

Database concept of "Tanktool" Application

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1 Table definitions

1.1 Table: CAR

1.1.1 Structure

Column	Datatype		PK	NN	UQ	BIN	UN	ZF	AI	G	Default / Expression
id	INT(11)	↕	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CarName	VARCHAR(30)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
kmstatus	VARCHAR(20)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
userID	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
fuelID	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
licenseplate	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<click to edit>		↕	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.1.2 Primary Key

The Column "id" has been defined as the Primary Key.

1.1.3 Foreign Key

Following foreign keys have been defined:

1. fuel2-2fuel, references to the id of the table "FUEL"
2. user2user2, references to the id of the table "UserData"

1.1.4 Reference options

For both Foreign Key Constraints is the reference option "RESTRICTED" , so on "UPDATE" and "DELETE".

1.1.5 Indices

1. index on "licenseplate" (UNIQUE)
2. index on "fuelID" (FK Constraint)
3. index on "userID" (FK Constraint)

1.2 Table: FUEL

1.2.1 Structure

Column	Datatype		PK	NN	UQ	BIN	UN	ZF	AI	G	Default / Expression
id	INT(11)	↕	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
fuelname	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<click to edit>		↕	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.2.2 Primary Key

The Column "id" has been defined as the Primary Key.

1.2.3 Content

This table has a pre-defined Content. That means , that in this table contents already rows/entrys, which also means that this table is not going to be filled by User-Inputs. The content is already pre-defined because it will never change , it will always be the same kind of fuels, so for Example:

1. Super 95
2. SuperPlus
3. Diesel
4. ...

1.3 Table: UserData

1.3.1 Structure

Column	Datatype		PK	NN	UQ	BIN	UN	ZF	AI	G	Default / Expression
id	INT(11)	↕	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
firstname	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
lastname	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gender	VARCHAR(10)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
birth	VARCHAR(10)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
username	VARCHAR(30)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
userpassword	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
mobilnr	VARCHAR(20)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
adress	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
city	VARCHAR(60)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
zip	VARCHAR(10)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.3.2 Primary Key

The Column "id" has been defined as the Primary Key.

1.3.3 Indices

1. Index on "username" (UNIQUE)

1.4 Table: FuelEntry

1.4.1 Structure

Column	Datatype		PK	NN	UQ	BIN	UN	ZF	AI	G	Default / Expression
id	INT(11)	↕	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
carID	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
stationname	VARCHAR(60)	↕	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
daytime	TIMESTAMP	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
ppLiter	DOUBLE	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
literamount	DOUBLE	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
endcost	DOUBLE	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
userid	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
fuelID	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
photo	MEDIUMBLOB	↕	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
kmstatus	INT(11)	↕	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.4.2 Primary Key

The Column "id" has been defined as the Primary Key.

1.4.3 Foreign Key

Following foreign keys have been defined:

1. car2car references on the column "id" of the table "CAR"
2. fuel2fuel references on the column "id" of the table "FUEL"
3. user2user references on the column "id" of the table "USER"

1.4.4 Reference option

For all Foreign Key Constraints is the reference option "RESTRICTED" , so on "UPDATE" and "DELETE".

1.4.5 Indices

1. Index on "carID" (FK Constraint)
2. Index on "fuelID" (FK Constraint)
3. Index on "userID" (FK Constraint)

2 Relationships

2.1 Visualization by Database Diagram

