

# ARQUITECTURA DE SOFTWARE

## Examen 3 Unidad

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## DOCKER COMPOSE

### Configuracion de Docker-Compose

```
C: > Users > luisc > OneDrive > Escritorio > EXAMEN 3U > docker-compose.yml
1  version: '2'
2
3  services:
4
5      kong-database:
6          image: postgres:latest
7          hostname: kong-database
8          container_name: kong-database
9          environment:
10             POSTGRES_USER: "kong"
11             POSTGRES_DB: "kong"
12             POSTGRES_PASSWORD: "kong"
13          ports:
14             - "5432:5432"
15
16      kong-bootstrap:
17          image: kong:3.1.1-alpine
18          hostname: kong
19          container_name: kong-bootstrap
20          depends_on:
21             - kong-database
22          environment:
23             KONG_DATABASE: "postgres"
24             KONG_PG_HOST: "kong-database"
25             KONG_PG_DATABASE: "kong"
26             KONG_PG_USER: "kong"
27             KONG_PG_PASSWORD: "kong"
28          command: "kong migrations bootstrap"
29          restart: "on-failure"
30
31      kong:
32          image: kong:3.1.1-alpine
33          hostname: kong
34          container_name: kong
35          restart: always
36          depends_on:
37             - kong-bootstrap
```

## DOCKER

The screenshot shows the Docker Desktop interface. On the left is a sidebar with navigation options: Containers, Images, Volumes, Dev Environments (marked BETA), and Extensions. The main area is titled 'Containers' and includes a toggle for 'Only show running containers' and a search bar. Below this is a table of running containers:

	Name	Image	Status	Port(s)	Started	Actions
<input checked="" type="checkbox"/>	banquito-exam	-	Running (7/7)			
<input type="checkbox"/>	kong-database 6fd040a73487	postgres:latest	Running	5432-5432	13 seconds ago	
<input type="checkbox"/>	postgres-banquito 89bfe93e2924	postgres:latest	Running		13 seconds ago	
<input type="checkbox"/>	mongo-banquito 987cab85af29	mongo:latest	Running		13 seconds ago	
<input type="checkbox"/>	products-accounts 4047cece7b3f	banquito-exam-products-accounts	Running		9 seconds ago	
<input type="checkbox"/>	kong eb744357e070	kong:3.1.1-alpine	Running	8000:8000 8001:8001 8443:8443 8444:8444	5 seconds ago	
<input type="checkbox"/>	branches 78ab7d12c042	banquito-exam-branches	Running		10 seconds ago	
<input type="checkbox"/>	kong-bootstrap 9b724e18ad51	kong:3.1.1-alpine	Running		9 seconds ago	

Showing 8 items

## POSTMAN

- Configuración KONG

The screenshot shows the Postman interface. The left sidebar contains 'My Workspace' with a 'Banquito' collection. The main area shows a GET request to 'localhost:8001/config'. The 'Body' tab is selected, showing a JSON response:

```
1 {
2   "message": "this endpoint is only available when Kong is configured to not use a database"
3 }
```

The status bar at the bottom indicates 'Status: 400 Bad Request', 'Time: 144 ms', and 'Size: 325 B'. The bottom of the interface has a toolbar with options like 'Online', 'Find and Replace', 'Console', 'Cookies', 'Capture requests', 'Runner', 'Trash', and 'Test'.

- Service Branch

My Workspace

NewImport

BanquitoGET ConfigPOST New Request+...

No Environment

Collections

+Banquito

GET Config

GET New Request

New Collection

Environments

Mock Servers

Monitors

Flows

History

Banquito / New Request

SaveSend

POSTlocalhost:8001/services

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettings

noneform-datax-www-form-urlencodedrawbinaryGraphQLJSON

```
1
2
3
4
```

BodyCookiesHeaders (7)Test Results

Status: 201 CreatedTime: 74 msSize: 613 BSave Response

PrettyRawPreviewVisualizeJSON

```
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```

OnlineFind and ReplaceConsole

CookiesCapture requestsRunnerTrash

- Service Product Account

My Workspace

NewImport

BanquitoGET ConfigPOST Post-BranchesPOST Post-Products/Accounts+...

No Environment

Collections

+Banquito

GET Config

GET Post-Branches

GET Post-Products/Accounts

New Collection

Environments

Mock Servers

Monitors

Flows

History

Banquito / Post-Products/Accounts

SaveSend

POSTlocalhost:8001/services

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettings

noneform-datax-www-form-urlencodedrawbinaryGraphQLJSON

```
1
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```

BodyCookiesHeaders (7)Test Results

Status: 201 CreatedTime: 34 msSize: 640 BSave Response

PrettyRawPreviewVisualizeJSON

```
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```

OnlineFind and ReplaceConsole

CookiesCapture requestsRunnerTrash

## • Service InterestRate

**My Workspace** | New | Import | Banquito | GET Config | POST Post-Branches | POST Post-Products/Accounts | POST InterestRate | + | ... | No Environment

**Collections** | Banquito | GET Config | GET Post-Branches | GET Post-Products/Accounts | GET InterestRate | New Collection

**Banquito / InterestRate** | POST | localhost:8001/services | Send | Cookies | Beautify

Params | Authorization | Headers (8) | **Body** | Pre-request Script | Tests | Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL JSON

```
1 {
2   "name": "interest-rate",
3   "url": "http://products-accounts:9000/api/v1/interestrates"
4 }
```

**Body** | Cookies | Headers (7) | Test Results | Status: 201 Created | Time: 30 ms | Size: 632 B | Save Response

Pretty | Raw | Preview | Visualize | JSON

```
1 {
2   "updated_at": 1678424263,
3   "tls_verify": null,
4   "host": "products-accounts",
5   "name": "interest-rate",
6   "tls_verify_depth": null,
7   "protocol": "http",
8   "tags": null,
9   "ca_certificates": null,
10  "retries": 5,
11  "port": 9000,
12  "client_certificate": null,
13  "path": "/api/v1/interestrates",
14  "connect_timeout": 60000,
15  "enabled": true,
16  "read_timeout": 60000,
17  "write_timeout": 60000,
18 }
```

Online | Find and Replace | Console | Cookies | Capture requests | Runner | Trash | ?

## • Ruta Branches

**Collections** | GET Config | POST Post-Branches | POST Post-Products/Accounts | POST InterestRate | POST New Request | + | ... | No Environment

**Banquito / New Request** | POST | localhost:8001/services/branches/routes | Send | Cookies | Beautify

Params | Authorization | Headers (8) | **Body** | Pre-request Script | Tests | Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL JSON

```
1 {
2   "name": "branches-service-routes",
3   "paths": ["/branch"],
4   "strip_path": true
5 }
```

**Body** | Cookies | Headers (7) | Test Results | Status: 201 Created | Time: 39 ms | Size: 728 B | Save Response

Pretty | Raw | Preview | Visualize | JSON

```
1 {
2   "updated_at": 1678424565,
3   "paths": [
4     "/branch"
5   ],
6   "methods": null,
7   "name": "branches-service-routes",
8   "destinations": null,
9   "snis": null,
10  "protocols": [
11    "http",
12    "https"
13  ],
14  "path_handling": "v0",
15  "request_buffering": true,
16  "response_buffering": true,
17  "id": "a8dfe79-9ec8-44be-a548-8f78a6746f5e",
18  "read_timeout": 60000,
19  "write_timeout": 60000,
20 }
```

Online | Find and Replace | Console | Cookies | Capture requests | Runner | Trash | ?

- Ruta Product Account

Banquito

GET Config

POST Post-Branches

POST Post-Products/Acco

POST InterestRate

POST RutasBranches

POST RutasProductsAcco

+

...

No Environment

Banquito / RutasProductsAccounts

POST

localhost:8001/services/branches/routes

Send

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettings

● none● form-data● x-www-form-urlencoded● raw● binary● GraphQLJSON

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Send

```
1{
2  "name": "products-accounts-service-routes",
3  "paths": ["/products-accounts"],
4  "strip_path": true
5}
```

BodyCookiesHeaders (7)Test Results

Status: 201 CreatedTime: 50 msSize: 748 BSave Response

PrettyRawPreviewVisualizeJSON

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## IMPLEMENTACION BRANCHES EN POSTMAN

- All Branches

Banquito / Branch / AllBranches

GET localhost:8000/branch **Send**

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (7) Test Results Status: 200 OK Time: 4.27 s Size: 420 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   {
3     "id": "640ac68be24cdffb0e6c2867",
4     "code": "1",
5     "name": "Agencia Norte"
6   },
7   {
8     "id": "640ac68be24cdffb0e6c2868",
9     "code": "2",
10    "name": "Agencia Sur"
11  },
12  {
13    "id": "640ac68be24cdffb0e6c2869",
14    "code": "3",
15    "name": "Agencia Centro"
16  }
17 }
```

- CreateBranch

Banquito / Branch / CreateBranch

POST localhost:8000/branch **Send**

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "code": "4",
3   "name": "Agencia Valles"
4 }
```

Body Cookies Headers (6) Test Results Status: 200 OK Time: 3.49 s Size: 174 B Save Response

Pretty Raw Preview Visualize Text

```
1
```

Banquito / Branch / AllBranches

GET localhost:8000/branch Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (7) Test Results Status: 200 OK Time: 62 ms Size: 484 B Save Response

Pretty Raw Preview Visualize JSON

```
2 {
3   "id": "640ac68be24cdffb0e6c2867",
4   "code": "1",
5   "name": "Agencia Norte"
6 },
7 {
8   "id": "640ac68be24cdffb0e6c2868",
9   "code": "2",
10  "name": "Agencia Sur"
11 },
12 {
13   "id": "640ac68be24cdffb0e6c2869",
14   "code": "3",
15   "name": "Agencia Centro"
16 },
17 {
18   "id": "640ac8a0c728d43f5a12f725",
19   "code": "4",
20   "name": "Agencia Valles"
21 }
22 }
```

Cookies Capture requests Runner Trash

## IMPLEMENTACION PRODUCTACCOUNT EN POSTMAN

- CreateProductsAccounts

Banquito / ProductsAccounts / CreateProductsAccounts

POST localhost:8000/products-accounts Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify



```
1 {
2   "id": "TEST1",
3   "name": "Cuenta Ahorros",
4   "description": "Cuenta de ahorros simple no maneja interes",
5   "minimunBalance": 200.00,
6   "payInterest": "N",
7   "acceptsChecks": "Y",
8   "state": "ACT"
9 }
```


Body Cookies Headers (6) Test Results Status: 200 OK Time: 3.38 s Size: 175 B Save Response

Pretty Raw Preview Visualize Text


1


- Get ProductAccountbyId

Banquito / ProductsAccounts / New Request  

GET 



localhost:8000/products-accounts/TEST1



Send 

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies 

Query Params



	KEY	VALUE	DESCRIPTION	...	Bulk Edit
	Key	Value	Description		


Body Cookies Headers (6) Test Results  Status: 404 Not Found Time: 62 ms Size: 177 B Save Response 

Pretty Raw Preview Visualize Text  


1


- AllInterestRate

Banquito / InterestRate / AllInterestRate  

GET 



localhost:8000/interest-rate



Send 

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies 

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
	Key	Value	Description		

Body Cookies Headers (7) Test Results  Status: 200 OK Time: 347 ms Size: 314 B Save Response 

Pretty Raw Preview Visualize JSON  

```
1 {
2   {
3     "id": 1,
4     "name": "PASIVA CORRIENTE",
5     "interestRate": 0.00,
6     "state": "ACT",
7     "stait": "2023-03-10",
8     "end": null
9   }
10 }
```

- CreateInterestRate



Banquito / InterestRate / CreateInterestRate

POSTlocalhost:8000/interest-rate

Send

ParamsAuthorizationHeaders (8)BodyPre-request ScriptTestsSettings

noneform-data x-www-form-urlencodedrawbinaryGraphQLJSON

```
1 {
2   "name": "TARJETA DEBITO",
3   "interestRate": 0.02,
4   "state": "ACT",
5   "start": "2023-05-12",
6   "end": "2024-05-12"
7 }
```

BodyCookiesHeaders (6)Test Results

Status: 400 Bad RequestTime: 275 msSize: 180 BSave Response

PrettyRawPreviewVisualizeText

1

Banquito / InterestRate / AllInterestRate

GETlocalhost:8000/interest-rate

Send

ParamsAuthorizationHeaders (6)BodyPre-request ScriptTestsSettings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

BodyCookiesHeaders (7)Test Results

Status: 200 OKTime: 60 msSize: 420 BSave Response

PrettyRawPreviewVisualizeJSON

```
1 [
2   {
3     "id": 1,
4     "name": "PASIVA CORRIENTE",
5     "interestRate": 0.00,
6     "state": "ACT",
7     "start": "2023-03-10",
8     "end": null
9   },
10  {
11    "id": 2,
12    "name": "TARJETA DEBITO",
13    "interestRate": 0.02,
14    "state": "ACT",
15    "start": "2023-05-12",
16    "end": "2024-05-12"
17  }
18 ]
```

## TEST

- BranchService Test

The screenshot shows an IDE with the `BranchServiceTest` class open. The class is a JUnit test for `BranchService`. It includes imports for `com.banquito.core.branches.service.BranchService` and `org.mockito.Mockito`. The test class has a `setUp()` method that initializes `branchService` with a `BranchRepositoryMock`. The test methods are `testCreate()`, `testCreateThrowsException()`, `testGetAll()`, `testLookByCode()`, `testLookById()`, `testLookByIdThrowsException()`, and `testUpdate()`. The IDE shows the test results in the left sidebar, indicating that all tests passed. The bottom panel shows the debug console with the following output:

```
23:38:42.941 [main] DEBUG com.banquito.core.branches.service.BranchService - Creating branch with the following info: Branch(id=null, code=B001, name=null)
23:38:42.973 [main] ERROR com.banquito.core.branches.service.BranchService - Error in branch creation: Test exception, with data: Branch(id=null, code=B001, name=null)
23:38:42.988 [main] INFO com.banquito.core.branches.service.BranchService - looking branch with code 01
23:38:42.990 [main] DEBUG com.banquito.core.branches.service.BranchService - Branch info for code 01 -> Branch(id=null, code=01, name=BranchTest)
23:38:43.014 [main] INFO com.banquito.core.branches.service.BranchService - Creating branch with code: 01
23:38:43.014 [main] DEBUG com.banquito.core.branches.service.BranchService - Creating branch with the following info: Branch(id=null, code=01, name=BranchTest)
23:38:43.025 [main] INFO com.banquito.core.branches.service.BranchService - Going to return all braches
23:38:43.044 [main] INFO com.banquito.core.branches.service.BranchService - Going to update branch with code: 222
23:38:43.044 [main] DEBUG com.banquito.core.branches.service.BranchService - Going to update branch with code: 222 with the following data Branch(id=null, code=222, name=branch2)
23:38:43.049 [main] DEBUG com.banquito.core.branches.service.BranchService - Branch with id: null and code: 222 has been updated with the following info Branch(id=null, code=222, name=branch2)
```

- BranchController Test

The screenshot shows an IDE with the `BranchControllerTest` class open. The class is a JUnit test for `BranchController`. It includes imports for `org.mockito.Mockito`, `org.springframework.http.HttpStatus`, `org.springframework.http.ResponseEntity`, `com.banquito.core.branches.controller.dto.BranchRQRS`, `com.banquito.core.branches.exception.CRUDException`, `com.banquito.core.branches.model.Branch`, and `com.banquito.core.branches.service.BranchService`. The test class has a `setUp()` method that initializes `branchService` with a `BranchRepositoryMock`. The test methods are `testCreateValid()`, `testCreateBranchWithException()`, `testObtainAll()`, `testObtainByCodeWithValidCode()`, `testObtainByCodeWithInvalidCode()`, and `testUpdate()`. The IDE shows the test results in the left sidebar, indicating that all tests passed. The bottom panel shows the debug console with the following output:

```
23:44:11.696 [main] INFO com.banquito.core.branches.controller.BranchController - Going to return all branches
23:44:11.698 [main] INFO com.banquito.core.branches.controller.BranchController - Returning 2 branches
23:44:11.713 [main] INFO com.banquito.core.branches.controller.BranchController - Going to find branch by code: 01
23:44:11.721 [main] INFO com.banquito.core.branches.controller.BranchController - Going to find branch by code: 01
<200 OK OK,BranchRQRS(id=idBranchTest, code=01, name=BranchTest),[]>
```

- ProductAccountService Test

The screenshot shows an IDE with the `ProductsAccountsServiceTest.java` file open. The test class includes a `setUp()` method using `MockitoAnnotations.openMocks(this);` and a `@Test` method `testListAllActives()` that creates a `ProductAccount` and calls `productAccountService.listAllActives()`. The test results pane on the left shows 5/5 tests passed (100%). The debug console at the bottom shows the following log messages:

```
01:13:18.588 [main] INFO com.banquito.core.productsaccounts.service.ProductAccountService - Creating Product Account with the following info: ProductAccount(id=1, name=account1, description=description1, minimumBalance=100.00, payInterest=Y, acceptsChecks=Y, state=ACT, creationDate=null)
01:13:18.652 [main] ERROR com.banquito.core.productsaccounts.service.ProductAccountService - Error in Product Account creation: Database connection error, with data: ProductAccount(id=1, name=account1, description=description1, minimumBalance=100.00, payInterest=Y, acceptsChecks=Y, state=ACT, creationDate=Fri Mar 10 01:13:18 ECT 2023)
01:13:18.760 [main] INFO com.banquito.core.productsaccounts.service.ProductAccountService - Obtaining all active Products Accounts records
01:13:18.768 [main] DEBUG com.banquito.core.productsaccounts.service.ProductAccountService - Returning 2 Products Accounts records
01:13:18.785 [main] INFO com.banquito.core.productsaccounts.service.ProductAccountService - Creating Product Account with the following info: ProductAccount(id=1, name=account1, description=description1, minimumBalance=100.00, payInterest=Y, acceptsChecks=Y, state=ACT, creationDate=null)
01:13:18.786 [main] DEBUG com.banquito.core.productsaccounts.service.ProductAccountService - Product Account created with the following info: ProductAccount(id=1, name=account1, description=description1, minimumBalance=100.00, payInterest=Y, acceptsChecks=Y, state=ACT, creationDate=Fri Mar 10 01:13:18 ECT 2023)
01:13:18.801 [main] INFO com.banquito.core.productsaccounts.service.ProductAccountService - Looking Product Account by id: 1
01:13:18.811 [main] INFO com.banquito.core.productsaccounts.service.ProductAccountService - Looking Product Account by id: 1
```

- InterestRateService Test

The screenshot shows an IDE with the `InterestServiceTest.java` file open. The test class includes a `setUp()` method using `MockitoAnnotations.openMocks(this);` and a `@Test` method `testListAllActives()` that creates an `InterestRate` and calls `interestRateService.listAllActives()`. The test results pane on the left shows 9/9 tests passed (100%). The debug console at the bottom shows the following log messages:
















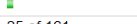
```
01:14:22.389 [main] INFO com.banquito.core.productsaccounts.service.InterestRateService - Creating interest rate with the following info: InterestRate(id=null, name=test, interestRate=0.01, state=ACT, start=Fri Mar 10 01:14:22 ECT 2023, end=null)
01:14:22.392 [main] DEBUG com.banquito.core.productsaccounts.service.InterestRateService - Interest rate created with the following info: InterestRate(id=null, name=test, interestRate=0.01, state=ACT, start=Fri Mar 10 01:14:22 ECT 2023, end=null)
01:14:22.404 [main] INFO com.banquito.core.productsaccounts.service.InterestRateService - Looking interest rate by id: 1
01:14:22.414 [main] INFO com.banquito.core.productsaccounts.service.InterestRateService - Going to inactivate Interest Rate with id: 1
01:14:22.415 [main] DEBUG com.banquito.core.productsaccounts.service.InterestRateService - Interest Rate with id: 1 has been inactivated with the following info InterestRate(id=1, name=rate1, interestRate=0.01, state=INA, start=Fri Mar 10 01:14:22 ECT 2023, end=Fri Mar 10 01:14:22 ECT 2023)
01:14:22.426 [main] INFO com.banquito.core.productsaccounts.service.InterestRateService - Looking interest rate by id: 1
01:14:22.434 [main] INFO com.banquito.core.productsaccounts.service.InterestRateService - Going to update Interest Rate with id: 1
01:14:22.434 [main] DEBUG com.banquito.core.productsaccounts.service.InterestRateService - Going to update Interest Rate with id: 1 with the following data InterestRate(id=null, name=test, interestRate=0.02, state=ACT, start=Fri Mar 10 01:14:22 ECT 2023, end=null)
01:14:22.436 [main] DEBUG com.banquito.core.productsaccounts.service.InterestRateService - Interest Rate with id: 1 has been updated with the following info InterestRate(id=1, name=test, interestRate=0.02, state=ACT, start=Fri Mar 10 01:14:22 ECT 2023, end=null)
```

## COVERAGE














### Branches

 branches >  com.banquito.core.branches.service >  BranchService




#### BranchService

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods
 <a href="#">update(String, Branch)</a>		64 %		50 %	1	2	4	14	0	1
 <a href="#">create(Branch)</a>		100 %		n/a	0	1	0	8	0	1
 <a href="#">lookById(String)</a>		100 %		100 %	0	2	0	5	0	1
 <a href="#">lookByCode(String)</a>		100 %		n/a	0	1	0	4	0	1
 <a href="#">getAll()</a>		100 %		n/a	0	1	0	2	0	1
 <a href="#">BranchService(BranchRepository)</a>		100 %		n/a	0	1	0	3	0	1
 <a href="#">static {...}</a>		100 %		n/a	0	1	0	1	0	1
Total	25 of 161	84 %	1 of 4	75 %	1	9	4	37	0	7


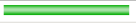









#### BranchController

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods
 <a href="#">update(String, BranchRQRS)</a>		50 %		n/a	0	1	3	5	0	1
 <a href="#">create(BranchRQRS)</a>		100 %		n/a	0	1	0	6	0	1
 <a href="#">obtainByCode(String)</a>		100 %		100 %	0	2	0	5	0	1
 <a href="#">obtainAll()</a>		100 %		n/a	0	1	0	4	0	1
 <a href="#">BranchController(BranchService)</a>		100 %		n/a	0	1	0	3	0	1
 <a href="#">static {...}</a>		100 %		n/a	0	1	0	1	0	1
Total	13 of 93	86 %	0 of 2	100 %	0	7	3	24	0	6





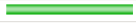
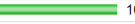











### ProductAccount

 products-accounts >  com.banquito.core.productsaccounts.service >  ProductAccountService

#### ProductAccountService

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods
 <a href="#">create(ProductAccount)</a>		100 %		n/a	0	1	0	9	0	1
 <a href="#">obtainById(String)</a>		100 %		100 %	0	2	0	5	0	1
 <a href="#">listAllActives()</a>		100 %		n/a	0	1	0	4	0	1
 <a href="#">ProductAccountService(ProductAccountRepository)</a>		100 %		n/a	0	1	0	3	0	1
 <a href="#">static {...}</a>		100 %		n/a	0	1	0	1	0	1
Total	0 of 87	100 %	0 of 2	100 %	0	6	0	22	0	5

#### InterestRateService

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods
 <a href="#">inactivate(Integer)</a>		59 %		50 %	1	2	4	14	0	1
 <a href="#">update(Integer, InterestRate)</a>		100 %		100 %	0	2	0	15	0	1
 <a href="#">create(InterestRate)</a>		100 %		n/a	0	1	0	8	0	1
 <a href="#">obtainById(Integer)</a>		100 %		100 %	0	2	0	5	0	1
 <a href="#">listAllActives()</a>		100 %		n/a	0	1	0	4	0	1
 <a href="#">InterestRateService(InterestRateRepository)</a>		100 %		n/a	0	1	0	3	0	1
 <a href="#">static {...}</a>		100 %		n/a	0	1	0	1	0	1
Total	25 of 209	88 %	1 of 6	83 %	1	10	4	50	0	7