# **Deployment Documentation**

Library Management System "Biblius"

Team number 4

#### 1. Introduction

The Library Management System "Biblius" is a server application created using the ASP.NET Core framework. The application allows employees to manage the library's collection, as well as allows users to browse and compare books and reserve a selected book until their visit to the library. The aim of the implementation is to improve processes related to the functioning of the library, as well as the possibility of cataloging the collection.

## 2. Scope of deployment

The implementation includes all activities leading to full functionality of the system, including:

- Application installation and configuration
- Carrying out system tests and verifying correct operation

### 3. Technical Requirements

- OS: Windows/Windows Server (min. Windows 10 22H2 lub Windows Server 2019)
- Database System: Microsoft SQL
- Modern web browser based on Chromium Web Engine (Google Chrome, Microsoft Edge, Opera)

```
"ConnectionStrings": {
  "DefaultConnection":
"Server=AdresSerweraSQL;Database=NazwaBazyDanych;Trusted_Connection=True;Multiple
ActiveResultSets=true"
},
 "Logging": {
  "LogLevel": {
   "Default": "Information",
   "Microsoft.AspNetCore": "Warning"
 }
 },
 "SmtpSettings": {
  "Server": "smtp.gmail.com",
  "Port": 465,
  "SenderName": "Biblius",
  "SenderEmail": "example@gmail.com",
  "Username": "example@gmail.com",
  "Password": "password",
  "UseSsl": true
 "AllowedHosts": "*"
```

Listing 1. Initial content of the file appsettings.json

#### 4. System Deployment

- The computer on which the "Biblius" system will be run should have an installed and running SQL database server.
- The person implementing the project should create a new database with a name of their choice (IMPORTANT! DO NOT USE POLISH CHARACTERS IN THE DATABASE NAME).
- The next step is to copy the received files to the target, previously prepared empty folder.
- Then, in any text editor, open the appsettings.json file in edit mode. A sample content of this file is shown on the previous page.
- It is necessary to change the settings in the "DefaultConnection" and "SmtpSettings" sections
- In the "Default Connection" section, the "AdresSerweraSQL" fragment should be replaced with the address of the SQL server, while the "NazwaBazyDanych" fragment should be replaced with the name of the newly created database in the SQL system. Changing the remaining parameters in this section is not recommended.
- The "SmtpSettings" section is responsible for the functionality related to sending the contact form. The "Server", "Port", "SenderEmail", "Username" and "Password" fields must be configured accordingly. They represent: the e-mail server, the port used to connect to the application, the e-mail address from which the forms will be sent, the username to log in to the mail and the password to log in to the mail. Changing the remaining parameters in this section is not recommended.
- After completing the above steps and saving the changes, we can start the system by running the ZarzadzanieBiblioteka.exe application.
- When launched for the first time and the database is connected correctly, the application will automatically migrate and apply the required database structure.
- After the message "Application started. Press Ctrl+C to shut down" is displayed in the console, we can connect to the application using a web browser by entering the address displayed in the message above.
- The next step of implementation is to create the first user account, following section 1.1 of the
  User Documentation. The first account created will automatically receive administrator
  privileges. Then the system is fully configured and ready to operate. In case of problems, we
  suggest following the User Documentation and we invite you to contact our technical support.