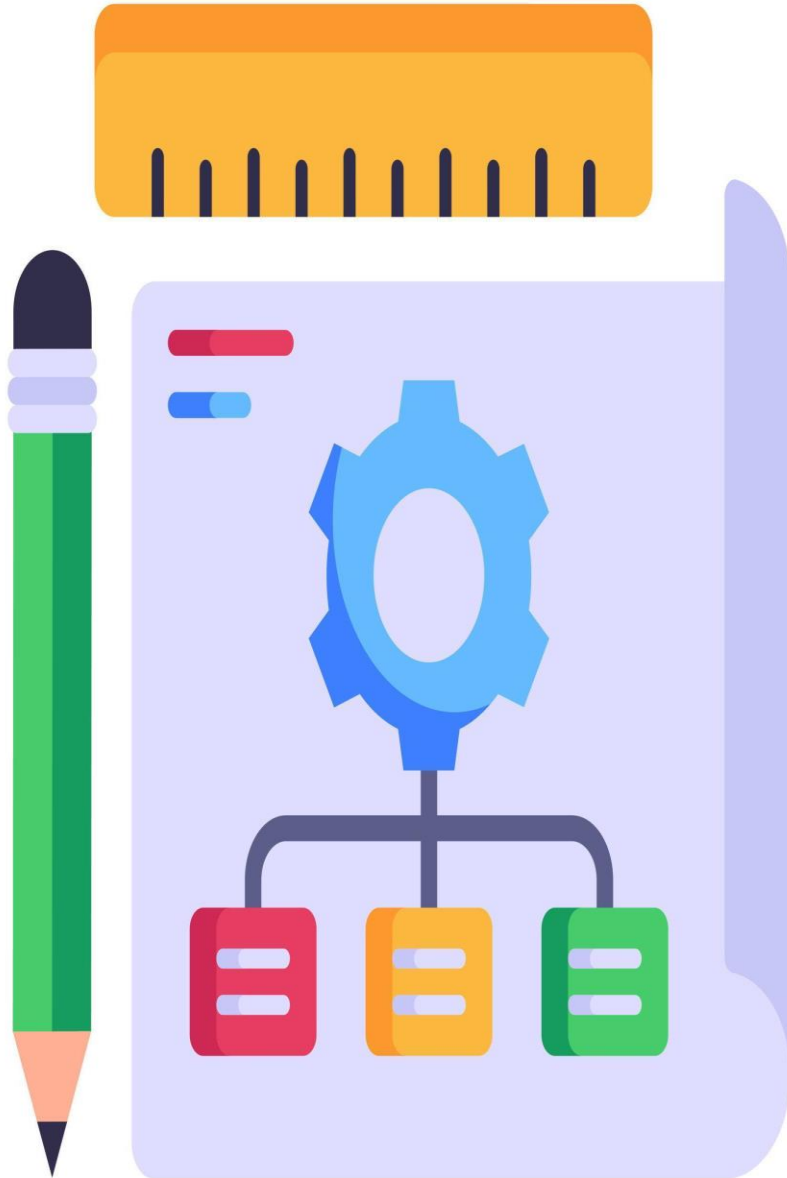


SCHEDULING OF SOFTWARE

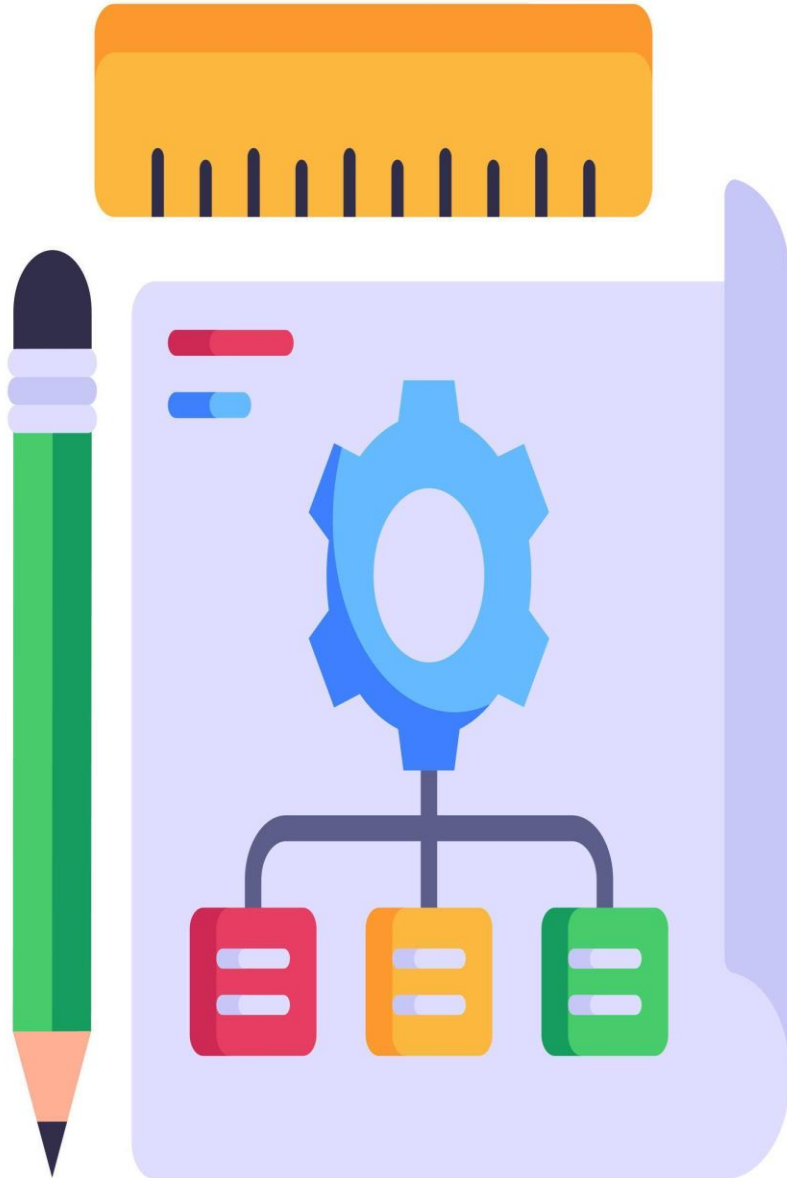
GANTT CHARTS



GANTT CHARTS

Gantt chart is a "CPM" (Critical Path Method) tools to:

- manage the tasks involved in big and complex projects
- let project managers organise time, people, equipment and money
- ensure the right people and equipment are in the right place and the right time
- allow managers to monitor the progress of a project

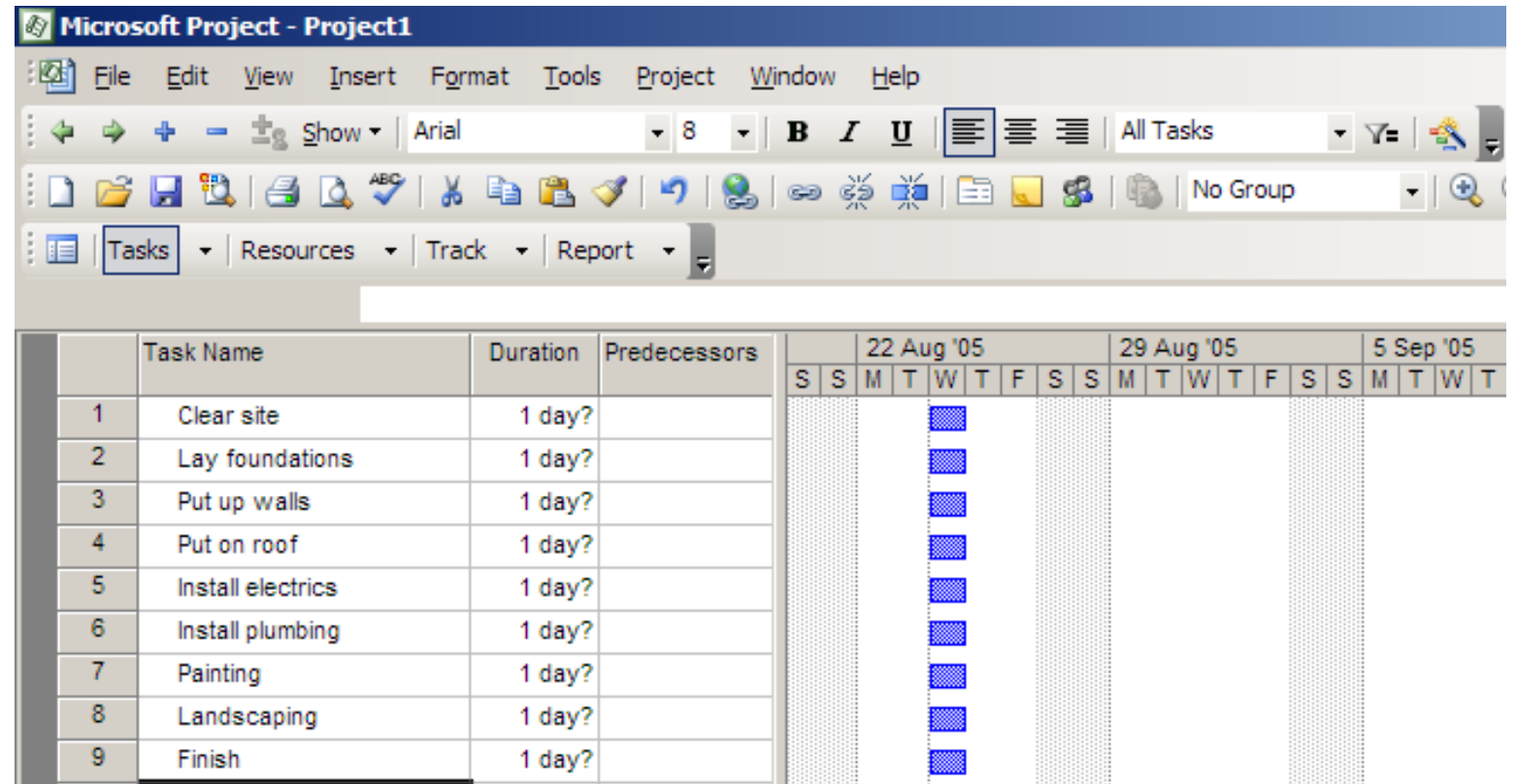


HOW TO CREATE ONE?

- Gantt chart is a timeline with tasks that can be connected to each other
- duration of an activity depicts by the horizontal bar size
- Can be created using Excel or Microsoft Project

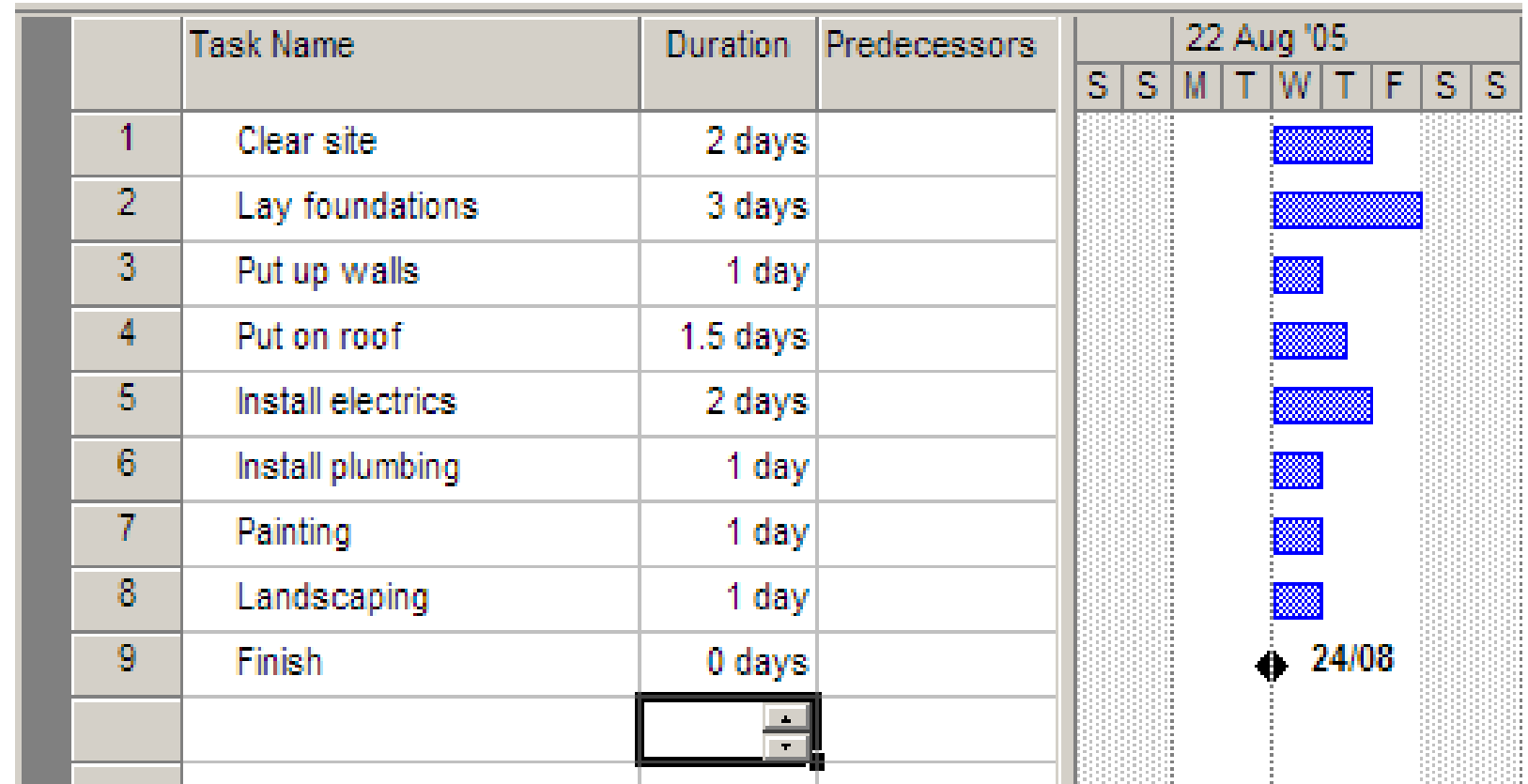
MAKING A GANTT CHART: STEP 1

List all tasks



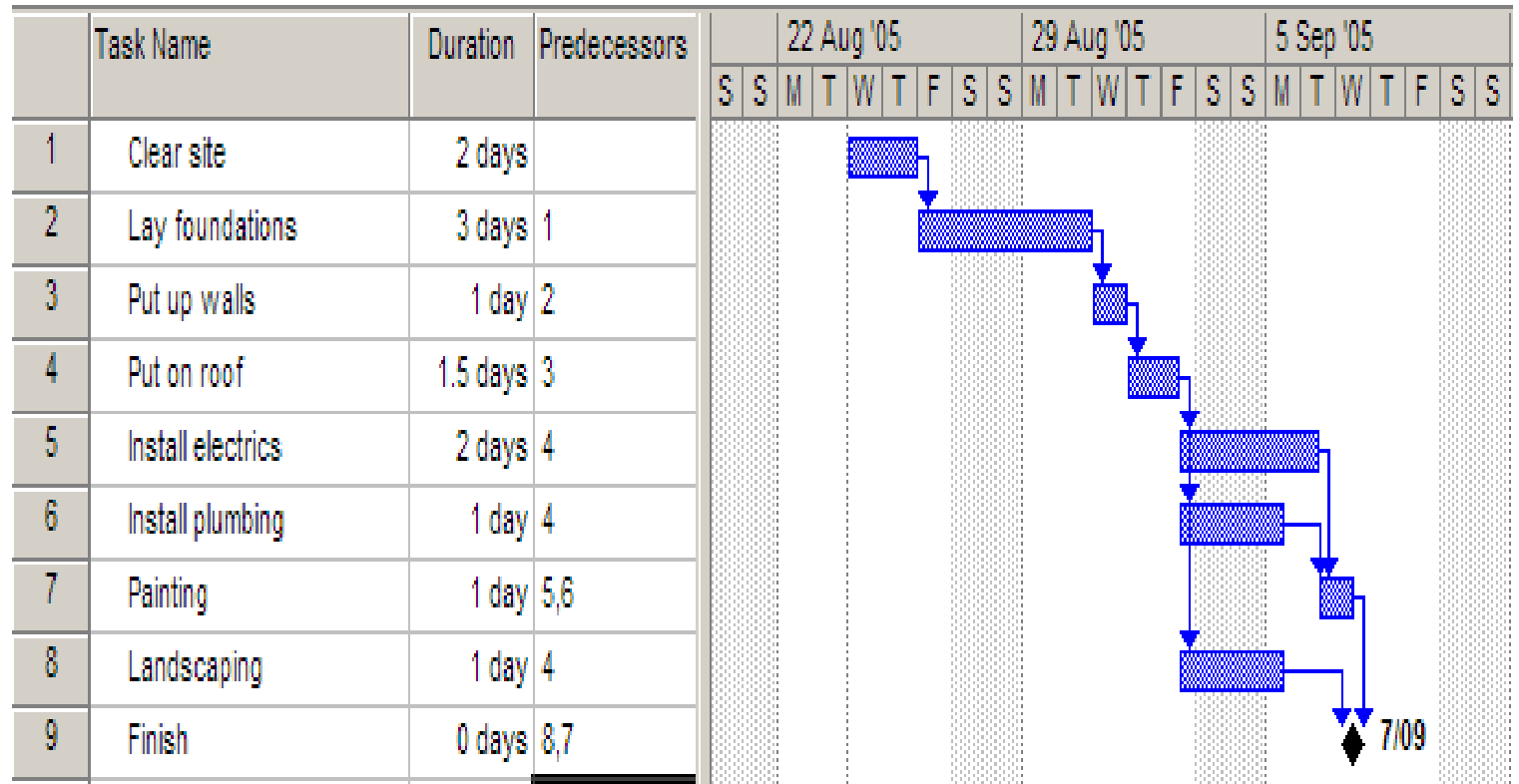
MAKING A GANTT CHART: STEP 2

Add the duration for every task



MAKING A GANTT CHART: STEP 3

Add dependencies for every task (if any)



MAKING A GANTT CHART: STEP 3

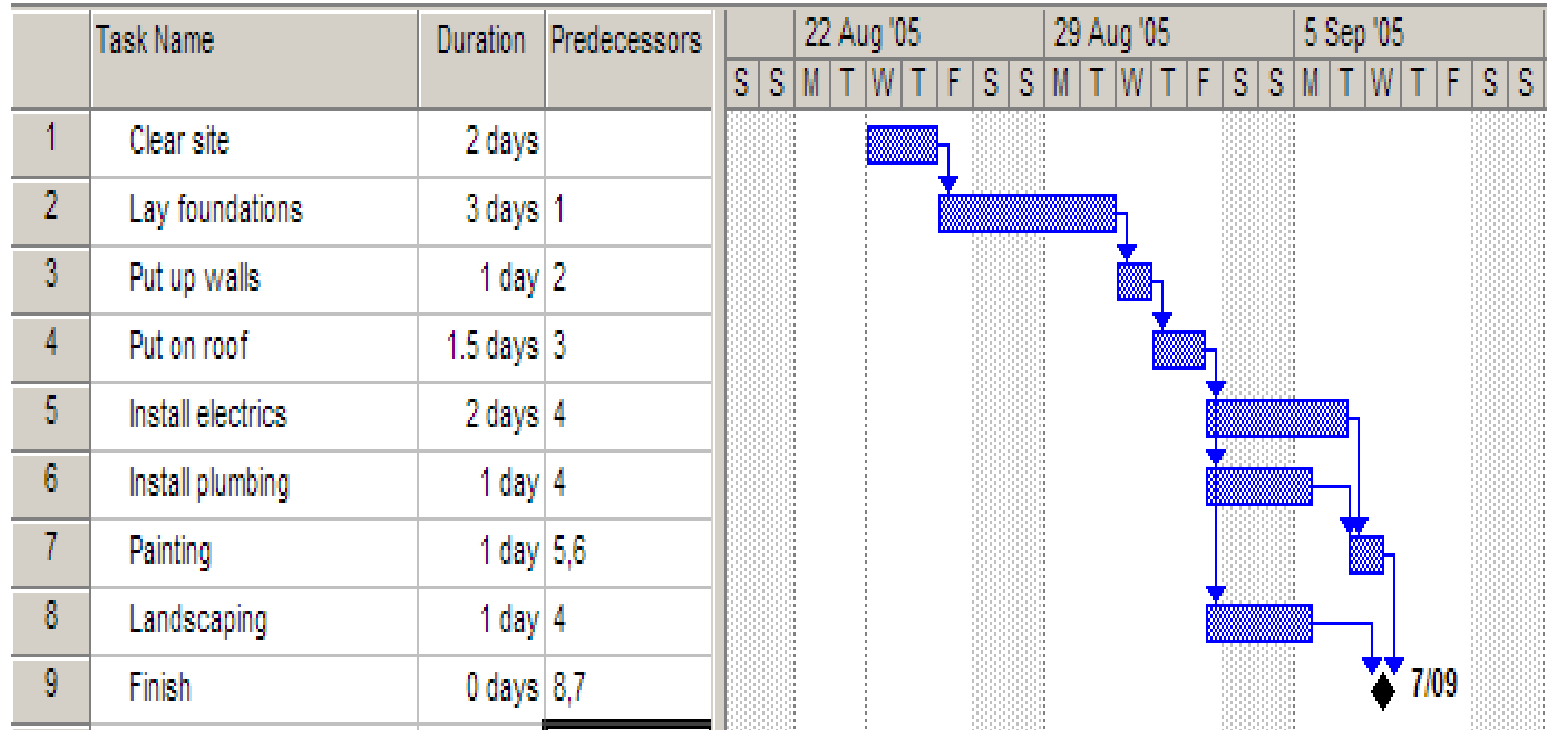
Add dependencies for every task (if any)

In this example,

- task 2 cannot start before task 1 ends.
- Task 3 is **dependent** on task 2.
- Task 7 is dependent on two other tasks
- Electrics, plumbing and landscaping are **concurrent**

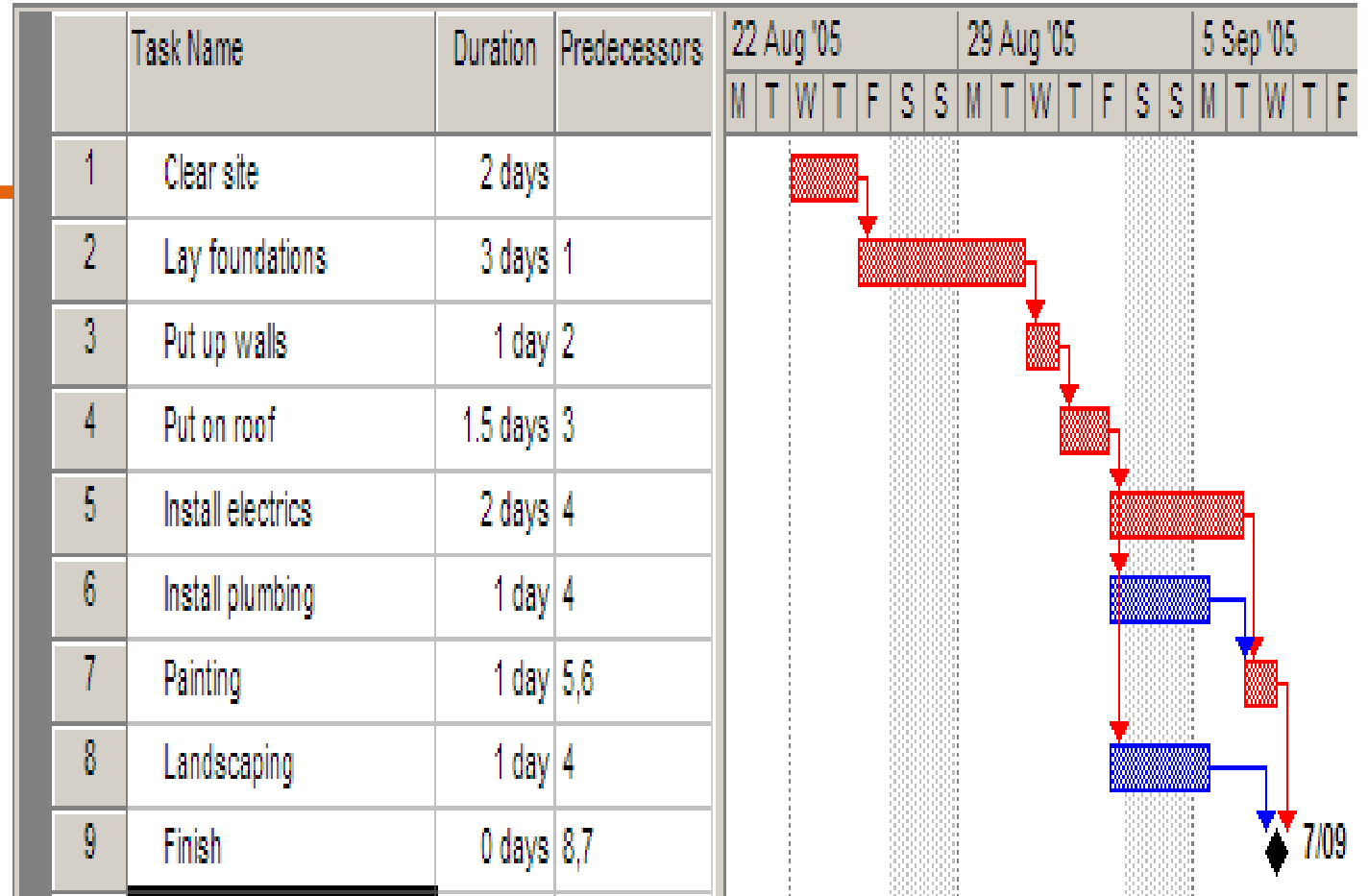
tasks and can occur simultaneously. All 3 can start after task 4 ends.

- Task 9 has zero duration, and is a **milestone**

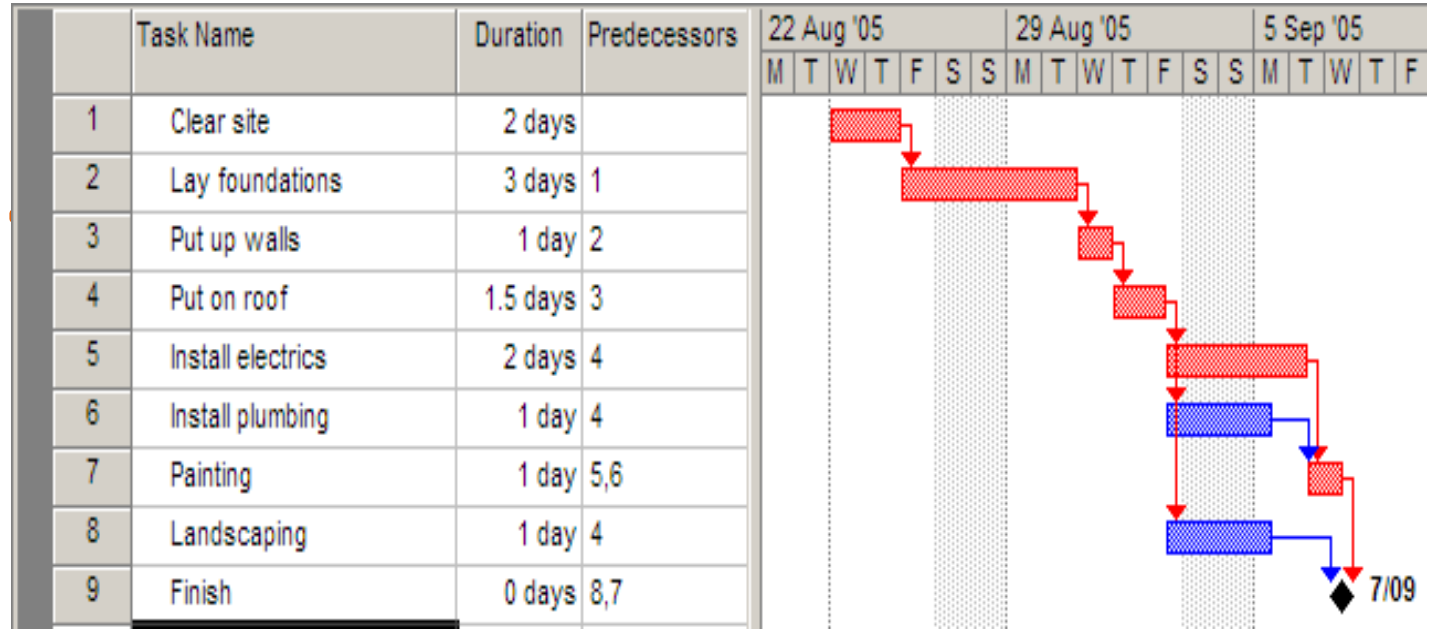


MAKING A GANTT CHART: STEP 4

- Identify critical path using task duration
- Shown in red in diagram
- The critical path contains a list of linked tasks that directly affects the project finish date.
- If any task on the critical path is late, the whole project is late



MAKING A GANTT CHART: STEP 4



- MS Project can identify the critical path
- The length of the critical path is the sum of the lengths of all critical tasks (the red tasks 1,2,3,4,5,7) which is $2+3+1+1.5+2+1 = 10.5$ days.
- In other words, the minimum amount of time required to get all tasks completed is 10.5 days
- The other tasks (6,8) can each run over-time before affecting the end date of the project