

Clarification and changes of the assignment Problem 3, sub question 1

Problem 3:

For the ER diagram illustrated in Figure 2 of Problem 2, the management team of the hospital wants to make the database available to the regulator for monitoring and inspection, so that they can have access to historical data. In order to facilitate fast access to the database and for security reasons you are required to do the following:

1. Discuss the different implementation options you have when converting the database to relational schema. Are there any advantages or disadvantages of the different choices one might select, and if yes, what are these?

Please change the above sub-question as follows:

1. Use specialization and generalization relations to revise the ER diagram in Figure 2 of Problem 2 with the following additional description: (a) the doctors can be classified as either part-time or full-time employed. (2) for a part-time doctor who has a second employer. The second employer could be either a public sector or a private one. Discuss the different implementation options you have when converting the EER diagram to relational schema. Are there any advantages or disadvantages of the different choices one might select, and if yes, what are these?

Some further explanation to the sub-question 3-1:

The 'different implementation options' refer to the options when using generalisation or specialisation for multiple relations, e.g. the options 8a or 8b.