

# ATM software

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## Introduction

The aim of this project was to make an ATM that communicates with the MySQL database. The project is using multiple DLL components and EXE that uses C++. EXE and DLLs are using QT. Project also has RFID reader for simulating a credit card.

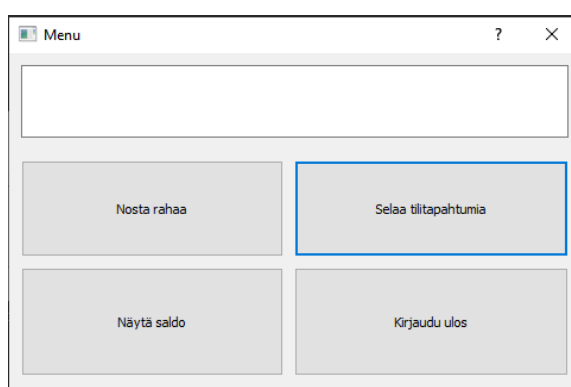


FIGURE 1. Menu that opens after successful login.

## Objectives

The basic aim included RESTAPI that communicates between MySQL database and the user interface. Also to make some DLL components that EXE uses to compile everything together. Project uses RFID reader that detects when card is read and opens login dialog window. After that the EXE opens a menu where you can select what to do next for example see the actions on your card, withdraw money or check your balance.

Software Application Project

ECTS credits: 15

Date of publication: 2022, Spring

Instructors: Teemu Leppänen

## Methods

The EXE contains all the windows excluding login dialog box. EXE is also the link to all DLL components. DLL components communicate between each other through the EXE. The RESTAPI DLL and the serial port DLL are only ones that use external connections. For example, RESTAPI communicates with database and serial port DLL uses the RFID reader.



FIGURE 2. Nucleo-64 for simulating RFID card reader.

How the program is planned to work is that it checks first if a card is read from RFID reader. After that EXE gets signal that starts the user login. After the user has entered their password the RESTAPI DLL checks the password and returns true or false then login can proceed. If the password is true, the action menu opens in a new window.

## Results

Results have been excellent. We managed to connect our database with C++ user interface with QT and the database is complete. Project shows that it is working as planned.

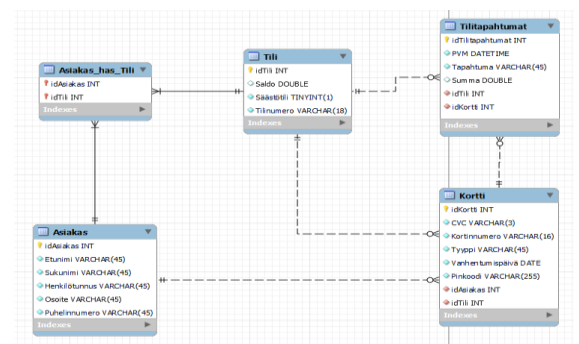


FIGURE 3. Database ER diagram.

## Conclusions

At the time of writing this poster, the project is not complete. The project needs little bit more time to finish. The finished project will meet every objectives the project has.

## References

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