“azd up“
One command to rule them all

Who are your guides today?

Christian Lechner

Development Architect @ SAP

Microsoft MVP – Azure

Love Serverless

Twitter: @lechnerc77

- **Martin Pankraz**
- Senior Product Manager
SAP Integration@Microsoft
- Ninja Cat
- Twitter: @martinpankraz

What is our challenge?

Typical steps for a new dev project

- Setting up the dev environment
- Creating the basic app setup according to best practices (“blueprint”)
- Defining the necessary infrastructure as code
- Setting up CI/CD according to corporate guidelines
- Ensure that everything follows the security and compliance baselines of the company

How those steps are often applied out there in the "wild"

- Manuals how to set up your dev environment of course different per project
- Development guidelines and best practices in Word, wikis or GitHub pages
- Repositories with code samples/templates (outdated/not centralized)
- Setup of infrastructure and CI/CD in a per project approach … from scratch
- Endless wiki pages around security and compliance

Wouldn‘t it be great to have …

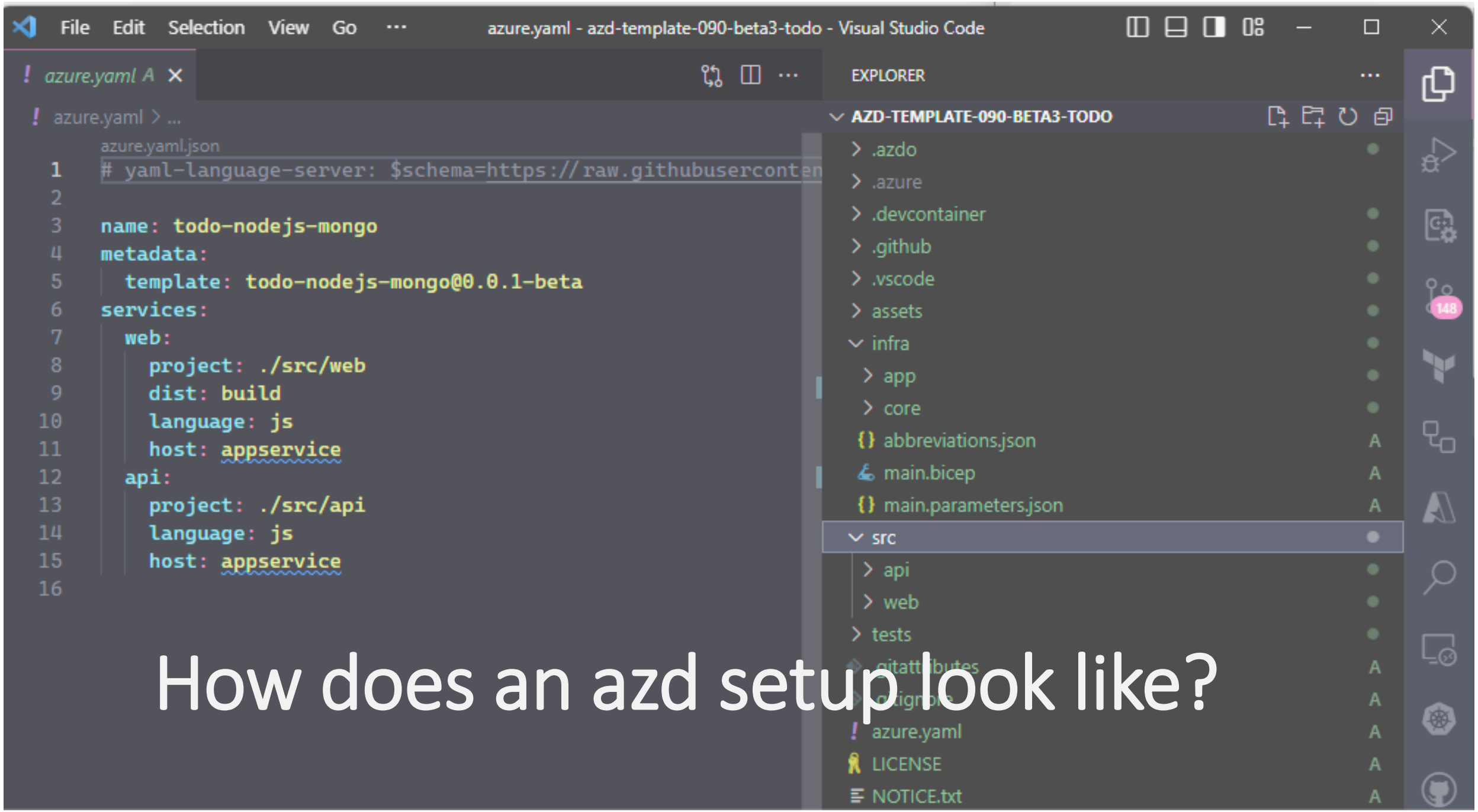
- **One tool** to solve all challenges
- **One setup** covering all requirements

The Azure Developer CLI

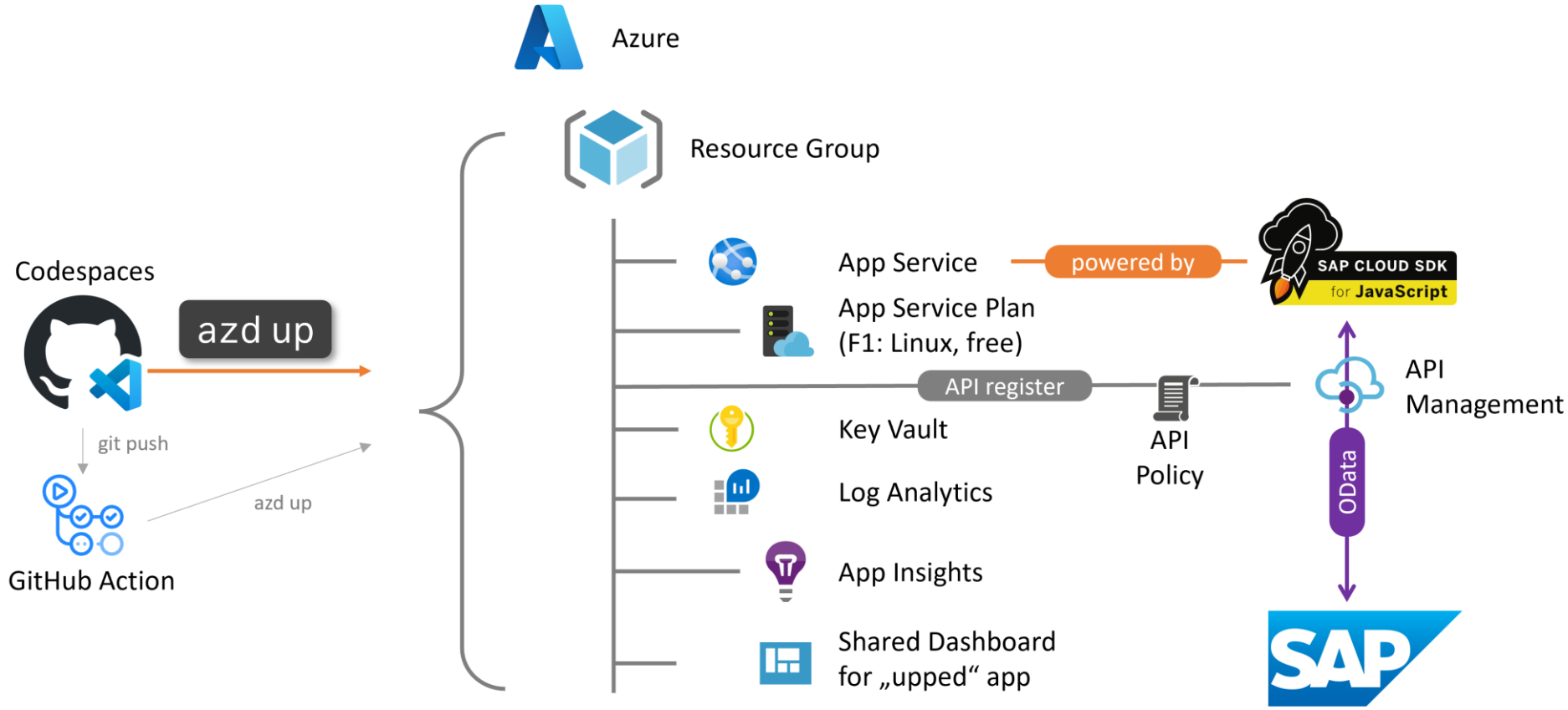
What is the Azure Developer CLI

Azure Developer CLI (`azd`) is an open-source tool that accelerates the time it takes for you to get your application from local development environment to Azure. `azd` provides best practice, developer-friendly commands that map to key stages in your workflow, whether you're working in the terminal, your editor or integrated development environment (IDE), or CI/CD (continuous integration/continuous deployment).

You can use `azd` with extensible blueprint templates that include everything you need to get an application up and running on Azure. These templates include reusable infrastructure as code assets and proof-of-concept application code that can be replaced with your own app code. You can also create your own template or find one to build upon.

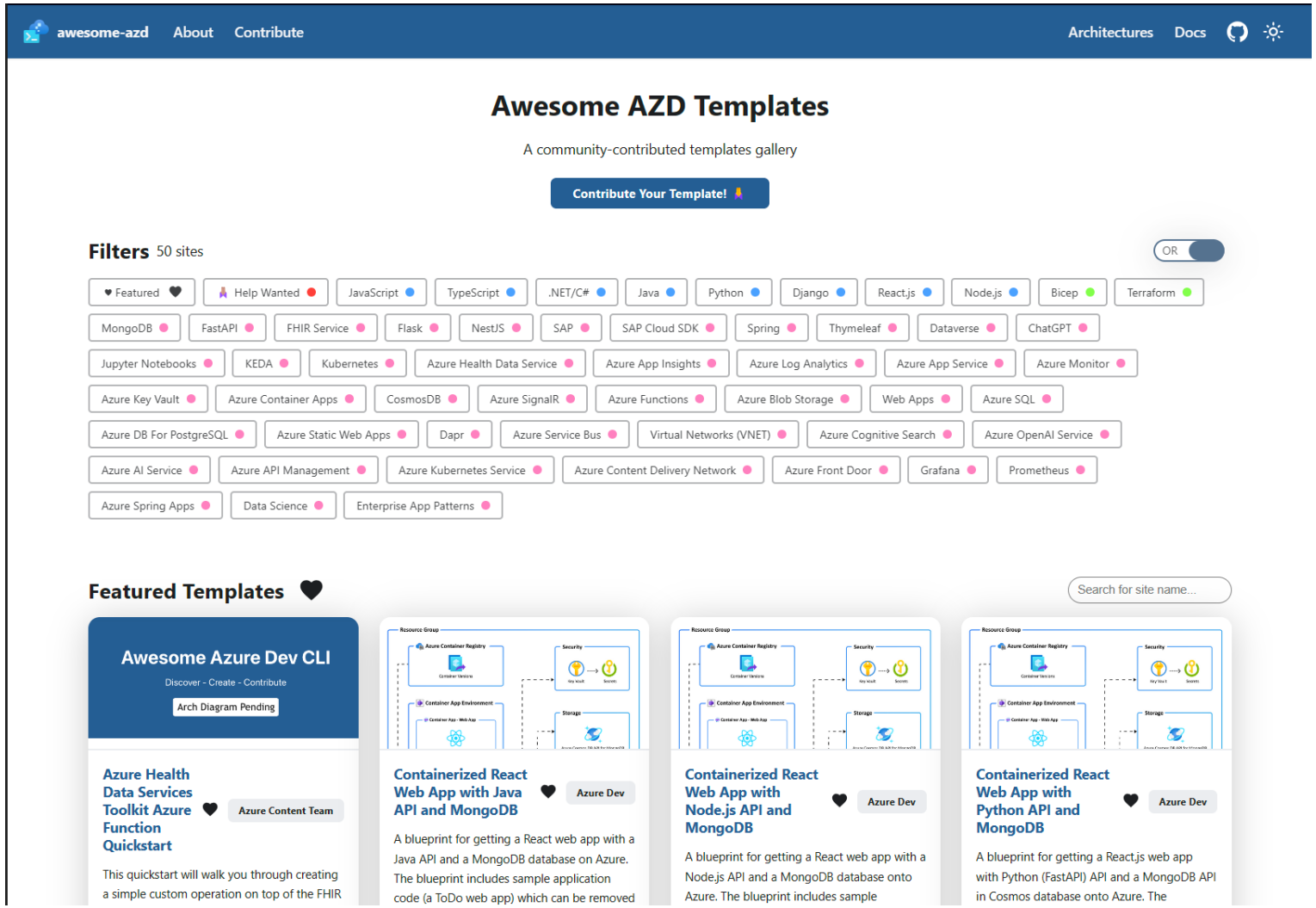

File Edit Selection View Go ···
azure.yaml - azd-template-090-beta3-todo - Visual Studio Code
azure.yaml A
azure.yaml > ...
azure.yaml.json
yaml-language-server: $schema=https://raw.githubuserconten
name: todo-nodejs-mongo
metadata:
template: todo-nodejs-mongo@0.0.1-beta
services:
web:
project: ./src/web
dist: build
language: js
host: appservice
api:
project: ./src/api
language: js
host: appservice
EXPLORER
AZD-TEMPLATE-090-BETA3-TODO
.azdo
.azure
.devcontainer
.github
.vscode
assets
infra
app
core
abbreviations.json
main.bicep
main.parameters.json
src
api
web
tests
azure.yaml
LICENSE
NOTICE.txt
How does an azd setup look like?

Great, but can this thing also tackle sophisticated setups?



Demo time

Ecosystem


awesome-azd
About
Contribute
Architectures
Docs
Awesome AZD Templates
A community-contributed templates gallery
Contribute Your Template!
Filters 50 sites
OR
♥ Featured
Help Wanted
JavaScript
TypeScript
.NET/C#
Java
Python
Django
React.js
Node.js
Bicep
Terraform
MongoDB
FastAPI
FHIR Service
Flask
NestJS
SAP
SAP Cloud SDK
Spring
Thymeleaf
Dataverse
ChatGPT
Jupyter Notebooks
KEDA
Kubernetes
Azure Health Data Service
Azure App Insights
Azure Log Analytics
Azure App Service
Azure Monitor
Azure Key Vault
Azure Container Apps
CosmosDB
Azure SignalR
Azure Functions
Azure Blob Storage
Web Apps
Azure SQL
Azure DB For PostgreSQL
Azure Static Web Apps
Dapr
Azure Service Bus
Virtual Networks (VNET)
Azure Cognitive Search
Azure OpenAI Service
Azure AI Service
Azure API Management
Azure Kubernetes Service
Azure Content Delivery Network
Azure Front Door
Grafana
Prometheus
Azure Spring Apps
Data Science
Enterprise App Patterns
Featured Templates
Search for site name...
Awesome Azure Dev CLI
Discover - Create - Contribute
Arch Diagram Pending
Azure Health Data Services Toolkit Azure Function Quickstart
Azure Content Team
This quickstart will walk you through creating a simple custom operation on top of the FHIR
Containerized React Web App with Java API and MongoDB
Azure Dev
A blueprint for getting a React web app with a Java API and a MongoDB database on Azure. The blueprint includes sample application code (a ToDo web app) which can be removed
Containerized React Web App with Node.js API and MongoDB
Azure Dev
A blueprint for getting a React web app with a Node.js API and a MongoDB database onto Azure. The blueprint includes sample
Containerized React Web App with Python API and MongoDB
Azure Dev
A blueprint for getting a React.js web app with Python (FastAPI) API and a MongoDB API in Cosmos database onto Azure. The

Our take on azd

- Very comprehensive tool
- Streamlines the dev setup a lot (even without AI ☺)
- Complex scenarios are feasible without breaking your fingers
- Great support from azd team (really open to feedback!)
- More experience (at least for us) is needed to shape best practices like hooks and structuring of CI/CD

Questions

Additional links

- azd on GitHub: https://github.com/Azure/azure-dev
- azd Documentation: https://learn.microsoft.com/azure/developer/azure-developer-cli/overview
- Awesome AZD Templates: https://azure.github.io/awesome-azd/
- Our quickstarter on GitHub: https://github.com/Azure-Samples/app-service-javascript-sap-cloud-sdk-quickstart