

Project: Expense Manager

Producers: IT Squad

What is this project about?

A project to create a expense manager “e-Xpense” is an implementation of the command works on subject “Programming with C#”. Task we identified is to create an app that would help simplify the process of organizing its budget and expenses for the individual.

Many people don't do “home bookkeeping”. Some do not do this as the result of time constraints or the complexity of the process, some think it's right to use all of their money on everyday expenses. All these opinions have the right to life, however, calculating your budget is an important part of our routine.

Studies prove these assumptions. According to statistics, only 15% of Estonian families count their expenses electronically, and more than half remember their calculations in memory.¹ Our team thought about how to motivate more people to keep track of your monetary transactions and to simplify the process of recording income and expenditure of the person. So we decided to develop a universal program “e-Xpense” (combination of “electronic, internet, Estonia” and “experience”).

What is the goal?

At the moment the market is sufficiently large number of such apps for different platforms that have similar functions. Our goal is to make as easy to use program in which a user would be able to 100% manage their calculations and get the results in a convenient format. All the changes the user sees in real-time, where all the indicators dynamically change.

First and foremost, we are preparing our application to the needs of customers from Estonia. In the future we plan the implementation of separate modules for different regions and countries. For example, for the Estonian user, we want to implement the ability to import the account statement from your bank account.

For this projects we are going to use technology in .NET Framework, Visual Studio, SQL databases and other development tools for C#. Initially, we expect that our program will work under the operating system Windows 10.

¹ Source: <https://kukkur.swedbank.ee/rahakott/uuring-igal-neljandal-perel-ei-ole-piisavalt-saaste>

How can end-user use this application?

Our primary user audience is people aged from 16 to retirement age who are tracking their income and dealing with their savings.

The end user has the following options when using our program (*must have*):

- The user can create a base of financial operations where user can create, modify, and delete records
- The user can obtain a combined analysis at different time intervals (day, week, month, year or any other specified period). All calculations occur automatically in the specified tab. *The user can adjust some of the data for calculation "Settings" tab.*
- The user has the ability to choose category for own income/outcome from the predefined list
- The user has the ability to store data and use them on your local device at any time after the program is closed
- The user has the ability to set personal limits for month. The system notifies the user in advance of overcoming limits.
- The user can export and import all the data from the application in different popular formats.

What are the *nice to have* functions?

- The login to application is by ID-card, Mobile-ID, Smart ID
- The implementation of the login based on the personal account & registration
- Backup stored in the cloud and accessible from any device on the web version of our app. Sync with desktop version
- Separate settings for tax calculation for different countries
- Automatic updates of the application as a new release from the developer
- The ability to attach documents/pictures/scans to records
- The ability to digitally sign reports
- Exporting data in various formats, including PDF
- Each user has the opportunity to complete a visualized overview of their income for a certain period of time in real-time

Which parts of the realization could be problematic?

At the stage of constructing the model of our application, we had the following ideas about possible problems in application development.

- Problem import data from other databases (in our case, the Bank)
- Debugging
- Problems in calculating results in real time

- To associate the database with the program itself
- Users may need to download additional software and plugins to use
- Compatibility with other versions and different operating systems
- Make up a name for the program
- Security. Creating users, creating unique passwords for the system.