



Create your own Azure DevOps web extension

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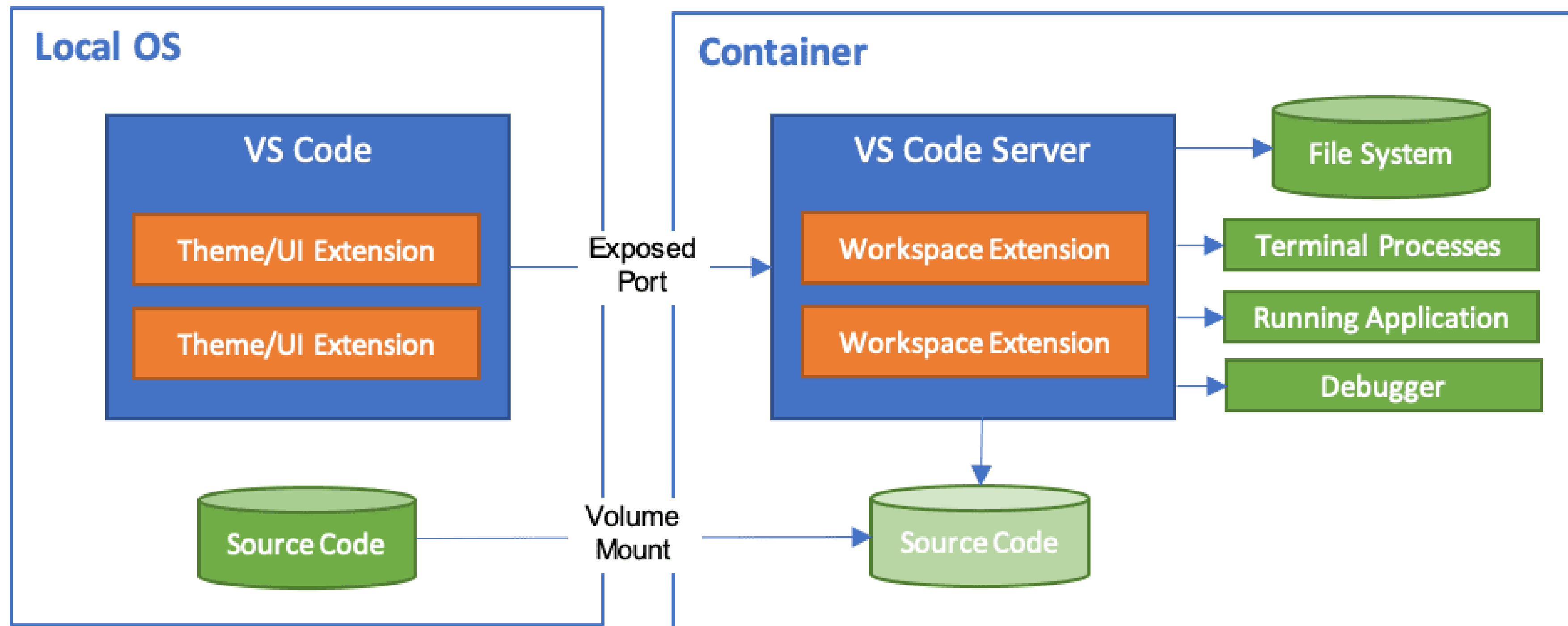
Business-Software for People



Prereq: VS Code dev container

What's that?

A mechanism to have easy to create, cleanly separated, standardized dev environments



Prereq: VS Code dev container

What's that?

Direct
install

Project with

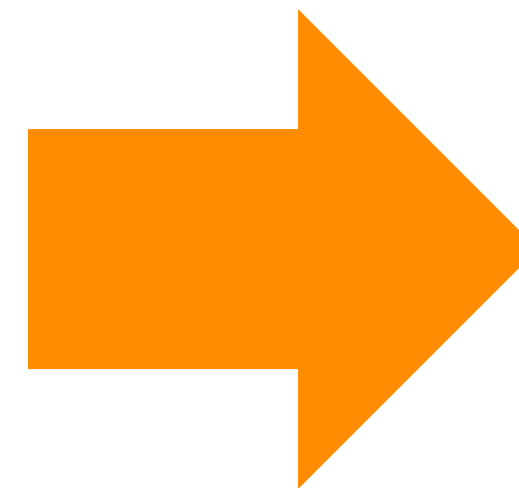
- .NET Core 3.1
- Node.js 12
- SQL Server 2019

Project with

- Deno 1.15

Project with

- .NET Core 3.1
- Python 2.7
- Mongo DB



Direct
install

Project with

- .NET Core 5
- Node.js 12
- SQL Server 2019

Project with

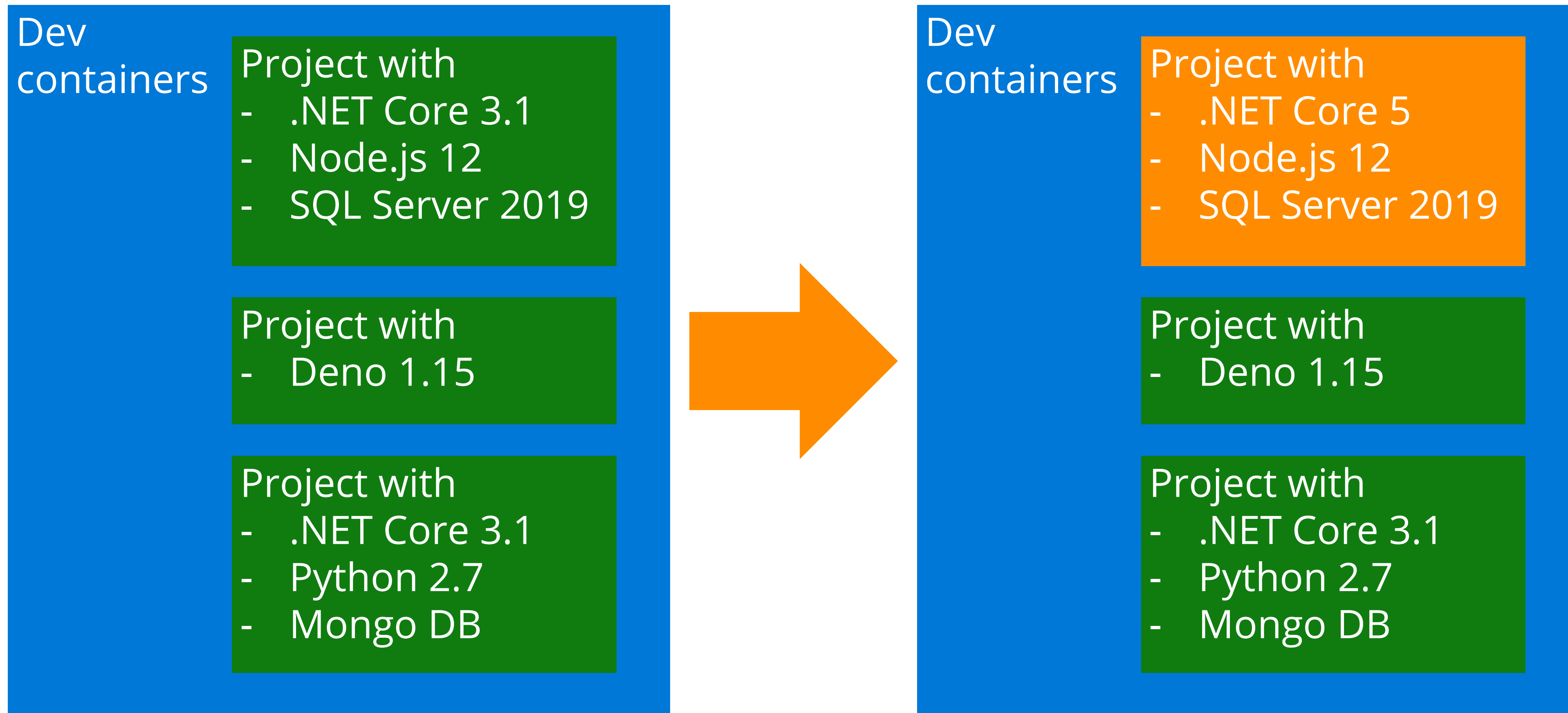
- Deno 1.15

Project with

- .NET Core 3.1
- Python 2.7
- Mongo DB

Prereq: VS Code dev container

What's that?



Prereq: VS Code dev container

What's that?

Configured through devcontainer.json

```
{
  "name": "C# (.NET)",
  "build": {
    "dockerfile": "Dockerfile",
    "args": {
      // Update 'VARIANT' to pick a .NET Core version: 2.1, 3.1, 5.0
      "VARIANT": "5.0",
      "INSTALL_NODE": "true",
      "NODE_VERSION": "12",
      "INSTALL_AZURE_CLI": "false"
    }
  },
  "extensions": [
    "ms-dotnettools.csharp",
    "eamodio.gitlens",
    "firefox-devtools.vscode-firefox-debug"
  ],
  ...
}
```

Prereq: VS Code dev container

What's that?

Set up through Dockerfile

```
ARG VARIANT="5.0"
FROM mcr.microsoft.com/vscode/devcontainers/dotnet:0-${VARIANT}

# [Option] Install Node.js
ARG INSTALL_NODE="true"
ARG NODE_VERSION="12"
RUN if [ "${INSTALL_NODE}" = "true" ]; then su vscode -c "umask 0002 && .
/usr/local/share/nvm/nvm.sh && nvm install ${NODE_VERSION} 2>&1"; fi

# [Option] Install Azure CLI
ARG INSTALL_AZURE_CLI="false"
COPY library-scripts/*.sh library-scripts/*.env /tmp/library-scripts/
RUN if [ "${INSTALL_AZURE_CLI}" = "true" ]; then bash /tmp/library-scripts/azcli-debian.sh; fi \
    && apt-get clean -y && rm -rf /var/lib/apt/lists/* /tmp/library-scripts

# [Optional] Uncomment this section to install additional OS packages.
# RUN apt-get update && export DEBIAN_FRONTEND=noninteractive && apt-get -y install ...

# [Optional] Uncomment this line to install global node packages.
RUN su vscode -c "source /usr/local/share/nvm/nvm.sh && npm install -g webpack webpack-cli tfx-
cli webpack-dev-server" 2>&1
```

Prereq: VS Code dev container

What's that?

-
- Needs Windows Subsystem for Linux (WSL2)
 - Very easy setup through Windows Store
 - Container management through Docker Desktop ("Switch to Linux containers")
 - Needs VS Code "Remote – Containers" extension
 - Might as well install "Remote Development" extension pack including "Remote – SSH" (with Windows support) and "Remote – WSL"
 - Run "Remote-containers: Clone repository in Container volume" action

Prereq: VS Code dev container

What's that?



Azure DevOps Web Extension

What's that?

[illegible]

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What's that?

Save

Follow


Updated by Jürgen Stühler: Oct 13

Details

Time tracking

(1)

Deployment



To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

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What's that?

TASK 24

24 Test2

Unassigned

0 comments

Add tag

Save

Follow

Settings

Refresh

Undo

More

State: New

Area: Vision time tracking

Reason: New

Iteration: Vision time tracking\Sprint 1

Updated by Jürgen Stühler: Oct 13

Details

Time tracking

History

Links (1)

Attachments

Date

Start time

End time

Break

Work item finished?

SEND DATA TO CC|ERP

2021

Fri, Oct 22

< October 2021 >

Su Mo Tu We Th Fr Sa

1 2

3 4 5 6 7 8 9

10 11 12 13 14 15 16

17 18 19 20 21 22 23

24 25 26 27 28 29 30

31

11:45

11:45

0.00

Work item finished?

☐ Finished

Configured through manifest file vss-extension.json (1/3)

```
{
  "manifestVersion": 1,
  "id": "<put-your-publisher-here>-example-dev",
  "public": false,
  "baseUri": "https://localhost:3000",
  "version": "0.0.1",
  "name": "Dev Extension",
  "description": "Extension for development tests",
  "publisher": "<put-your-publisher-here>",
  "demands": [
    "api-version/3.0"
  ],
  "categories": [
    "Azure Boards"
  ],
  "targets": [
    {
      "id": "Microsoft.VisualStudio.Services"
    }
  ],
}
```

Configured through manifest file vss-extension.json (2/3)

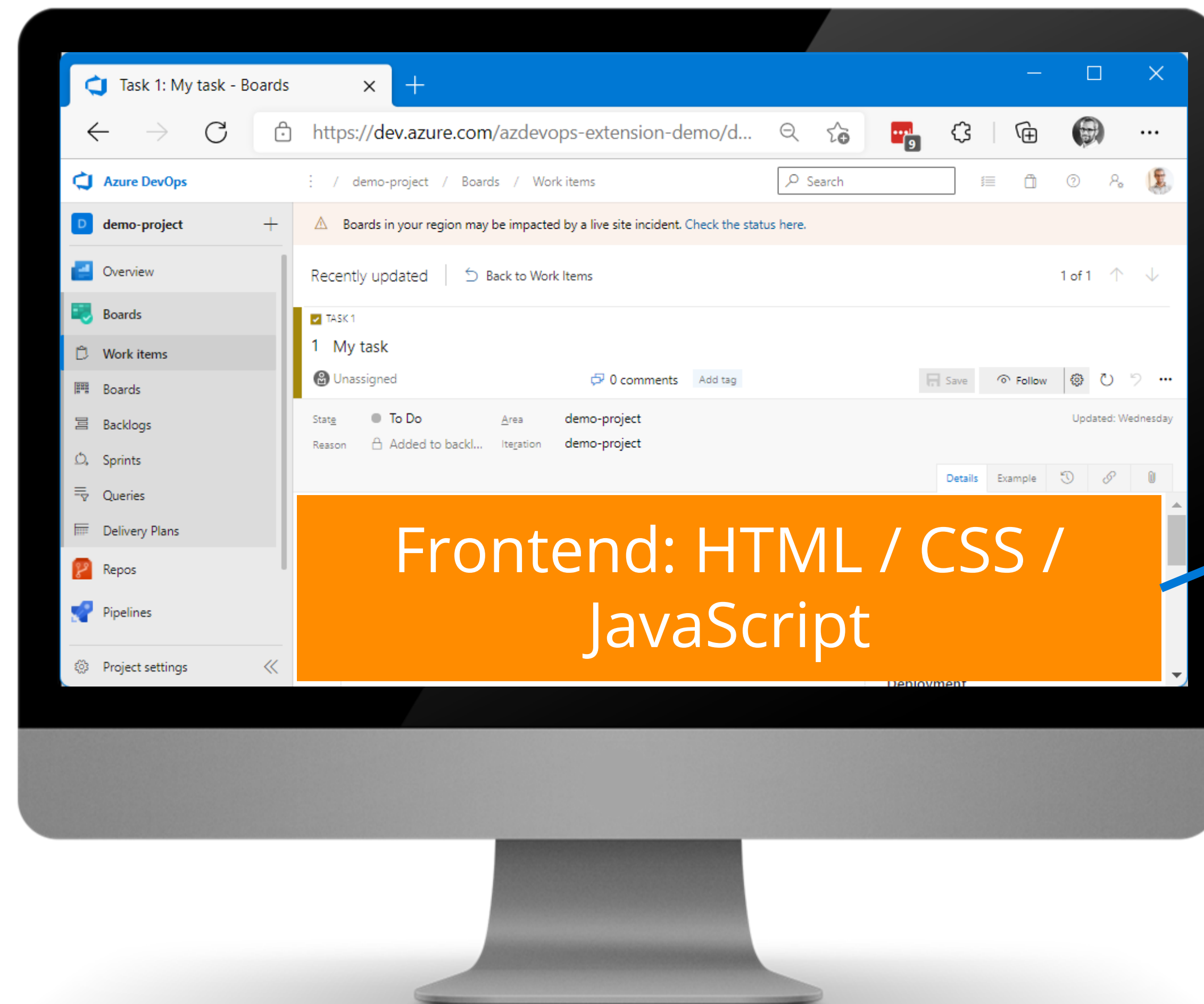
```
"content": {
  "details": {
    "path": "README.md"
  }
},
"icons": {
  "default": "img/world.png"
},
"files": [
  {
    "path": "dist",
    "addressable": true
  },
  {
    "path": "img",
    "addressable": true
  }
],
```

Configured through manifest file vss-extension.json (3/3)

```
"contributions": [  
  {  
    "id": "example-work-item-form-page",  
    "type": "ms.vss-work-web.work-item-form-page",  
    "description": "Example page",  
    "targets": [  
      "ms.vss-work-web.work-item-form"  
    ],  
    "properties": {  
      "name": "Example",  
      "uri": "dist/example/example.html"  
    }  
  }  
]
```

Azure DevOps Web Extension

How does it work?



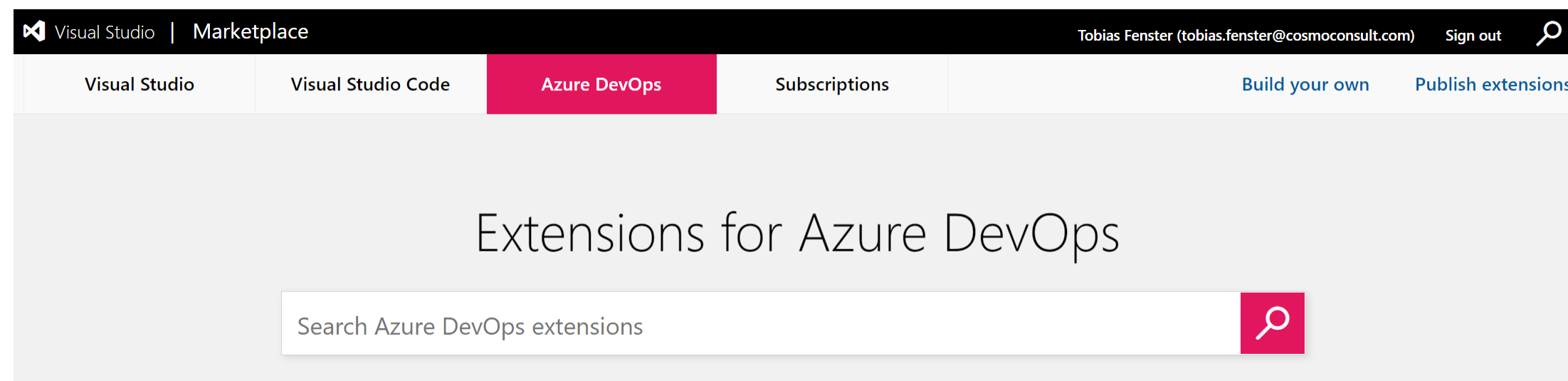
Frontend: HTML / CSS /
JavaScript

Backend: .NET
Core Web API

Azure DevOps Web Extension

How does it work?

Build & Publish



Install

Extension (Manifest)

:3000

Backend: .NET
Core Web API

Dev Container

:5000

Frontend: HTML / CSS /
JavaScript

Azure DevOps Web Extension

Let's try!



Thanks for your attention

Any questions?



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