## Working with data

## EXPLICIT USE OF A TRANSACTION IS NECESSARY

All operations in the database should occur within a transaction!

While the creation of the database occurred in a transaction that was run "under the hood" with no explicit "transaction" keyword used, **for** 

adding/removing/updating/retrieving data, explicit use of a transaction is required.

You need to get a transaction from the database object and indicate which object store the transaction will be associated with.

Source code example for creating a transaction associated with the object store named "customers":

```
var transaction =db.transaction(["customers"], "readwrite");//
or "read"...
```

Transactions, when created, must have a mode set that is eitherread, readwrite or versionchange (this last mode is only for creating a new database or for modifying its schemas: i.e. changing the primary key or the indexes).

When you can, use the transaction in read mode as multiple read transactions can run concurrently in this mode.

In the following pages, we will explain how to insert, search, remove and update data. A final example that merges all examples together will also be shown at the end of this section.