



Tenfe

[Readme.md](#)

Funciones Backend

▼ Líneas

- Get líneas → Línea, origen, destino

To finish

```
lines::getLines
```

```
@return array with all different lines and their origin and destination
```

- Get Líneas By User → Línea

- Get líneas By User & Línea → Origen, destino

- Get líneas By estación

```
lines::getConnectionsOfStation
```

```
@param int $stationId station id
```

```
@return array with all routes where you can transfer from in a station
```

▼ Horarios

- Horarios by origen, destino, fecha y hora

```
routes::calculateBetweenStations
```

- Create horario (hora_salida, origen, destino, estaciones, tiempo entre-paradas)

To be tested

```

schedules::createNew

@param $stationsAndTimes array with station ids and times it goes through them
@param $routeId string route id
@return bool if the schedule was created

```

- Modificar horario de salida

To finish

```

schedules::modifyDepartureTime

@param string $time the new departure time
@return bool if the departure time was modified

```

▼ Estaciones

- Get estaciones → Nombre, líneas estacion

```

lines::getAllStationsWithConnections

@return array with all stations and their connections

```

▼ Usuarios

```

INSERT INTO
  users(name, password, email)
VALUES ('admin', '123321', 'admin@tenfe.com')

```

- Get usuarios (super admin only)

To be tested

```

users::getAll

@return array with all the users

```

- Get usuarios (rest)

- Create user (user_data, líneas)

To be tested

```

users::createNew

@param $name string the name of the user
@param $email string the email of the user
@param $password string the password of the user without encryption
@param $lines array the lines the user is able to edit
@return bool if the user was created

```

- DB role trigger

- Modify user

To be tested

```
users::modify  
  @param int $userId the id of the user to update  
  @param string $name the name of the user  
  @param string $email the email of the user  
  @param array $lines the lines the user is able to edit  
  @return bool if the user was modified successfully
```

General TODO

- Fix PK in Schedules table
- Create the create Tables with everything
- Add try/catch and error control
- Update ER diagram

▼ Views

```
CREATE VIEW user_view AS (SELECT * FROM users WHERE id > 1)
```

```
CREATE VIEW routes_R1 AS (SELECT * FROM routes WHERE name = 'R1');  
CREATE VIEW routes_R2 AS (SELECT * FROM routes WHERE name = 'R2');  
CREATE VIEW routes_R3 AS (SELECT * FROM routes WHERE name = 'R3');  
CREATE VIEW routes_R4 AS (SELECT * FROM routes WHERE name = 'R4');  
CREATE VIEW routes_R5 AS (SELECT * FROM routes WHERE name = 'R5');  
CREATE VIEW routes_R6 AS (SELECT * FROM routes WHERE name = 'R6');  
CREATE VIEW routes_R7 AS (SELECT * FROM routes WHERE name = 'R7');  
CREATE VIEW routes_R8 AS (SELECT * FROM routes WHERE name = 'R8');  
CREATE VIEW routes_R9 AS (SELECT * FROM routes WHERE name = 'R9');  
CREATE VIEW routes_R10 AS (SELECT * FROM routes WHERE name = 'R10');  
CREATE VIEW routes_R11 AS (SELECT * FROM routes WHERE name = 'R11');  
CREATE VIEW routes_R12 AS (SELECT * FROM routes WHERE name = 'R12');
```

```
CREATE VIEW schedules_R1 AS (SELECT * FROM schedules WHERE route_id = 'R1');  
CREATE VIEW schedules_R2 AS (SELECT * FROM schedules WHERE route_id = 'R2');  
CREATE VIEW schedules_R3 AS (SELECT * FROM schedules WHERE route_id = 'R3');  
CREATE VIEW schedules_R4 AS (SELECT * FROM schedules WHERE route_id = 'R4');  
CREATE VIEW schedules_R5 AS (SELECT * FROM schedules WHERE route_id = 'R5');  
CREATE VIEW schedules_R6 AS (SELECT * FROM schedules WHERE route_id = 'R6');  
CREATE VIEW schedules_R7 AS (SELECT * FROM schedules WHERE route_id = 'R7');  
CREATE VIEW schedules_R8 AS (SELECT * FROM schedules WHERE route_id = 'R8');  
CREATE VIEW schedules_R9 AS (SELECT * FROM schedules WHERE route_id = 'R9');  
CREATE VIEW schedules_R10 AS (SELECT * FROM schedules WHERE route_id = 'R10');
```

```
CREATE VIEW schedules_R11 AS (SELECT * FROM schedules WHERE route_id = 'R11');
CREATE VIEW schedules_R12 AS (SELECT * FROM schedules WHERE route_id = 'R12');
```

▼ Roles

```
CREATE ROLE
'R1', 'R2', 'R3', 'R4', 'R5', 'R6', 'R7', 'R8', 'R9', 'R10', 'R11', 'R12';
```

```
GRANT SELECT ON tenfe.* TO
'R1', 'R2', 'R3', 'R4', 'R5', 'R6', 'R7', 'R8', 'R9', 'R10', 'R11', 'R12';
```

```
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R1 TO 'R1';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R2 TO 'R2';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R3 TO 'R3';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R4 TO 'R4';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R5 TO 'R5';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R6 TO 'R6';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R7 TO 'R7';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R8 TO 'R8';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R9 TO 'R9';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R10 TO 'R10';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R11 TO 'R11';
GRANT SELECT,UPDATE,INSERT ON tenfe.schedules_R12 TO 'R12';
```

▼ Triggers

▼ Procedures / Functions

```
+-----+
| Grants for R1
+-----+
| GRANT USAGE ON *.* TO `R1`
| GRANT SELECT, INSERT, UPDATE ON `tenfe`.`routes_R1` TO `R1`
| GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, REFERENCES, INDEX, ALTER, CREATE VIEW, SHOW VIEW, TRIGGER ON `tenfe`.`schedules_R1` TO `R1` |
+-----+
3 rows in set (0.00 sec)
```

Grants for testuser@linux

```
GRANT `R1` TO `testuser`@`linux`
```

```
GRANT USAGE ON *.* TO `testuser`@`linux`
```

```
mysql> SELECT * FROM tenfe.routes_R1;
ERROR 1142 (42000): SELECT command denied to user 'testuser'@'linux' for table 'routes_R1'
```