# The full process UNF to 3NF

ID:

NAME:

# **Process**

## UNF

```
SHOW_BOOKING (show_date_time, play_number, play_name, play_writer, total_number_of_patrons, theatre_id, theatre_street, theatre_town, (booking_number, number_of_seats, total_amount_due, paid, client_number, client_name))
```

#### 1NF

```
SHOW ( show_date_time , play_number , play_name, play_writer, total_number_of_patrons, theatre_id)

THEATRE ( theatre_id , theatre_street, theatre_town)

BOOKING ( booking_number , number_of_seats, total_amount_due, paid, client_number, show_date_time, play_number)

CLIENT ( client_number , client_name)
```

## Partial Dependencies:

• client\_number -> client\_name

#### 2NF

```
SHOW ( show_date_time , play_number , play_name, play_writer, total_number_of_patrons, theatre_id)

THEATRE ( theatre_id , theatre_street, theatre_town)

BOOKING ( booking_number , number_of_seats, total_amount_due, paid, client_number, show_date_time, play_number)

CLIENT ( client_number , client_name)
```

## Transitive Dependencies:

- theatre\_id -> theatre\_street, theatre\_town
- play\_number -> play\_name, play\_writer

### 3NF

```
SHOW ( show date time , play number , total_number_of_patrons)

THEATRE ( theatre_id , theatre_street, theatre_town)

BOOKING ( booking_number , number_of_seats, total_amount_due, paid,

client_number, show_date_time, play_number)

CLIENT ( client_number , client_name)

PLAY ( play_number , play_name, play_writer)

SHOW_THEATRE ( show_date_time , play_number , theatre_id)
```

## Full Dependencies:

- show\_date\_time, play\_number -> total\_number\_of\_patrons
- theatre\_id -> theatre\_street, theatre\_town
- play\_number -> play\_name, play\_writer
- booking\_number -> number\_of\_seats, total\_amount\_due, paid, client\_number, show\_date\_time, play\_number
- client\_number -> client\_name
- show\_date\_time, play\_number -> theatre\_id