

# Recruitment Test

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An existing Patient Management System in a hospital wants to add a new feature to let doctors manage their calendar.

## User requirements

1. Each doctor has to be able to define his own calendar - working days and working hours. Note that the hospital is open 24/7.
2. The calendar slot unit is 15 minutes: all appointments are assumed to last 15 minutes.
3. Doctors will schedule their patients using their calendar.
  - (a) The system must be able to prevent collisions - more than one patient in the same slot.
  - (b) When doctors try to make an appointment in a busy slot the system should not only prevent it, but also suggest a neighbour slot that is still free.
4. Individual appointments can be re-scheduled - e.g., a patient calls to change it.
5. Doctors sometimes get sick. The system shall provide a feature to re-schedule all the appointments of a doctor on a particular day.

## Deliverables

1. UML design of the business layer and database persistence layer
2. Java code for the class in your UML design you find more interesting
3. Database data model design

**Goal** The goal of the test is that you present your designs and your code and we can engage in a discussion about it.

The actual media used is irrelevant - you can use UML software or draw by hand in a sheet of paper.

## Notes

1. The specification of the problem is not complete. You can make assumptions to fill the gaps as long as you can justify them.
2. Do not add extra features.