

Software Design

Class Diagram

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- Objects represent something in the real world, such as a patient, a prescription, a doctor, etc.
- May need to define additional implementation objects that are used to provide the required system functionality

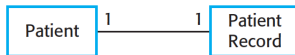
Class Diagrams

- Class diagrams are used when developing an object-oriented system model
- Shows the classes in a system and the associations between these classes
- An object class can be thought of as a general definition of one kind of system object
- An association is a link between classes that indicates that there is a relationship between these classes
- Each class may have to have some knowledge of its associated class

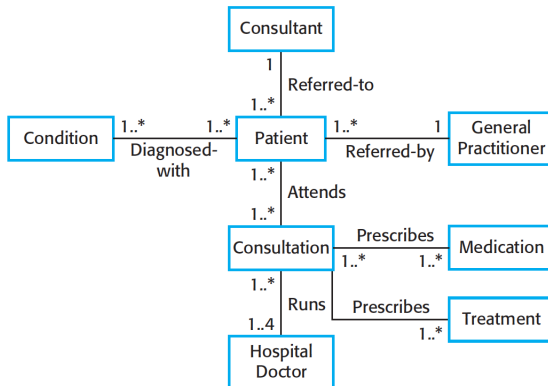
Classes and Association

- Look at the world, identify the essential objects, and represent these as classes
- Note the existence of an association
- Name associations to give the reader an indication of the type of relationship that exists
- Show how many objects are involved in the association

Example: Patient Class Diagram for MHC-PMS



Example: Classes and Association in MHC-PMS



- **Attributes:** The characteristics of an object
- **Operations:** The things that you can request from an object

Example: The Consultation Class in MHC-PMS

Consultation
Doctors Date Time Clinic Reason Medication Prescribed Treatment Prescribed Voice Notes Transcript ...
New () Prescribe () RecordNotes () Transcribe () ...

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