others to sell the idea

Cost part of Proposal: Price breakdown, contract change procedures, payment details

Project Planning

Project Planning Tools

Statement of Work: Describes what is to be provided in the project. Covers General Scope, itemize the tasks to be performed, products to be delivered at the end, the data and reports to be supplied

Milestones: They are key dates for major project activities

Work Breakdown Structure: Product oriented family tree

Gantt (Bar) Charts

Network Scheduling Systems (PERT Charts)

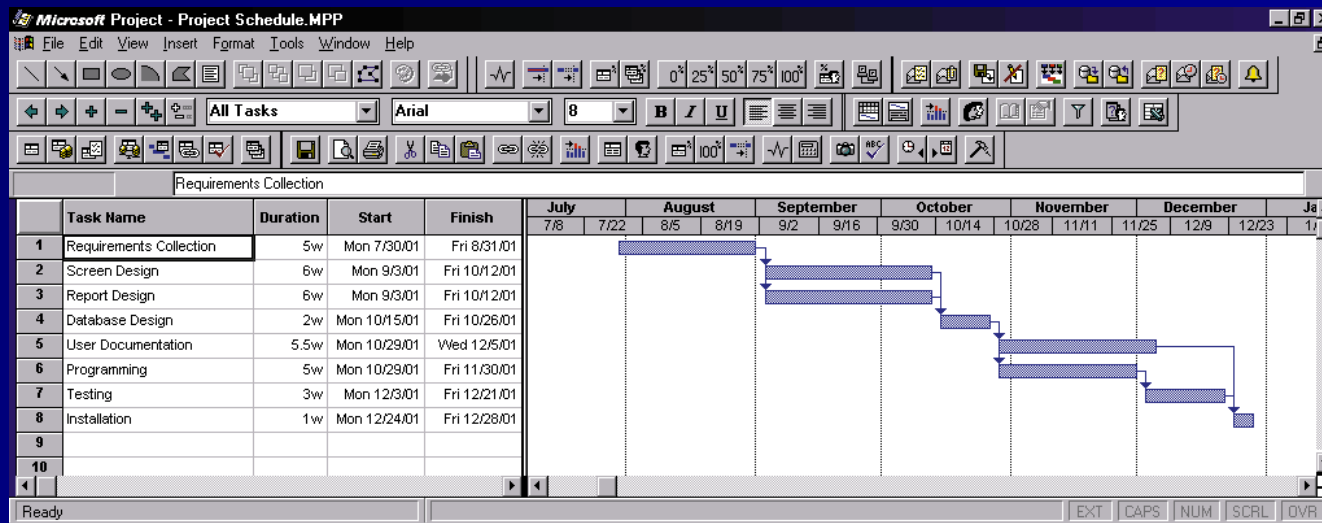
Project Planning

Project Planning Tools

Gantt (Bar) Charts

Three things need to be established for Gantt Charts

1. The tasks (activities) needed to complete the project
2. The precedence relationships of the tasks
3. Expected Duration of each task



Project Planning

Project Planning Tools

o-optimistic time to finish the task
r-realistic time to finish the task
p-pessimistic time to finish the task

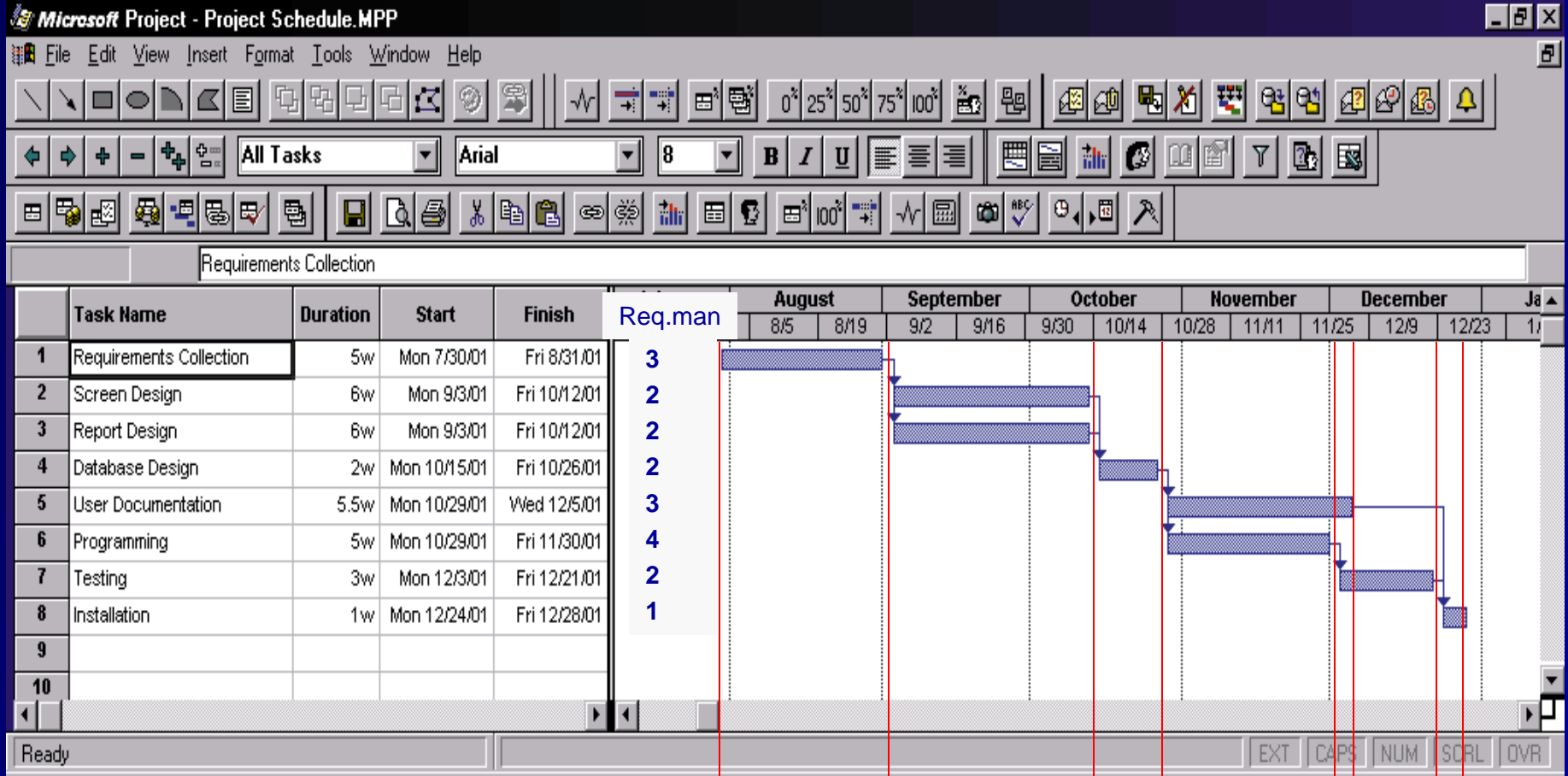
Gantt (Bar) Charts

Example

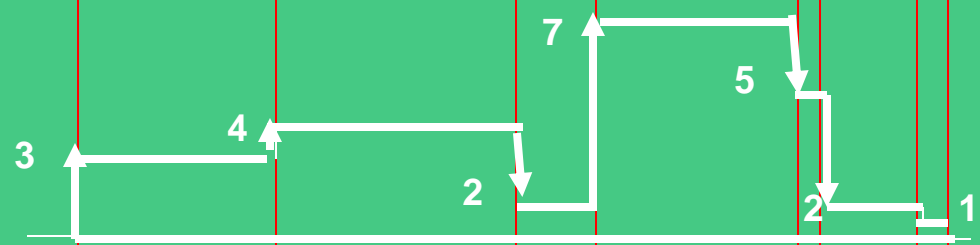
ACTIVITY (TASK)	TIME ESTIMATE (in weeks)			EXPECTED TIME $(o+4r+p)/6$	PRECEEDING ACTIVITY
	o	r	p		
1. Requirements Collection	1	5	9	5.00	-
2. Screen Design	5	6	7	6.00	1
3. Report Design	3	6	9	6.00	1
4. Database Design	1	2	3	2.00	2 and 3
5. User Documentation	3	6	7	5.50	4
6. Programming	4	5	6	5.00	4
7. Testing	1	3	5	3.00	6
8. Installation	1	1	1	1.00	5 and 7

Project Planning

Gantt (Bar) Charts



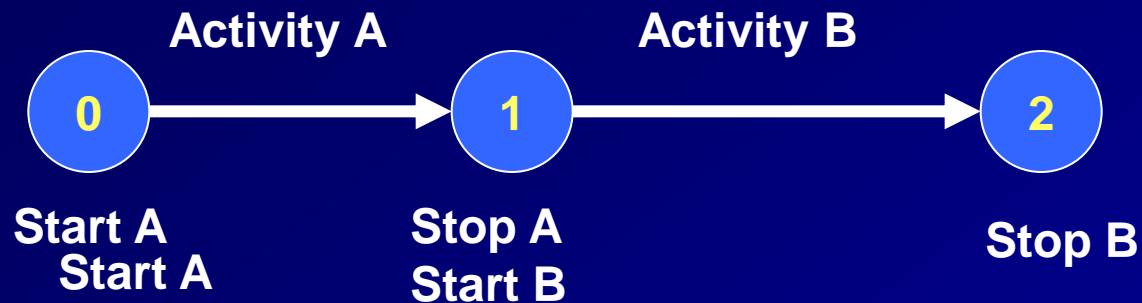
Worker-level profile



Project Planning

PERT Charts

Arrow (network) diagram



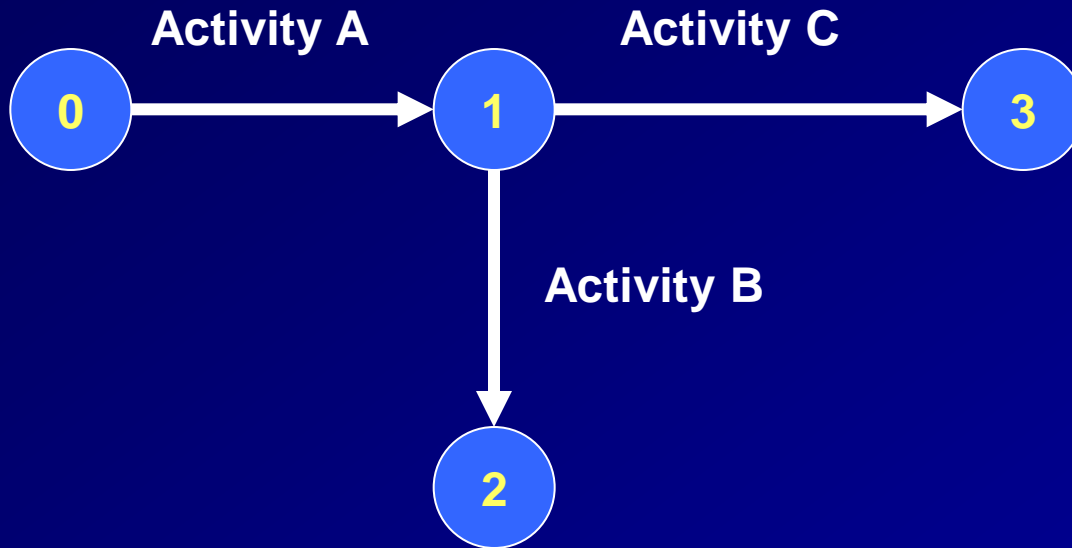
Activity-on-node (network) diagram



Project Planning

PERT Charts

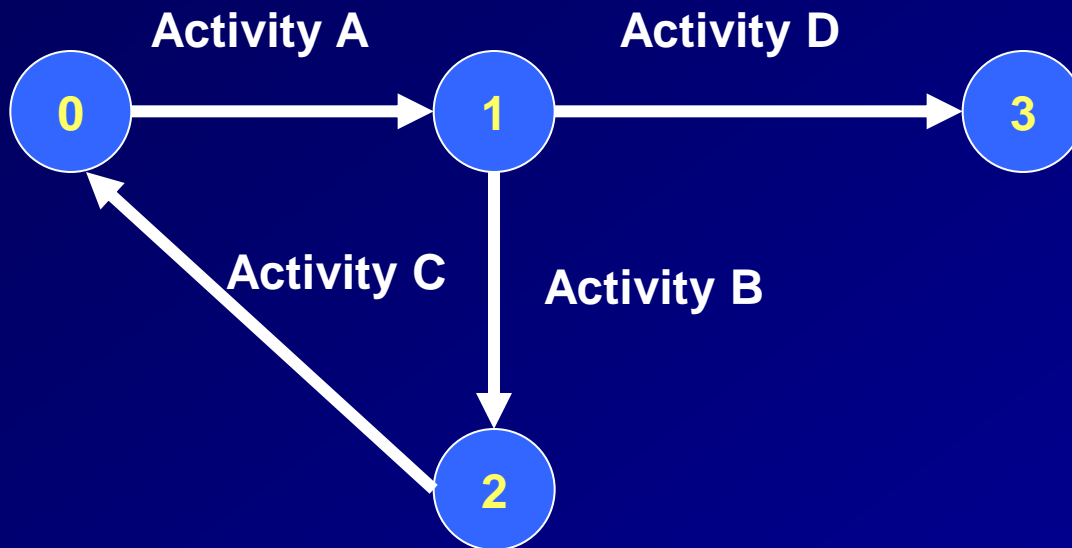
Arrow (network) diagram



Project Planning

PERT Charts

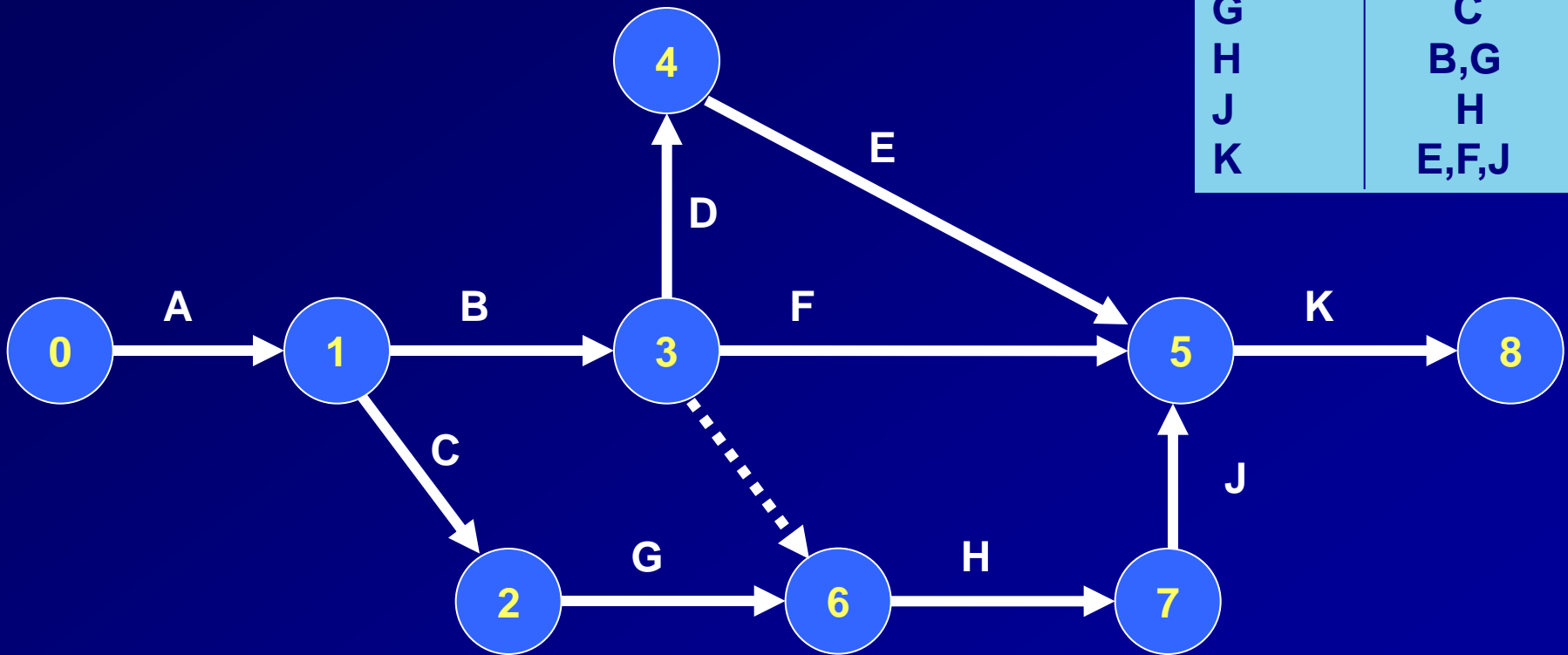
Arrow (network) diagram



Project Planning PERT Charts

Example: Arrow (network) diagram

Activity	Predecessor
A	-
B	A
C	A
D	B
E	D
F	B
G	C
H	B,G
J	H
K	E,F,J

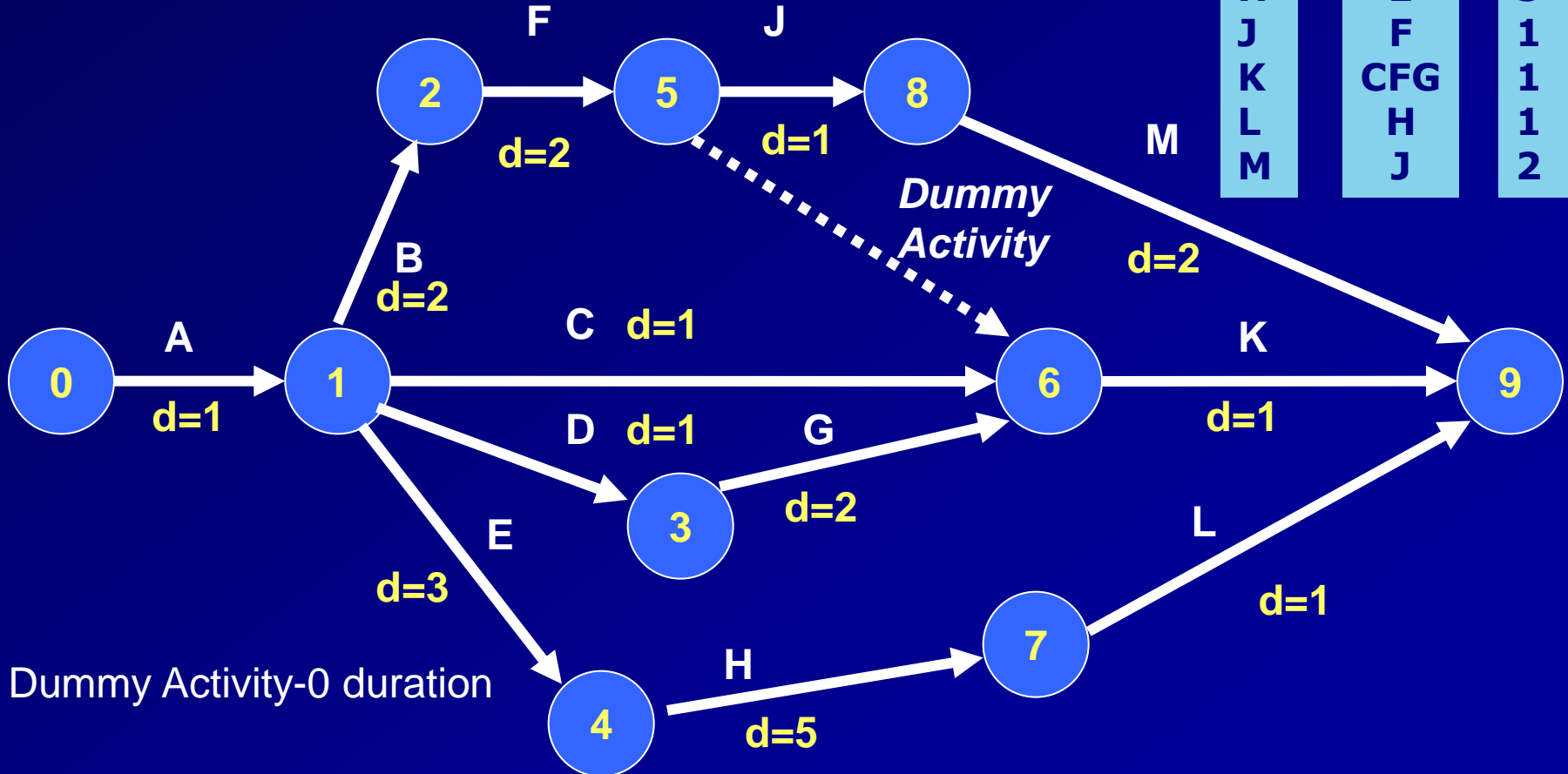


Project Planning PERT Charts

Example: Adding Times

TASK PREC. DAYS

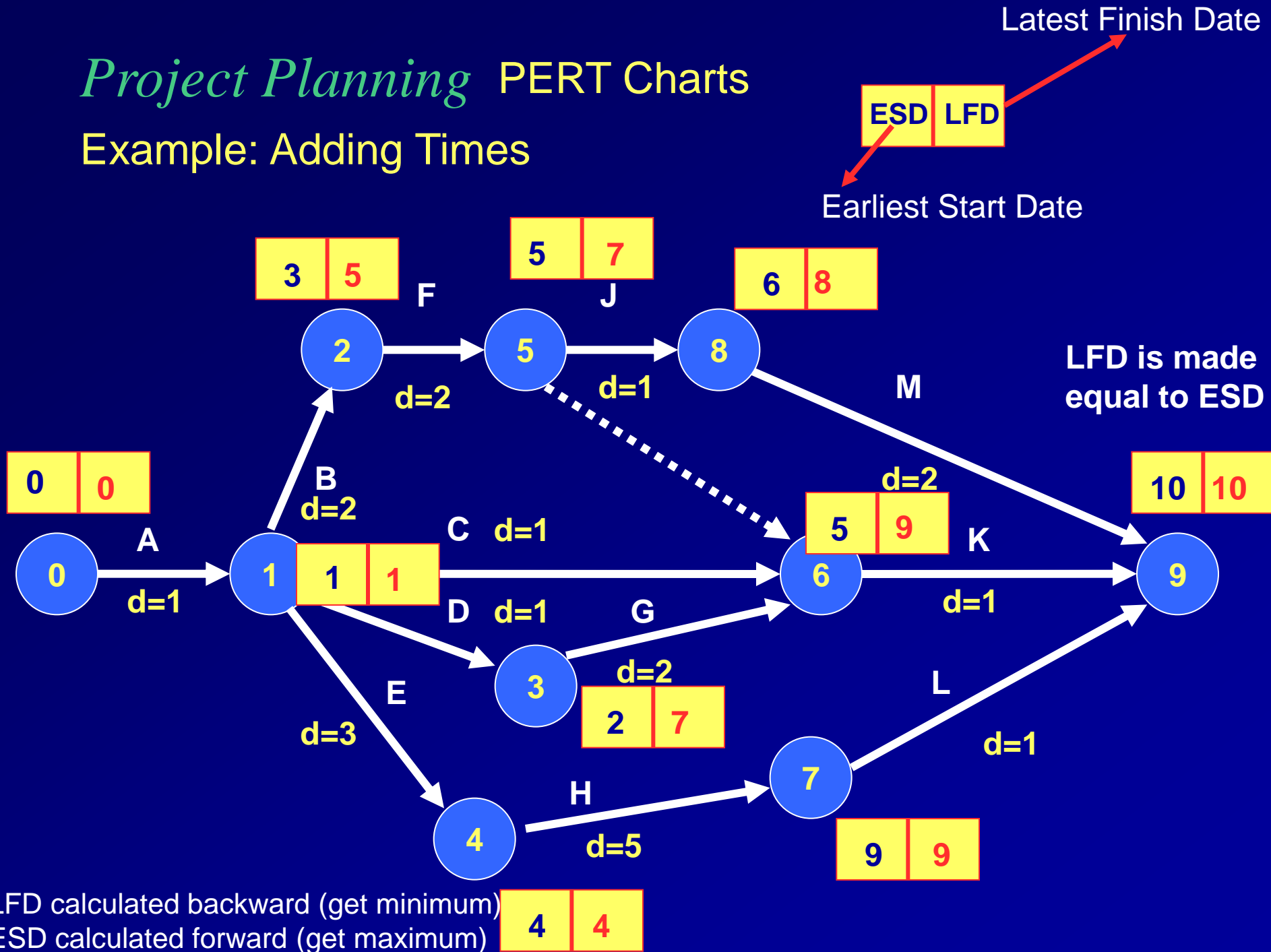
A	-	1
B	A	2
C	A	1
D	A	1
E	A	3
F	A	2
G	B	2
H	D	2
J	E	5
K	F	1
L	C	1
M	F	1
	H	1
	J	2



Dummy Activity-0 duration

Project Planning PERT Charts

Example: Adding Times



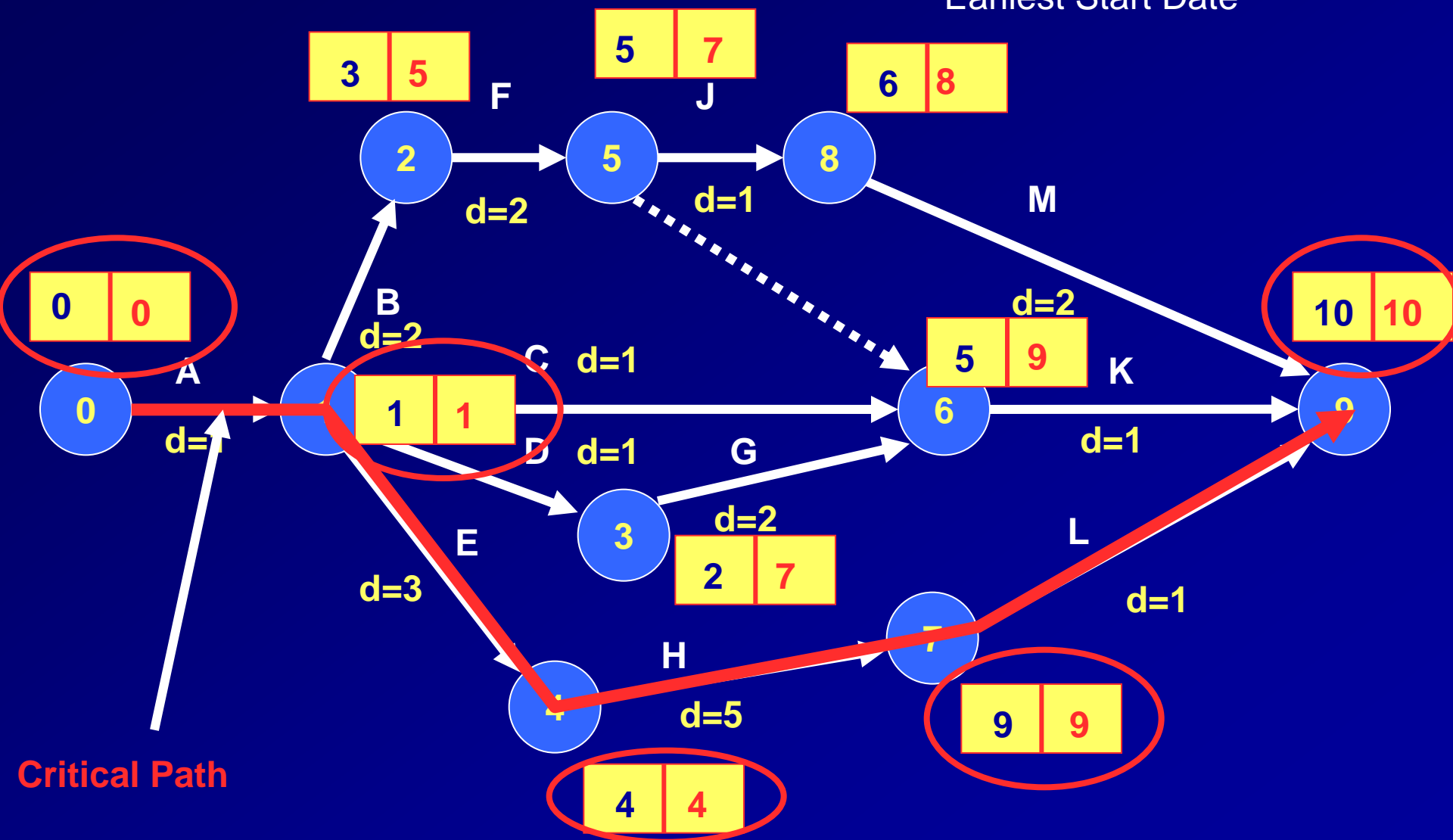
Latest Finish Date

Project Planning PERT Charts

Example: Finding Critical Path



Earliest Start Date



Critical Path