

Central Hospital

José María Campos Trujillo

1ºDAW

29/11/2022

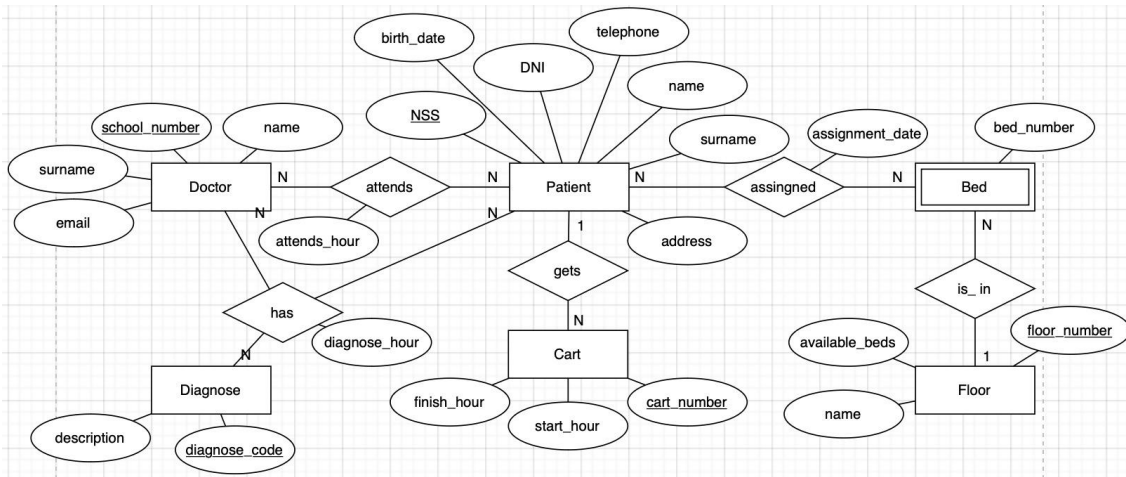
<b>Author:</b> José María Campos Trujillo	<b>Course:</b> 1 DAW
<b>Title:</b> Central Hospital	<b>Nº:</b> 01

<b>1. Diagram</b>	<b>3</b>
<b>2. Relational model tables</b>	<b>4</b>
<b>3. Normal Forms</b>	<b>4</b>

<b>Author:</b> José María Campos Trujillo	<b>Course:</b> 1 DAW
<b>Title:</b> Central Hospital	<b>Nº:</b> 01

## 1. Diagram

Here we can see the E/R diagram.  
It has 6 entities and 5 relationships.



<b>Author:</b> José María Campos Trujillo	<b>Course:</b> 1 DAW
<b>Title:</b> Central Hospital	<b>Nº:</b> 01

## 2. Relational model tables

### Entities:

Patient (NSS:numeric, DNI:numeric, name:text, surname:text, birth\_date:date, telephone:numeric, address:text)

Bed (bed\_number:numeric, floor\_number:numeric)

Floor (floor\_number:numeric, name:text, available\_beds:numeric)

Cart (cart\_number:numeric, start\_hour:date, finish\_hour:date, patient\_nss:numeric)

Doctor (school\_number:numeric, name:text, surname:text, email:text)

Diagnose (diagnose\_code:numeric, description:text)

### Relationship:

Attends (attends\_hour:date, patient\_nss:numeric, doctor\_number:numeric )

Patient\_Doctor\_Diagnose (diagnose\_hour:date, diagnose\_code:numeric, doctor\_number:numeric, patient\_nss:numeric)

Assingned (assignment\_date:date, patient\_nss:numeric, bed\_number:numeric)

## 3. Normal Forms

1NF: All are in 1 normal form because there are no multivalued fields.

2NF: All are in second normal form because the primary key is well chosen.

3NF: All are in third normal form because we found no transitive dependencies.

Boyce and Codd: All of them are in Boyce and Codd since all the dependencies come from primary keys or candidate keys in the case of the Patient entity the DNI would be a candidate key and it would fulfill the form