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systems

DBT FACE RECOGNITION SYSTEM

recognition-system.com/



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DBT



INTRODUCTION

01.

What is it?

02.

Solution

03.

Advantages



DBT

INTRODUCTION

DBT is the first fully autonomous facial recognition system that does not require:

- Internet connection
- Access to external databases
- Storage of biometric data

It is fully compliant with **GDPR / RGPD / CNIL** regulations.

01.

What is it?



DBT
INTRODUCTION

A **globally innovative solution**, patented in Europe and fully compliant with **GDPR/CNIL regulations**, enabling **automatic and reliable identity validation** without: registration in databases presenting identity documents at the checkpoint

02.
Solution



DBT
INTRODUCTION

- Hands-free operation 100% offline system
- **NO DATABASE ACCESS REQUIRED**
- **NO INTERNET CONNECTION REQUIRED**

03. Advantages

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systems*



How
DBT
works

100 % OFFLINE

100 % RGDP COMPLIANT



Passenger approaching
the boarding gate



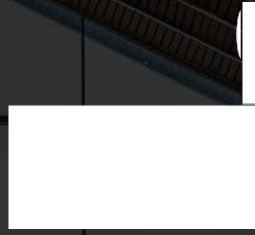
The passenger
approaches the
checkpoint



Authorization process



Passenger approaching
the boarding gate



The passenger approaches the boarding gate.

When entering the access gate, the *DBT Server* receives information indicating that a passenger has passed the gate's infrared sensor.

The *DBT Server* installed at the gate sends a signal to the passenger's mobile phone. If the phone has the *DBT Client app* activated, a communication protocol is established between the DBT Client app and the *DBT Server*.

If both systems are authorized to communicate, the *DBT Client app* on the passenger's mobile phone sends a token containing the passenger's biometric data. If no response is received, a message appears on the gate screen asking the passenger to contact an assistant.

The token contains at least::

- Passenger facial features (facial minutiae)
- Passenger name
- Flight number
- Boarding pass
- Reservation number

And any additional information required by the airport system to grant or deny passenger access.



The passenger
approaches the
checkpoint



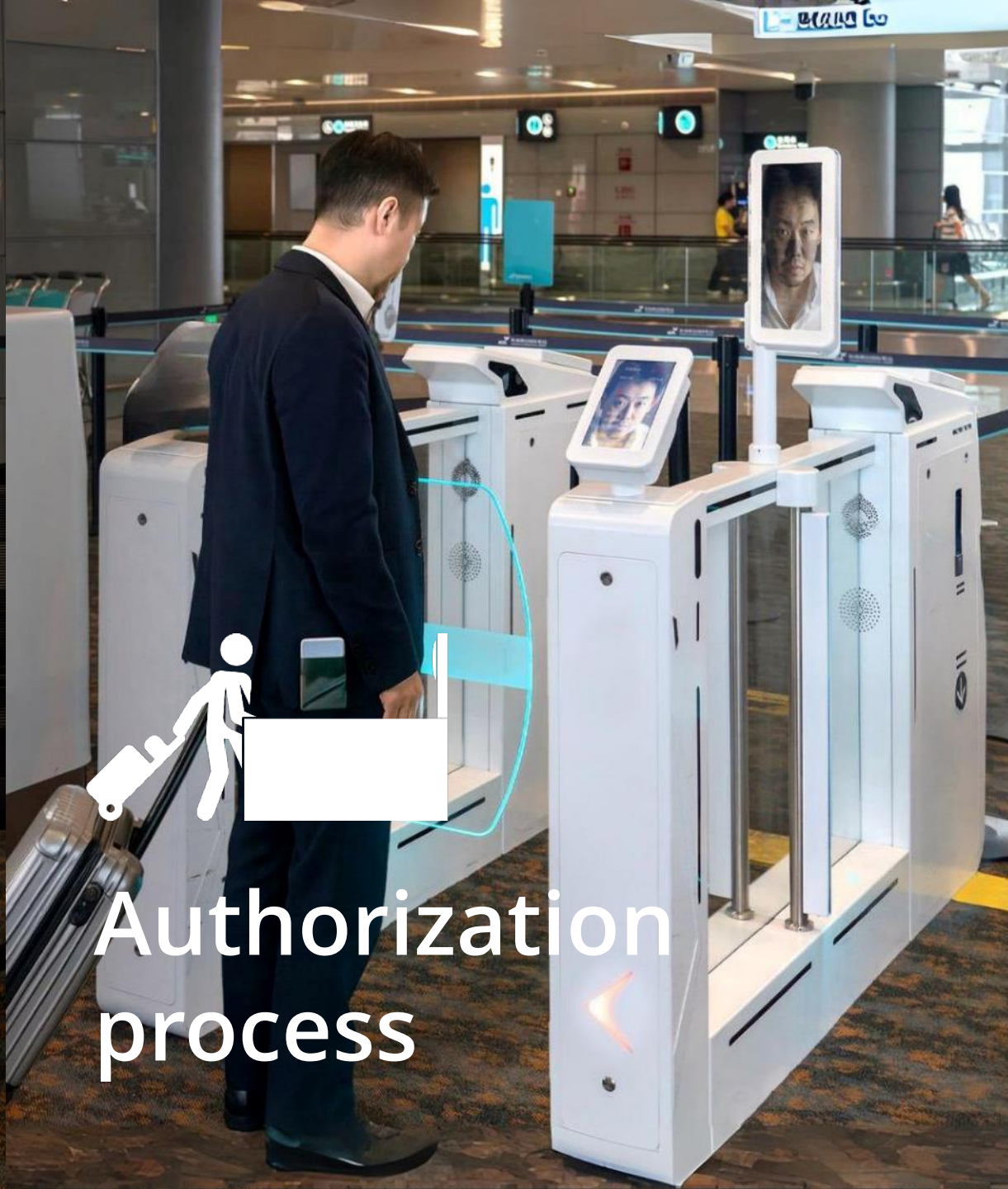
The passenger approaches the checkpoint

The *DBT Server* installed in the access control system checks whether the mobile phone running the *DBT Client app* is authorized to use this access point. If it is not authorized, a message appears on the screen asking the passenger to contact an assistant.

If the passenger is authorized to use the access control point, the camera connected to the *DBT Server* is activated and the facial recognition process begins.



Authorization process



Authorization process

The *DBT Server* is activated when the passenger triggers the passage detector, initiating the facial recognition process, which consists of:

- Capture the passenger's facial features in front of the camera.
- Compare the facial features captured by the camera of the access control system connected to the *DBT Server* with the facial features contained in the token sent by the *DBT Client app* activated on the passenger's mobile phone.

If the match is positive, the token is sent to the airport system, which verifies the passenger's biographical data, boarding pass, flight number, reservation number, and other information required to authorize or deny access.

The system then sends a message to the screen connected to the *DBT Server* displaying the result of the verification.



Authorization process

01. Passenger entry detection sensor





Authorization process

01. Passenger entry detection sensor

02. Access gate computer



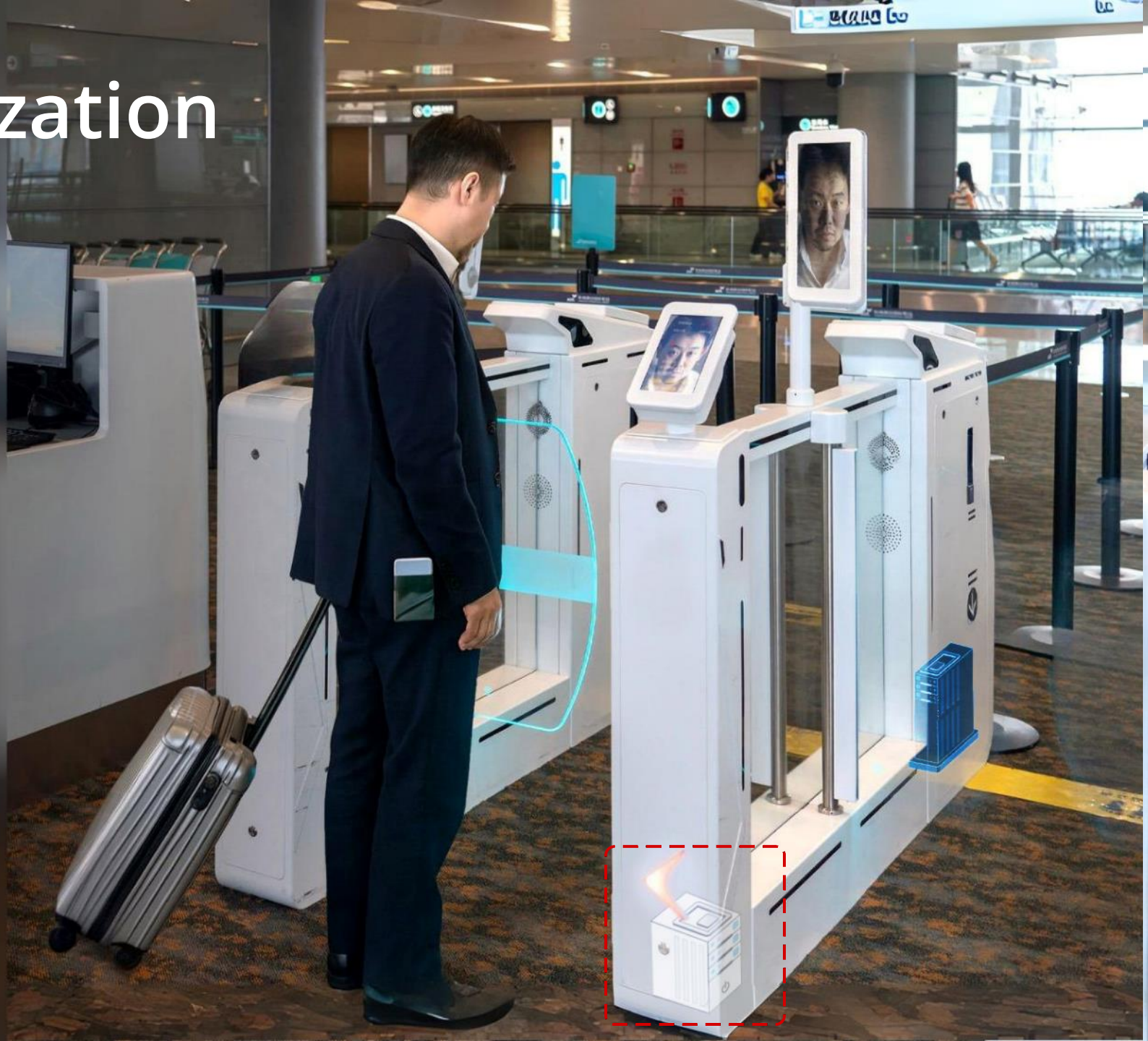


Authorization process

01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server





Authorization process

01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server

04. RJ45 communication





Authorization process

01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server

04. RJ45 communication

05. Mobile with the *DBT Client app*





Authorization process

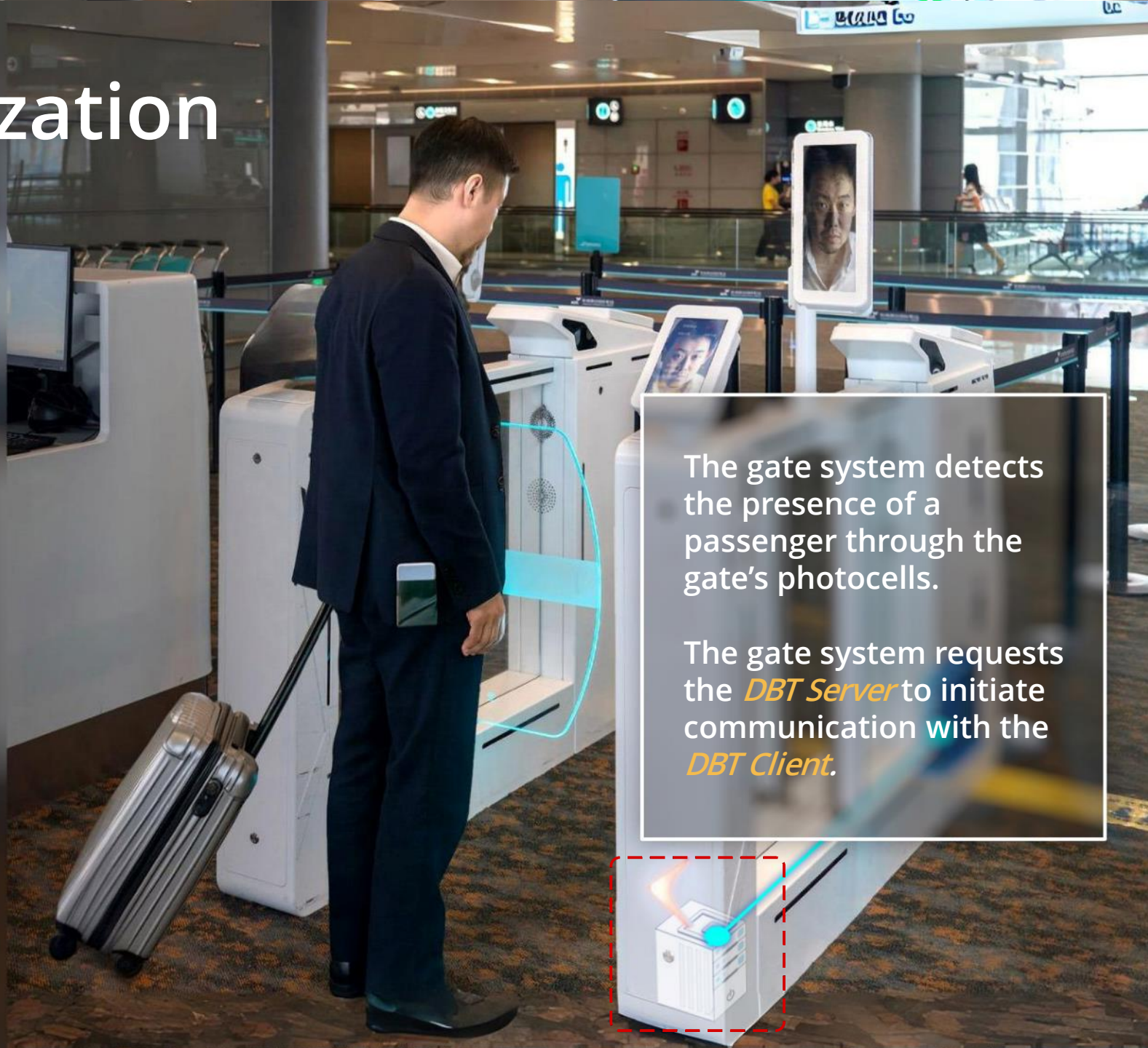
01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server

04. RJ45 communication

05. Mobile with the *DBT Client app*



The gate system detects the presence of a passenger through the gate's photocells.

The gate system requests the *DBT Server* to initiate communication with the *DBT Client*.



Authorization process

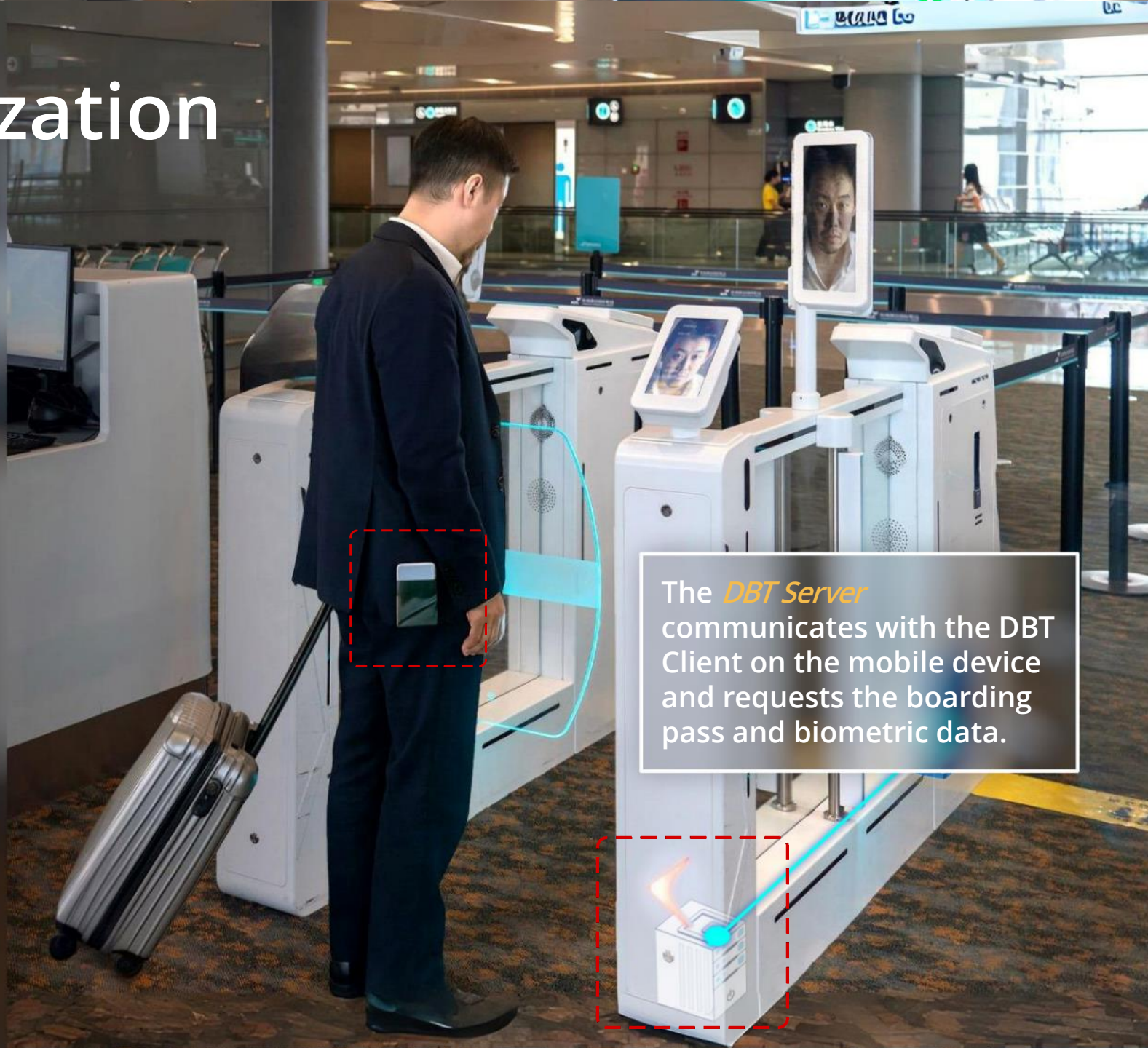
01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server

04. RJ45 communication

05. Mobile with the *DBT Client app*



The *DBT Server* communicates with the DBT Client on the mobile device and requests the boarding pass and biometric data.



Authorization process

01. Passenger entry detection sensor

02. Access gate computer

03. DBT Server

04. RJ45 communication

05. Mobile with the *DBT Client app*



The computer activates the camera once the *DBT Server* has verified that the passenger has the *DBT Client* installed on their mobile device.



Authorization process

01. Passenger entry detection sensor
02. Access gate computer
03. DBT Server
04. RJ45 communication
05. Mobile with the *DBT Client app*

A document verification will be performed on a centralized server, along with a 1:1 facial verification between the identity document and a selfie taken on the passenger's mobile phone.

The *DBT system* compares the passenger's facial features with those captured by the gate camera and sends the result, together with the boarding pass, to the computer via RJ45 cable.

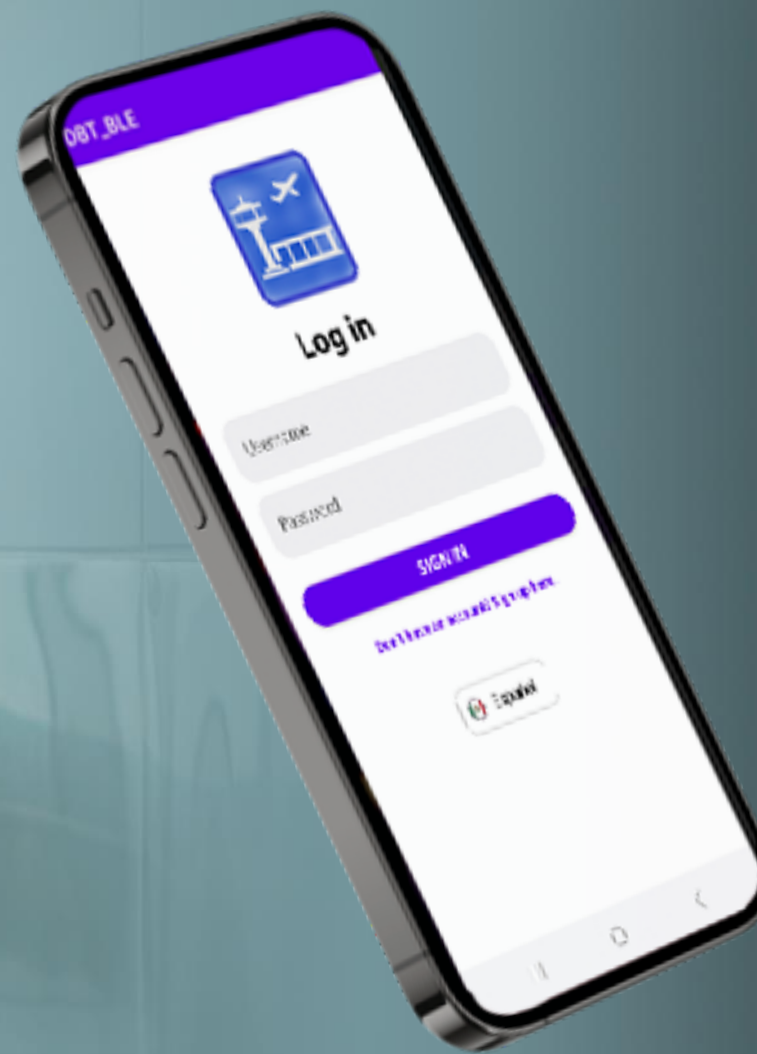


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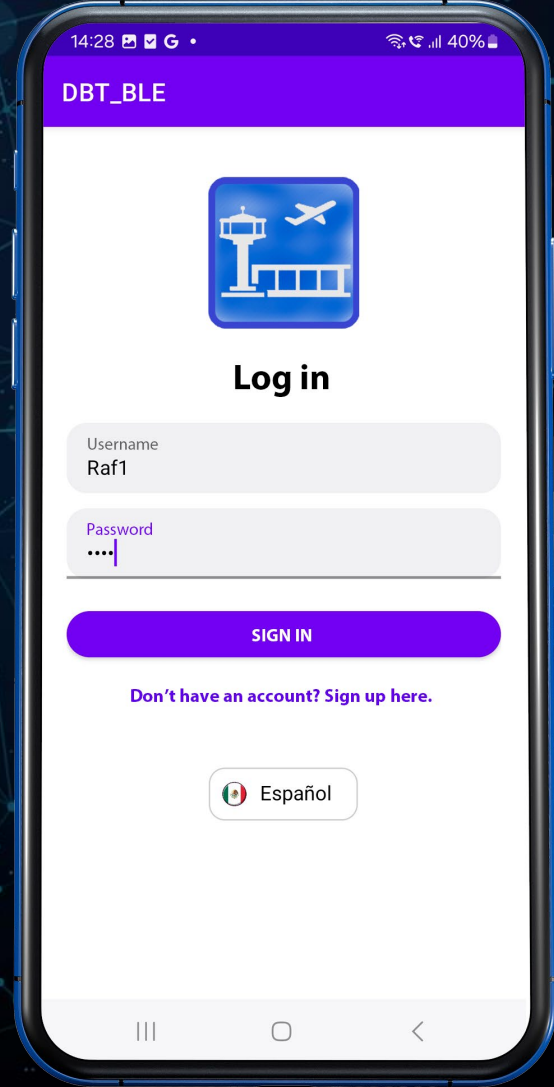
AppDBT
Procedure

APP DBT
Passenger Registration with
Passport or ID in the DBT App



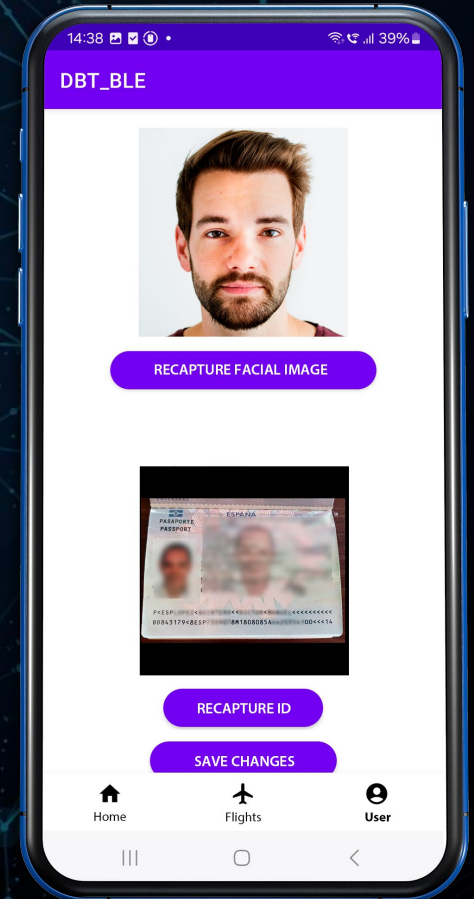
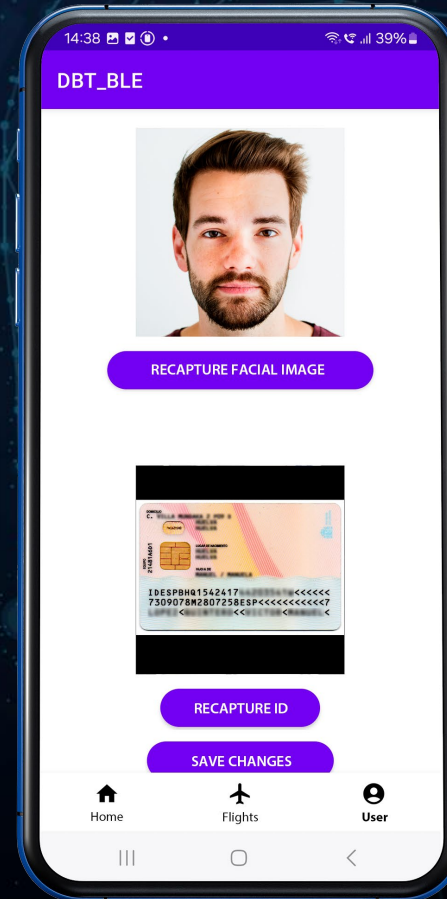
01.

System registration



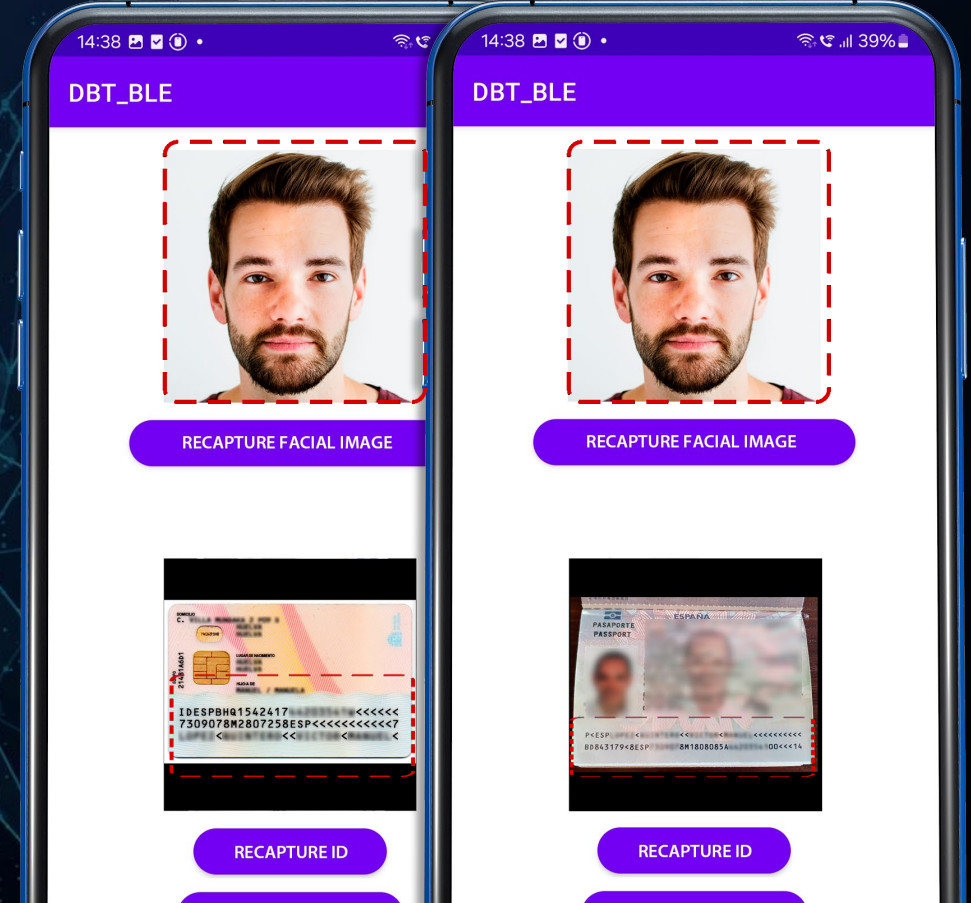
02.

Identification using
a national ID card
or passport. This
step is performed
only once.



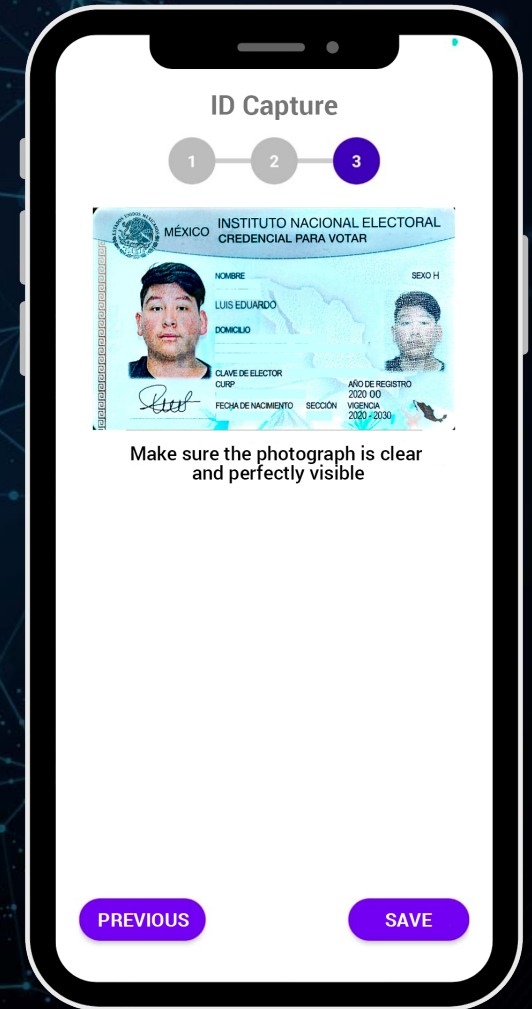
02.

Identification using a national ID card or passport. This step is performed only once.



Both the photograph and the machine-readable zone of the ID card or passport must be clear and fully visible.

INE ID Card Registration with QR Biometric Validation



INE ID Card Registration with QR Biometric Validation

10:16 720%

REGISTRATION WITH INE ID

✓ All set. Press Process INE

  ⚠ When taking the photo, rotate your phone to HORIZONTAL so the INE ID fits better in the frame

Front of the INE ID



Front of the INE ID card showing personal information and a photo. The card is from the INSTITUTO NACIONAL ELECTORAL (INE) in México. It includes fields for NOMBRE, SEXO, LUIS EDUARDO, DOMICILIO, CLAVE DE ELECTOR, CURP, AÑO DE REGISTRO, FECHA DE NACIMIENTO, and SECCIÓN. There are checkmarks next to LUIS EDUARDO and DOMICILIO.

CAPTURE FRONT

Back of the INE ID (with QR)

When photographing the back, make sure the two large QR codes are clearly visible and well lit.



Back of the INE ID card showing QR codes and a signature. The card includes a barcode, two large QR codes, and a signature. There are checkmarks next to the QR codes.

CAPTURE BACK

INE ID Card Registration with QR Biometric Validation

10:16 120%

REGISTRATION WITH INE ID

✓ All set. Press Process INE

⚠ When taking the photo, rotate your phone to HORIZONTAL so the INE ID fits better in the frame

Front of the INE ID

MÉXICO INSTITUTO NACIONAL ELECTORAL
CREDENCIAL PARA VOTAR

NOMBRE: LUIS EDUARDO
DOMICILIO: ✓
CLAVE DE ELECTOR: CURP
FECHA DE NACIMIENTO: 2020-00
SECCIÓN: 2020-2030
AÑO DE REGISTRO: 2020-00
VIGENCIA: 2020-2030

CAPTURE FRONT

Back of the INE ID (with QR)

When photographing the back, make sure the two large QR codes are clearly visible and well lit.

ID MEX 020 07<<58 9
16 MEX<00<< <0
<<LUIS<EDUARDO<<

CAPTURE BACK

10:16 120%

CAPTURE BACK SIDE

QR Code Status:

- QR 1: ✓ Read (858 bytes)
- QR 2: ✓ Read (858 bytes)

✓ Data extracted from the INE:

- First Name: EDUARDO
- Last Name 1:
- Last Name 2:
- CURP:
- Sex: Male
- Validity: 2020-2030
- CIC: 40
- OCR: 580 669

PROCESS INE

✓ CONTINUE WITH REGISTRATION

CANCEL

Passenger Photo Capture for Automatic Biometric Validation Using the Photo Encoded in the QR Codes

Registration

1 2 3

First Name
LUIS EDUARDO

Last Name

Username
luiedu276

Password
...

Confirm Password
...

Additional Document Information

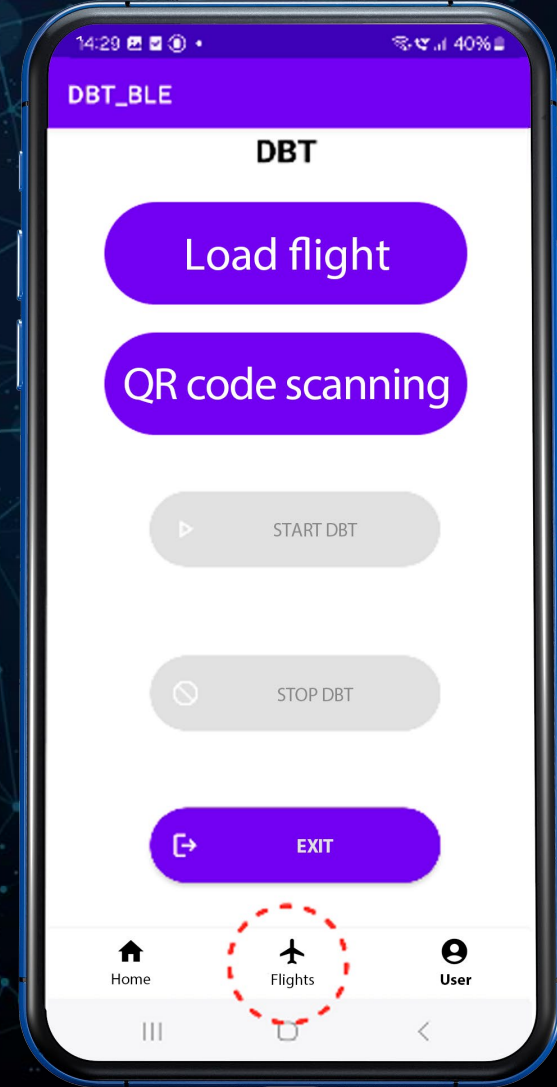
CURP: CA	A5
CIC: 20	
OCR: 58	.69
Validity : 2020-2030	
Sex: Male	
Transaction ID:	
f89	866

CANCEL NEXT

02.
Identification
a national
or passport
step is pe
only once

03.
Register
destination
flight

04.
This step
required
time; af
only the
pass ne
change



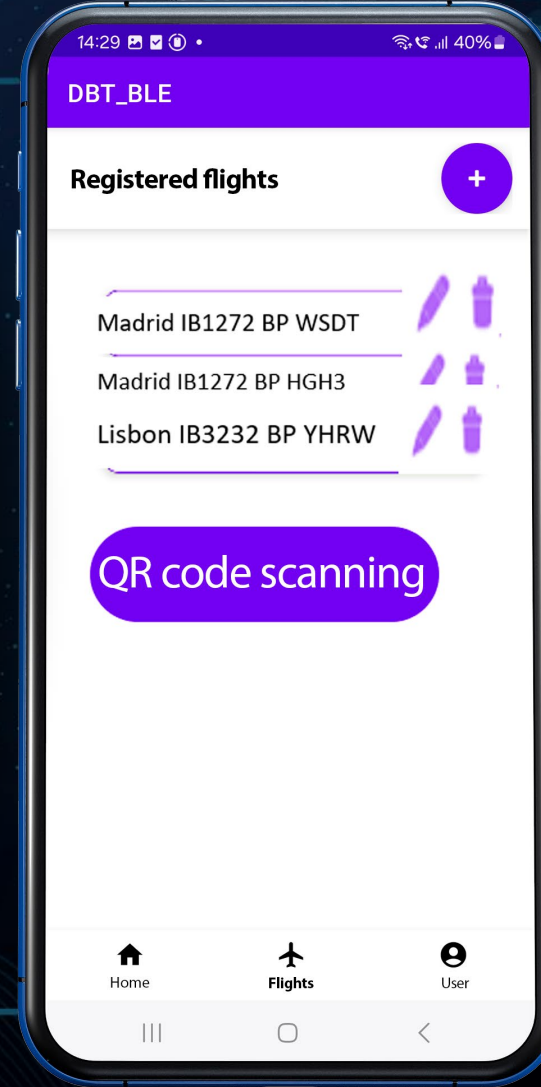
03

Register
destination
flightSystem
registration

01

04.

This step is only required the first time; afterwards, only the boarding pass needs to be changed.



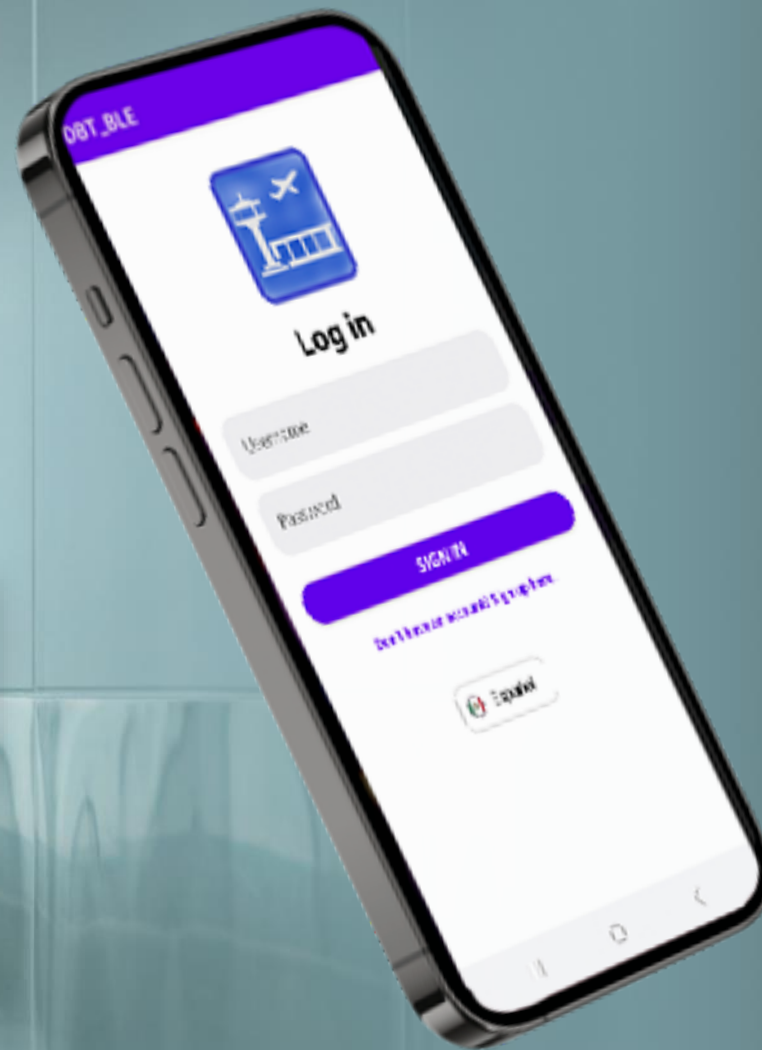
The boarding pass for already registered flights can be cancelled or changed, allowing easy updates to flight information.

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AppDBT
Procedure

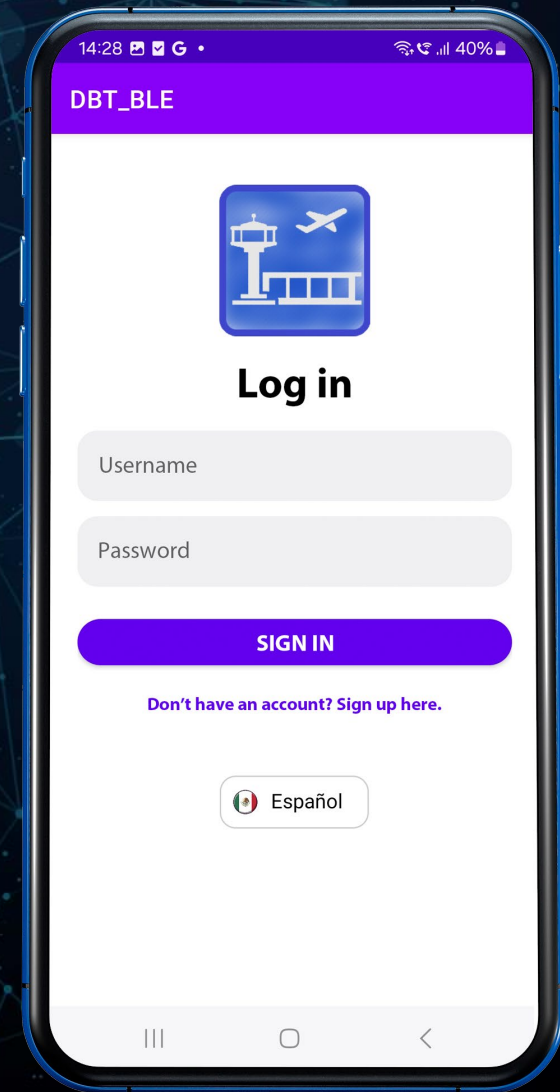
APP DBT
Passenger arriving at the airport



01.
Sign in

02.
Load flight

03.
Select flight

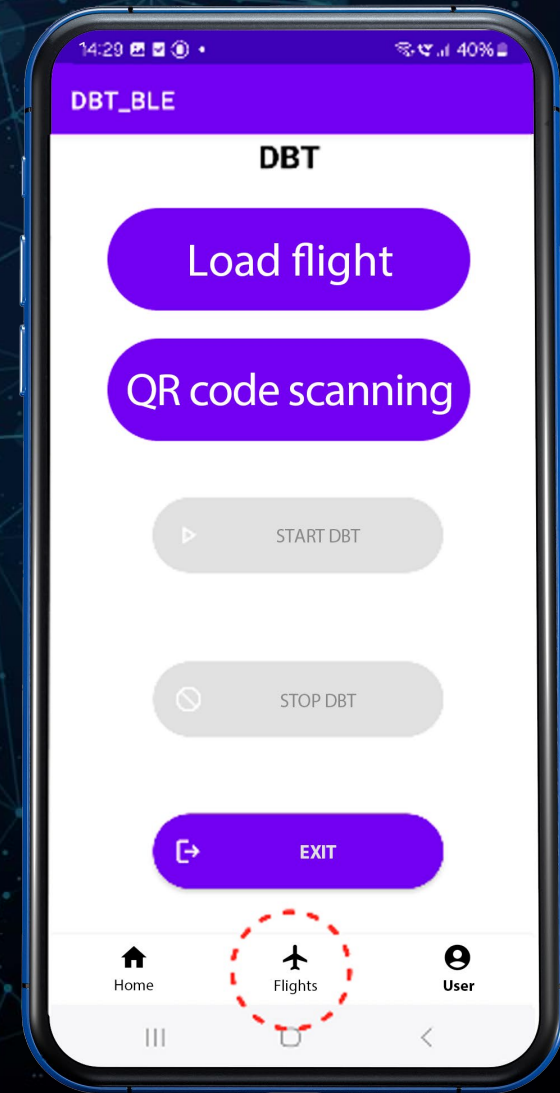


01.
Sign in

02.
Load flight

03.
Select flight

04.
Start D



01.

Sign in

02.

Load flight

03.

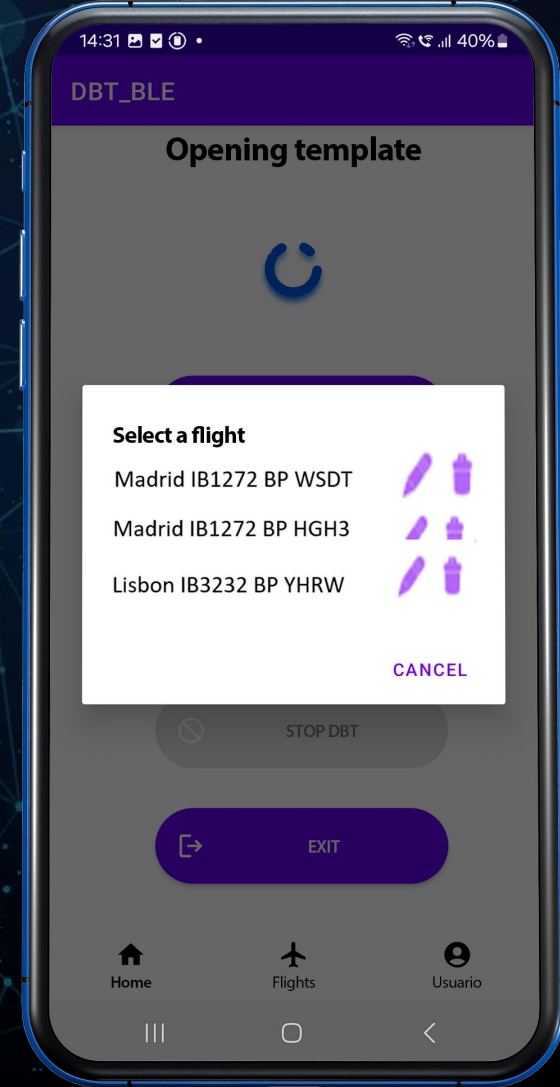
Select flight

04.

Start DBT

05.

Process complete

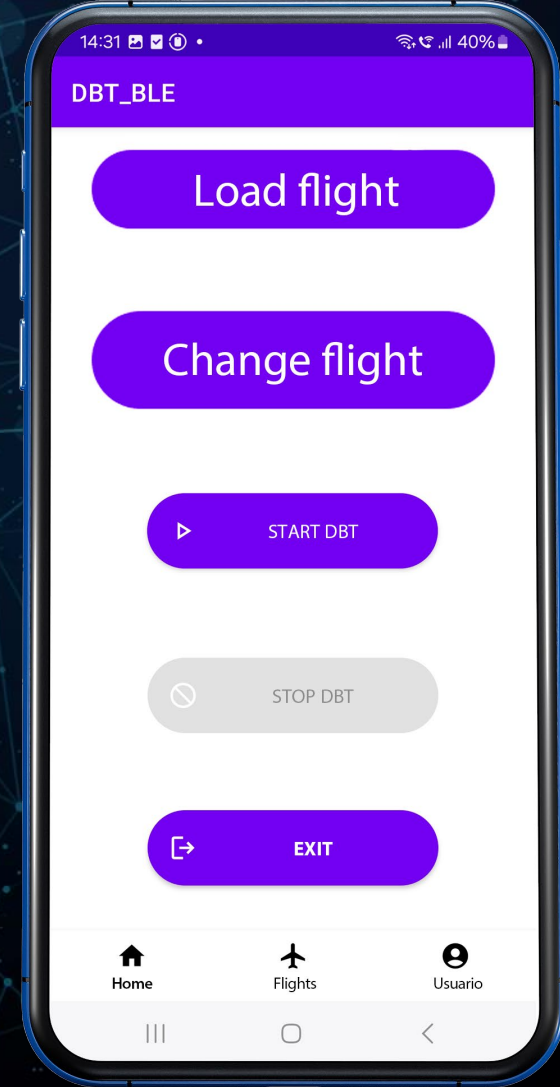


02.
Load flight

03.
Select flight

04.
Start DBT

05.
Process
completed



03.

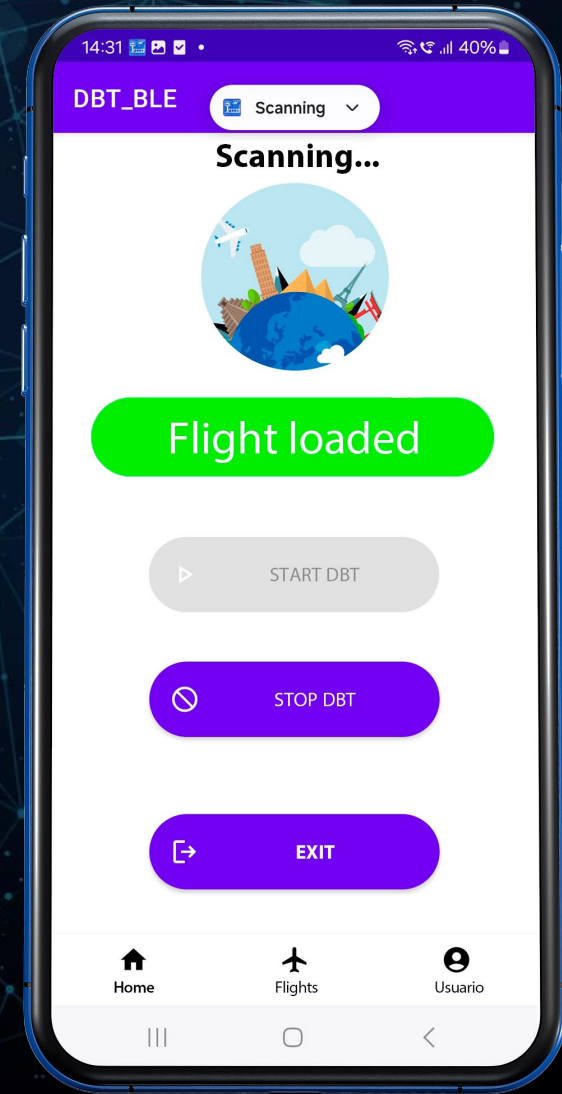
Select flight

04.

Start DBT

05.

Process
completed





THANK YOU

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