# 1.2. Proposed solution

## 1.2.1. What it does

The solution offered to the library is a software, that would allow to make information transfer between two libraries possible, thus accommodating book exchange for the involved parties and exposing statistics of interest. Furthermore, the solution was required to allow people to register and be able to lend certain number of books and return them after member has stopped using them, also notifying the users if grace period expires or if library card must be renewed. The solution likewise had to make work for librarian easier by allowing for improved management of non-lendable books and books of interest.

## 1.2.2. How it does

To do already expressed goals group decided to create a distributed system using WCF. The work was done using C# which is one of the most popular and versatile programming languages commonly used for tasks like this. Information was saved in Microsoft SQL Server which is relational database and it should provide fast response times for the solution in the following 30 years. To display the information to user MVC was used as it is great architectural pattern with many benefits.

## 1.2.3. Why it does

Although we did not have representative of the library to review the solution in making, we believe that result and technologies used are fulfilling of the needs of the institution for perceivable future. The technologies were chosen as we wanted to create a high-quality future proof software, that could be fast to operate and easy to extend if need arises.