Mapping Approach

We created our schema using the statement 'create schema'. We carried on by creating tables for various entities from our entity relation diagram, starting from the entity 'user'.

We included in our entity relation diagram: 16 entities(with a lot of attributes), 8 relationship sets and 4 ISA hierarchies. After that we created all the entity and relationship tables using the 'create table' statement.

We created the tables for the entities by declaring their attributes and an ID for each entity and setting that as the entity's primary key. We also created the relationships' tables by declaring the participating entities IDs as foreign keys in the relationship.

We captured the multiplicities wherever it is 1:1 by adding the keyword 'unique' at the IDs which were also primary keys like for example 'player_id int primary key unique not null' and by using composite primary keys for 1:n relationships like 'primary key(player_id, game_id)'.

We also captured the ISA hierarchies by declaring the parent ID as a foreign key of the child entity. We followed the second alternative namely 'relations only entity sets with instances' to translate the ISA hierarchies into relations because we want all users of the service to be in one of the two subclasses 'player' and 'publisher' and also inherit the parent's attributes.