

# Unit 407 Project management

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## Gantt charts

# What is a Gantt chart?

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A Gantt chart:

- shows the activities of a project mapped against a timescale
- is used to plan a project, sequencing activities and setting them out in the order in which they must be completed
- must be used as a tool, along with other project management tools.

# How a Gantt chart works

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- Tasks are listed on the vertical axis and the project time span is on the horizontal axis.
- The critical path is drawn on the chart first, then each non-critical activity is added, showing earliest finish time and duration – contingencies can be built in here.
- It will immediately be clear which activity has the greatest impact on the project duration.

# Features of a Gantt chart

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- Gantt charts can indicate dependencies – tasks that can't start until another one is complete.
- A Gantt chart should include a key to show the meanings of the symbols used and the significance of colours.
- The chart must be updated, as the project progresses, to show the current state.

# Producing a Gantt chart

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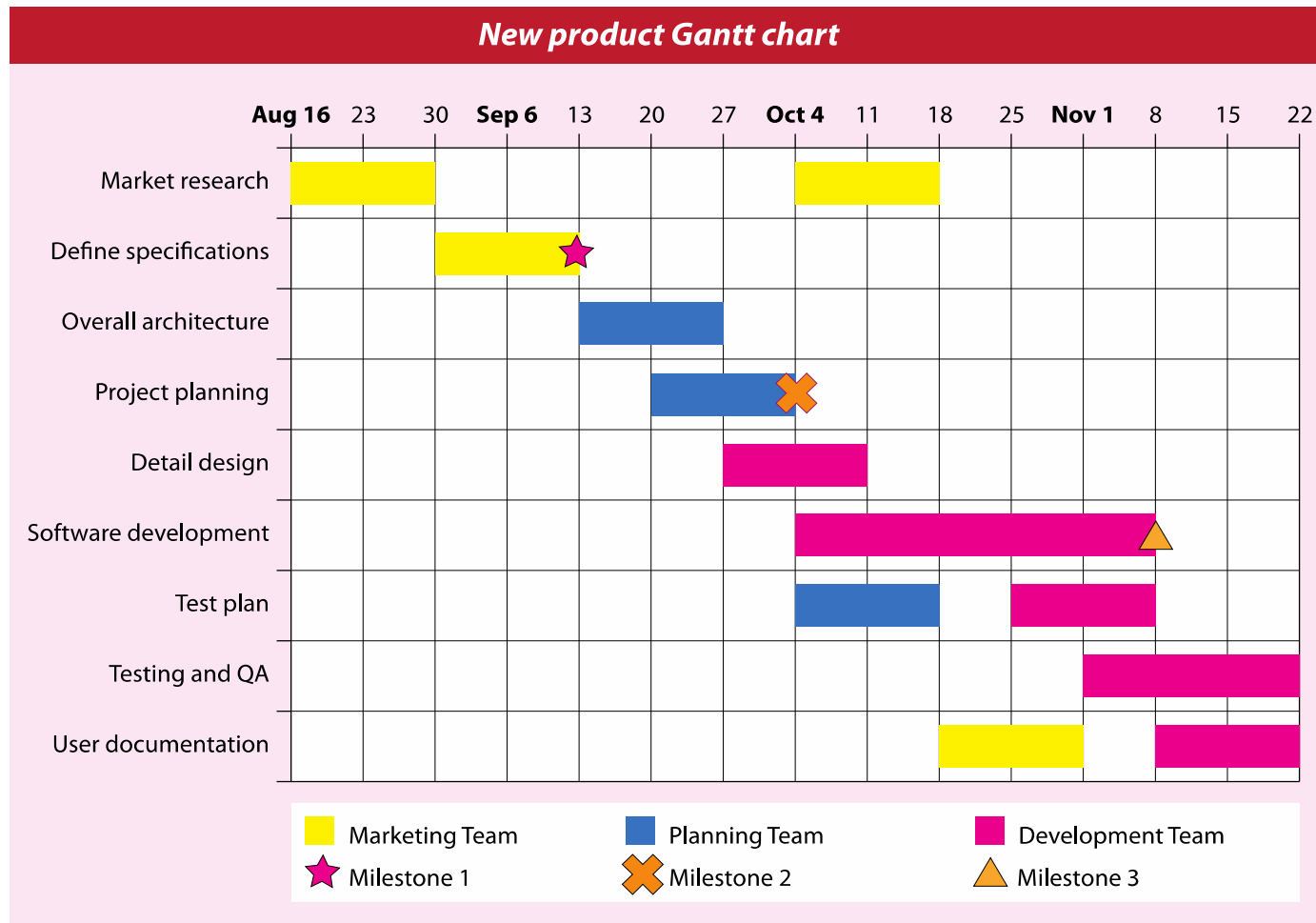
- Gantt charts are usually created by means of computer software.
- There are packages specifically designed to produce them.
- Each package has different features and produces different looking charts, but the results are similar.

# Parts of a Gantt chart

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- The next slide shows a simple Gantt chart with a title and nine tasks.
- The tasks range from market research at the start to user documentation at the end.
- The tasks are listed on the vertical axis.
- The horizontal axis is divided into weeks, subdivided into days.

# Example of a Gantt chart



# Creating a Gantt chart

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- To create the chart, the start and end dates of the individual tasks and sub-tasks are entered interactively to the software.
- Milestones can also be entered.
- The software produces the chart on the basis of the information supplied.
- The progress of the tasks is entered on a regular basis; the software updates the chart accordingly.



# Developing a Gantt chart

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- Depending on the software used, reports can be produced about those tasks that are running behind schedule and the impact of any delay on the end date of the project can be seen.
- Some organisations call a Gantt chart a 'programme of work', a 'schedule' or simply a 'bar chart'.

# Benefits of a Gantt chart

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- Clarity
- Communication
- Coordination
- Time management
- Flexibility
- Manageability
- Efficiency
- Accountability

# Limitations of a Gantt chart

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- The Gantt chart relies on the work breakdown schedule being complete.
- If tasks or milestones are missing, they will not be accounted for and the Gantt chart may have to be redrawn.
- The main focus is on time, therefore cost and scope of the project may not be accounted for.