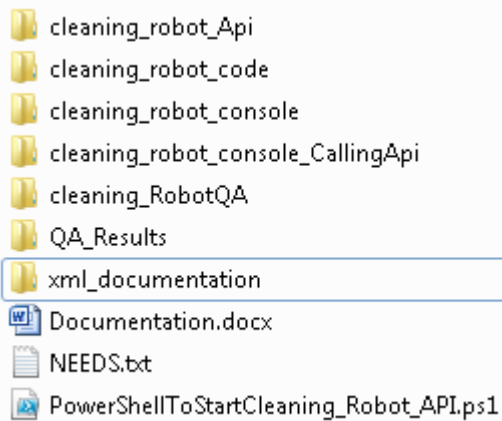## GitHub Repository

https://github.com/betinbeton/cleaning_robot.git

Project methodology:

This project was created using scrum methodology. I create all the tasks that need to be done and create my custom scrum board having: things to be done, testing and done area.

Folder description

Cleaning_robot_code

This folder had all the code that was used.

Cleaning_robot_console

This is the final application for the testing code. This application runs using de cmd of windows

Instruction

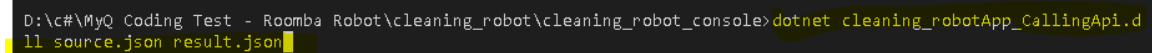dotnet cleaning_robot.dll source.json result.json

In this folder need to exist the source.json and the result is a new file in the folder result.json

cleaning_robot_console_CallingApi

Release console project for coding test using an API. This application ran be run using de cmd of windows

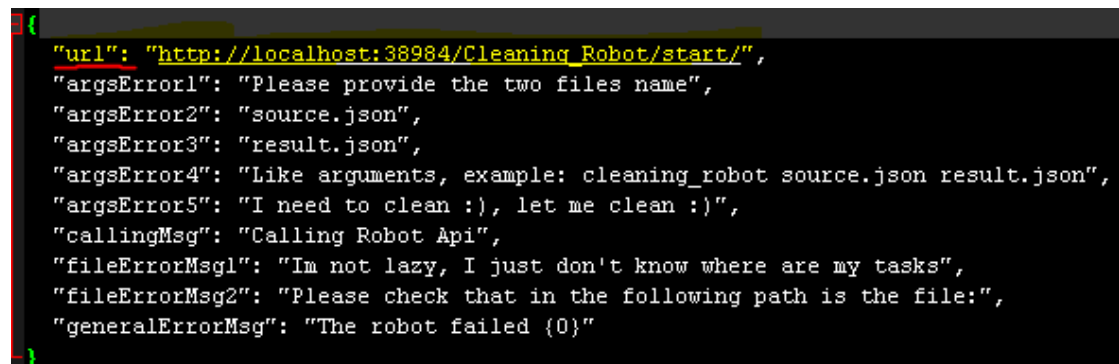dotnet cleaning_robotApp_CallingApi.dll source.json result.json

```
D:\c#\MyQ Coding Test - Roomba Robot\cleaning_robot\cleaning_robot_console>dotnet cleaning_robotApp_CallingApi.d
ll source.json result.json
```

Notes:

1-

First you need to check for the URL and see that is the correct one, this can be found in the appsettings.json

appsettings.json

```
{
    "url": "http://localhost:38984/Cleaning_Robot/start/",
    "argsError1": "Please provide the two files name",
    "argsError2": "source.json",
    "argsError3": "result.json",
    "argsError4": "Like arguments, example: cleaning_robot source.json result.json",
    "argsError5": "I need to clean :), let me clean :)",
    "callingMsg": "Calling Robot Api",
    "fileErrorMsg1": "Im not lazy, I just don't know where are my tasks",
    "fileErrorMsg2": "Please check that in the following path is the file:",
    "generalErrorMsg": "The robot failed {0}"
}
```

You only need to change the http://localhost:38984 in case is using a other port number or url

2-

Publishing the Cleaning robot Api,

You need to copy the folder to the iisexpress folder or virtual directory (please, do not include spaces in the path).

cleaning_robot_Api

I create a powershell to start the iisexpress using the path of the folder that you want. You only need to configure where is the iisexpress and the path of the cleaning_robot_api

Open the PowerShellToStartCleaning_Robot_API.ps1

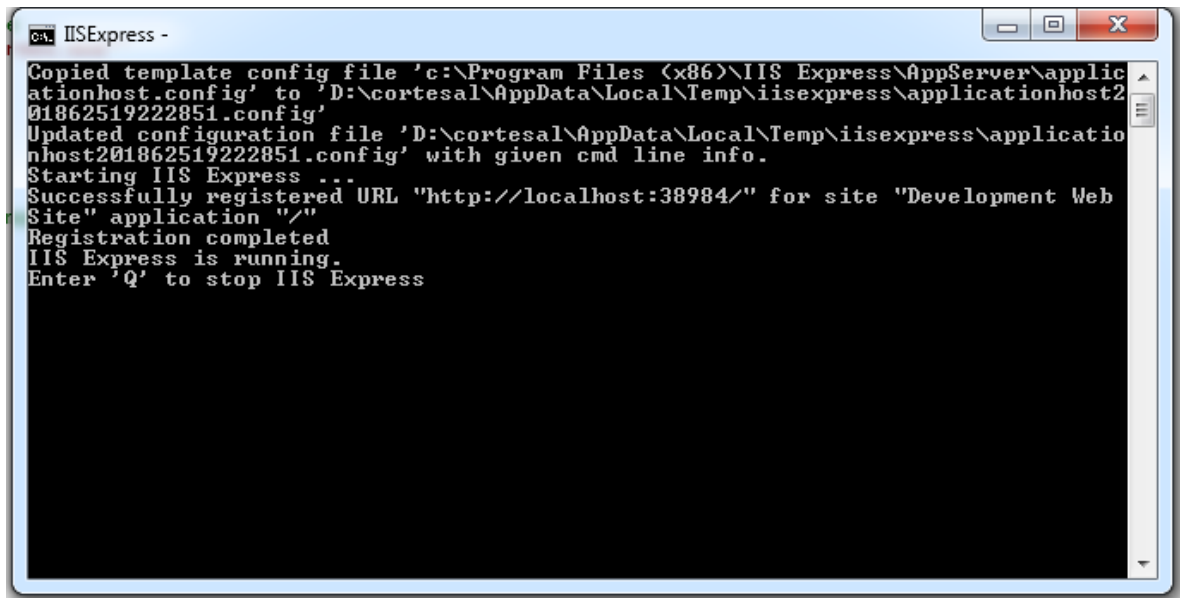PowerShellToStartCleaning_Robot_API.ps1

```
PowerShellToStartCleaning_Robot_API.ps1 X
1  #Shell to start the iisexpress with the path of the cleaning_robot_Api
2
3
4  #path where iisexpress is located
5  #Usually in c:\Program Files (x86)\IIS Express\iisexpress.exe
6  $iisExpressExe = '"c:\Program Files (x86)\IIS Express\iisexpress.exe"'
7
8  $path = (Resolve-path .)
9  Write-Host $path
10 Write-host "Starting site on port: $port"
11
12 #port of the site, for this we are using 38984
13 #path of the site, please use a path with no spaces like exampleD:\cleaning_robot_Api
14 $params = "/port:38984 /path:D:\cleaning_robot_Api"
15
16 $command = "$iisExpressExe $params"
17 cmd /c start cmd /k "$command"
18 Start-Sleep -m 1000
19 Write-Host "Site started"
```

Make sure that the iisExpress is in "c:\Program Files (x86)\IIS Express\iisexpress.exe" if not please change where you have the exe.

You can change the port, but if you change it, please change in the appsettings.json that's call the api

Change the path where api is going to be found, for example I copy the folder to D:\cleaning_robot_Api and change the path

When you run the powershell a cmd will open and you can see that is working the api
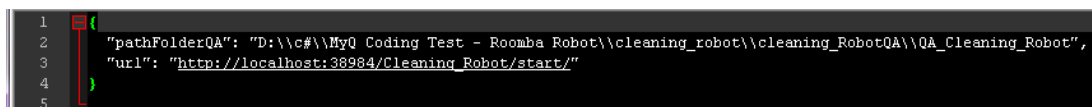
To do a quick test that is working the api you can go to http://localhost:38984/ and you will see a welcome message: Robot say: Welcome Friend :), ready to clean

cleaning_RobotQA

This folder is for QA. This folder is the console application to do the testing with normal call and api call.

This project will read all the files that are inside of the folder QA_Cleaning_Robot, you can configure another folder in the appsettings.json


```
1  {
2      "pathFolderQA": "D:\\c#\\MyQ Coding Test - Roomba Robot\\cleaning_robot\\cleaning_RobotQA\\QA_Cleaning_Robot",
3      "url": "http://localhost:38984/Cleaning_Robot/start/"
4  }
5
```

Please use the \\ to change folder.

QA_Results

This folder includes the testing that I did in the time that I have and the results. I just copy the results from the application cleaning_RobotQA

Xml_ documentation

This folder includes the class libray documentation in xml format that VS2017 generated.

PowerShellToStartCleaning_Robot_API.ps1

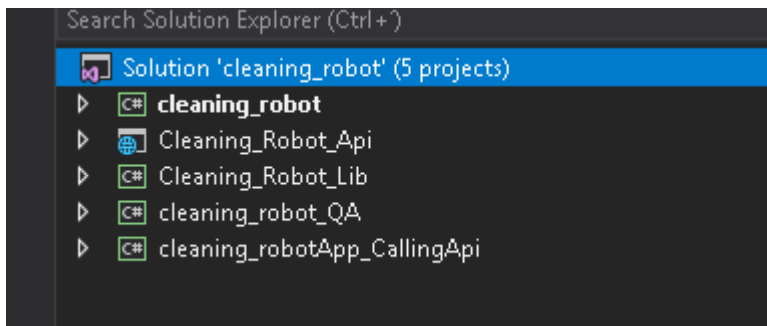Is a powershell to start iisexpress using the cleaning_robot_Api project

Requisites

IIS Express

.net Core 2.*

This project is done using Visual Studio 2017

Project:

Cleaning_robot

Contains the code of a console application using the cleaning robot lib

Cleaning_Robot_api

Contains the code of a rest full api, this code also use the cleaning robot lib

Cleaning_Robot_Lib

This is a class library application that contains all the logic of the cleaning robot algorithm. All the classes and objects that are used in the other application depend on this project.

Cleaning_robot QA

Contains the code of a console application that calls the cleaning robot lib and the cleaning robot api. The propose of this project is to loop and get all the testing files in a specific folder and test the robot lib and robot api. This is a testing project.

Building

To build the solution, open the solution file that is located on the cleaning_robot_code the name of the file is cleaning_robot.sln
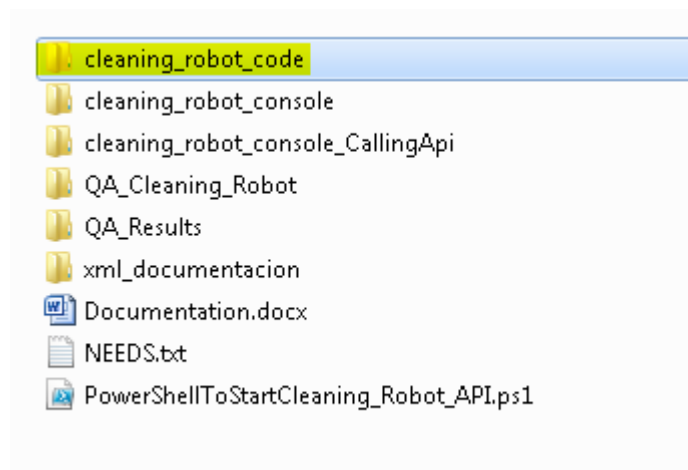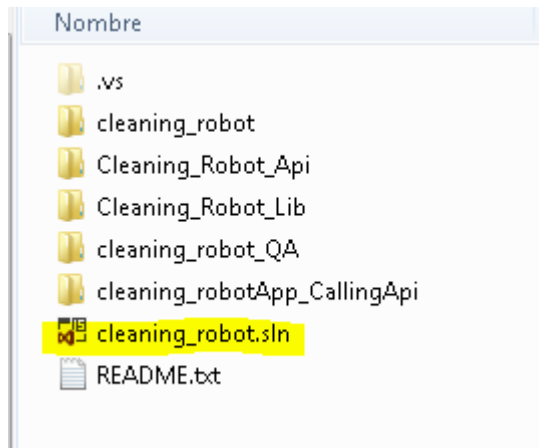
Note: for the first time, please do a rebuild solution and then a build solution so all the files that are needed in the different project can be refreshed

1 – Rebuild Solution

2- Build Solution