Capstone Project

Due date: 24th Sept

You are a senior DevOps architect in your firm and your firm is being approached by Digital Bank, one of the leading online bank providers across Europe. You have been designated with the task of driving an end to end DevOps transformation for DIGITAL BANK. You are supposed to architect an end to end DevOps flow to fulfil the below requirements.

Below are the Requirements:

1. Code needs to be migrated to GitHub
   1. The codebase is currently available in a zipped file in the below location:
2. Continuous Delivery needs to be implemented using Jenkins
   1. On a Git push, Jenkins job needs to be triggered. This job should contain source code building, testing and packaging stages.
3. Implement a one-click deployment. Since this is a banking software we want to ensure only a human can authorise the deployment of the software.
4. The deployment package should be containerised in a Docker container.
5. Deploy the containerised application in AWS
   1. 15 instances of the application should be running anytime to ensure availability using Docker Swarms/ Kubernetes Cluster.
6. Build a monitoring mechanism to monitor the host systems and services.

Other Details: This is a sample application that uses Maven as it's build tool

How to compile ?

* Execute "mvn clean compile"

How to execute a test?

* JUnit Tests - Execute "mvn clean test"

How to package the application?

* To create a deployment package, execute "mvn clean package"

|  |  |
| --- | --- |
|  | Digital-Bank.zip [Digital-Bank.zip](https://quadralogics.moodlecloud.com/pluginfile.php/485/mod_assign/introattachment/0/Digital-Bank.zip?forcedownload=1)  23 August 2020, 6:05 PM |

Submission status

|  |  |
| --- | --- |
| **Submission status** | No attempt |
| **Grading status** | Not graded |
| **Due date** | Saturday, 31 October 2020, 4:00 AM |
| **Time remaining** | 5 days 5 hours |
| **Last modified** | - |
| **Submission comments** | [Comments (0)](https://quadralogics.moodlecloud.com/mod/assign/view.php?id=161) |