

Homework - BE Dev

Format:

please commit your code into this github repository.

Duration:

There is no formal deadline on this assignment. In order for you to understand the effort: we expect that this task would not take longer then 4-6 hours of time for experienced candidates.

Goals:

- evaluate ability to set up cloud infrastructure
- evaluate ability to organise and group projects

Components to set up:

- config server
- auth server
- api gateway
- discovery service
- cloud monitoring

Services to implement:

- Account Service
- Bank Information Service

API endpoints

Service	Endpoint	Method	Authenticated	Description	Sample request	Sample Output
Account	/accounts/	GET		Get list of all accounts	GET /accounts/	[{ "id": 1, "firstName": "Max", "lastName" : "Mustermann" }, { "id": 2, "firstName": "Darth", "lastName" : "Vader" }]
	/account/{id}	POST	X	Create an account with specified ID	POST /account/1	Response Code: 200
	/account/{id}	GET	X	Get specific account information	GET /account/1	{ "id": 1, "firstName": "Max", "lastName" : "Mustermann" }
Bank Information	/bank/{id}	GET	X	Get bank information for specified account id	GET /bank/1	{ "id": 1, "firstName": "Max", "lastName" : "Mustermann", "IBAN": "DE89370400440532013081" }

Task:

- Implement service to manage accounts

- Implement service to get bank data of account
 - for requested account id fetch account information from account service
 - make sure that authentication checked automatically
 - make sure that endpoint is resolved dynamically
 - return account id as last digits of IBAN
 - take "DE89370400440532013087" as a base value
 - replace last N digits of IBAN with account id
- Make sure that both services are properly registered in discovery and monitoring services

Notes:

- do NOT use complex structures during your implementation
- use only in-memory data storage, i.e. either basic java data structures or in-memory databases
- please provide detailed instructions on startup, usage and testing process of your services
- use basic spring boot with maven as a baseline for implementation