

BookIT

Virtual Library Documentation

UMCS 2022

1 Project setup

Project is a ASP.NET, MVC based web application. Things needed to set this project up are:

- Visual Studio 2022
- MSSQL Server
- SSMS (not necessarily needed but it's perfect to manage database)

1.1 Open project in VS 2022

If things listed above are installed you can open project in Visual Studio 2022 or find "bkit.sh" file and it will automatically open editor.

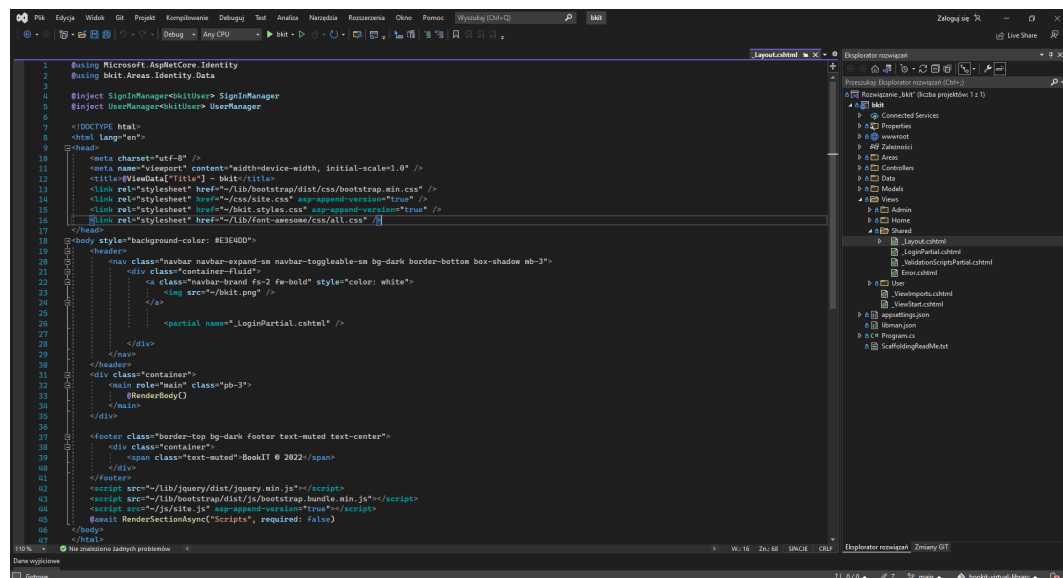


Figure 1: Visual Studio 2022

1.2 Import database

To import database first open SSMS and make sure SQL Server runs on your computer. After successful login right click on "Databases" folder and then click "Import Data-tier Application" and import "bookit.bacpac" file located in "db" folder.

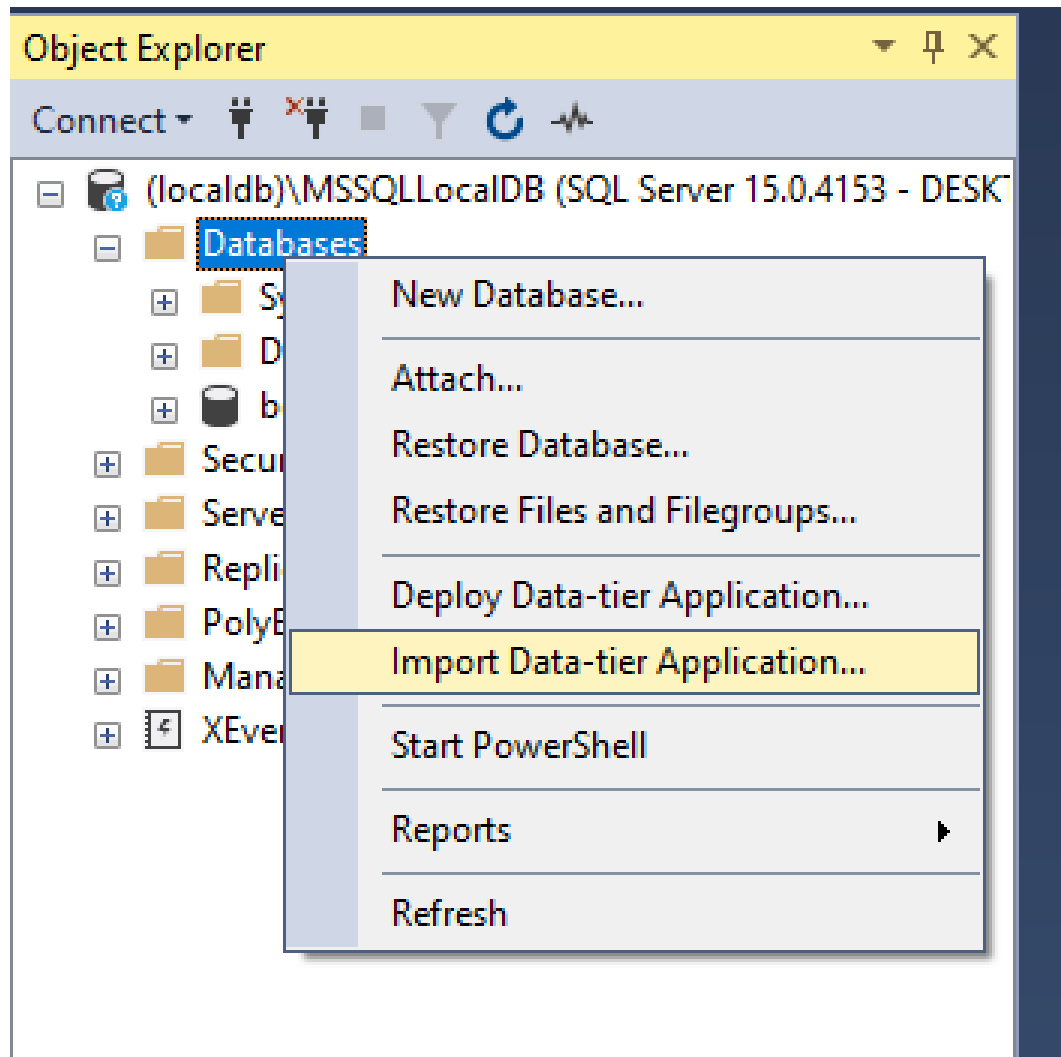


Figure 2: Importing database

After that you should be able to start project in VS 2022 by pressing play button.

2 About project

The project is a ASP.NET MVC based application. Project has four basic functionalities CRUD:

- CREATE
- READ
- UPDATE
- DELETE

The project is a simple virtual library system.

2.1 Functionalities

2.1.1 Users and roles

System has a role based login system. You can log into one of two types of account:

- Admin
- User

New users can register using register form.

2.1.2 CRUD

System has implemented CRUD functionalities. CREATE, UPDATE and DELETE options are only given for admin users as well as READ option (listing books from database). Normal user can see books stored in database, borrow and return them.

3 Models, Views, Controllers

BookIT system uses 3 data models, views divided based on user (admin user, normal user, anonymus user) and 3 controllers.

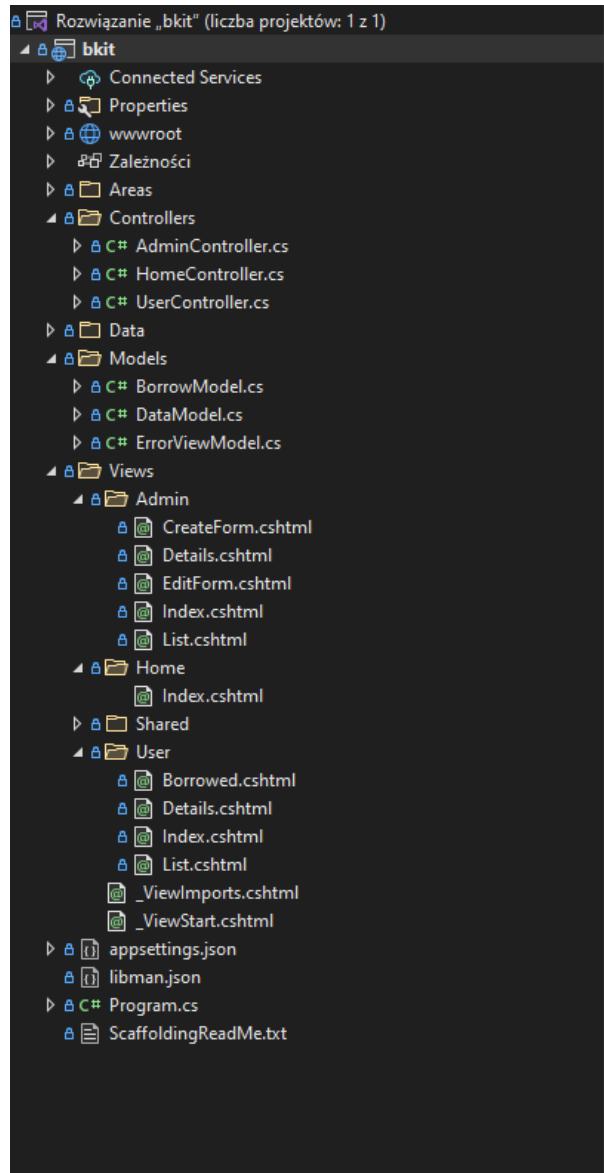


Figure 3: MVC

3.1 Models

- BorrowModel (Borrowings)
- DataModel (Books)
- ErrorViewModel (Errors)

3.2 Views

- Admin Views (Admin subpages)
- Home View (Landing page)
- User Views (User subpages)

3.3 Controllers

- AdminController (Admin functionalities)
- HomeController (Home page functionalities)
- UserControllers (User functionalities)

4 Information from creator

Project was developed for .NET labs. It was my first contact with .NET. If something doesn't work for you that's a shame, because it works perfectly fine for me xD.