Critical Path Method In Project Schedules

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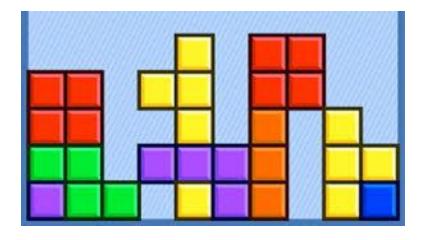
CECS 445

Lecture 7: February 18th, 2021



Steps For This Week...

- Calculate Effort for Each Requirement
- Build Schedule (use Project Tables and/or Macro Schedules on the way)
- Start Coding & Be Ready to Share with Your Customer in One Week



What Requirements Should I Start With?

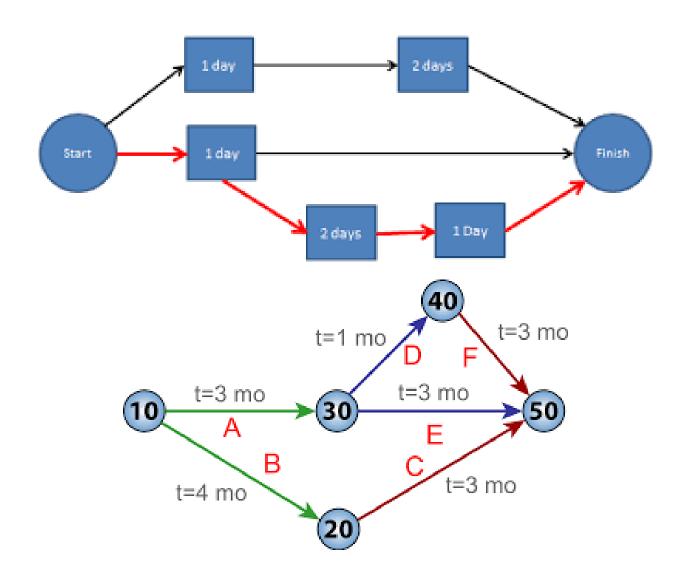
Effort & Priority HIGH

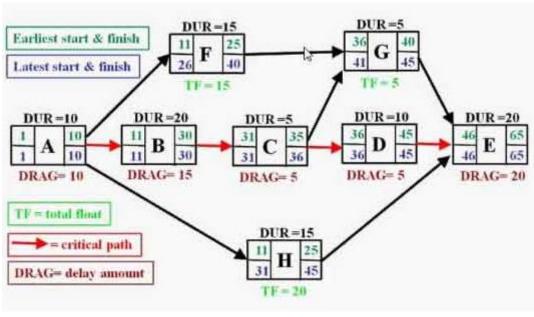
• Effort =
$$\frac{L^3}{P^3t^4}$$

Priority = ?

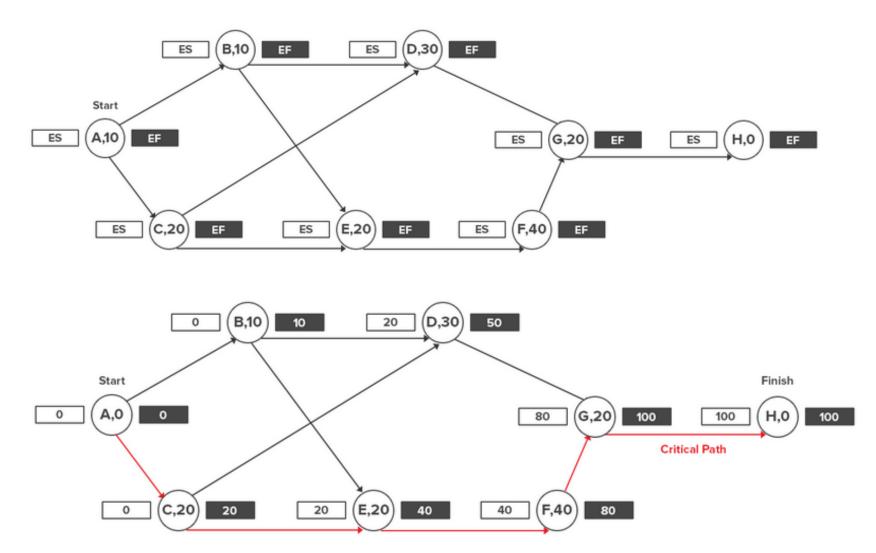
Effort HIGH Effort LOW Dependencies HIGH Dependencies HIGH Critical Path Modules Easy First Modules "Must Begin Now" "Quick Wins" **Effort LOW Effort HIGH Dependencies LOW Dependencies LOW** Easy Last Modules Parallel Path Modules "Do I Even Need This?" "Must Begin But Isolated"

Critical Path Method (CPM)



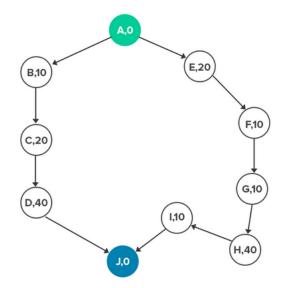


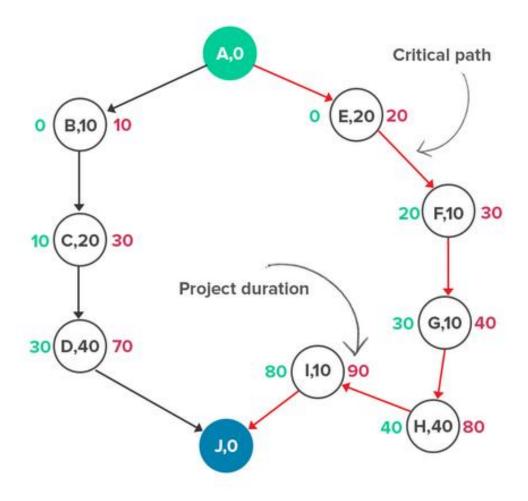
Critical Path Method (CPM)



CPM Steps

Task ID	Task Description	Task Predecessors	Task Duration (hours)
A	Project start		0
В	Buy materials for A	A	10
С	Buy materials for B	Α	20
D	Build A	B, C	30
E	Build B	B, C	20
F	Polish and finish B	E	40
G	Join A and B	D, F	20
Н	Project finish	G	0





Gantt Chart Examples

