Information security

Information Security

Information security concept:

- It is the protection of information and data circulating on the Internet from tampering, sabotage and alteration, or from any danger threatening it, such as the access of any person who is not authorized to access it and tamper with its data and view it, by providing the necessary means and methods to protect it from internal and external risks.

Information Security Elements :

1. Secret

Only the authorized person is able to access and view the information

2. Integration and data integrity:

Protecting messages or information that has been circulated, and making sure that it has not been subjected to any modification: adding or deleting part of it

3. Availability of data:

It means the availability of complete data when it is needed so that it is correct and accurate information that is not modified or incomplete, which makes the elements of the system work properly.

Ways to maintain information security:

There are many simple ways that must be followed in order to maintain information security, which is to keep the computer in a safe place, and to set a password on it to prevent intruders from tampering, and that the password contains letters, numbers, and symbols; To be difficult to predict

Firewall Use:

A firewall is a device or application that is placed on the server and in network filters, each according to its needs.

Encoder:

Encryption is a way to encode messages unreadable by unauthorized users, it is the best way to keep data safe from spies and thieves.

Methods and tools to protect information security

- Install antivirus and update it periodically
- Installing and updating intrusion detection systems
- Backup action
- Use of strong systems to encrypt transmitted information
- Uninterruptible device support

Digital signature

Digital signature

The concept of electronic signature:

An electronic signature is a mechanism for protecting information by verifying the identity of the source of the information (the message), as it is considered one of the most important methods used to ensure the documents sent by making the recipient of the message or document reassuring from the party who sent it to him.

The first recognition of the electronic signature was in 1989 in the field of credit cards, where the French Court of Cassation recognized the validity of the electronic signature and considered that it consisted of two components: presenting the credit card and entering the card holder’s number. This court also confirmed that this method provides the guarantees found in the manual signature.

On December 13, 1999, a European Union guidance on electronic signature was issued. However, the first electronic signature was issued in America on October 1, 2000.

The signature is generally a personal mark (the signer) through which the identity of the person can be distinguished. This mark consists of one of the nominal characteristics of the person (his name and surname). The name is the soul of the signature, and its main function is to express the person’s satisfaction with what was issued by him, and the signature must be handwritten, But for certain considerations, the legislation allowed signing with a stamp and a fingerprint

Electronic signature:

It is a coding process consisting of some electronic letters, symbols and numbers, issued by one of the specialized and recognized authorities governmentally and internationally. It works on documenting files of all kinds that are done over the Internet. Through it, the identity of the signer is linked to the document, so that the recipient of the document can verify the authenticity of the signature, and it is also easy for each person to obtain this signature from the competent authorities to issue certificates .This signature is used for several purposes, including personal, political, or commercial purposes and other fields, and it must fulfill the functions of the signature as it determines the identity of the signer and expresses his will to agree to the content of the data message.

The difference between an ordinary signature and an electronic signature is that a normal signature is a drawing that a person does, meaning that it is an art, not a science, and from here it is easy to forge. As for an electronic signature, it is a science, not an art, and it is difficult to forge.

How the electronic signature works:

To make the electronic signature, one must submit to one of the competent authorities to issue certificates so that the certificate is issued to the user, and it has two keys, one public and the other private.

When this user who owns a certificate sends a message, it will be encrypted with his private key or the public key of the receiver, turning this message into unintelligible tokens accompanied by the sender's signature. Then the receiver sends a copy of the electronic signature to the authority concerned with issuing the certificate, to verify the validity of the signature, and then the computers of the competent authority verify the validity of the signature and the result returns to the receiver again, to verify the authenticity and integrity of the message, so the receiver reads the message using his private key

If the encryption was done on the basis of his public number or by the public number of the sender, if the encryption was done by the private number of the sender, and then he answers to the sender using the same method and so the process is repeated, and the hashing process is also used with the electronic signature, which provides less cost than encrypting the message so that you Creates a specific numeric value that is smaller than the message so that it guarantees

The message is free from any change made to it so that when the user receives the message and the hash, he performs the hashing again on the message, and then compares the hash he received with the hash he made with the one he made if they are equal, indicating the integrity of the data from distortion and forgery, and if they differ, it indicates forgery. It is several numbers that are installed to be at the end a code to be signed, and this is used in banking transactions and electronic correspondence that take place between merchants or between companies , An example is a credit card that contains a secret number that only the customer knows.

It is based on the investigation of a personality based on the physical characteristics of individuals such as personal fingerprint, human eye scanning, human face recognition, Characteristics of the human hand, verification of tone of voice, and personal signature. The identity of the customer is verified by entering information into the computer or recent messages, such as taking an accurate picture of the user's eyes, voice, or hand, and it is stored in an encrypted manner in the computer's memory to perform the matching. There are many problems in this system, including that the signature image is placed The hard disk of the computer can then be attacked or copied by the methods used in electronic hacking.

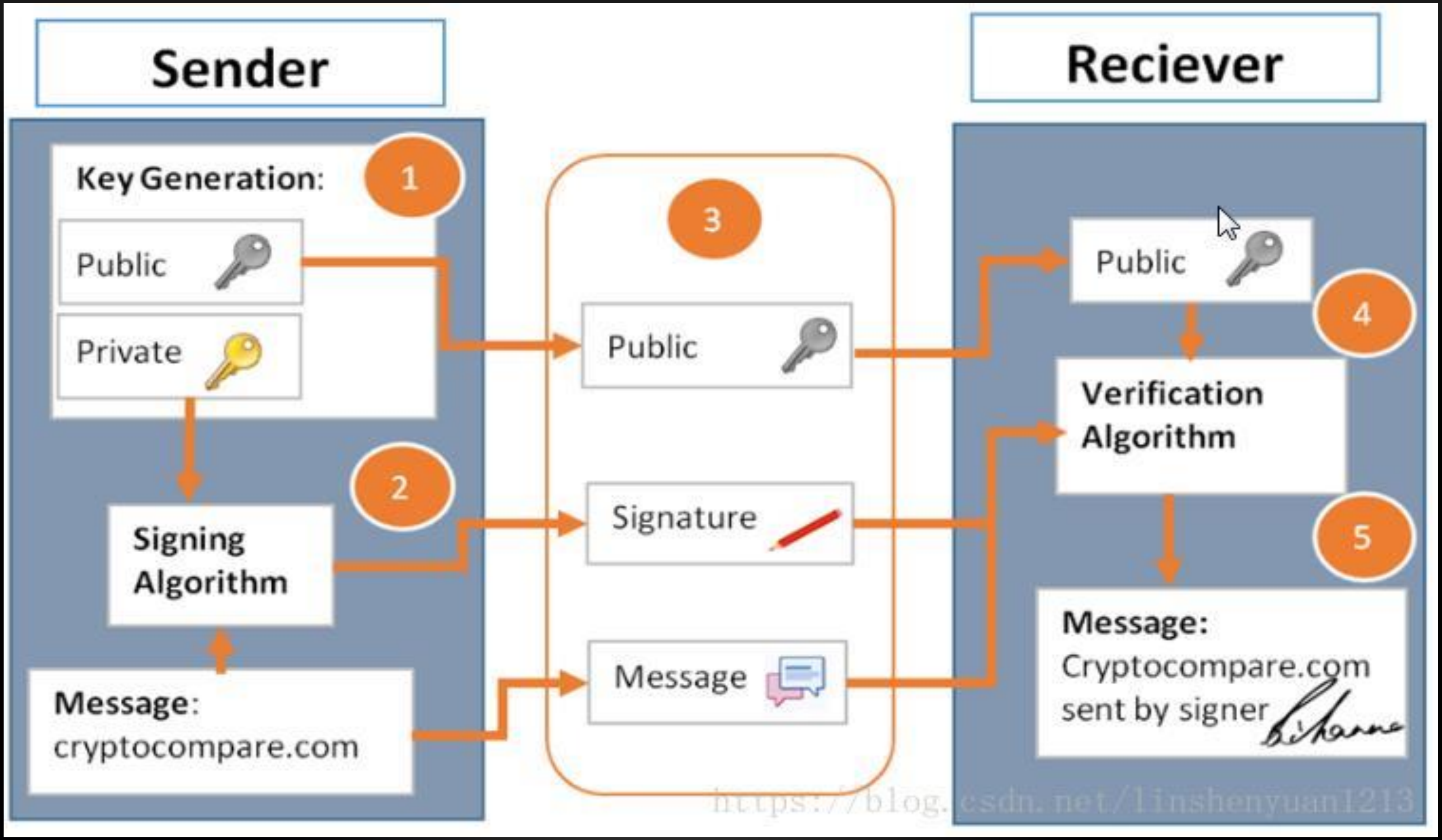
Here, the sender of the message writes his personal signature using a special electronic pen on the computer screen through a specific program, and this program captures the signature and verifies its validity. This system needs a computer with special specifications and uses this signature to verify the identity. This type of signature is better than manual signature, which is done on a computer screen or a special panel prepared for that by using a special pen when the electronic editor appears on the screen, and this type does not enjoy a high degree of security.

Public key encryption algorithm:

It is an algorithm that solves the problem of insecure distribution of keys in symmetric encryption. Instead of using a single key, asymmetric encryption uses two keys that have a relationship, and these two keys are called the public key and the private key. They are encrypted with a public key and decrypted. Encryption with a private key.

Thus, we have ensured the integrity and integrity of the data, the reliability of the data, the proof of the data making it undeniable.

Electronic Signature Mechanism:



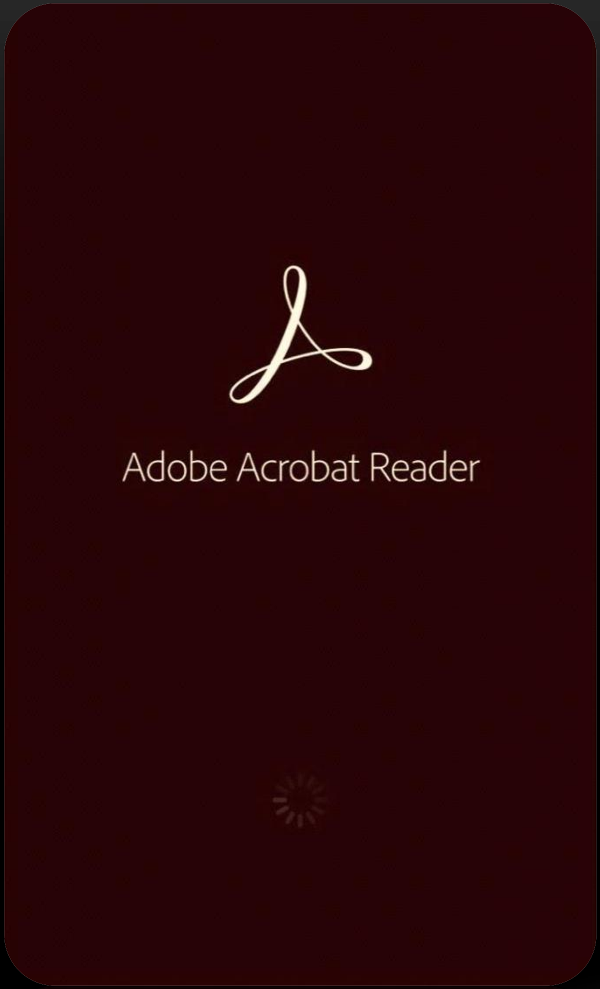
The digital signature is linked to the correct date and time stamp:

Digital signature protocols give clear confirmation of the date and time a file was signed.The fastest in activating the electronic signature and making it available to everyone by the state because of its complementarity, confidentiality, speed and reliability.

Credibility:

Although messages include information about the entity or content of the message, most of the time this information is not accurate, and therefore a digital signature can authenticate the source of this message. “In the sense that the digital signature proves the authenticity of the sender and not the authenticity of the data in the message.”The importance of this certification is currently visible in financial documentsFor example, if a branch of a bank sends a message to the main branch requesting a change of a specific account, if the main branch is not sure that the source of the message sender is authorized to issue this information in changing this account, it is considered a serious mistake.

1



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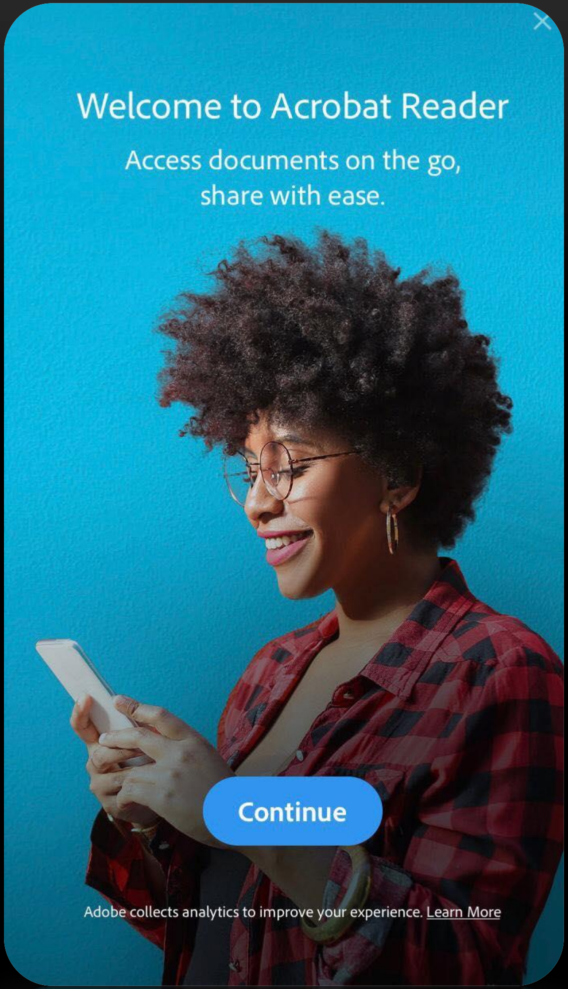
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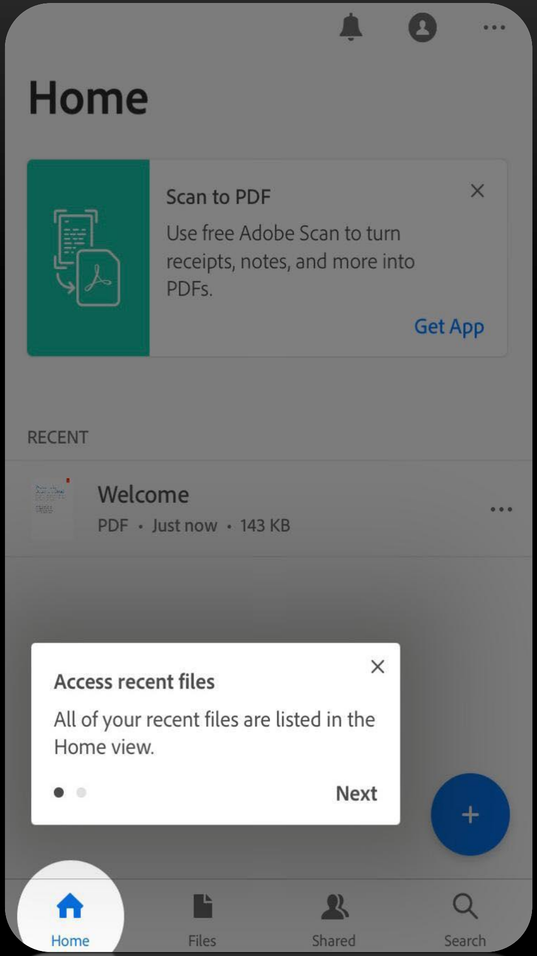
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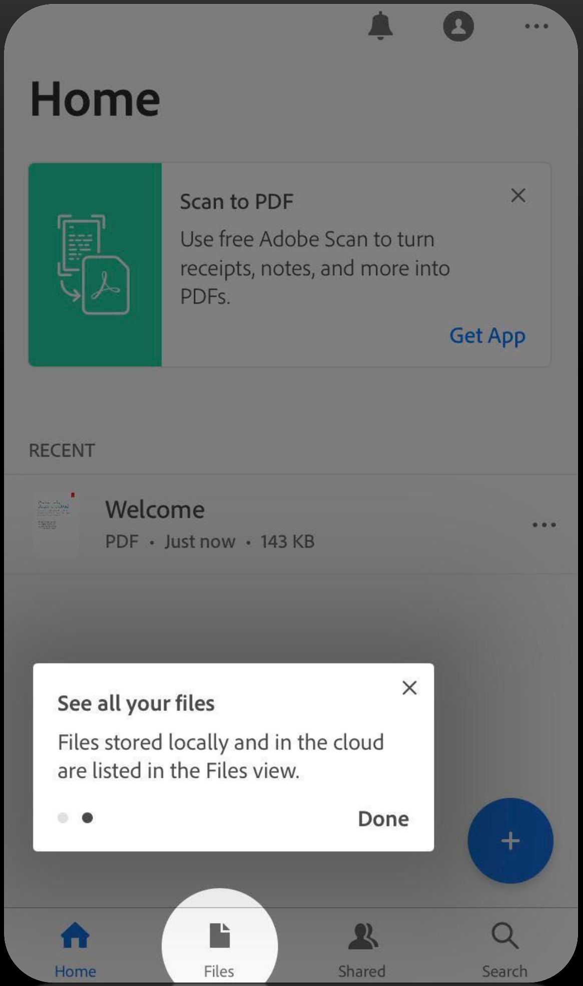

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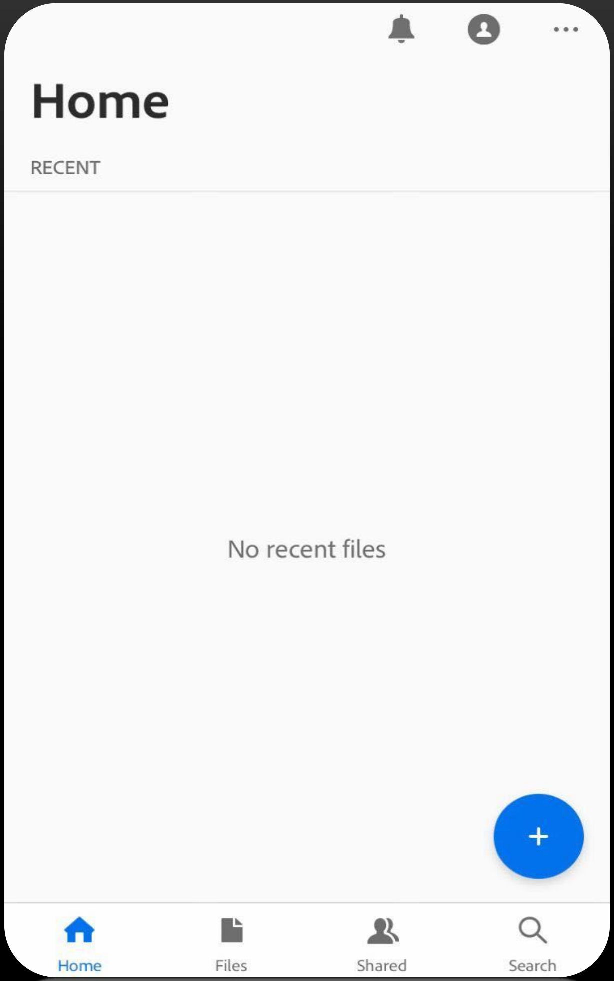

Home

RECENT

No recent files

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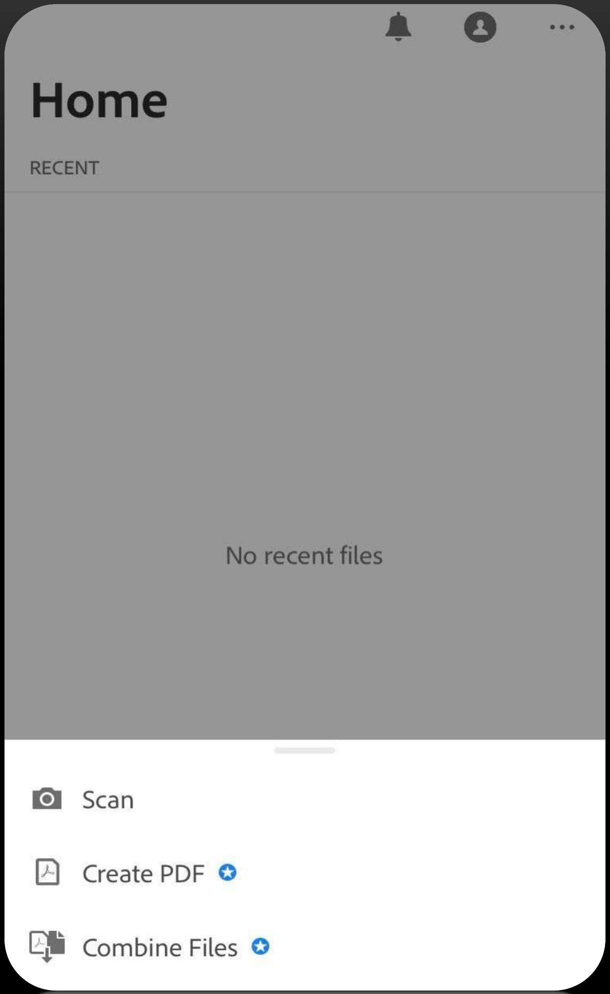

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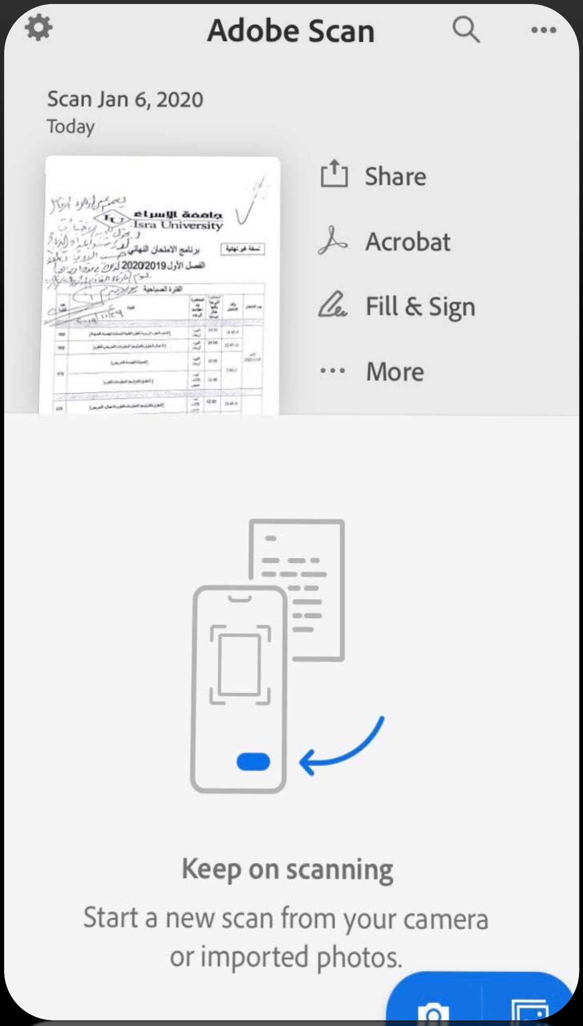

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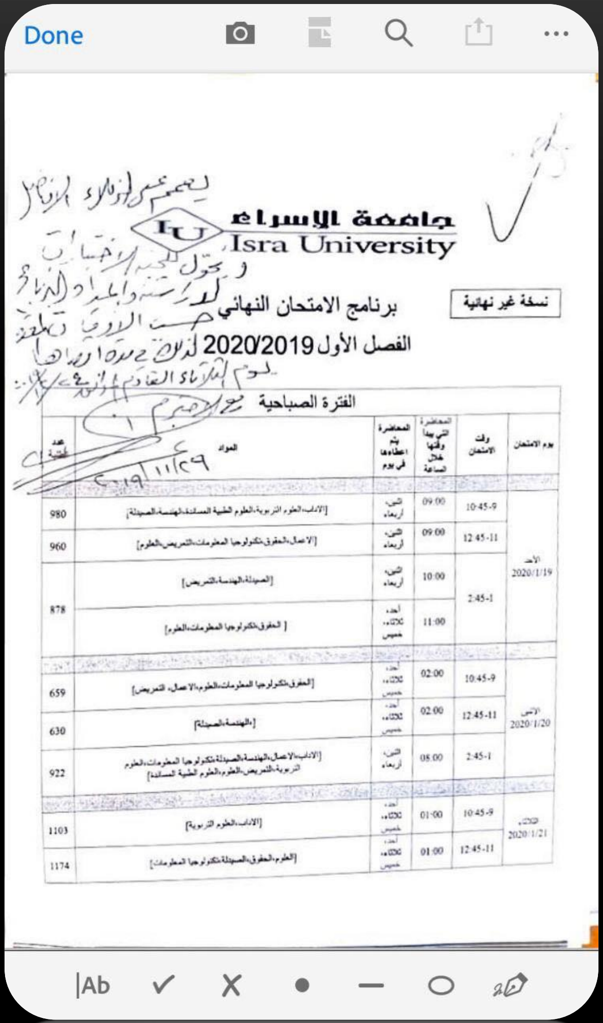

ليعمم على الزملاء الأفاضل
و يحول للجنة الامتحانات
للأرشفة وإبلاغ الأبناء
حسب الأصول وتعلق
لذلك مدة إصدارها
ليوم الثلاثاء القادم الموافق ٤/١٢/

جامعة الإسراء
Isra University

برنامج الامتحان النهائي

نسخة غير نهائية

الفصل الأول 2020/2019

الفترة الصباحية

٢٠١٩/١١/٢٩

يوم الامتحان	وقت الامتحان	المحاضرة التي بدأ وقتها خلال الساعة	المحاضرة يتم اعطاؤها في يوم	المواد	عدد الطلبة
الأحد 2020/1/19	10:45-9	09:00	اثنين، أربعاء	[الاداب،العلوم التربوية،العلوم الطبية المساندة،الهندسة،الصيدلة]	980
	12:45-11	09:00	اثنين، أربعاء	[الاعمال،الحقوق،تكنولوجيا المعلومات،التمريض،العلوم]	960
	2:45-1	10:00	اثنين، أربعاء	[الصيدلة،الهندسة،التمريض]	878
		11:00	أحد، ثلاثاء، خميس	[الحقوق،تكنولوجيا المعلومات،العلوم]	
الاثنين 2020/1/20	10:45-9	02:00	أحد، ثلاثاء، خميس	[الحقوق،تكنولوجيا المعلومات،العلوم،الاعمال، التمريض]	659
	12:45-11	02:00	أحد، ثلاثاء، خميس	[،الهندسة،الصيدلة]	630
	2:45-1	08:00	اثنين، أربعاء	[الاداب،الاعمال،الهندسة،الصيدلة،تكنولوجيا المعلومات،العلوم التربوية،التمريض،العلوم،العلوم الطبية المساندة]	922
الثلاثاء 2020/1/21	10:45-9	01:00	أحد، ثلاثاء، خميس	[الاداب،العلوم التربوية]	1103
	12:45-11	01:00	أحد، ثلاثاء، خميس	[العلوم،الحقوق،الصيدلة،تكنولوجيا المعلومات]	1174

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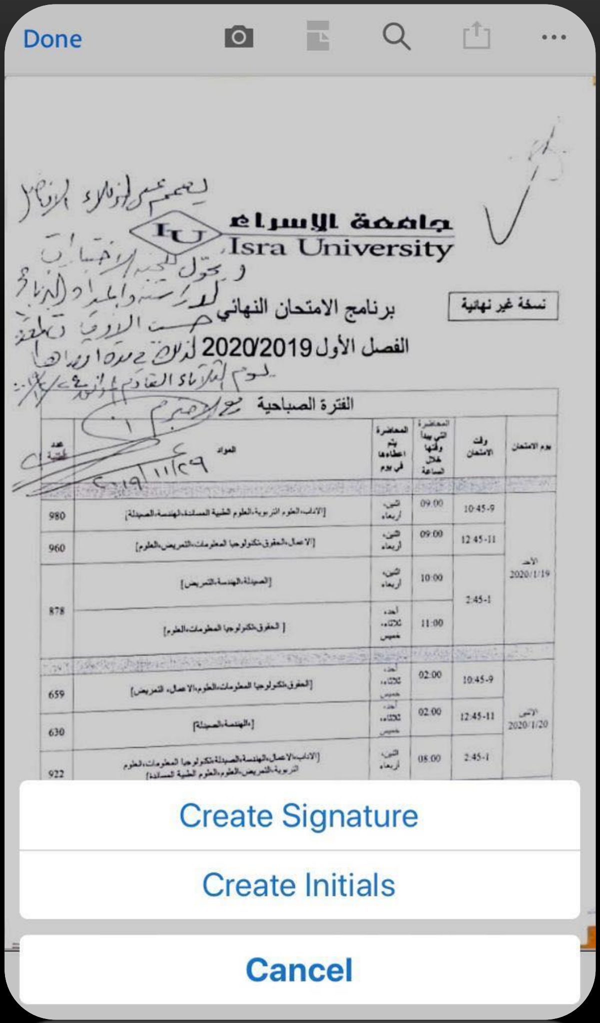

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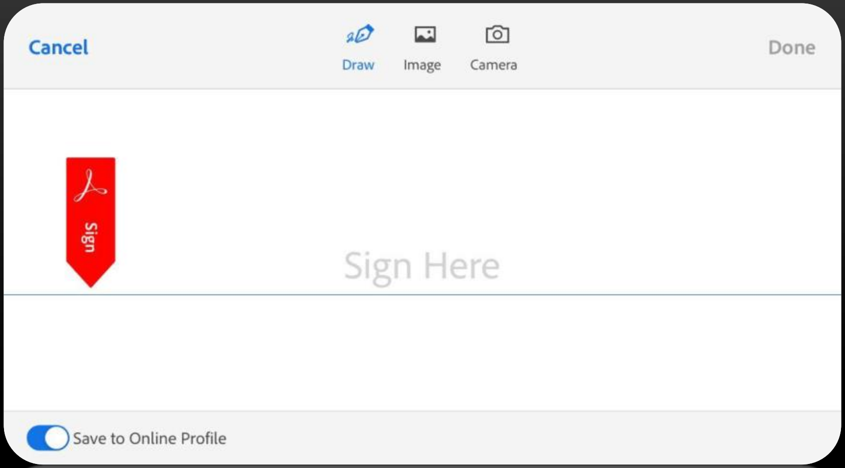

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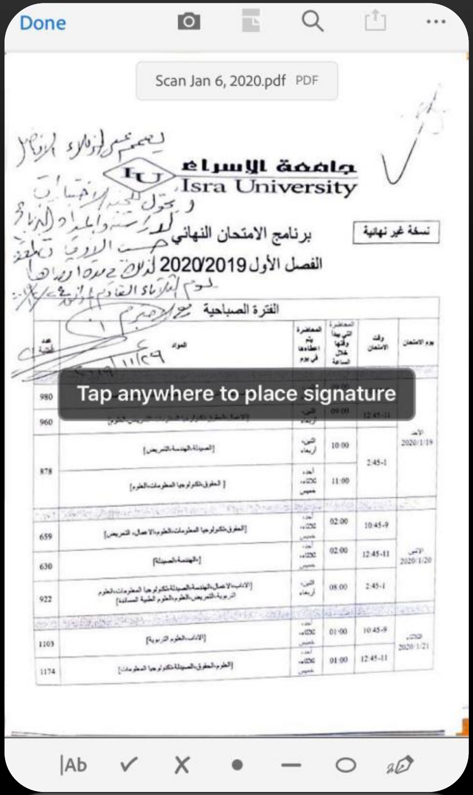

Tap anywhere to place signature

ليعمم على الزملاء الأفاضل

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الفصل الأول 2020/2019

يوم الثلاثاء القادم

الفترة الصباحية

29/11/2019

يوم الامتحان	وقت الامتحان	المحاضرة التي يبدأ وقتها خلال الساعة	المحاضرة يتم اعطاؤها في يوم	المواد	عدد الطلبة
الأحد 2020/1/19	10:45-9	09:00	اثنين، أربعاء	[الآداب،العلوم التربوية،العلوم الطبية المساندة،الهندسة،الصيدلة]	980
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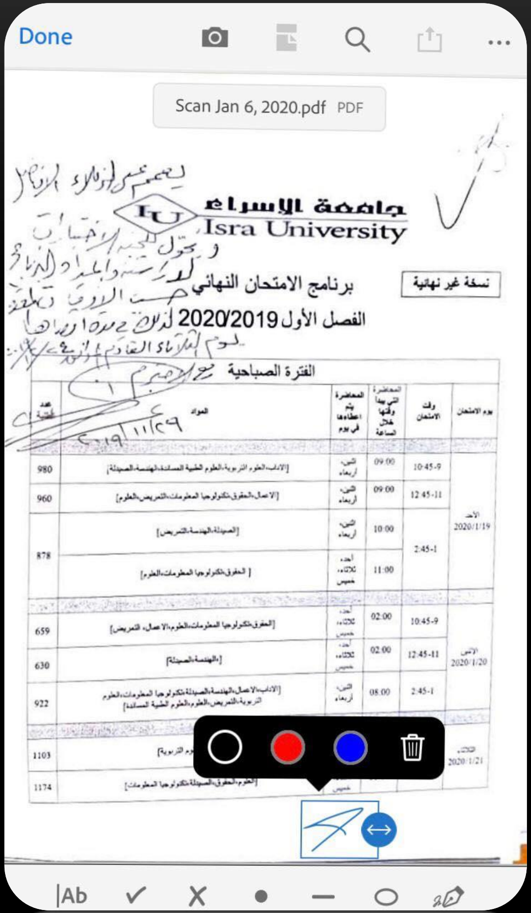

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student's work :
Nour Musleh & Shoroq khazkyea