User Stories assignment 1

User Story "Design an ERD"

As a: **developer**
I want to: **easily view the database structure via an ERD diagram**
So that: **I can easily understand, modify and integrate with the database schema**

Checklist

- Analyze the Someren case and identify all entities, relationships and attributes.
- The ERD contains all required entities.
- The ERD contains all relationships between entities.
- The ERD contains a complete attribute list.
- The ERD contains the functionality (1, n, m) for all relationships.
- Each functionality is also described in text to avoid confusion;
- The ERD contains the totality (O, T) for all relationships;
- Each totality is also described in text to avoid confusion;
- The ERD is checked and discussed in the group.

User Story "Convert the ERD into a relational model"

As a: **developer**
I want to: **have a relational model based on the ERD diagram**
So that: **I can create and use a well structured database for my application**

Checklist

- *(condition 1)* All entities have a unique name;
- *(condition 2)* All entities have a primary key;
- *(conversion rule 1)* All n-to-m relations are represented by means of three tables: two for the entity types and one for the relationship type (containing reference keys to both entity types);
- *(conversion rule 2)* For all n-to-1 and 1-to-n relations, the 1-sided entity type is converted into a table that contains a reference key to the n-side entity type;
- *(conversion rule 3)* For all 1-to-1 relations, one of the entity types is converted into a table that contains all attribute types of the relationship as well as a reference key to the other entity type;
- *(conversion rule 4)* For all tables with a reference key totally participating in a relationship, the reference key in that table is filled (not nullable);
- *(conversion rule 5)* For all tables totally participating in a relationship, all key values occur at least once as the value of the reference key in the other table;
- The relational model is checked and discussed in the group.