

Project description for Degree project

Department of Computer Science

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Background

The world of mobile applications has exploded in the last couple of years. More and more people use their smartphones every day. Companies have now started to streamline their workflow by the use of mobile applications in everyday work for their employees.

Problem formulation

While using mobile applications a data connection is not always a given. You might be in a place where you don't have any reception. And particularly in situations where you use your application within work, at that point it is of big importance that the application always works.

This means that you need to have functionality within your application that allows you to add/remove/update data even when you are offline, which then has the ability to sync to your database later on.

This can be problematic because you can have different versions of different data and need to be able to handle and merge this correctly. The end user should not need to worry about this at all, this should be managed in the background of the application.

Not only does this require database storage but also local storage within the application. This local storage also needs to be able to handle large amounts of data in a good structure depending on the situation as well as being able to deliver good performance.

Expected result

A framework that contains an easy setup for a connection to a database and has functionality to query and save to that database.

It should also handle a local storage that automatically syncs the offline local data with the online one keeping track of which version is correct.