



## SPRINT 2: Desarrollo del Backend

Identificación Proyecto	
Nombre Proyecto:	Banco Essence
Número Equipo:	Grupo 02
Integrantes del equipo	
Rol (Líder-Desarrollador – Cliente)	Nombre
Desarrollador – Cliente	Weimar Moisés Alvarez Cardona
Desarrollador – Cliente	Olga Lucia Fuentes Silva
Desarrollador – Cliente	Oscar Iván Jaimes Mora
Desarrollador – Cliente	Oscar Rodolfo Matamoros Garzón
Desarrollador – Cliente	Cristian Camilo Rey Cahuana

## Evidencia construcción del Backend

The first screenshot shows the Explorer view of the project structure. The project is named 'BANCO\_ESSENCE' and contains the following files and folders:

- .mvn
- .vscode
- src
  - main
    - java \ com \ banco\_essence \ banco\_essence
      - Controllers
        - CientesController.java
        - CuentasController.java
        - TransaccionesController.java
      - Models
        - CientesModel.java
        - CuentasModel.java
        - TransaccionesModel.java
      - Repositories
        - CientesRepository.java
        - CuentasRepository.java
        - TransaccionesRepository.java
      - Services
        - CientesService.java
        - CuentasService.java
        - TransaccionesService.java
        - BancoEssenceApplication.java
        - ServletInitializer.java
      - resources
        - static
        - templates
        - application.properties
      - test
      - target
      - .gitignore
      - HELP.md

The second screenshot shows the Spring Boot Dashboard. The application is running on port 8080. The BEANS section shows the following beans:

- banco\_essence pid: 10128
  - applicationAvailability singleton
  - applicationTaskExecutor singleton
  - bancoEssenceApplication singleton
  - basicErrorController singleton

The ENDPOINT MAPPINGS section shows the following endpoints:

- banco\_essence pid: 10128
  - /actuator [GET]
  - /actuator/health [GET]
  - /actuator/health/\*\* [GET]
  - /clientes/ [POST]
  - /clientes/ [PUT]
  - /clientes/{id} [DELETE]

The MEMORY section shows the heap memory usage:

- Heap Memory
  - Size 128 MB / Used 48 MB / Max 2001 MB

The third screenshot shows the file explorer for the 'banco\_essence' project, displaying the following files:

- Controllers
  - CientesController.java
  - CuentasController.java
  - TransaccionesController.java
- Models
  - CientesModel.java
  - CuentasModel.java
  - TransaccionesModel.java
- Repositories
  - CientesRepository.java
  - CuentasRepository.java
  - TransaccionesRepository.java
- Services
  - CientesService.java
  - CuentasService.java
  - TransaccionesService.java



Unnamed	
<ul style="list-style-type: none"> <li>c4g21_banca_essence           <ul style="list-style-type: none"> <li>c4g21_administradores</li> <li>c4g21_clientes</li> <li>c4g21_cuentas</li> <li>c4g21_transacciones</li> </ul> </li> </ul>	96.0 KiB 16.0 KiB 16.0 KiB 32.0 KiB 32.0 KiB

Nombre	Filas	Tamaño	Creado	Actualizado	Motor	Comentario	Tipo
c4g21_administrador...	0	16.0 KiB	2022-12-08 18:31:40	2022-12-08 17:01:05	InnoDB	Tabla Administradores    c4g21_administradores	Table
c4g21_clientes	3	16.0 KiB	2022-12-08 18:31:40	2022-12-08 17:00:11	InnoDB	Tabla Clientes    c4g21_clientes	Table
c4g21_cuentas	3	32.0 KiB	2022-12-08 18:31:09	2022-12-08 17:03:57	InnoDB	Cuentas Bancarias    c4g21_cuentas	Table
c4g21_transacciones	2	32.0 KiB	2022-12-08 18:31:09	2022-12-08 17:07:47	InnoDB	Movimientos Bancarios (Transacciones)    c4g21_transacciones	Table

#	Nombre	Tipo de datos	Longitud/Co...	Sin signo	Permitir...	Relle...	Predeterminado	Comentario	Collation
1	_id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREMENT		
2	transaction_date	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		
3	transaction_value	DOUBLE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'0'		
4	transaction_type	VARCHAR	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	column_check('D' or 'R')		latin1_swedish_ci
5	_id_cuenta	VARCHAR	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci

#	Nombre	Tipo de datos	Longitud/Co...	Sin signo	Permitir...	Relle...	Predeterminado	Comentario	Collation
1	_id	VARCHAR	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"		latin1_swedish_ci
2	cuenta_fecha_apertura	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		
3	cuenta_saldo	DOUBLE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'0'		
4	_id_cliente	VARCHAR	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"		latin1_swedish_ci

#	Nombre	Tipo de datos	Longitud/Co...	Sin signo	Permitir...	Relle...	Predeterminado	Comentario	Collation
1	_id	VARCHAR	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
2	client_name	VARCHAR	80	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
3	client_passwd	VARCHAR	50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
4	client_email	VARCHAR	80	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci

#	Nombre	Tipo de datos	Longitud/Co...	Sin signo	Permitir...	Relle...	Predeterminado	Comentario	Collation
1	_id	VARCHAR	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
2	admon_name	VARCHAR	80	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
3	admon_passwd	VARCHAR	50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci
4	admon_email	VARCHAR	80	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sin valor predeterminado		latin1_swedish_ci

_id	client_name	client_passwd	client_email
1	Sergio Medina	123456	sm@gmail.com
2	Luisa Lane	654321	ll@outlook.com
3	Weimar Alvarez	123789	wm@gmail.com

_id	admon_name	admon_passwd	admon_email
1	Leanny Sanchez	123456	ls@hotmail.com

_id	cuenta_fecha_apertura	cuenta_saldo	_id_cliente
01-01	2021-06-10	100,000	1
02-02	2022-05-15	500,000	1
03-03	2022-01-25	750,000	2
04-04	2022-07-01	1,000,000	3

_id	transaction_date	transaction_value	transaction_type	_id_cuenta
1	2022-02-20	100,000	D	01-01
2	2022-07-15	100,000	R	04-04



## Evidencias de los “endpoint” con el consumo de recursos del API REST

GET

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

☐ parameter value

Status: 200 OK Size: 208 Bytes Time: 16 ms

Response Headers 5 Cookies Results Docs {}

```
1 {
2   "_id": "04-04",
3   "cuenta_fecha_apertura": "2022-07-01T05:00:00.000+00:00",
4   "cuenta_saldo": 1000000.0,
5   "_id_cliente": {
6     "_id": "3",
7     "client_name": "Weimar Alvarez",
8     "client_passwd": "123789",
9     "client_email": "wm@gmail.com"
10  }
11 }
```

Copy

GET

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

☐ parameter value

Status: 200 OK Size: 95 Bytes Time: 257 ms

Response Headers 5 Cookies Results Docs {}

```
1 {
2   "_id": "2",
3   "client_name": "Luisa Lane",
4   "client_passwd": "654321",
5   "client_email": "ll@outlook.com"
6 }
```

Copy

GET

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

☐ parameter value

Status: 200 OK Size: 334 Bytes Time: 23 ms

Response Headers 5 Cookies Results Docs {}

```
1 {
2   "_id": 2,
3   "transaction_date": "2022-07-15T05:00:00.000+00:00",
4   "transaction_value": 100000.0,
5   "transaction_type": "R",
6   "_id_cuenta": {
7     "_id": "04-04",
8     "cuenta_fecha_apertura": "2022-07-01T05:00:00.000+00:00",
9     "cuenta_saldo": 1000000.0,
10    "_id_cliente": {
11      "_id": "3",
12      "client_name": "Weimar Alvarez",
13      "client_passwd": "123789",
14      "client_email": "wm@gmail.com"
15    }
16  }
17 }
```



localhost:8080/clientes/list

JSON	Datos sin procesar	Cabeceras
Guardar	Copiar	Contraer todo
Expandir todo	Filtrar JSON	

```
▼ 0:
  _id: "1"
  client_name: "Sergio Medina"
  client_passwd: "123456"
  client_email: "sm@gmail.com"
▼ 1:
  _id: "2"
  client_name: "Luisa Lane"
  client_passwd: "654321"
  client_email: "ll@outlook.com"
▼ 2:
  _id: "3"
  client_name: "Weimar Alvarez"
  client_passwd: "123789"
  client_email: "wm@gmail.com"
```

localhost:8080/transacciones/list

JSON	Datos sin procesar	Cabeceras
Guardar	Copiar	Contraer todo
Expandir todo	Filtrar JSON	

```
▼ 0:
  _id: 1
  transaction_date: "2022-02-20T05:00:00.000+00:00"
  transaction_value: 100000
  transaction_type: "D"
  ▼ _id_cuenta:
    _id: "01-01"
    cuenta_fecha_apertura: "2021-06-10T05:00:00.000+00:00"
    cuenta_saldo: 100000
    ▼ _id_cliente:
      _id: "1"
      client_name: "Sergio Medina"
      client_passwd: "123456"
      client_email: "sm@gmail.com"
▼ 1:
  _id: 2
  transaction_date: "2022-07-15T05:00:00.000+00:00"
  transaction_value: 100000
  transaction_type: "R"
  ▼ _id_cuenta:
    _id: "04-04"
    cuenta_fecha_apertura: "2022-07-01T05:00:00.000+00:00"
    cuenta_saldo: 1000000
    ▼ _id_cliente:
      _id: "3"
      client_name: "Weimar Alvarez"
      client_passwd: "123789"
      client_email: "wm@gmail.com"
```

localhost:8080/cuentas/list

JSON	Datos sin procesar	Cabeceras
Guardar	Copiar	Contraer todo
Expandir todo	Filtrar JSON	

```
▶ 0: {..}
▶ 1: {..}
▼ 2:
  _id: "03-03"
  cuenta_fecha_apertura: "2022-01-25T05:00:00.000+00:00"
  cuenta_saldo: 750000
  ▼ _id_cliente:
    _id: "2"
    client_name: "Luisa Lane"
    client_passwd: "654321"
    client_email: "ll@outlook.com"
▼ 3:
  _id: "04-04"
  cuenta_fecha_apertura: "2022-07-01T05:00:00.000+00:00"
  cuenta_saldo: 1000000
  ▼ _id_cliente:
    _id: "3"
    client_name: "Weimar Alvarez"
    client_passwd: "123789"
    client_email: "wm@gmail.com"
```



GET  Send

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

<input checked="" type="checkbox"/> idcta	04-04
<input type="checkbox"/> parameter	value

Status: 200 OK Size: 336 Bytes Time: 21 ms

Response Headers 5 Cookies Results Docs

```
1 [
2   {
3     "_id": 2,
4     "transaction_date": "2022-07-15T05:00:00.000+00:00",
5     "transaction_value": 100000.0,
6     "transaction_type": "R",
7     "_id_cuenta": {
8       "_id": "04-04",
9       "cuenta_fecha_apertura": "2022-07-01T05:00:00.000+00:00",
10      "cuenta_saldo": 1000000.0,
11      "_id_cliente": {
12        "_id": "3",
13        "client_name": "Weimar Alvarez",
14        "client_passwd": "123789",
15        "client_email": "wm@gmail.com"
16      }
17    }
18  }
19 ]
```

GET  Send

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

<input checked="" type="checkbox"/> idc	2
<input type="checkbox"/> parameter	value

Status: 200 OK Size: 207 Bytes Time: 33 ms

Response Headers 5 Cookies Results Docs

```
1 [
2   {
3     "_id": "03-03",
4     "cuenta_fecha_apertura": "2022-01-25T05:00:00.000+00:00",
5     "cuenta_saldo": 750000.0,
6     "_id_cliente": {
7       "_id": "2",
8       "client_name": "Luisa Lane",
9       "client_passwd": "654321",
10      "client_email": "ll@outlook.com"
11    }
12  }
13 ]
```

GET  Send

Query Headers 2 Auth Body Tests Pre Run New

Query Parameters

<input checked="" type="checkbox"/> usuario	wm@gmail.com
<input checked="" type="checkbox"/> clave	123789
<input type="checkbox"/> parameter	value

Status: 200 OK Size: 97 Bytes Time: 14 ms

Response Headers 5 Cookies Results Docs

```
1 {
2   "_id": "3",
3   "client_name": "Weimar Alvarez",
4   "client_passwd": "123789",
5   "client_email": "wm@gmail.com"
6 }
```

DELETE  Send

Query Headers 2 Auth Body 1 Tests Pre Run New

Json Xml Text Form Form-encode Graphql Binary

Json Content Format

```
1
```

Status: 200 OK Size: 99 Bytes Time: 428 ms

Response Headers 5 Cookies Results Docs

```
1 {
2   "_id": "4",
3   "client_name": "Carmen Cardona",
4   "client_passwd": "123654",
5   "client_email": "cc@outlook.com"
6 }
```



PUT  http://localhost:8080/clientes/

Query Headers 2 Auth **Body 1** Tests Pre Run New

Json Xml Text Form Form-encode GraphQL Binary

Json Content Format

```
1 {
2   "_id": "4",
3   "client_name": "Carmen Cardona",
4   "client_passwd": "123654",
5   "client_email": "cc@outlook.com"
6 }
```

Status: 200 OK Size: 99 Bytes Time: 39 ms

Response Headers 5 Cookies Results Docs {}

```
1 {
2   "_id": "4",
3   "client_name": "Carmen Cardona",
4   "client_passwd": "123654",
5   "client_email": "cc@outlook.com"
6 }
```

POST  http://localhost:8080/clientes/

Query Headers 2 Auth **Body 1** Tests Pre Run New

Json Xml Text Form Form-encode GraphQL Binary

Json Content Format

```
1 {
2   "_id": "4",
3   "client_name": "Carmen Cardona",
4   "client_passwd": "654123",
5   "client_email": "cc@hotmail.com"
6 }
```

Status: 200 OK Size: 99 Bytes Time: 570 ms

Response Headers 5 Cookies Results Docs {}

```
1 {
2   "_id": "4",
3   "client_name": "Carmen Cardona",
4   "client_passwd": "654123",
5   "client_email": "cc@hotmail.com"
6 }
```

▼ C4G21

- localhost:8080/clientes/list/2  
27 mins ago
- localhost:8080/transacciones/list/2  
3 hours ago
- localhost:8080/transacciones/list  
3 hours ago
- localhost:8080/cuentas/list/04-04  
3 hours ago
- localhost:8080/clientes/  
24 mins ago
- localhost:8080/clientes/  
23 mins ago
- localhost:8080/clientes/4  
18 mins ago
- localhost:8080/clientes/login?usuario=wm@gmail.com&clave=123789  
14 mins ago
- localhost:8080/cuentas/consulta?idc=2  
8 mins ago
- localhost:8080/transacciones/consulta?idcta=04-04  
just now



## Evidencia GitLab o GitHub

Link de acceso a Github: [WMRioga/Ciclo\\_4\\_WApp: Ciclo\\_4\\_Aplicaciones\\_Web \(github.com\)](https://github.com/WMRIoga/Ciclo_4_WApp: Ciclo_4_Aplicaciones_Web)

**WMRioga C04\_G21-08**
844f677 2 minutes ago 11 commits

**C04\_G21-08**

Creación Sprint2  
Se ajusta Repositorio de la tabla Transacciones.  
Se corrige error en consulta de la tabla Transacciones.

.vscode	C04_G21-03	last month
Evidencias Backend	C04_G21-08	2 minutes ago
banca_essence_mdb	C04_G21-06	22 days ago
banco_essence	C04_G21-08	2 minutes ago
Leeme_wm.txt	Actualizacion Leeme.txt	last month

File Edit View Repository Branch Help

Current repository: **Ciclo\_4\_WApp**
Current branch: **main**
Fetch origin (Last fetched 3 minutes ago)

Changes History

No branches to compare

WMRioga • 3 minutes ago

WMRioga • 3 hours ago

Weimar M Alvarez C • Nov 16, 2022

Weimar M Alvarez C • Nov 16, 2022

Weimar M Alvarez C • Nov 14, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 6, 2022

Weimar M Alvarez C • Nov 5, 2022

**C04\_G21-08**  
Se ajusta Backend Banca Essence  
Se Realiza validación MariaDB  
Se realizan pruebas de los recursos API

**C04\_G21-07**  
banco\_essence\hs\_err\_pid2060.log

**C04\_G21-06**  
banco\_essence\hs\_err\_pid2980.log

**C04\_G21-05**  
banco\_essence\pom.xml

**C04\_G21-04**  
banco\_essence\CuentasController.java

**Actualizacion Leeme.txt**  
banco\_essence\TransaccionesController.java

**C04\_G21-03**  
banco\_essence\TransaccionesModel.java

**C04\_G21-02**  
banco\_essence\CuentasRepository.java

**C04\_G21-DeleteAll**  
banco\_essence\TransaccionesRepository.java

**C04\_G21-DeleteAll**  
banco\_essence\CuentasService.java

**C04\_G21-01**  
banco\_essence\application.properties

```

@@ -0,0 +1,767 @@
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

```

Out of Memory Error (allocation.cpp:44), pid=2060, tid=10360

JRE version: OpenJDK Runtime Environment Temurin-17.0.4.1+1 (17.0.4.1+1) (build 17.0.4.1+1)

Java VM: OpenJDK 64-Bit Server VM Temurin-17.0.4.1+1 (17.0.4.1+1, mixed mode, emulated-client, tiered, compressed oops, compressed class ptrs, g1 gc, windows-amd64)