PDMS C# Project Documentation, of the Part done by Stephan Pfleger

**Class "HexConverter"**

has a method "converter" which can convert a very long integer as string via "biginteger" to a hex value and returns its value as a string again. "biginteger" requires reference System.Numerics. Quickly tested.

**Class "ReadCard"**

method "readpatient" reads card data and returns a patient object with the data. if it fails, it returns an empty patient object and creates a popup window with the error message. Quickly tested.

method "readhexcin" reads the ecard id-number and returns the hexadecimal string version of it via HexConverter. if an error happens, it returns an empty string and creates a popup window with the error message. Quickly tested.

For access to the carddata webservices, as of vers.2019b, Json is required and thus is included.

**Class “Current”**

It was written for an object to be created upon login. It contains the value of the user role, in case of login with ecard his/her "hexcin" and a patient object. It is there to simplify rights management later.

**Database**

The DB was successfully created and managed on the local PC using XAMPP, MySQL Workbench and DBeaver.

**Class “SQLCon2”**

File named “SQLCon2.cs”, however it’s a part of partial class “SQLConnector”!

With method "searchpatient", the DB patient entries can be searched by patient name string. Its output is the Name, Surname and PatientID of all fitting patients. Quickly tested.

Via method "LogInECard", checks access for users logging in via ecard. Takes hexadecimal e-card id number and returns either the user-data filled "Current" object or an empty one. Quickly tested.

**Class FileDialog**

It contains the code to prompt the user to choose an ecg file in a file dialog window. Its output is the absolute path of the chosen file. Quickly tested.