Faculty of Informatics
Masaryk University

PA181
Services - Systems, Modeling and Execution

Term Project Documentation

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1 About

Term project for course *PA181 Services - Systems, Modeling and Execution*[1] in year 2019. Within the project, we had to create a fully functional application using the *IBM Cloud*[2] technology including a detailed documentation and a presentation. *doc. Mouzhi Ge, Ph.D.*[3] is the project supervisor.

2 Idea

The core idea was to create and develop a useful and practical application. The application provide services for testing the users in a form of questions and answers. Users are able to test themselves via these questions by selecting the correct answers. There are severals tests in three different types of language (Czech, Slovak and English).

3 Used Technologies

The following technologies were integrated and used during the development process:

- cloud based platform
  - IBM Cloud[4]
- version control system (VCS)
  - GitHub[5]
- continuous integration (CI)
  - Travis CI[6]

4 Work Division

Our team consisted of 5 members: Adrián Tóth, Jan Ondruch, Jiří Čechák, Tadeáš Pavlík and Václav Stehlík.

Everyone from us was in charge of a certain part of the project. The work was divided as the following:

- Adrián Tóth
  - project initialization
  - VCS initialization
  - creation of project skeleton
  - Travis CI integration and configuration
  - IBM DevOps toolchain configuration
  - creation of continuous delivery pipeline
  - project deployment

[1] is.muni.cz/predmet/fi/jaro2019/PA181
[2] cloud.ibm.com
[3] is.muni.cz/auth/osoba/239833
[4] cloud.ibm.com
[5] github.com
[6] travis-ci.org

- Jan Ondruch
  - **TODO**
- Jiří Čechák
  - application frontend
  - application design (user interface)
  - **TODO**
- Tadeáš Pavlík
  - **TODO**
- Václav Stehlík
  - application backend
  - backend and frontend linking
  - **TODO**

5 Application initialization

Firstly, we have chosen a stable, reliable and safe platform supporting team project development - GitHub. Furthermore, GitHub provides a version control system management and the integration with IBM Cloud is supported. Subsequently, after the repository was configured properly, we had to choose the technologies. We decided to use #C (general-purpose, multi-paradigm and object oriented programming language) and React (library for building user interfaces) for the project. Based on the above, we have initialized the project skeleton - a *'Hello, World!'* application.

6 Application implementation

TODO

7 Application deployment

TODO

8 Application instructions

TODO

9 Screenshots

TODO