# Parking Service Application

dfPark is a Visual Studio 2019 solution comprised of three projects:

|  |  |  |
| --- | --- | --- |
|  | BlazorApp | - .NET Core 3.0 Blazor Application (Client) |
|  | ParkingData | - Shared Data Model |
|  | ParkingService | - .NET Core 3.0 WebAPI Service (Service) |
|  |  | ReadMe.docx – THIS FILE  README.md – GitHub Readme |
|  |  |  |

## Application Requirements

The solutions utilizes the latest .NET Core technologies which may require additional downloads. Visual Studio needs to be updated in order to run the .NET Core 3.0 libraries.

### Visual Studio 2019

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| --- | --- | --- |
|  | <https://visualstudio.microsoft.com/downloads/> |  |
|  | <https://dotnet.microsoft.com/download/visual-studio-sdks> |  |
|  | <https://docs.microsoft.com/en-us/visualstudio/install/update-visual-studio?view=vs-2019> |  |
|  |  |  |

### .NET Core 3.0

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| --- | --- | --- |
|  | Latest release of .NET Core Framework |  |
|  | dotnet-sdk-3.0.101-win-x64.exe |  |
|  | <https://dotnet.microsoft.com/download/dotnet-core/3.0> |  |
|  |  |  |

### User Requirements

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| --- | --- | --- |
|  | Internet Information Services must be installed with full Administrative Privileges to create and configure websites and perform local host\* file changes. |  |
|  | \* Administrator Rights required. The changes only affect local host and pose no security risk. These settings allow host headers to work with IIS and mimic a true production environment. |  |
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## Setup

### Internet Information Services

|  |  |  |
| --- | --- | --- |
|  | Two websites are required: dfpark.com and dfparkapi.com |  |
|  |  | Any host name can be used for sites |
|  | Application Pools |  |
|  |  | The application pool .NET CLR Version uses “No Managed Code” fpr .NET Core applications. |
|  | Host Headers |  |
|  |  | Use same host names in previous step |
|  | Host file |  |
|  |  | C:\Windows\System32\drivers\etc |
|  |  |  |
|  |  | 127.0.0.1 dfpark.com  127.0.0.1 dfparkapi.com |
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### MS SQL Server

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| --- | --- | --- |
|  | Create a database called parkdb | Any database can be used as long as it is referenced in “DefaultConnection” setting of the appsettings.json configuration file. |
|  |  |  |
|  | ParkingData - Data path: dfpark\ParkingData\Data |  |
|  |  | If you cannot attach the included database file you can recreate the database from the scripts located in the ParkingData / Data folder. |
|  | createdatabase.sql |  |
|  | dbo.ParkingLog.Table.sql |  |
|  | dbo.ParkingLot.Table.sql |  |
|  | dbo.Users.sql |  |
|  | parkdb.mdf |  |
|  | parkdb\_log.ldf |  |
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## Applications

### BlazorApp

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| --- | --- | --- |
|  | The BlazorApp Api connection is found in the appsettings.json file, “ConnectionStrings” section, “ApiUrl” property. The “ApiUrl” value is mapped to a valid url to the ParkService web api. In our example the api is located at “http://dfparkapi.com”. The BlazorApp does not need a direct connection to the database. The example below includes both connections need by each service. |  |
|  | The settings should be changed in the development file and the published file. |  |
|  | \appsettings.json |  |
|  | \bin\netcoreapp3.0\publish\appsettings.json |  |
|  |  |  |
|  |  |  |
| "ConnectionStrings": {  "DefaultConnection": "Data Source=[**SERVER**];Initial Catalog=[DATABASE];Persist Security Info=True;User ID=**parkuser**; Password=**test123**",  "ApiUrl": "http://dfparkapi.com"  }, | | |
|  | [DATABASE] is the MS SQL server you will connect to. Credentials must match your environment. |  |

### ParkingData

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| --- | --- | --- |
|  | No special configuration changes are needed.  Source files define the data structure to be used across applications.  The MS SQL database parkdb.mdf resides in this folder. |  |
|  |  |  |

### ParkingService

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| --- | --- | --- |
|  | The ParkingService Database connection is found in the appsettings.json file, “ConnectionStrings” section, “DefaultConnection” property. The “DefaultConnection” value is mapped to a valid database connection that is used for the web api. In our example the “DefaultConnection” is  "Data Source=[**SERVER**];Initial Catalog=[DATABASE];Persist Security Info=True;User ID=**parkuser**; Password=**test123**"  Only the ParkingService needs a direct connection to the database.  The settings should be changed in the development file and the published file. |  |
|  | \appsettings.json |  |
|  | \bin\netcoreapp3.0\publish\appsettings.json |  |
|  |  |  |

## Run without Recompiling

Set the proper settings in the “appsettings.json” file: BlazorApp “ApiUrl” and ParkService “DefaultConnection”.

IIS Website Configuration

|  |  |  |
| --- | --- | --- |
|  | dfpark.com |  |
|  | Set the location path to the published directory on your hard drive |  |
|  |  |  |
|  | dfparkapi.com |  |
|  | Set the location path to the published directory on your hard drive |  |
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