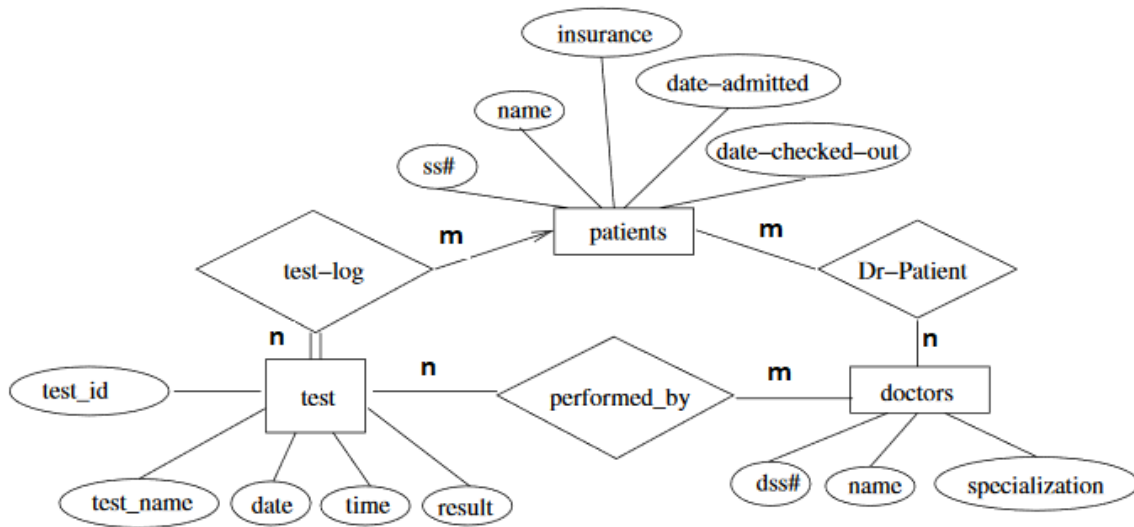


## Module 01 Exercises

- a. Consider a database used to record the marks that **students** get in different exams of different **course offerings**. Construct an alternative E-R diagram that uses only a binary relationship between students and course-offerings. Make sure that only one relationship **exists** between a particular student and course-offering pair, yet you can represent the marks that a student gets in different exams of a course offering.
- b. Apply mapping steps for the following Final ER schema:



- c. A college maintains details of its lecturers' subject area skills. These details comprise:
- Lecturer Number
  - Lecturer Name
  - Lecturer Grade
  - Department Code
  - Department Name
  - Subject Code
  - Subject Name
  - Subject Level

Assume that each lecturer may teach many subjects but may not belong to more than one department.

Subject Code, Subject Name and Subject Level are repeating fields.

***Normalize this data to Third Normal Form.***

- d. For the following table that represents data about sailors write the appropriate ***SOL*** to retrieve the sailors whose age is between 25 and 35 or the age is not entered:

Sailors	<u>S_ID</u>	Name	Age	Score
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