



PA181

Term Project

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About

- term project
- team project
- cloud native
- something useful

Idea

- system for user self-testing
- users are able to test themselves
- users can add new tests
- multilingual
- good for exams preparation

Work Division

■ Jan Ondruch

- specifications
- design
- testing

■ Jiří Čechák

- design
- frontend
- testing
- bug fixing

■ Tadeáš Pavlík

- analysis
- design
- testing

Work Division

- Adrián Tóth
 - configuration
 - architecture
 - deployment
 - documentation
 - presentation
- Václav Stehlík
 - backend
 - interconnection of backend & frontend
 - troubleshooting
 - bug fixing

Used Tools & Technologies

Technologies:

- IBM Cloud
- GitHub
- Travis CI

Tools:

- IBM Cloud DevOps Toolchain
- ASP.NET
- React
- Material-UI

Application Initialization

- created one private repository
 - hosted on GitHub
- inspired by IBM ASP.NET *'HelloWorld'*¹
- created project skeleton
 - ASP.NET Core Web API (*webapi*) - the main structure
 - Class library (*classlib*) - several support projects
- configured deployment
 - before the development itself
 - on a clean *'HelloWorld'* application
- configured automation pipeline
 - IBM Cloud DevOps Toolchain

¹github.com/IBM-Cloud/aspnet-core-helloworld



Application Implementation

TODO

Jirka and Václav - create few notes here
inspiration - see chapter '*Application Implementation*' in doc

TODO

Application Deployment

Our work looked like this:

■ Manual

- 1 Change code in a local repository
- 2 Commit changes in the local repository
- 3 Update of the remote repository

■ Automated

- 4 Test the application
- 5 Build the application from source
- 6 Deploy the built application
- 7 Create a release

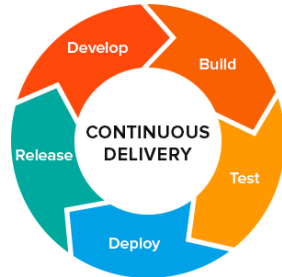


Figure: Continuous Delivery



Toolchain

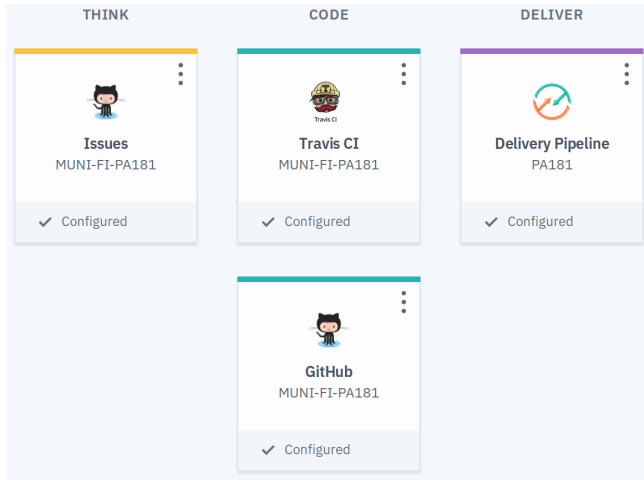


Figure: IBM Cloud DevOps Toolchain



Examples

The following screenshots illustrate our application.

Example 1



TO DO

Figure: **TODO**

Example 2



TO DO

Figure: **TODO**



Example 3



TO DO

Figure: **TODO**



Thank you for your attention!