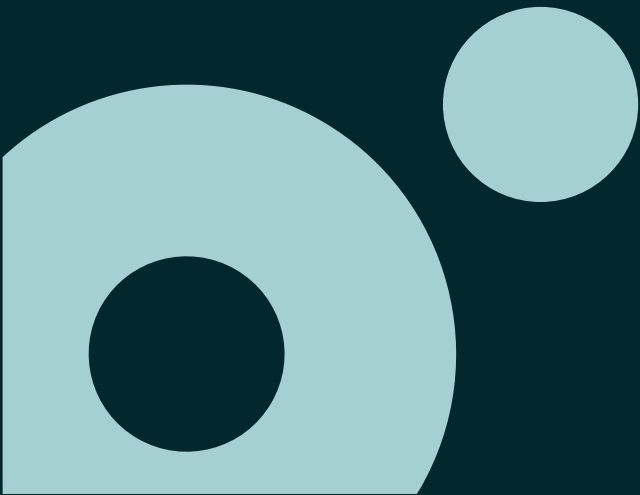


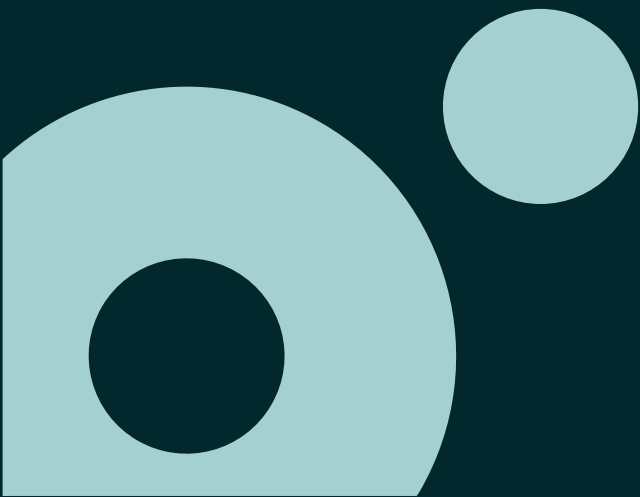
# Containers & Kubernetes

Session #10



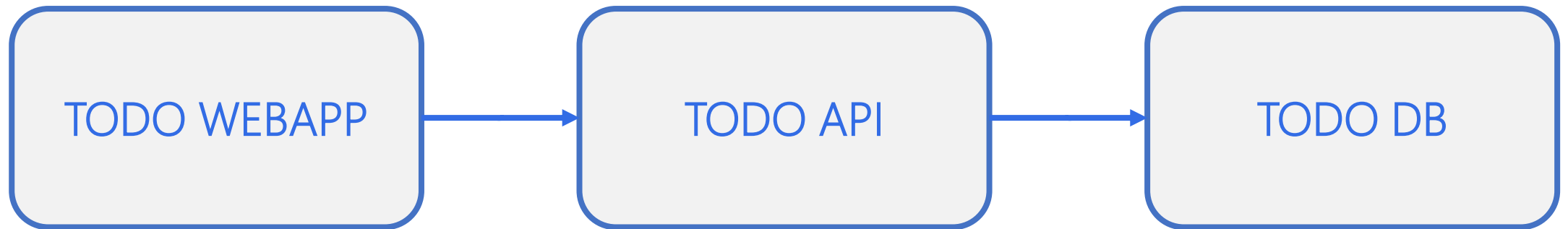


# Mini Project



# Todo App

## Mini Project



# Todo App

## Mini Project

- Codebase: [tasb/todo-app \(github.com\)](https://github.com/tasb/todo-app)
- Goals
- Create Dockerfiles for webapp and api
- Push to Docker hub
- Create Kubernetes Manifests
  - Deployments
  - Services
  - PersistentVolume and PersistentVolumeClaim
  - ConfigMaps and Secrets

# Todo WebApp

## Mini Project

- dotnet 6 MVC App
- Webapp available on http://URL/
- Uses API to implement features
- API URL defined on property "Services.TODOAPI"

# Todo API

## Mini Project

- dotnet 6 Minimal Api
- Endpoints available on <http://URL/todos/>
- Connects to MS SQL Server 2017
- Connection string on property "ConnectionStrings\_\_TodosDb"

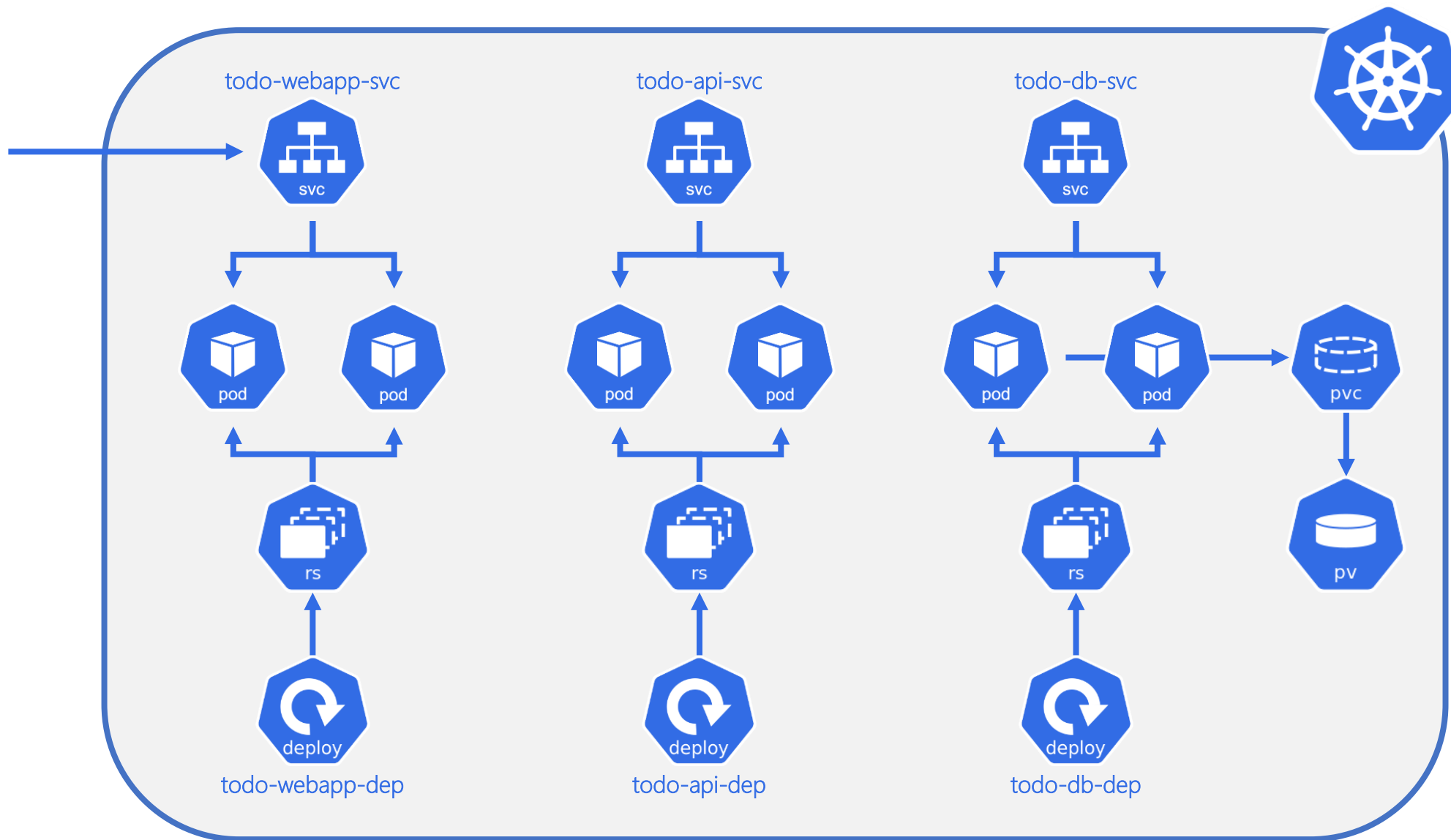
# Todo DB

## Mini Project

- MS SQL Server 2017
- Image: [mcr.microsoft.com/mssql/server:2017-latest](https://mcr.microsoft.com/mssql/server:2017-latest)
- Needs two environment variables
  - ACCEPT\_EULA=Y (static)
  - SA\_PASSWORD, with the value you want (notice connection string on Todo API)



External  
Users  
Access



# Todo App

## Mini Project

- Optional Goals
- Docker compose
- Ingress



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