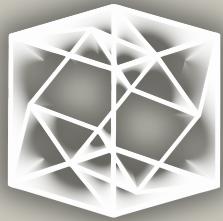




KaosD

ESTAS PROTEGIDO

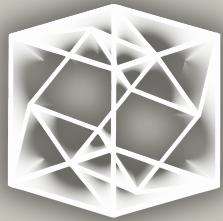
SECURITY SYSTEM FOR GNU/LINUX



IDEAS RECHAZADAS

KaosD



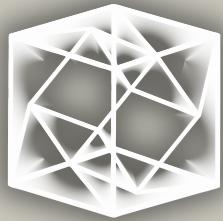


IDEAS RECHAZADAS

- Lector de huella

KaosD



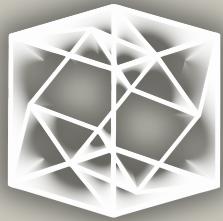


IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion

KaosD

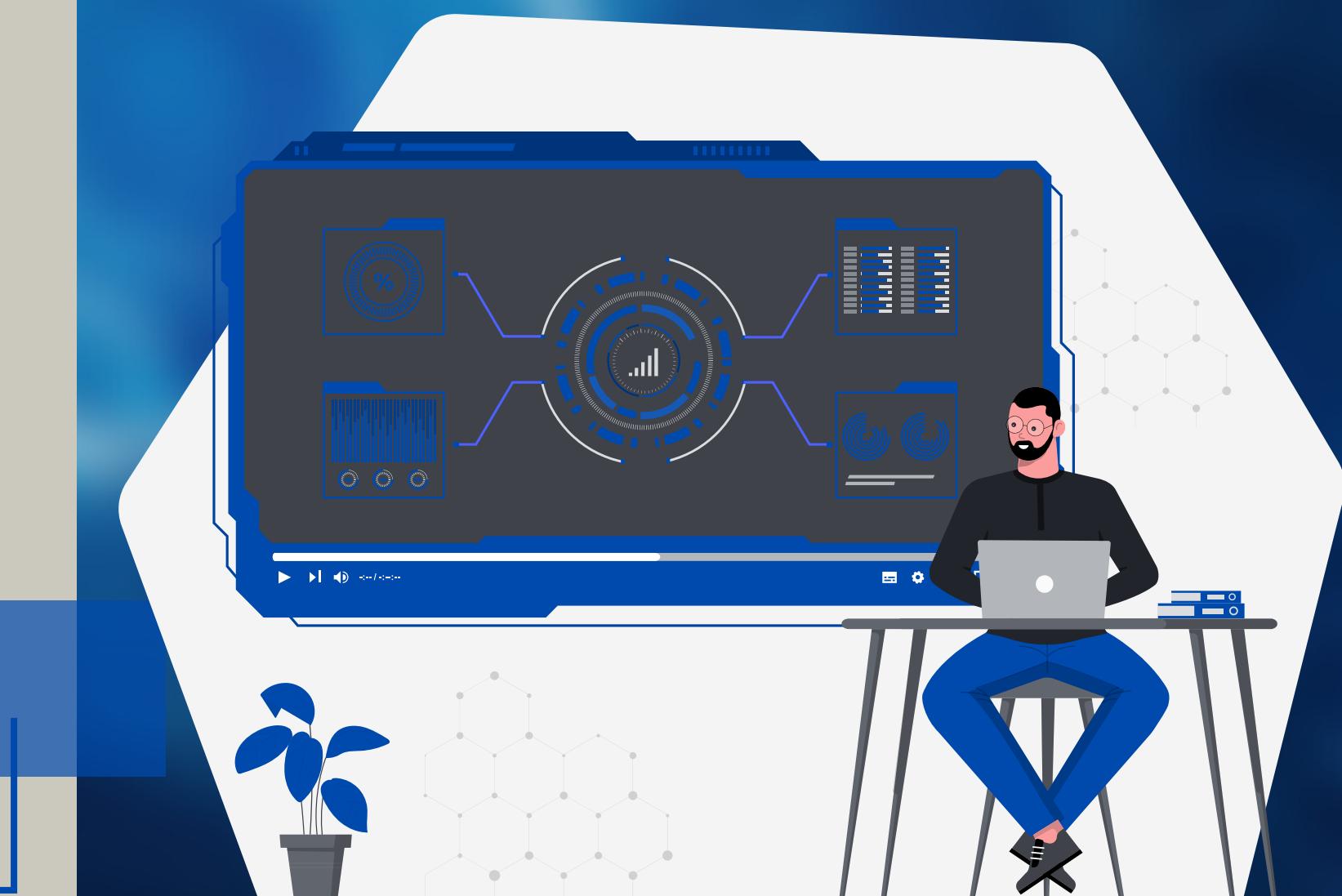


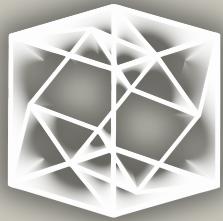


IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion
- One Time Password

KaosD



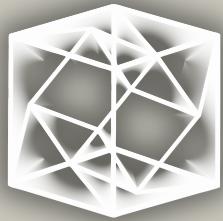


IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion
- One Time Password
- Token USB

KaosD



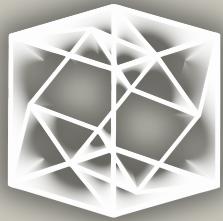


IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion
- One Time Password
- Token USB
- Tarjeta PKI

KaosD



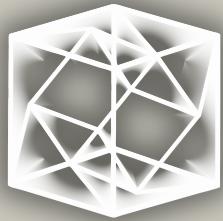


IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion
- One Time Password
- Token USB
- Tarjeta PKI
- Lector de retina del ojo

KaosD





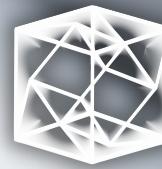
IDEAS RECHAZADAS

- Lector de huella
- Doble verificacion
- One Time Password
- Token USB
- Tarjeta PKI
- Lector de retina del ojo

Y LA CARA? ➤

KaosD





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ESTAS PROTEGIDO

ARTIFICIAL INTELLIGENT FACE RECOGNITION SECURITY
SYSTEM FOR GNU/LINUX



ESTADISTICAS

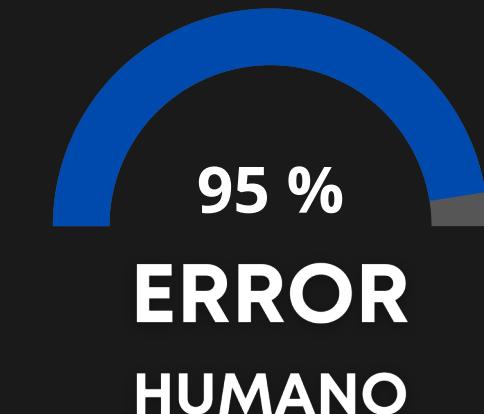




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ESTADISTICAS

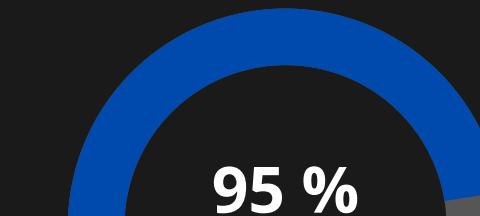




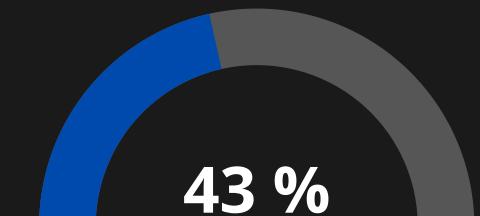
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ESTADISTICAS



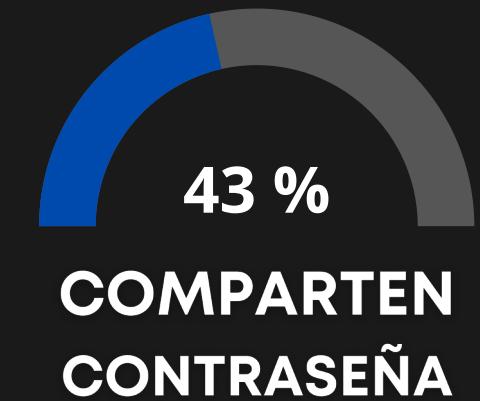
ERROR
HUMANO



COMPARTEN
CONTRASEÑA

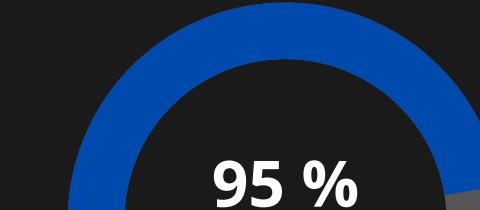


ESTADISTICAS



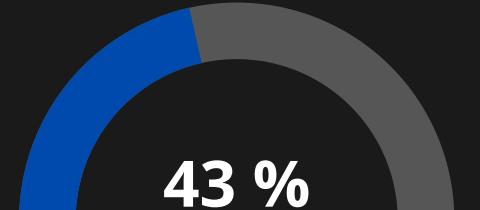


ESTADISTICAS



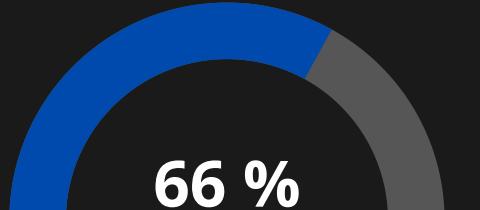
95 %

**ERROR
HUMANO**



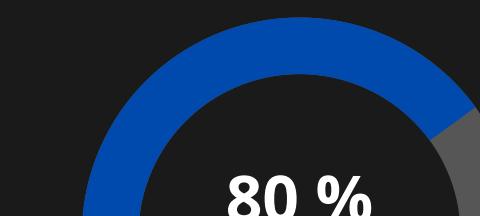
43 %

**COMPARTEN
CONTRASEÑA**



66 %

**REPITEN
CONTRASEÑAS**



80 %

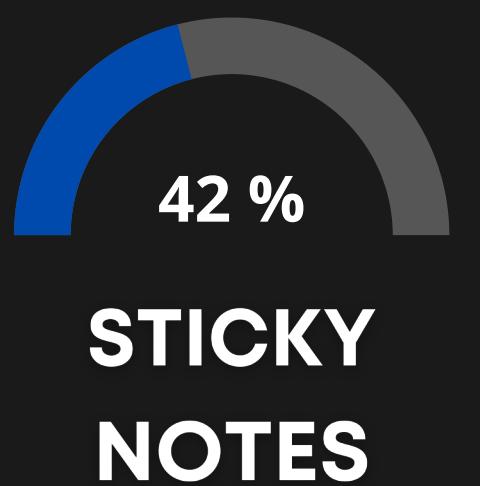
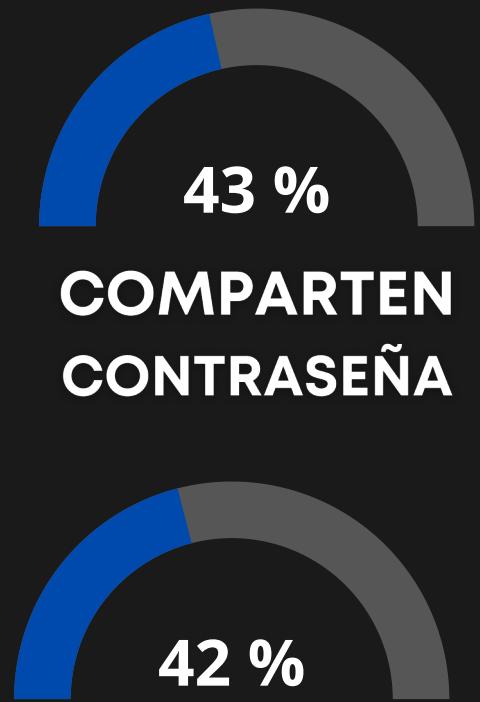
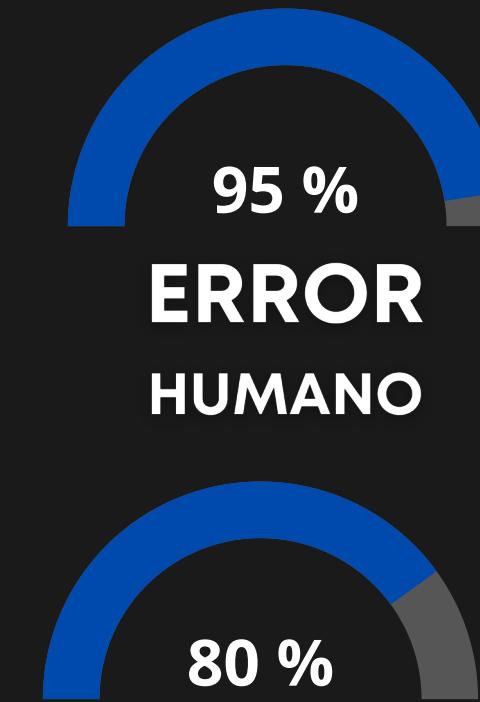
**PASSWORD
RELATED
HACKING**



KaosD



ESTADISTICAS

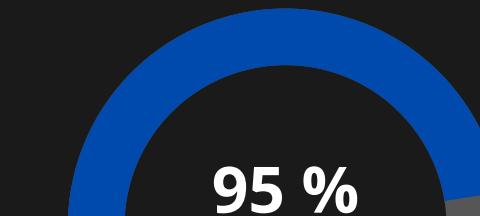




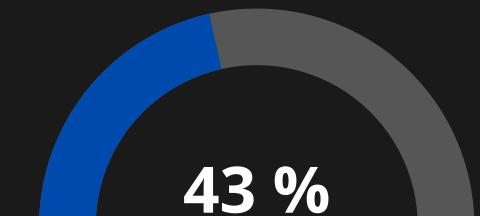
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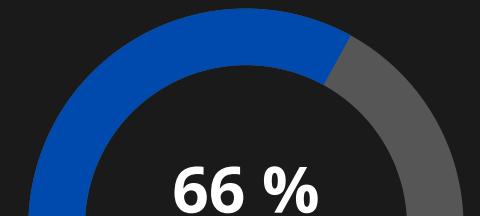
ESTADISTICAS



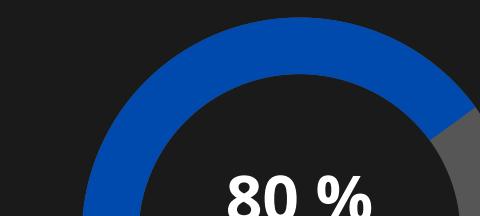
**ERROR
HUMANO**



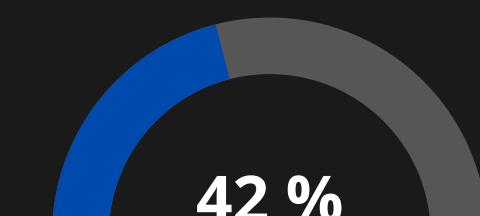
**COMPARTEN
CONTRASEÑA**



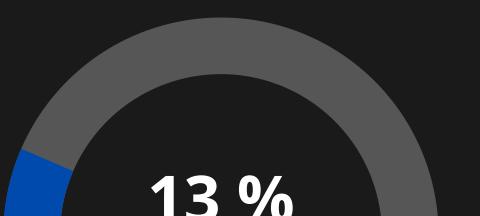
**REPITEN
CONTRASEÑAS**



**PASSWORD
RELATED
HACKING**



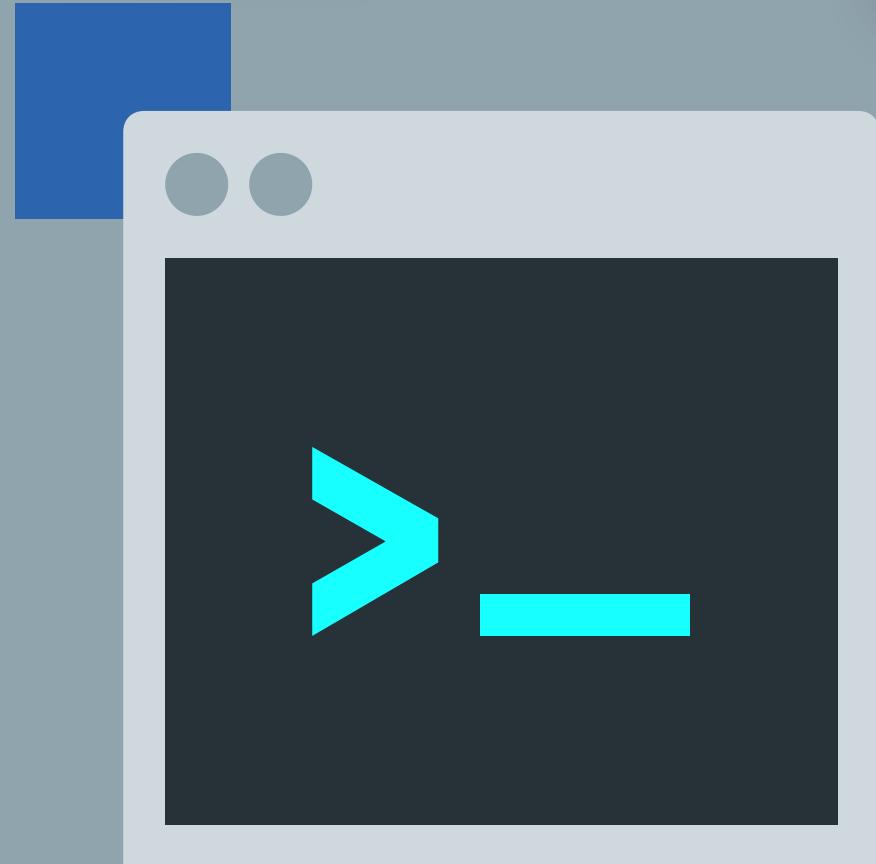
**STICKY
NOTES**



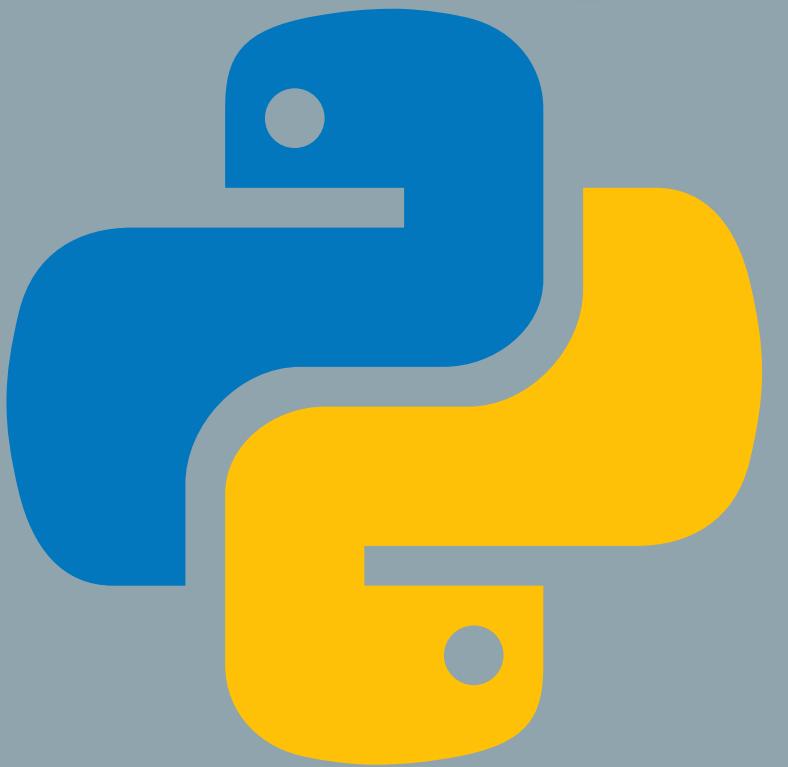
**CONTRASEÑA
UNICA**



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SCRIPTS





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SCRIPTS



Bash Script

Sistema de mensajes D-Bus

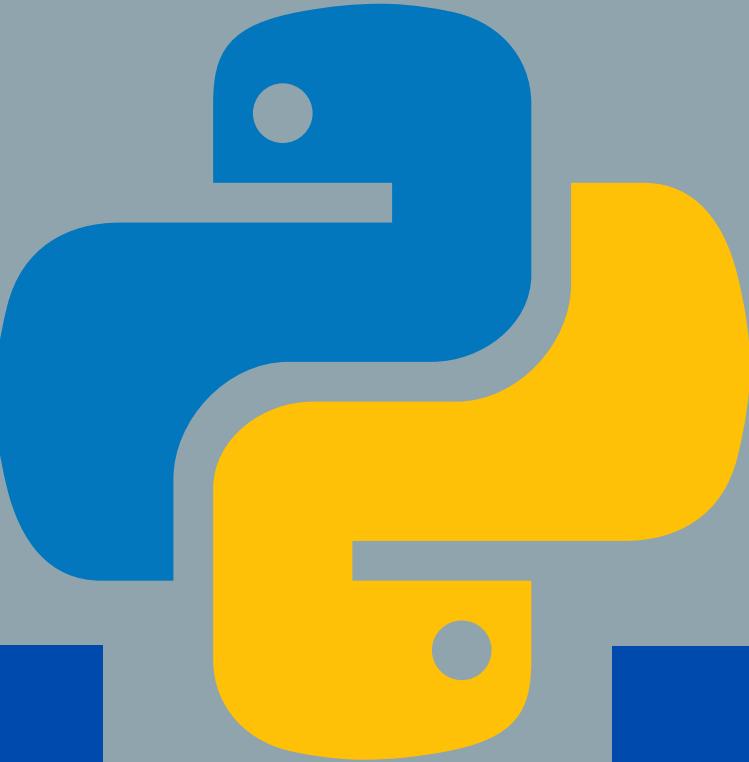
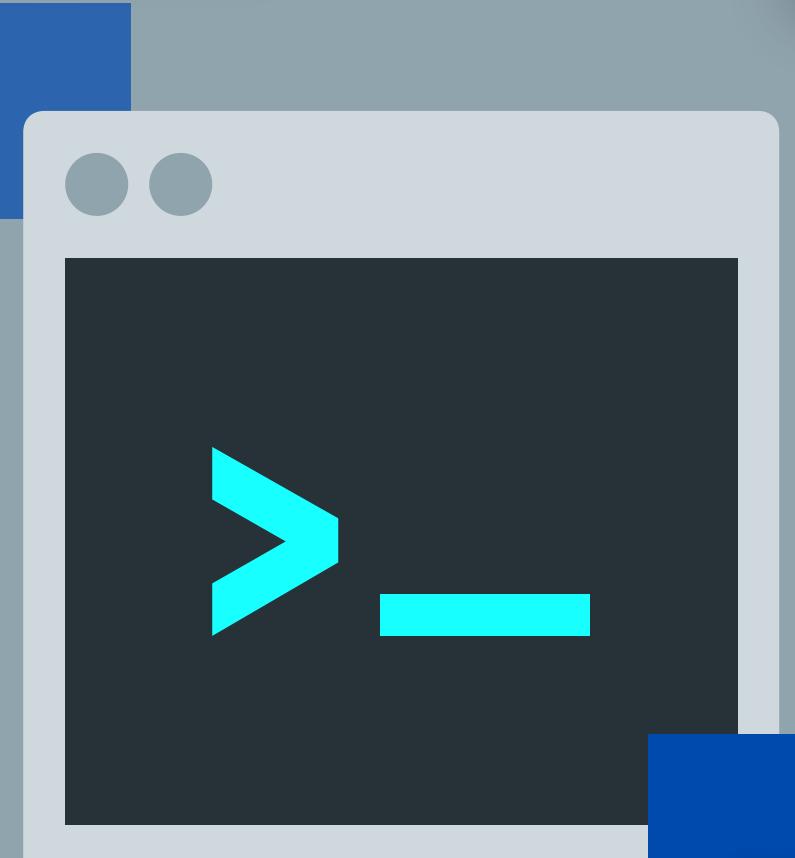
Comunica cambios
en ScreenSaver de Gnome

Ejecuta el script de Python



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SCRIPTS



Bash Script

Sistema de mensajes D-Bus

Comunica cambios
en ScreenSaver de Gnome

Ejecuta el script de Python

Python Script

FaceRecognition, CV2, Numpy, Call

Detecta caras, las codifica
y las compara

Ejecuta comando bash



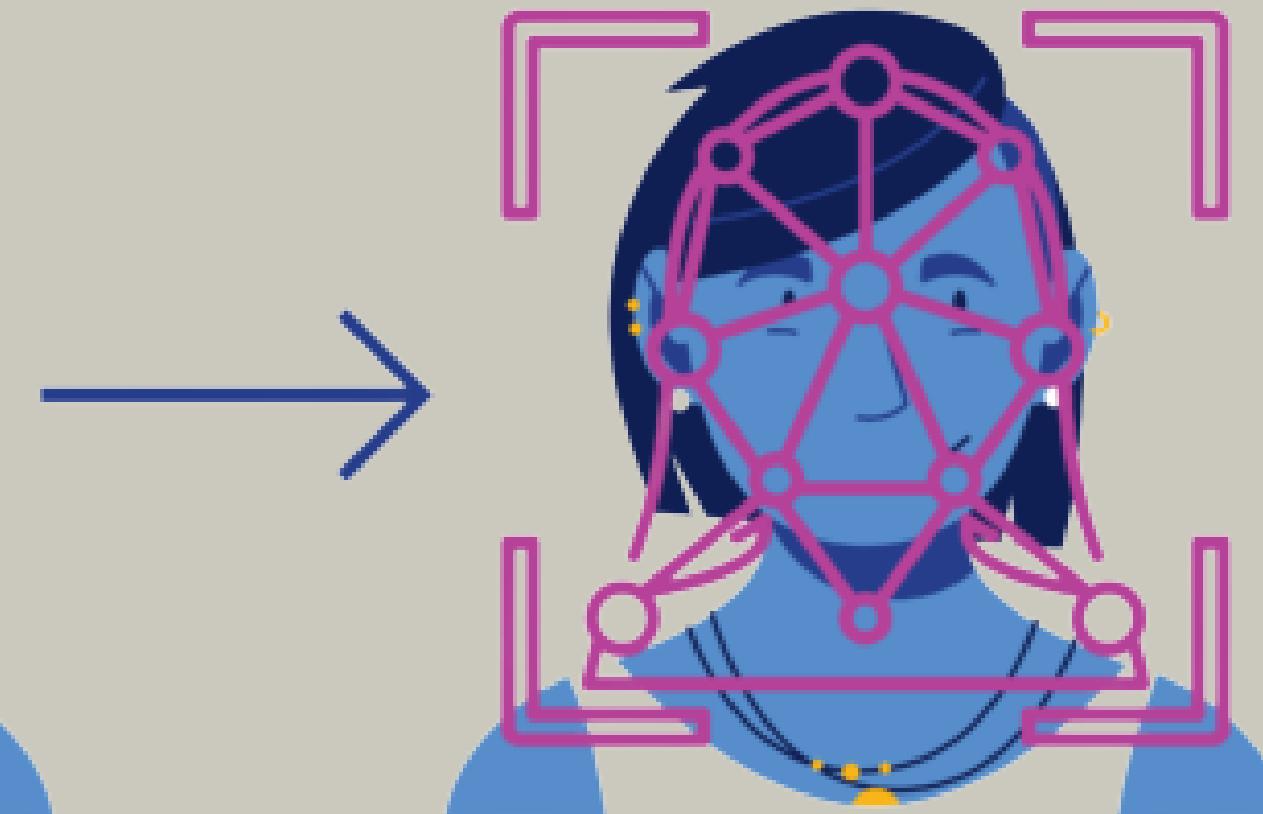
PROCESAMIENTO FACIAL



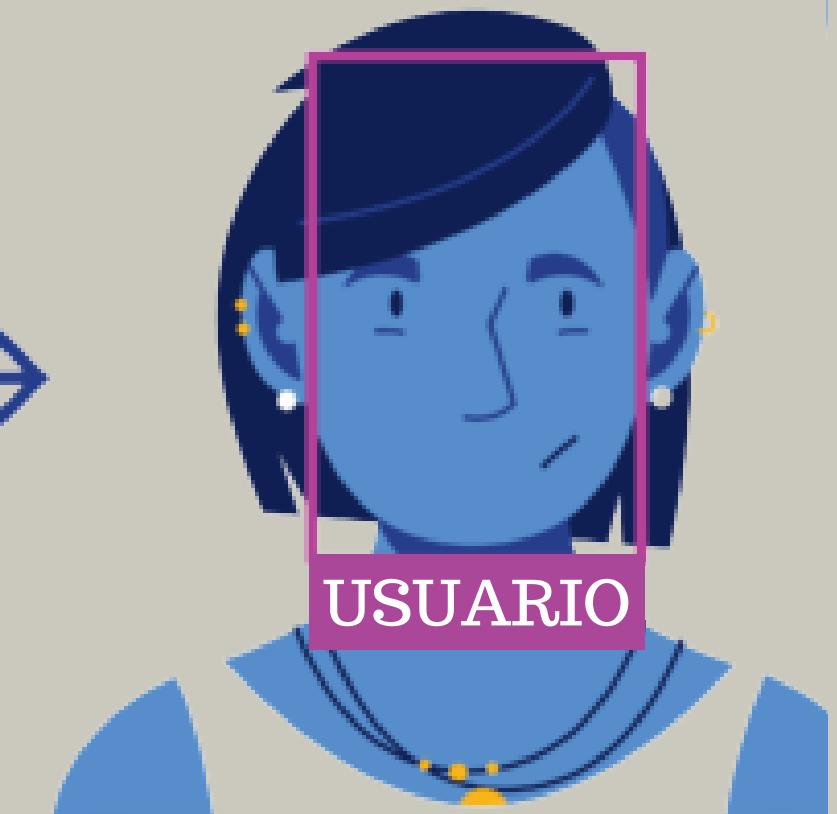
- 01.** Encuentra y recorta las caras de la imagen



- 02.** Procesa puntos clave de la cara, y los codifica

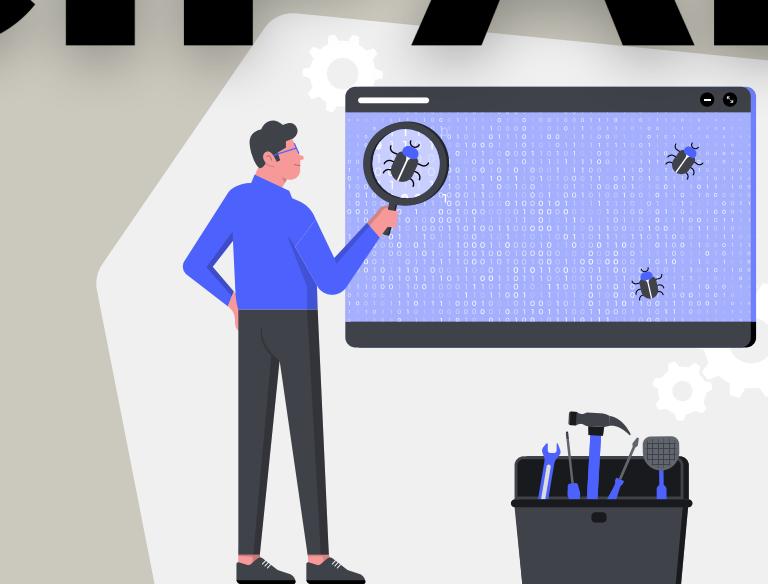


- 03.** Compara con la base de datos de caras codificadas y devuelve coincidencia



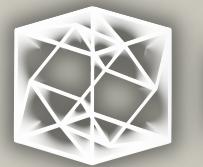
```
1 - if procesar_frame:  
2     # Encontrar caras y sus codificaciones en el frame actual  
3     ubicaciones_caras = face_recognition.face_locations(frame_chico_rgb)  
4     codificaciones_caras = face_recognition.face_encodings(frame_chico_rgb, ubicaciones_caras)  
5  
6     for cara_codificada in codificaciones_caras:  
7         # Ver si la cara detectada coincide con alguna de las conocidas  
8         coincide = face_recognition.compare_faces(caras_conocidas, cara_codificada)  
9  
10        # Si encuentra alguna coincidencia en caras_conocidas desbloqueara la computadora  
11        if True in coincide:  
12            cerrar = True  
13            bloqueo(False) #Desbloquea la pantalla  
14            break
```

PROCESAMIENTO PRINCIPAL



Procesamiento logrado en 9 líneas
(Quitando comentarios)

1. Encuentra caras y las codifica
2. Compara la cara detectada con aquellas en la base de datos
3. Si coincide desbloquea la pantalla y cierra el programa



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PROXIMAS MEJORAS



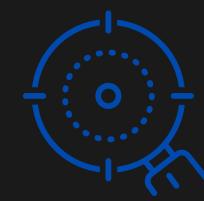
REGISTRO AUTOMÁTICO DE USUARIOS

Incorporar una función que al usuario le tome una foto y registre su nombre



GESTOR DE CONTRASEÑAS

Apoyo a aquellos sistemas que requieren uso de contraseñas



MAYOR ROBUSTEZ EN LA DETECCIÓN

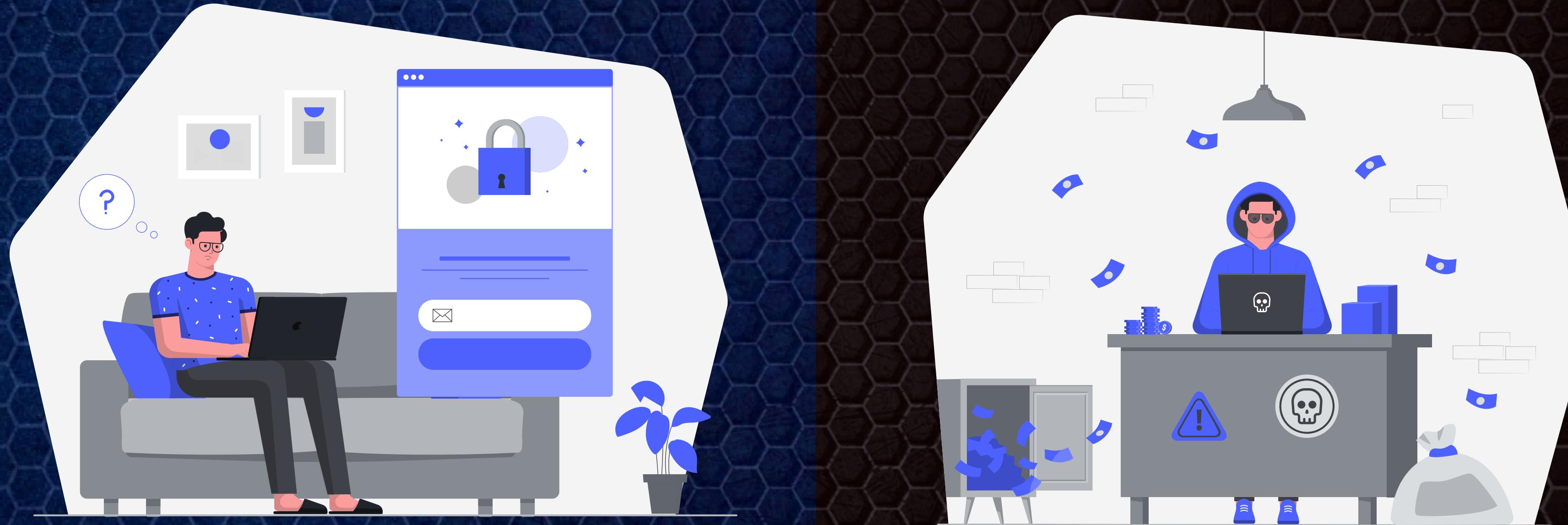
Se desconoce la precisión exacta del programa por lo que podría ser no tan preciso como sea necesario

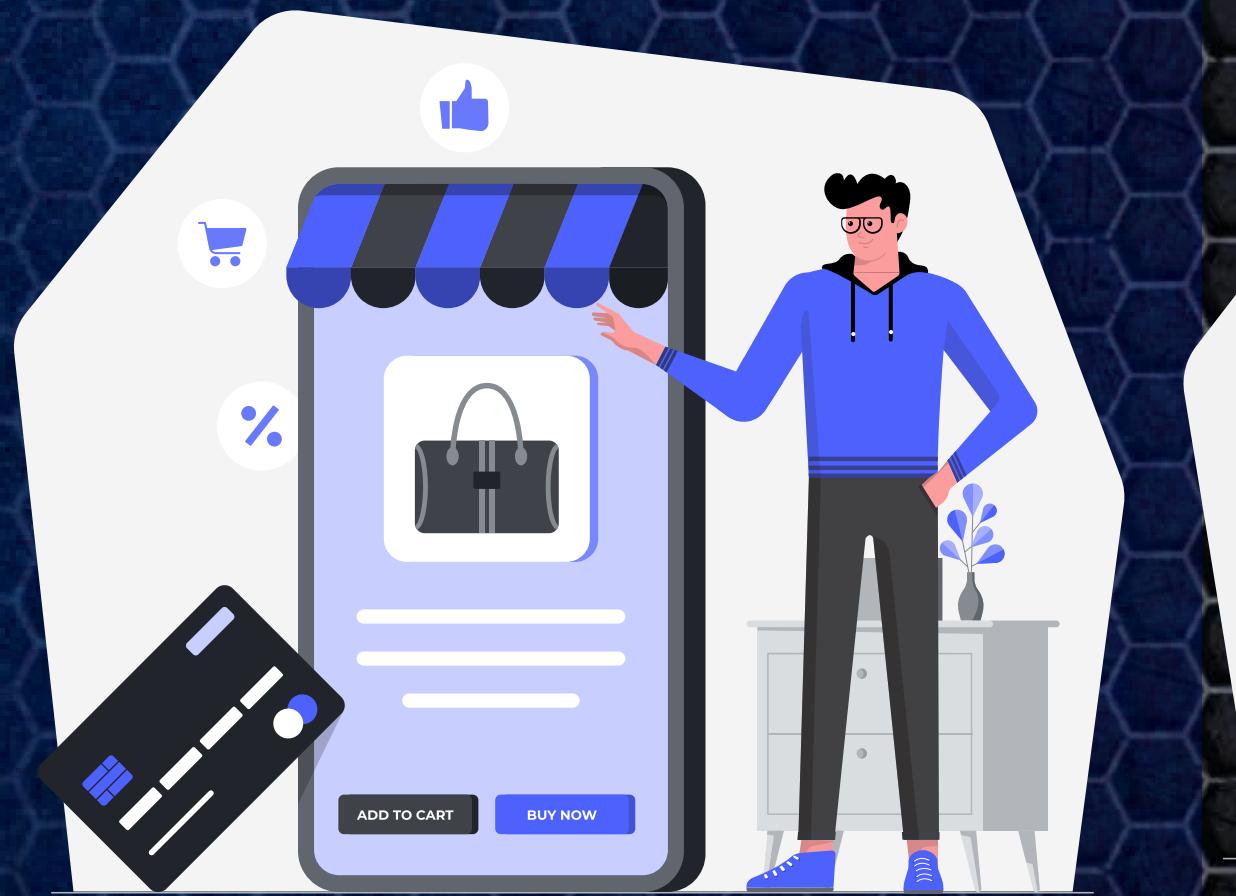


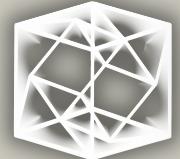
Sistema de alerta de intruso

Actualmente se está desaprovechando la capacidad de (utilizando la cámara) dejar registro de intrusos





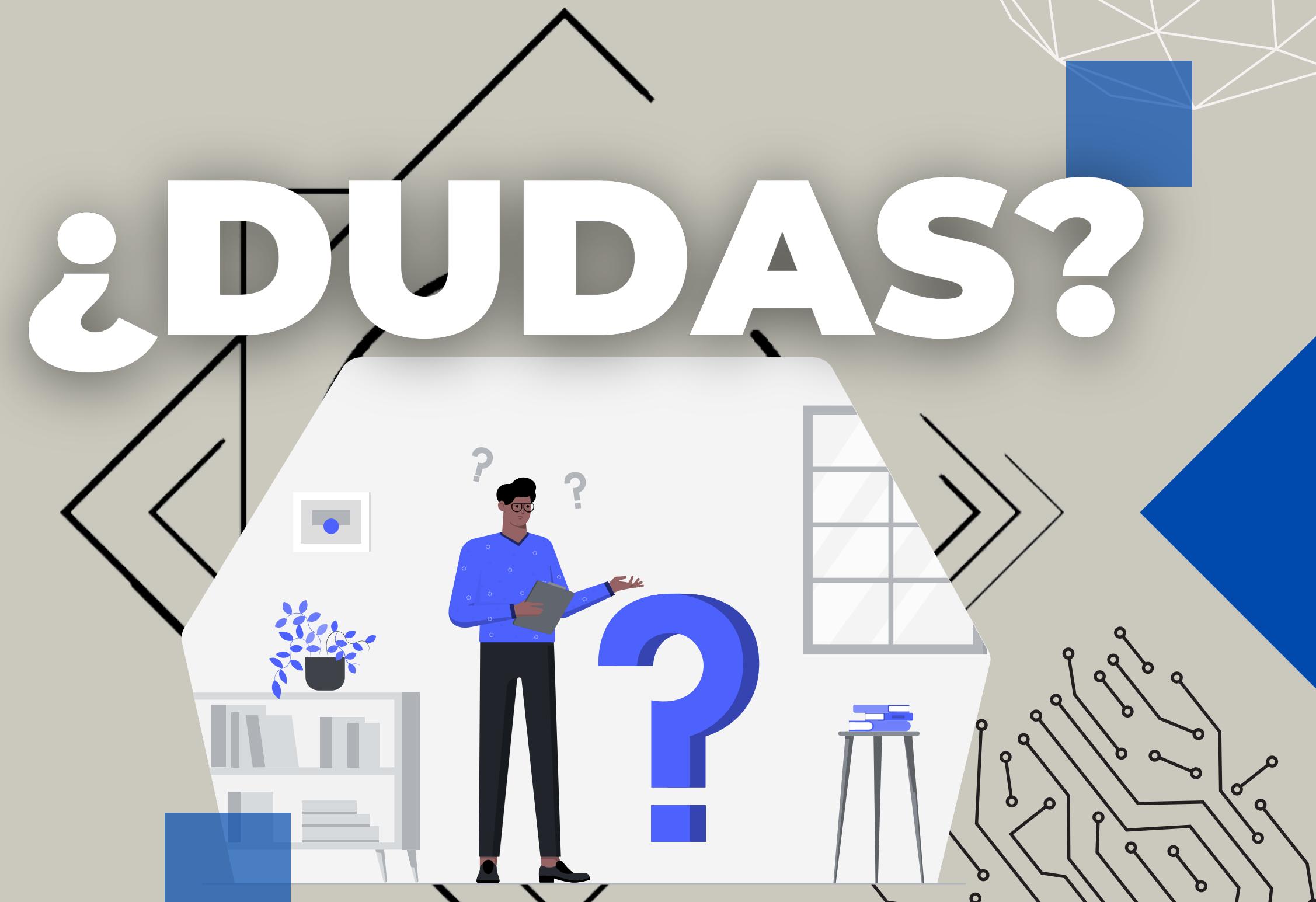




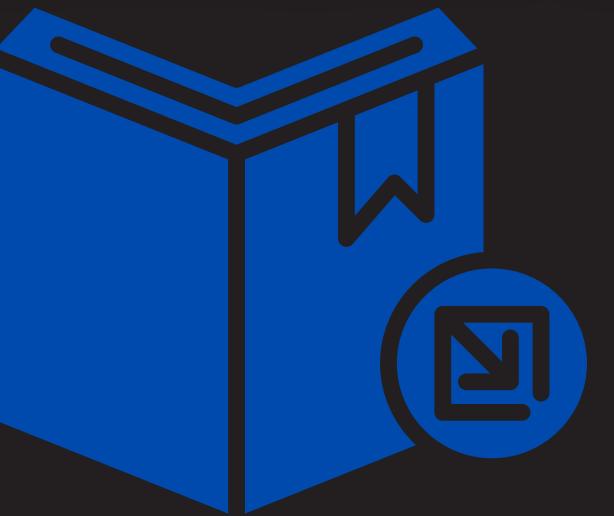
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¡MUCHAS GRACIAS!

NICOLAS GARRIDO NOVAS



REFERENCIAS



01

95% Error humano
[cybintsolutions.com/
cyber-security-facts-stats/](https://cybintsolutions.com/cyber-security-facts-stats/)

01

80% Password related hacking
[verizon.com/business/resources/
reports/dbir/2020/smb-data-breaches-deep-dive/](https://verizon.com/business/resources/reports/dbir/2020/smb-data-breaches-deep-dive/)

02

43% Comparten contraseña
[storage.googleapis.com/
gweb-uniblog-publish-prod/documents/
PasswordCheckup-HarrisPoll-InfographicFINAL.pdf](https://storage.googleapis.com/gweb-uniblog-publish-prod/documents/PasswordCheckup-HarrisPoll-InfographicFINAL.pdf)

02

42% Sticky notes
[mms.businesswire.com/media/
20200219005336/en/773763/5/
191522-Ponemon-Infographic-2020-final-1.jpg](https://mms.businesswire.com/media/20200219005336/en/773763/5/191522-Ponemon-Infographic-2020-final-1.jpg)

03

66% Repiten contraseñas
[storage.googleapis.com/
gweb-uniblog-publish-prod/documents/
PasswordCheckup-HarrisPoll-InfographicFINAL.pdf](https://storage.googleapis.com/gweb-uniblog-publish-prod/documents/PasswordCheckup-HarrisPoll-InfographicFINAL.pdf)

03

13% Contraseña única
[services.google.com/fh/files/
blogs/google_security_infographic.pdf](https://services.google.com/fh/files/blogs/google_security_infographic.pdf)