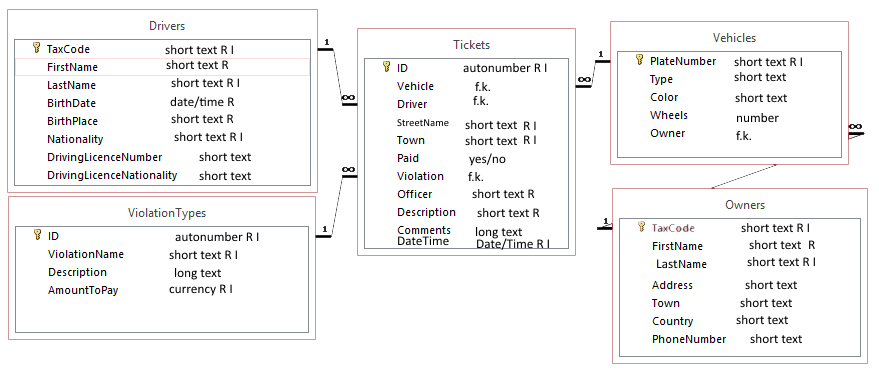
Free University of Bolzano Bozen – Faculty of Economics and Management

Information Systems and Data Management 27006 exam

## Exercise Relational databases



Explanations:

* Vehicles’ Type can be car, motorcycle, truck, …
* Driving license information are not required as the driver can be without a driving license.
* Officer is required as there must be a person who issued the ticket and he must enter a description.

Validation rules:

* AmountToPay >= 0 (it can be 0 for very minor violations or just warnings)
* Wheels >=2 (we issue no ticket to mono-wheel vehicles)

Queries:

1. List all the violations of 24th June 2015 with their amounts to pay
2. SUMMARY: (please note that I **do specify** which is the summary query!) What is the maximum amount to pay?

## Exercise Theoretical questions

**Solid State Drives**

TRUE  FALSE  are usually faster that standard hard disks

TRUE  FALSE  are more expensive than standard hard disks

TRUE  FALSE  are only external

TRUE  FALSE  do not have moving parts

**Freeware software**

TRUE  FALSE  asks for a small fee after some usage

TRUE  FALSE  is always open source

TRUE  FALSE  is usually produced by non-profit organizations

TRUE  FALSE  an example of it is Skype communication program

**GNU public licence**

TRUE  FALSE  is a freeware licence

TRUE  FALSE  is an open source licence

TRUE  FALSE  is a copyleft licence

**CTRL key on an English keyboard**

TRUE  FALSE  corresponds to AltGr key on a German keyboard

TRUE  FALSE  is equivalent to Windows key

TRUE  FALSE  is used to “paste” in combination with other keys

TRUE  FALSE  is used to “copy” in combination with other keys

TRUE  FALSE  is used to “cut” in combination with other keys

**Using Google Advanced search you can, if you want,**

TRUE  FALSE  search only for PDF files

TRUE  FALSE  search only for Excel files

TRUE  FALSE  search only for pages inside a specific domain

TRUE  FALSE  search for pages which do not contain a certain word

TRUE  FALSE  search for web pages only in a specific language

**Downloading using an UMTS-HSDPA connection (in perfect conditions) is faster than downloading using**

TRUE  FALSE  LTE (in perfect conditions)

TRUE  FALSE  Wi-Fi (in perfect conditions)

**When you digitally sign a document**

TRUE  FALSE  you need to have an agreement with a certification authority for your signature to

be recognized by other people

TRUE  FALSE  often a second password method is required

TRUE  FALSE  you use a public key

**A smartcard, such as the Italian national health card,**

TRUE  FALSE  can replace a password

TRUE  FALSE  can be used together with a password

TRUE  FALSE  needs an appropriate reader to be used

TRUE  FALSE  is used by public institutions to let you access your own data

**A virus on your computer can**

TRUE  FALSE  send around emails from your computer

TRUE  FALSE  prevent programs on your computer from running

TRUE  FALSE  shutdown your computer

TRUE  FALSE  damage your computer’s hardware

**RAID1**

TRUE  FALSE  is faster than RAID0

TRUE  FALSE  is safer than RAID0

TRUE  FALSE  is so reliable that it can be used as the only backup system

TRUE  FALSE  needs 4 hard disks

TRUE  FALSE  speeds up data saving and reading

TRUE  FALSE  protects against a hardware crash