Database concept of "Tanktool" Application

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1 Table definitions

1.1 Table: CAR

1.1.1 Structure



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

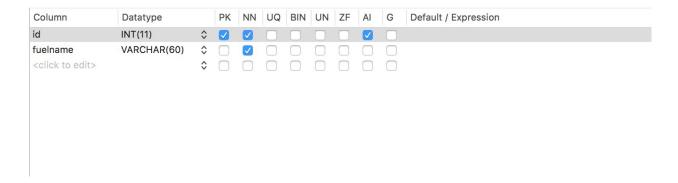
For both Foreign Key Constraints is the reference option "RESTRICTED" , so on "UPDATE" and "DELETE".

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



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	Al	G	Default / Expression
id	INT(11)	\$	V								
firstname	VARCHAR(60)	\$		/							
lastname	VARCHAR(60)	\$		V							
Gender	VARCHAR(10)	\$		V							
birth	VARCHAR(10)	\$		V							
username	VARCHAR(30)	\$		V	✓						
userpassword	VARCHAR(60)	\$		V							
mobilnr	VARCHAR(20)	\$		/							
adress	VARCHAR(60)	\$		V							
city	VARCHAR(60)	\$		V							
zip	VARCHAR(10)	\$		V							

1.3.2 Primary Key

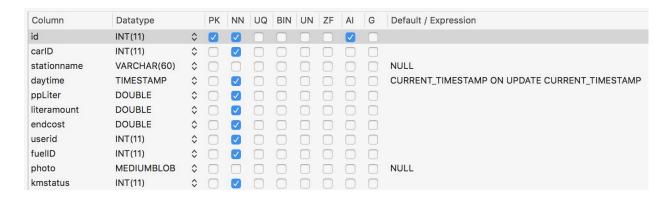
The Column "id" has been defined as the Primary Key.

1.3.3 Indices

1. Index on "username" (UNIQUE)

1.4 Table: FuelEntry

1.4.1 Structure



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

