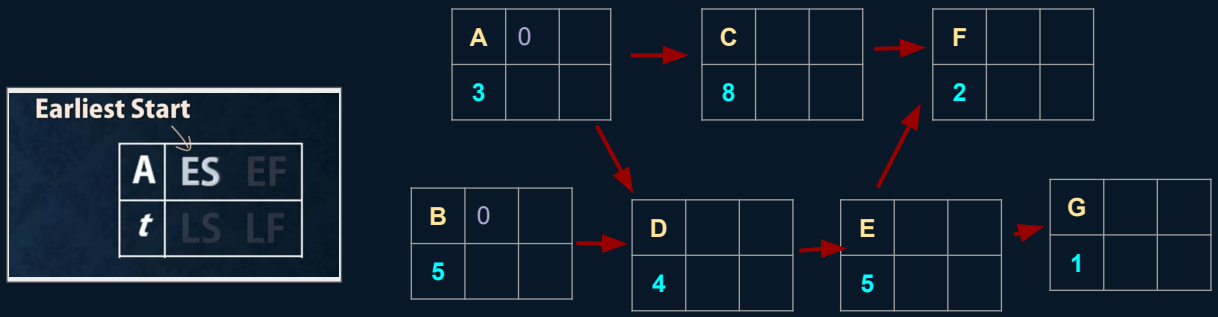
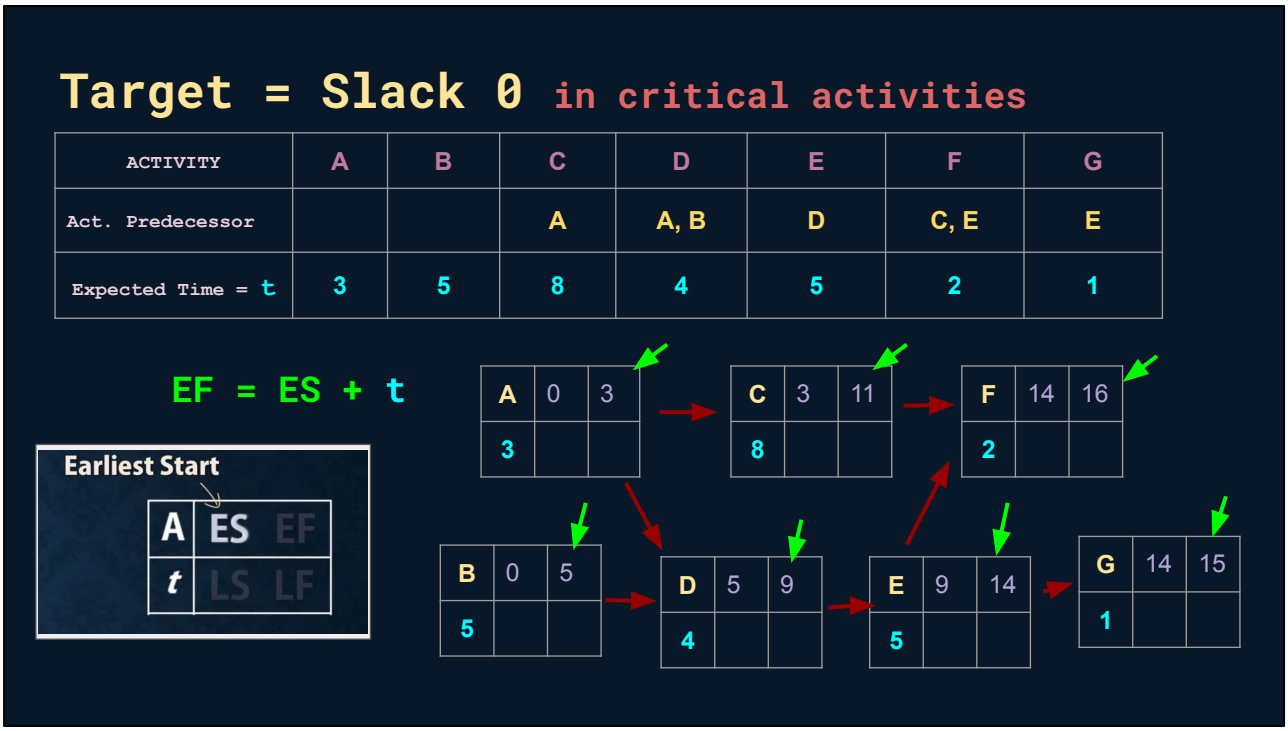
Behind the scenes or implementing a recap slide (RECAP, previously in this chapter… or, as said in previous comments, the time variable involves a mitigation plan for time-related issues that will start by default at the start of the project) I would call it a critical path chart, **an easy-to-visualize abstraction to monitor contingencies related to control of work time, easy to share, to use in meetings (related to timeline assessment) to identify, detect delays, establish dependencies evaluation schedules (especially when there are more than one task running simultaneously or they are connected by mutual dependencies).**

Target = Slack 0 in critical activities

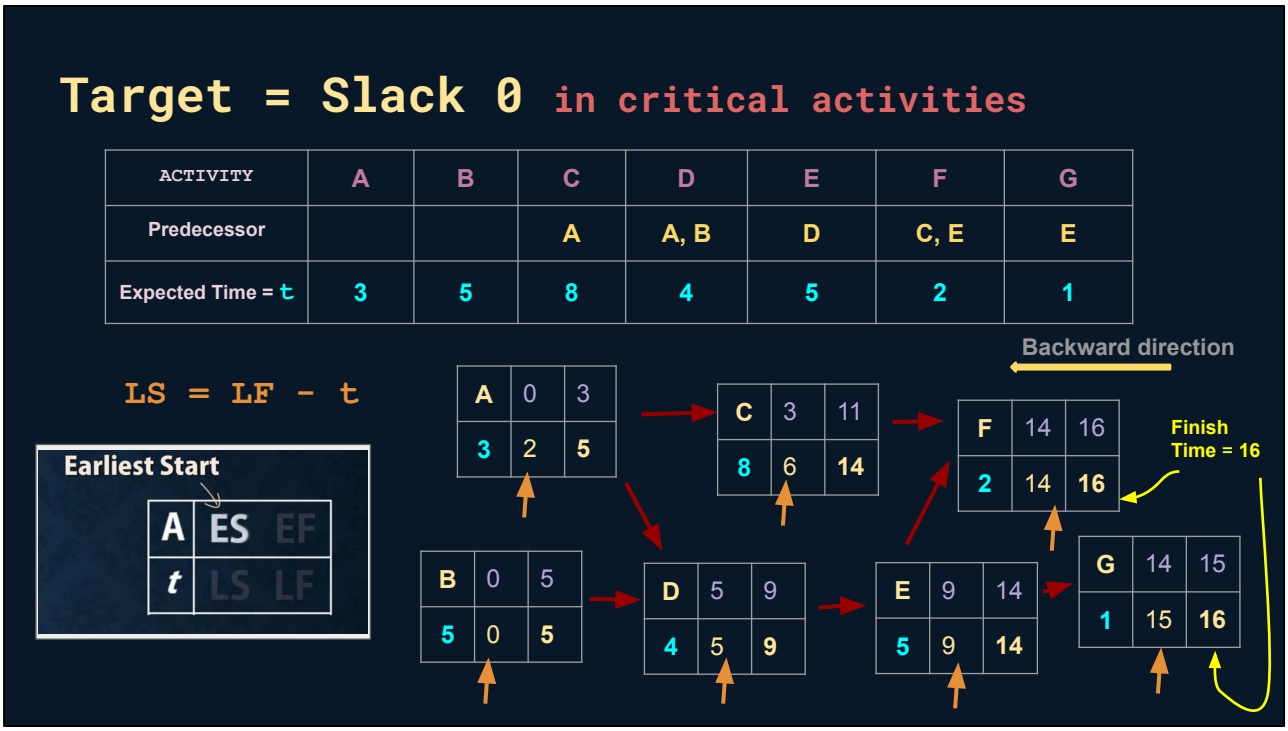
ACTIVITY	A	B	C	D	E	F	G
Predecessor			A	A, B	D	C, E	E
Expected Time = t	3	5	8	4	5	2	1



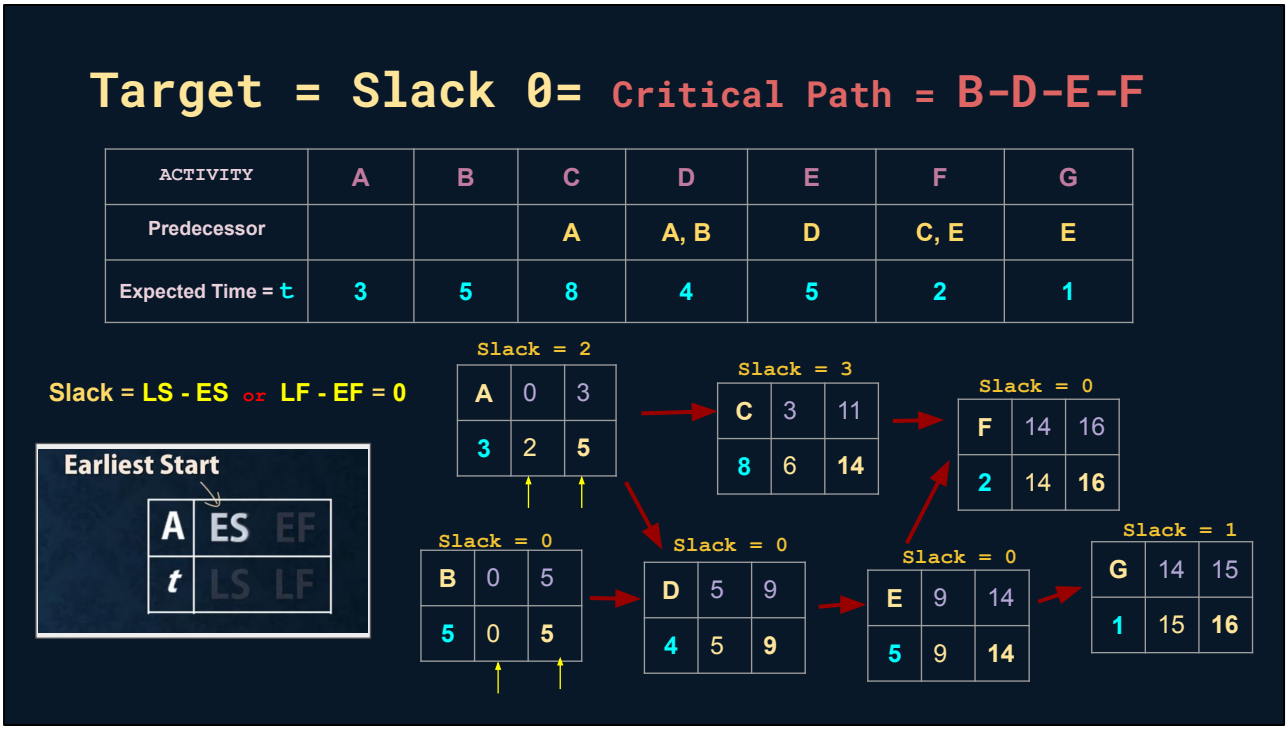
In order to visualize an example, following the settings at the top of this canvas, we can see the sequence of dependencies for this example project, notice activity D has B and A as dependencies, likewise activity F has C and E as predecessors both should get finished before start F.



Following the formula, the earliest finish (EF) time for an activity will be the earliest start time ES plus its duration, and facing more than one dependency, the highest EF (Earliest-Finish) value preceding an activity will be its Earliest-Starting time (ES) before carrying on with the formula, adding its own t, so that have its own EF earliest-finish time.



When doing the backwards calculation, first notice that the project completion time is the highest EF (Earliest Finish) time, 16 weeks, for instance, here. And we shall get when every activity should start as the latest time (LS) by subtracting the expected duration of each activity from LF, the latest finish time of its successor. Facing two dependencies or more on the other hand, the latest-finish-time (LF) of an activity must be the smallest LS (Latest-Start-time) from its successors.



So how long we can afford to delay an activity without compromise the completion time for a project?, they call that spare time, “slack”. And, on doing this so useful calculation, we got that the Critical Path for an project is the sequence of activities that gives us 0 when subtracting its LS minus its ES variables or LF minus EF as it is read in the above example, and that is the target of this exercise.