Week 2 / Chapter 6: Project Time management

Project Time Management Processes

- **Planning schedule management:** determining the policies, procedures, and documentation that will be used for planning, executing, and controlling the project schedule
- **Defining activities:** identifying the specific activities that the project team members and stakeholders must perform to produce the project deliverables
- **Sequencing activities:** identifying and documenting the relationships between project activities
- **Estimating activity resources**: estimating how many resources a project team should use to perform project activities **Estimating activity durations:** estimating the number of work periods that are needed to complete individual activities
- **Developing the schedule**: analyzing activity sequences, activity resource estimates, and activity duration estimates to create the project schedule
- **Controlling the schedule**: controlling and managing changes to the project schedule

Critical Path Method (CPM)

Describe critical path analysis. How is the critical path calculated?

CPM is a network diagramming technique used to predict total project duration. A critical path for a project is the series of activities that determine the earliest time by which the project can be completed. It is the longest path through the network diagram and has the least amount of slack or float.

Slack or float is the amount of time an activity may be delayed without delaying a succeeding activity or the project finish date

Calculating the Critical Path

- First develop a good network diagram
- Add the duration estimates for all activities on each path through the network diagram. The longest path is the critical path
- If one or more of the activities on the critical path takes longer than planned, the whole project schedule will slip unless the project manager takes corrective action