

Tax Calculator With API - Installation Guide

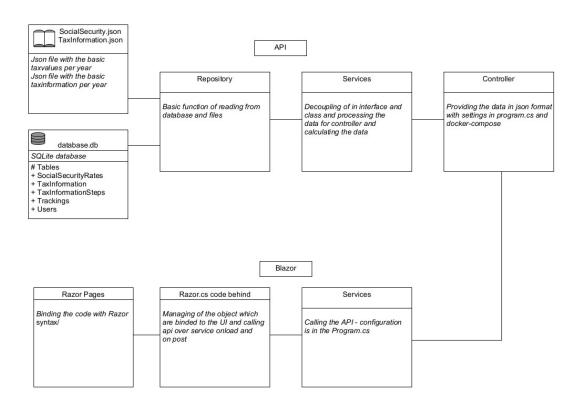
1. Used features

Framework: BlazorServer, ASP.Net Core Web Api, Entity Framework, Identity Framework

Persitence: SQLite, JSON-File, JSON.net, Migration Extention

2. Architecture of the solution

TaxCalculatorWithAPI Solution



3. Installation steps:

Manuel migration of database

- Command Nuget-Shell: add-migration <name>
- Comman Nuget-Shell update database

SSH-Connect from PS

- Command PS: ssh-keygen -t rsa -b 4096 -C "Email@example.com"
- Command Server: cd .ssh
- Command Server: nano authorized_keys add key.pub
- Command PS: Set-Service -Name ssh-agent -StartupType Manual
- Command PS: Start-Service ssh-agent
- Command PS: ssh-add mein_ssh_schluessel
- Command PS: ssh user@ip
- It will find the right connection automatically by the ssh-agent

Transfer

• Command: scp TaxCalculatorWithAPI.zip <user>@<ip>:<Directory>

Connect

• Command: ssh <user>@<ip>

Stop last version

Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker-compose down

Build

 Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker-compose build --no-cache

Upload

 Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker-compose up -d

Check Containers

• Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker ps

Expected Output:

```
ſĠ
CONTAINER ID IMAGE
                                          COMMAND
                STATUS
                               PORTS
CREATED
NAMES
79df70368d67 taxcalculatorblazorserver
                                         "dotnet TaxCalculator"
                                                                 43
seconds ago Up 41 seconds
                            0.0.0.0:80->80/tcp, :::80->80/tcp,
0.0.0.0:443->443/tcp, :::443->443/tcp
taxcalculatorwithapi_taxcalculatorblazorserver_1
                                          "dotnet TaxCalculator"
b0f82e6c6cf6
            taxcalculatorapi
                Up 41 seconds
43 seconds ago
taxcalculatorwithapi_taxcalculatorapi_1
```

Check Logs

 Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker logs 79df70368d67

Access Container

 Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker exec -it b0f82e6c6cf6 bash

List Networks

Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker network
 ls

Check Internal Network

 Command: <user>@localhost:~/<dir>/TaxCalculatorWithAPI# docker network inspect taxnetwork

Setup Docker-Compose for Docker Desktop

 Use 80:8080 binding for Docker Desktop and use comments to hide the ASPNETCORE ssl configuration - a specific # comment tag on the start of the line could be necessary to avoid utf-8 encoding error

Setup Dockerfile for Docker Desktop

• Expose port 80

Run on Docker Desktop

 Use playbutton on VS. If it has a browser connection error try the normal docker commands in powershell to run on Docker Desktop