.NET Conf 2018
Discover the world of .NET
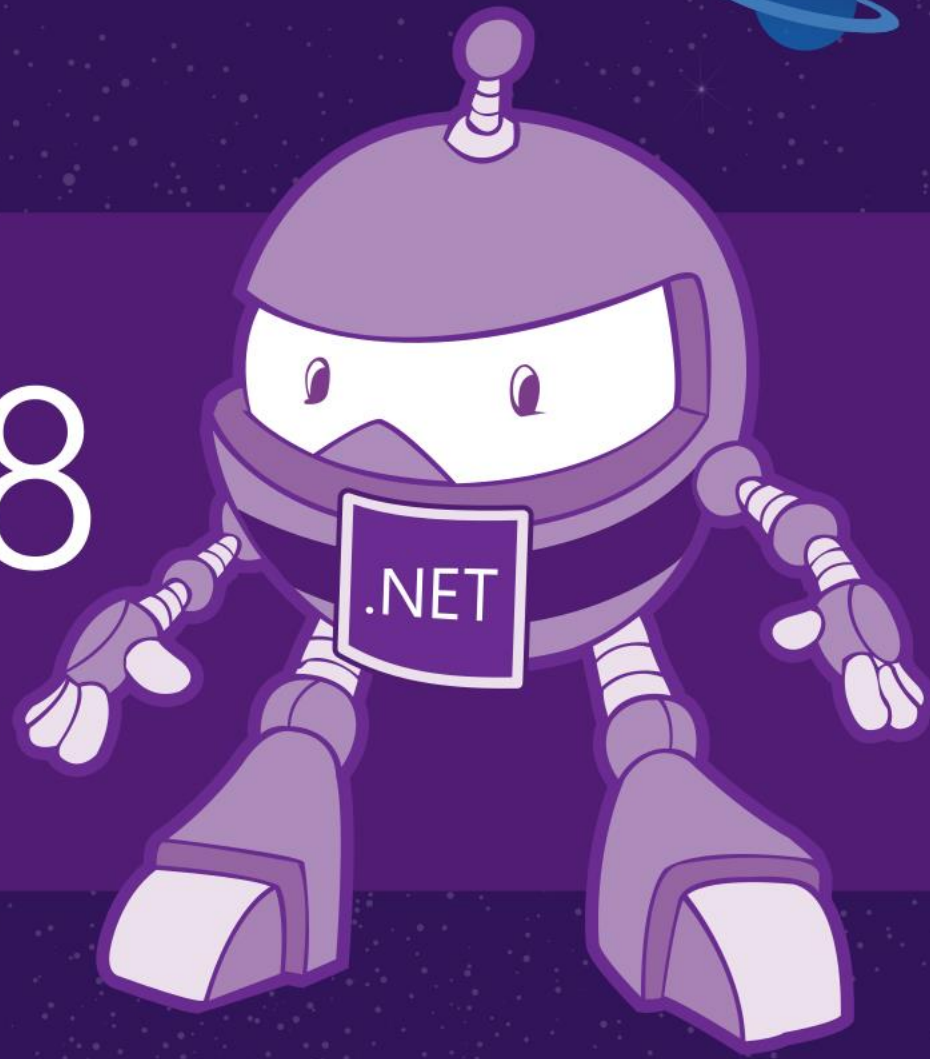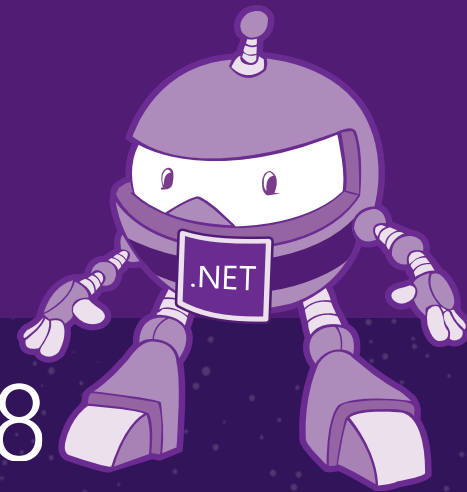
dotnet new

.NET

Modular Web Applications with ASP.NET Core

Thien Nguyen

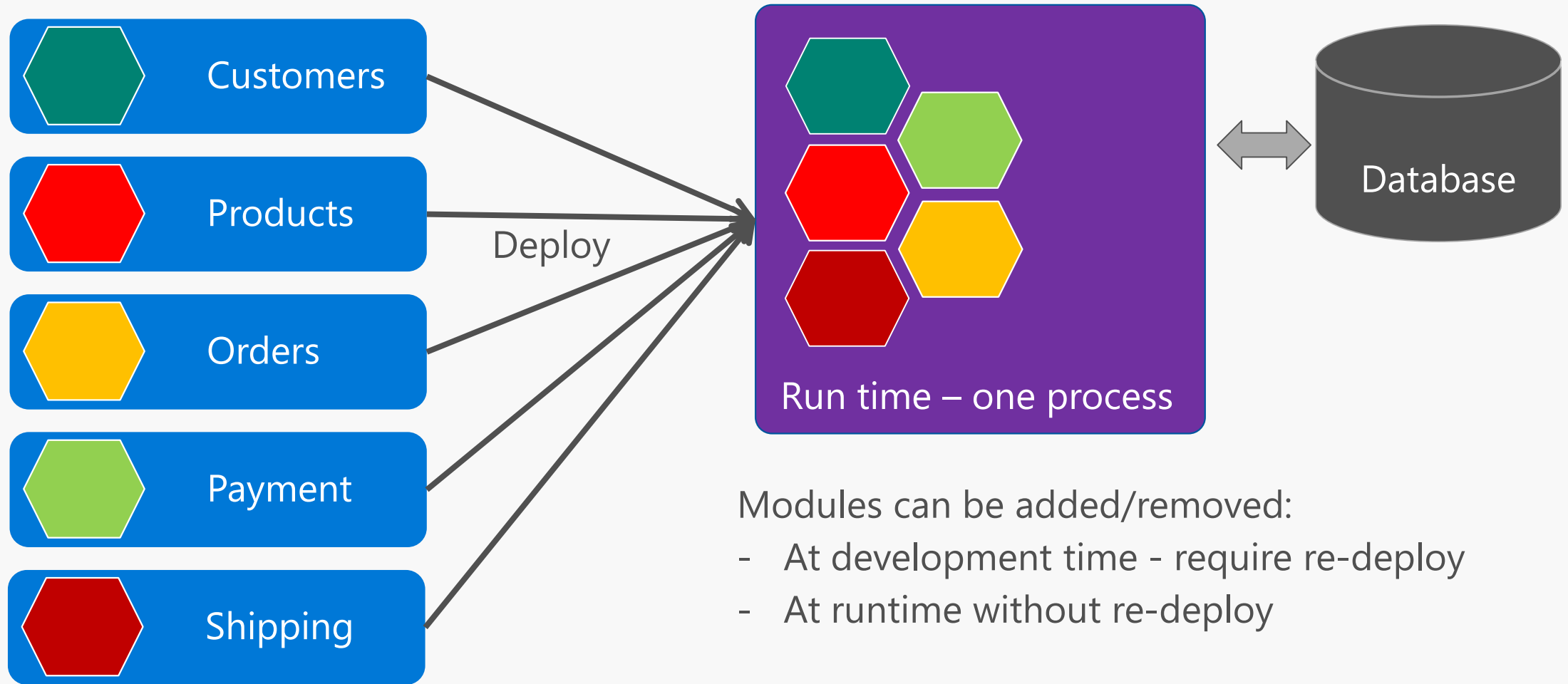.**NET** Conf 2018

About me

- Native name: Nguyễn Lê Quỳnh Thiện
- From: Vietnam
- Engineering Manager at NashTech
- Founder of SimplCommerce
- Microsoft MVP
- @thiennlq

Agenda

- An overview of Modular Architecture

- How we apply Modular Architecture in SimplCommerce
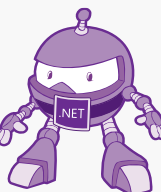
- The bright future

Modular Architecture

Customers

Products

Deploy

Orders

Payment

Shipping

Development time – separated projects

Run time – one process

Database

Modules can be added/removed:
- At development time - require re-deploy
- At runtime without re-deploy

Modular - Benefits

- Separation of Concerns

- Easier to add, delete or modify modules without affecting to others

- Modules can be easily developed in parallel

- Increase readability and maintainability

Modular - Challenges

- No native support

- Hard to separate modules properly

- Harder to manage dependences of modules

SimplCommerce

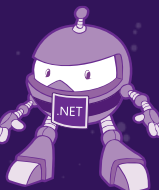- https://github.com/simplcommerce/SimplCommerce/

- The first commit is on Jan 13, 2016, target to .NET Full Framework 4.6

- May – 2016 switch to .NET Core 1.0 (RC2)

- Now 1.0-RC, .NET Core 2.1 and going to 1.0 RTM soon

- 1502 starts, 519 forks and 29 contributors

Demo

How we apply modular architecture in SimplCommerce

SimplCommerce – Modular Limitations

- Add or remove modules will require the website to restart

- Don't support side by side dependency

The bright future

.NET Core Plugins

Introducing an API for loading .dll files (and their dependencies) as 'plugins'

By Nate McMaster | July 25, 2018

https://natemcmaster.com/blog/2018/07/25/netcore-plugins/

Enable unloading of AssemblyLoadContext #18476

Merged janvorli merged 24 commits into dotnet:master from janvorli:collectible-assemblies a day ago
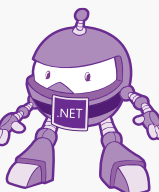
Conversation 72   Commits 24   Checks 0   Files changed 59

https://github.com/dotnet/coreclr/pull/18476

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Thank you!