

KYCID

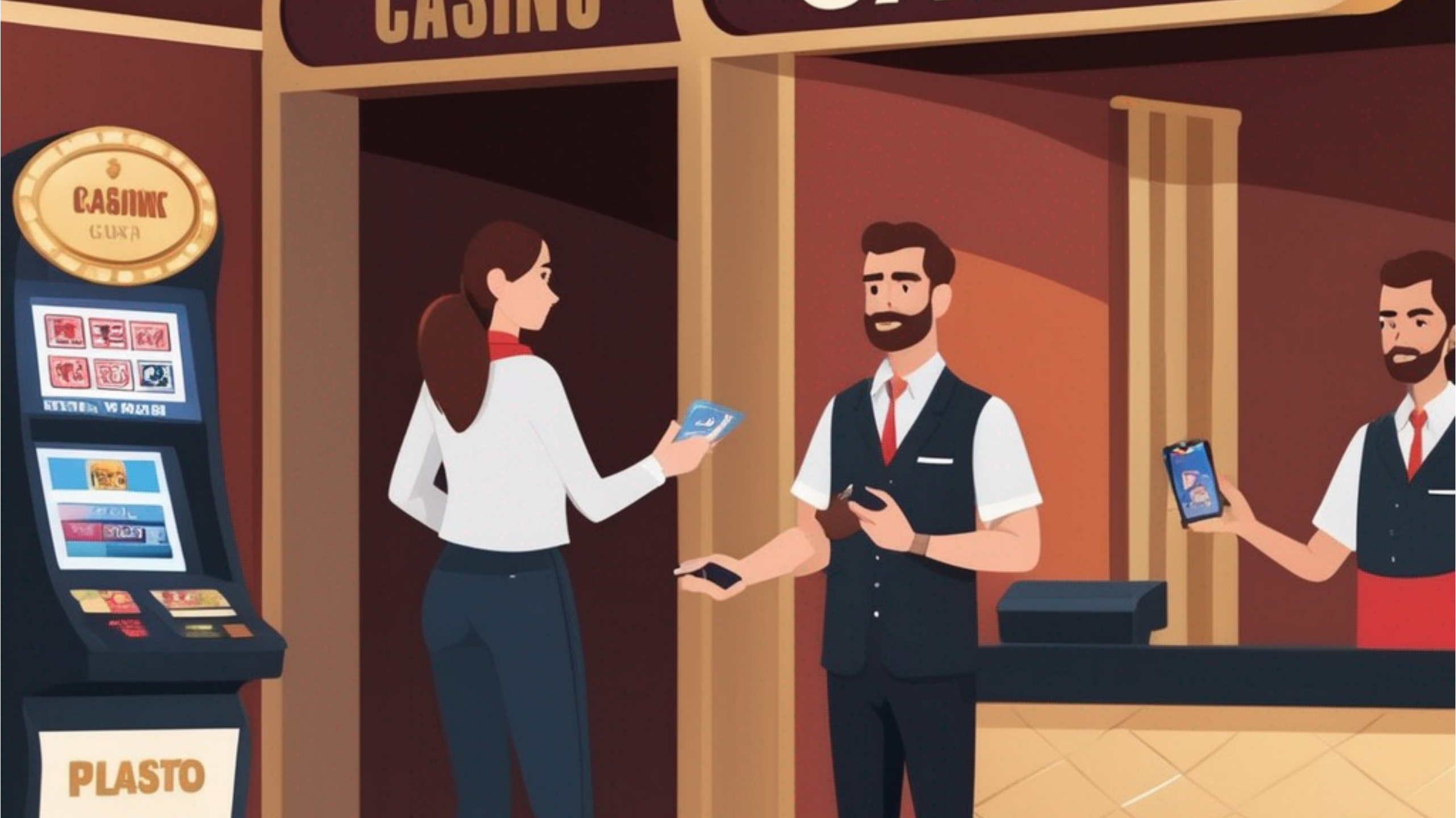
An operational oauth2 integration of eKYC

▶ BFH TI – Bachelor Thesis — Yann Mickael DOY



Summary

- ▶ Know you customer (KYC)
- ▶ Methods
- ▶ KYC-as-a-Service
- ▶ OAuth2
- ▶ Demo




CASINO

CASINO
GURA

PLASTO



Alson te?

An illustration depicting the KYC (Know Your Customer) process. In the center, a man in a yellow suit and tie is shown from the chest up, appearing to be on a screen or in a virtual environment. Below him is a white document with the letters 'KYC' in bold black font. To the right of the document is a stack of five gold coins, with the letter 'K' on the top coin. To the left of the document, three people (two women and one man) are shown from the waist up, looking towards the central figure. To the right, two more men in suits are shown, one standing and one partially visible. The background features large, stylized green leaves and white circles, suggesting a modern, digital, or financial environment. A large white banner with the text 'Know your customer' is overlaid across the middle of the image.

Know your customer

Electronic KYC (eKYC)



Double authentication challenge

Authority

Owner

The background features a central illustration of a man's face and torso, split vertically. The left side is dark with a beard, and the right side is light with a beard. He is wearing a dark suit jacket over a white shirt. Surrounding him are various icons: a shield with a white diagonal line on a red background, a man in a suit with a beard in a circle, a man in a suit in a circle, and a man in a suit holding a tablet. Dotted lines connect these elements, suggesting a network or flow of information.

SECURITY

- ▶ ID Card
- ▶ Passport
- ▶ Driving license

Indirect method



**TELECOM CHECK
CUSTOMER ID**



**VERIFY CUSTOMER
PHONE LINE**




**DELEGATE
VERIFICATION**

Phone number verification



Direct method

Verify ID Document




The image shows the front of a Swiss identity card. It features the Swiss cross logo in the top left corner. The text on the card includes "SCHWEIZERISCHE EIDGENOSSENSCHAFT", "CONFÉDÉRATION SUISSE", "CONFEDERAZIONE SVIZZERA", and "CONFEDERAZIUN SVIZRA". Below this, it says "SCHWEIZERISCHE EIDGENOSSENSCHAFT" in smaller text. The cardholder's name "Yann Mickaels" is visible, along with a portrait photo. There are several red rectangular boxes redacting parts of the card, including the ID number and other details.

Use the webcam to take a photo of your identity card or passport on the side containing your portrait.

Retry **Send**

Verify ID Document



The image shows the back of a Swiss identity card. It features a grid of small, repeating text and symbols. The text includes "SCHWEIZERISCHE EIDGENOSSENSCHAFT" and "CONFÉDÉRATION SUISSE". There are several red rectangular boxes redacting parts of the card, including the ID number and other details.

Use the webcam to take a photo of back of your document

Retry **Send**

Face challenge

Verify ID Document



Use the webcam to take a photo of you looking on left

Retry

Send

Verify ID Document



Use the webcam to take a photo of your face like on your document

Retry

Send

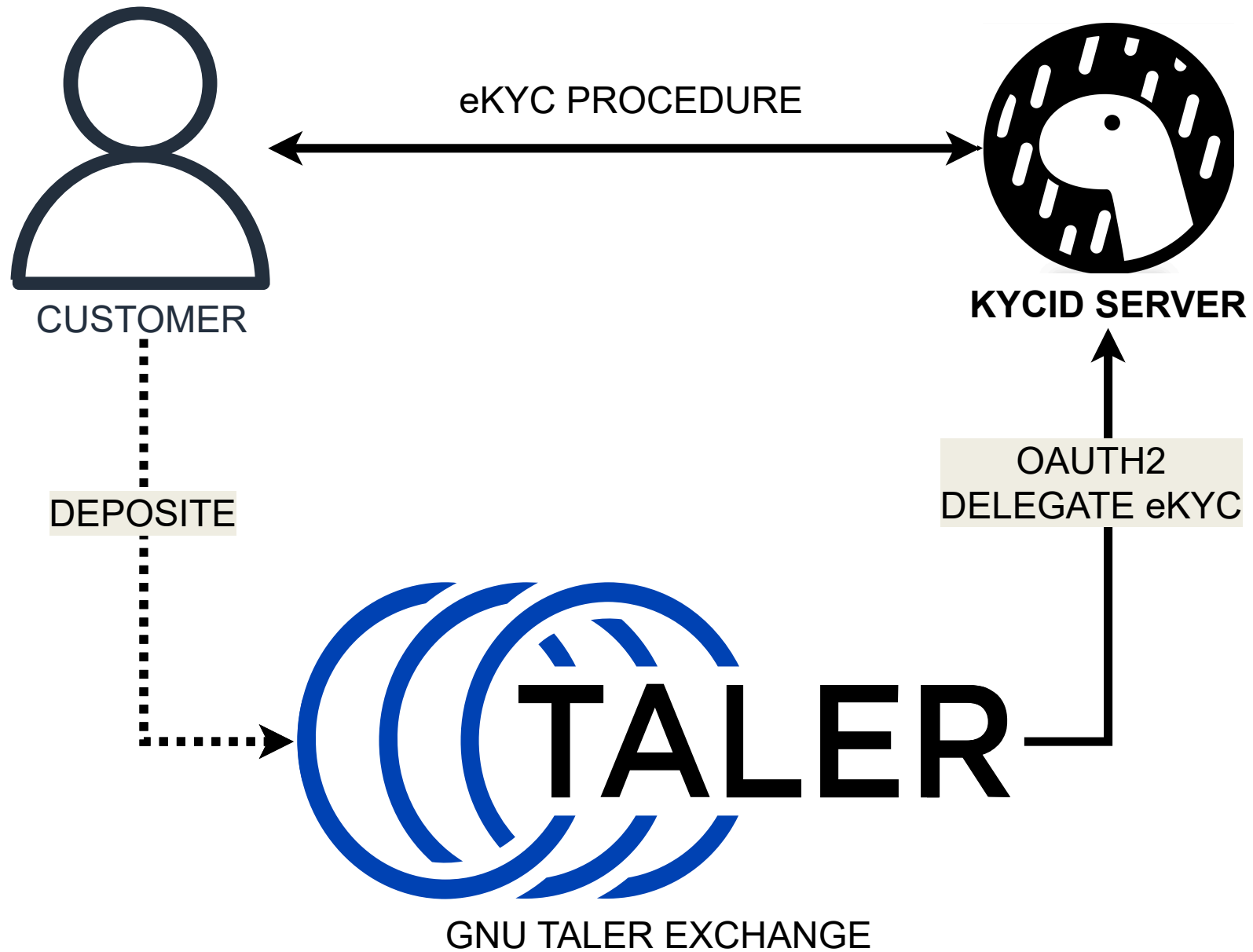
Verify ID Document



Use the webcam to take a photo of you looking on right

Retry

Send



Security

- ▶ SMS Pumping
- ▶ Brute force
- ▶ CSRF
- ▶ Injection
- ▶ Password security

DEMO

THANK YOU!

QUESTION?