

BPC-BDS – project assignment 1 – Ramiš, Tománek

Application description:

Our application represents a database system suitable for basic handling of informations about all people (employees and member customers as well) in a multiplex/cineplex company (considering the definitions of these words we actually created something that could be called „a cineplex of multiplexes“). The very basic root table in the system is holding information about people. This database also contains roles to distinguish between customers and employees in the system including some manager positions. It also holds contacts and addresses of all the people (and addresses of all the multiplexes). The „function of cineplex“ tables include films booked by certain customers, screens designated to play these films (all different screens and screen numbers are linked to different multiplexes on different addresses in the cineplex company). The screen don't need just the customers themselves but naturally some staff taking care of the customers and staff for operation of all the devices in the screen room. The films also have an optional „PEGI“ age restriction that can be checked using basic information.

Table descriptions:

- person – this table holds the basic information about people including age to check for age restrictions and an optional picture for their member/employee cards – our largest table holding 60 people at the moment
 - contact – a table holding information about their contacts including type of contact and nicknames of the people (in case someone would like to link their social media accounts to their profiles) – our one-to-many relationship
 - address – a table holding information about city, street, zipcode etc. either to be used by the employer or for the members... this is also needed to cascade down to the location of different cinemas
 - theatre – a table holding the name and location of certain buildings, the location is referenced straight from address table as one-to-one relationship
 - film – our second bigger table with 50 entries, including film name and an optional PEGI age restriction
 - screen – a table holding a screen number and an optional boolean clause to show that the screen room is able to play films in 3D
 - role – a table that holds a rolenames for different roles in the company
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- person_has_role – a table holding keys for many-to-many relationship linking a person with their assigned role

- person_has_film – a table holding keys for many-to-many relationship linking a person with a film they booked (there is a boolean case to confirm that the person is a customer)
- person_has_address – a table holding keys for many-to-many relationship linking a person with their address
- person_has_screen – a table holding keys for many-to-many relationship linking a person with a screen assigned to them (there is a boolean case to confirm that the person is an employee of the company)
- film_has_screen – a table holding keys for many-to-many relationship linking a film to an assigned screen