

Assignment # 2

SYSC 5704 – Model Driven Development of Real-Time and Distributed Software

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Submitted To
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By

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Part (b): Stereotypes Description

1. Name : Attributes

Description: The attributes are the characteristics of an entity in an ER Model.

Tag Definition : name

Description: The attributes name is a string whose 1st alphabet starts with a capital letter followed by a small ones. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones.

Tag Definition: type

Description: The attributes type is a string whose 1st alphabet starts with a capital letter followed by a small letter. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones.

2. Name: Entity

Description: An entity is a person, a place, an object, an event, or a concept about which an organization wishes to maintain data in their database.

Tag Definition : name

Description: The entity name is a string whose 1st alphabet starts with a capital letter followed by a small ones. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones.

Tag Definition: type

Description: The entity type is a string whose 1st alphabet starts with a capital letter followed by a small letter. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones. The types of entity are weak entity and strong entity.

Weak Entity: The entity that does not possess sufficient and enough attributes to form a primary key are weak set entity or weak entity

Strong Entity: The entity that does possess sufficient and enough attributes to form a primary key are strong set entity or strong entity.

3. Name: Relationships

Tag Definition: name

Description: The relationships name is a string whose 1st alphabet starts with a capital letter followed by a small ones. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones.

Tag Definition: type

Description: The relationships type is a string whose 1st alphabet starts with a capital letter followed by a small letter. There should be no space in between the 1st word and the 2nd word of the attribute types. The 2nd word should also start with a capital letter followed by a small ones.

Types of relationships are as follows:

a. Cardinality Ratio: It specifies maximum number of relationship instances in which participation of each entity is involved. The types are:

1:1, 1:N, M:N

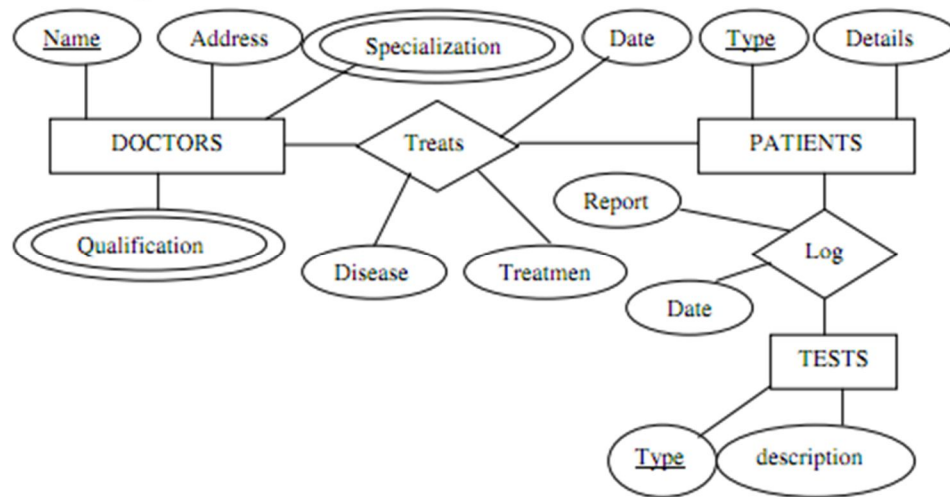
b. Participation: It specifies whether all entities of an entity type participate in a given relationship or being related to any entity via relationship type.

4. Name: ER Model

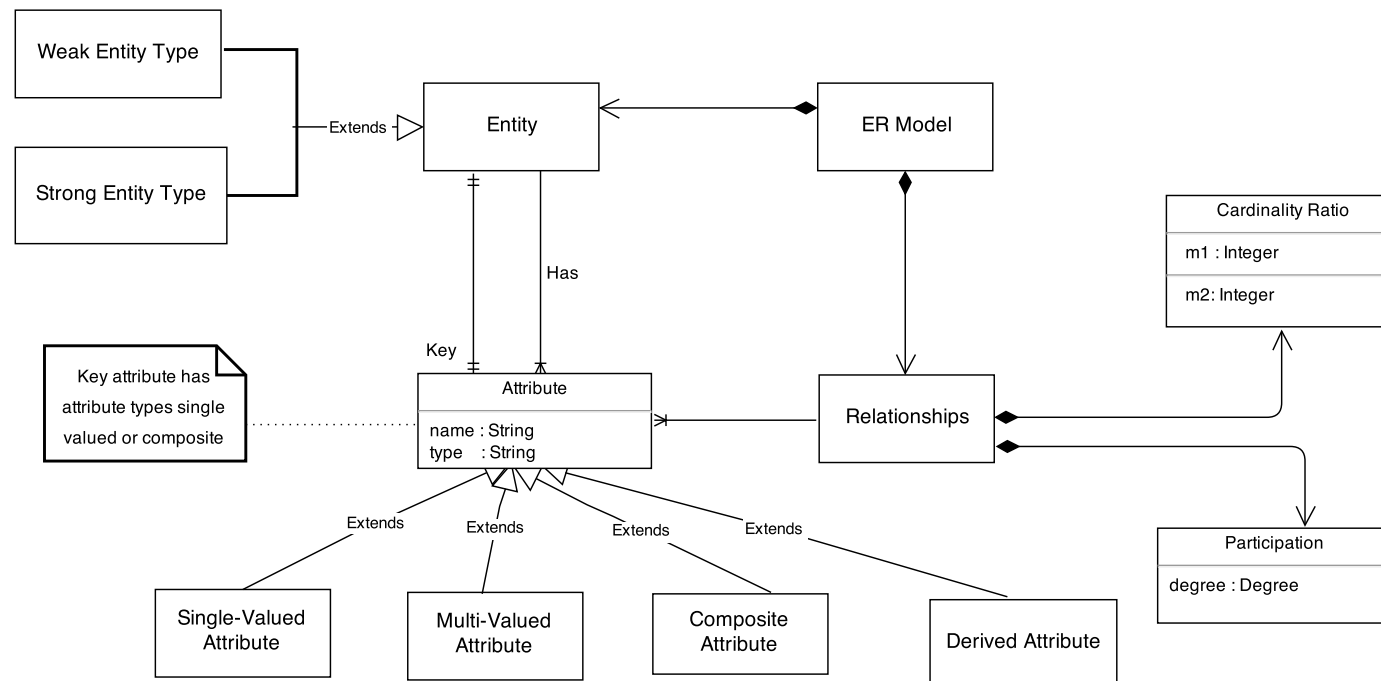
Description: ER Model is a graphical way of representing entities, attributes and relationships in order to create a database. The database structure is represented in a diagram called entity relationship diagram. The view can easily be identified by ER Model.

Part (c)[2nd Part]

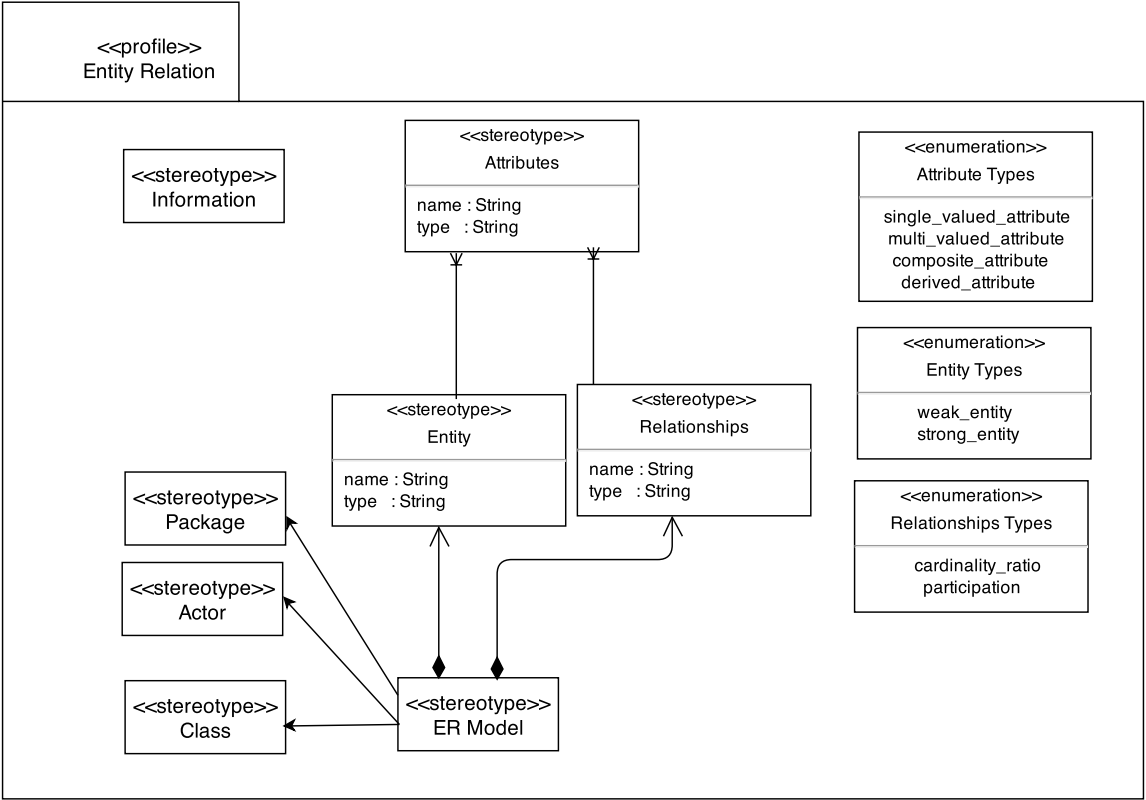
In the 2nd part of the Part (c), the ER model which I am choosing is the Hospital Management System. The ER Model of it are as follows:-



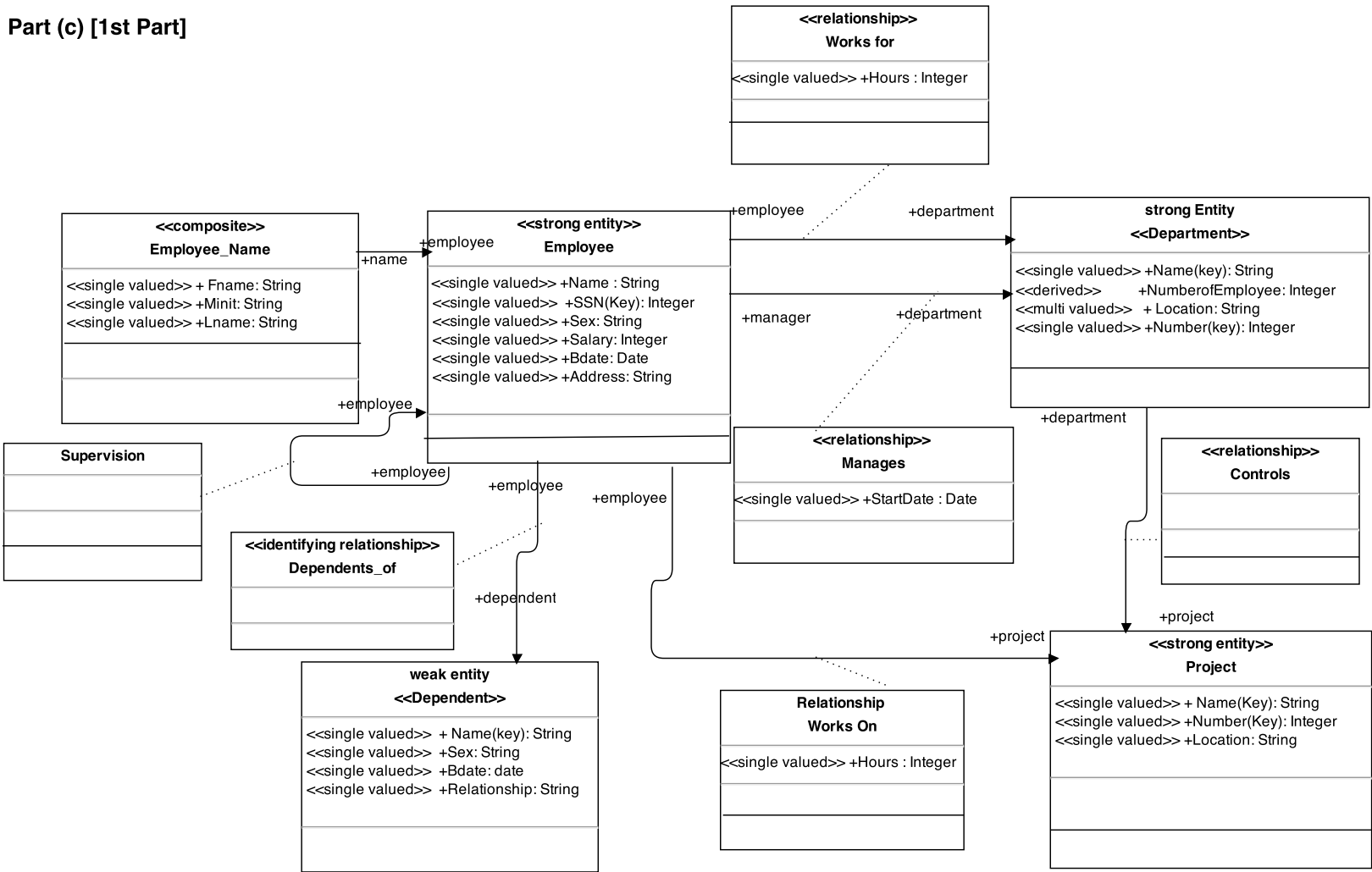
Part (a)



Part (b)



Part (c) [1st Part]



Part (c) [2nd Part]

