

Technical service

The technical service of a company does repair jobs for production machines. Such a job is called a “work order”. One is asked to automate the recalculation of those work orders (follow up on hours spent and total cost).

A work order is executed by one or more technicians. Every technician belongs to a discipline: “electrical”, “mechanical” or “general”. Every discipline has a responsible. It is the responsible who creates a work order and gives it a priority. He assigns the technicians that have to execute the work order (does not need to be from the same discipline).

Every technician can work on multiple work orders.

A work order is executed for one single machine.

Every machine has a bill of materials, i.e. a list of all parts used in that type of machine (with other words, all parts that might be replaced to repair the machine). A technician can consult these bill of materials to prepare his work order.

The hourly rate depends on the discipline and the shift (day shift, night shift, weekend shift, holiday, ...) in which the work order is executed. A work order is executed in one shift (additional work orders are created when multiple shifts are needed).

The technicians input all data after the execution of a job (registration of hours spent, used parts, comments).

The responsible of a work order determines when a work order is closed, i.e. when further data cannot be registered anymore.

One wants to be able to print a weekly report with following information:

ID work order; date/shift of work order; technicians + hours spent with hourly rate; used parts + cost of parts; total repair cost.