Cairo was established by Commander Johar Al -Skali on the sixth of July 969 AD by order

From the caliph al -Moez of the Fatimid religion, which is the fourth capital of Egypt since the Islamic conquest at the hands of Amr ibn al -Aas.On the date of the establishment of Cairo, the archaeological researcher Nadia Abdel -Fattah told the Middle East News Agency today that the story of the city of Cairo began after the Fatimids ’eliminating the Achieved state, where Jawhar al -Skali thought of building a new capital of the Fatimid caliph al -Mu’az of the religion of God, who was still residing in the countries of Morocco,In preparation for his move to Egypt.

She added that in the month of Muharram in the year 358 AH - 968 CE, Al -Mu’az gathered to the Fatimid religion of God, about a thousand horsemen, most of them from the barbarian tribes and from Al -Saqalqah, and gave Al -Moez, to Jawhar al -Saqli complete

Upon.

She explained that the first work carried out by Jawhar al -Saqali, after entering Egypt, was to lay the foundations of a new city to be a royal city and a capital of the state that includes most of the Islamic lands, where he chose a place located in a sandy area located in the northeast of the city

That the region had nothing but the garden of Al -Akhshid, known as the Bustan of Kafour, and a monastery of Christians called the Orthopedic Monastery, which is the location of Al -Aqmar Mosque now, and a small fortress known as the forks palace, which built on its ruins a small palace that was also called the Shok Palace.

The archaeological researcher Nadia Abdel -Fattah said that Cairo was initially known as (Mansuriya), after the city of Mansourieh, which was established by Al -Mansour in God, the father of Al -Moez, but as soon as Al -Moez reached Egypt in 362 AH until its name was from Mansuriya to Cairo, and at the time the story was associated with the astrologers and their predictionsWhere it was said that it had been built for time

The appearance of Mars, which was then called Cairo.

On the authority of Cairo in the Ayyubid era, the archaeological Nadia Abdel -Fattah explained that Sultan Salah

Religion is the rule of Egypt from (Dar) (the ministry in aesthetic, and its location is currently a school of Qassenqar and its Ghanshakhaknakir, where it made it the headquarters of the rule, and built the castle and surrounded the capitals of all of Egypt (Al -Fustat - Al -Askar - Al -Qatta - Cairo) with one wall to return the Crusaders' attacks and this was the common methodIn the Levant, confirming that there is no significant development in the planning of the streets of Cairo during the Ayyubid era from what it was in the Fatimid era.

First, architecture in the Cairo (Fatimid) era:

The Fatimid era witnessed an architectural and artistic renaissance that included the Fatimid state in general and Egypt in particular, as it is the seat of the Fatimid caliphate, where artists and architects began to present their creations, innovations and contributions to civilized development

First: Mosques:

The Fatimids were concerned with building mosques and cursed its architecture, which is noted that it is influenced by the Tulunian style on the one hand and the Moroccan architecture on the other hand, in addition to their interest in the facades of mosques, and one of the most famous mosques that was constructed in the Fatimid era is the Al -Azhar Mosque, which is one of the most important Fatimid religious buildings, in which the influence of Greek Tunisian architecture and the impact ofThe local Egyptian architecture, knowing that the Al -Azhar Mosque did not stop at the Fatimid construction, but its area has multiplied and added increases through the subsequent ages;However, the most important parts that belong to

The Fatimid era is represented in the contracts surrounding the plate, the contracts of metaphors with a high ceiling, the ancient mihrab in Iwan Al -Qibla in addition to the writings and decorations in the metaphor, in the old mihrab and in the tribal and sea walls

As well as the mosque of the moon, which acquires an additional architectural importance from its stone façade rich in sculpted motifs, which is the first interface in Egypt decorated with this method, where these decorations were formed from Hanaya in the form of a coincidence, in addition to decorations of pirates. [1]Inside the Mosque of the Qamar, it highlights the open plate surrounded by four Iwan, in addition to Persian contracts based on marble columns.

Second: The palaces

We have no information on the palaces of the Fatimids except the descriptions that were mentioned in the books of history and trips in the Middle Ages.To reside in the goat of the religion of God and his family, and he had a major interface and nine gates, and the Western Palace that was built after the construction of the eastern palace and was smaller than it, and included two wings with spacious delicacy.

2 - Architecture in the era of Cairo (Al -Ayyubiya)

Among the most important features of the Ayyubid era is the Salah al -Din al -Ayyubi Palace, which remained a witness to the splendor of architecture at that time ...

Salah al -Din al -Ayyubi began to construct a castle over Mount Al -Muqattam in a place known as the dome of the air.But he did not complete it in his life.Rather, the Sultan Al -Kamil Bin Al -Adil was completed.The first to live in it was the full king and took it as a house for the king.It continued as well until the Khedive era

Ismael.

First: About the gates of the castle

(Bab Al -Mokattam)

This door was blocked in a period of periods and it was a rectangular opening that worked in a very thick wall in the direction of the south of the Mokattam Tower. This section was added to the year 1200 AH/1785 AD.The time is a palace with the facilities that followed, and there was a souvenir in this section bearing a founding text in the Turkish language in the name of Yakan Pasha and the date of building the door and palace in the year 1200 AH/1785 AD.

(New door)

Muhammad Ali Pasha began building the new door in 1242 AH /1827AD to use instead of the included door, which was the public door of the castle established by Al -Nasser Salah al -Din al -Ayoubi

In the year 579 AH/1183 AD, Muhammad Ali Pasha saw that both the included door and the inhusher door are not fit to pass the vehicles and artillery with the calf, so he built the new door and paved a sloping road to facilitate the rise to the castle and descending from it and this road is known today as the New Bab Street or the quarry railway.

3- Al-Qaher

Khedive

First: Tahrir Square

Tahrir Square, the Khedive Cairo base was the beginning, the first name for the field was the Khedive Ismail, who wanted him a link between the barracks of the Nile Palace, and the palace of Abdin, but the field whose name was in the era of King Fouad to Ismailia Square, developed to become one of the most important fields of the Egyptian capital, not onlyIt leads you to 18 ministries, or the parliament building,

Or because the majority of political demonstrations start from it, but also because it connects to a number of the main streets that represent a vertical pillar of Cairo, including the streets of Qasr Al -Aini, Al -Jalah, Talaat Harb, Bab Al -Luq and Ramses, as there is the largest official building, which includes a number of

Government interests, and bears the name of the Galaa Complex.

Second: Maidan Abdeen and his royal palace

As for Abdin Square and its royal palace, it mediates the heart of Cairo

Where it starts from Tahrir Square, and it extends a field categorical Talaat Harb, Mustafa Kamel, passing through the streets of Sharif, Muhammad Farid and Imad Al -Din, to end in the field of opera and Al -Gomhoria Street.As the Khedive Cairo book says, the decision to establish the street was by a decision of the Khedive Ismail to the great engineer of Egypt at the time, Ali Mubarak, to be 1250 meters long, and its width is 20 meters, and it has a distinctive architectural group, including the Nasser Social Bank building, which was in the past the headquarters of the Italian bank.

Abdin Palace, is one of the most famous historical palaces of Egypt, has witnessed many events from the royal era until the emergence of modern Cairo.

Abdin Palace is a rare historical masterpiece in the way it turned into a museum that reflects the luxury in which the palace was built and the important events that he witnessed from the royal era until the July 1952 revolution.

The palace contains halls and salons that are characterized by the color of its walls, the white and red salon

The green is used to receive official delegations during its visit to Egypt.In addition to the Palace Library, which contains approximately 55 thousand books.

The palace also contains a theater that includes hundreds of gilded chairs and also contains isolated places in curtains for women and is now used to display special theatrical performances for visitors and guests.

Inside the palace, there are many wings such as the Belgian wing, which was designed to establish the important guests of Egypt, and my name: Likewise, because the King of Belgium is the first to stay in it, and this wing includes a bed that is considered a rare antiques due to the motifs and hand graphics it contains.

Cairo and Egypt in general are considered one of the countries rich in antiquities of various ages and civilizations, because of the varying rulers and authorities of the previous countries.Pass

Human ...

Returning to architecture throughout the ages in Cairo. One of the most important examples of the Khedive palaces on which we will shed light is the Palace of Habib Al -Sakakini, which was built in the Al -Dhahir neighborhood.Non -preservation of antiquities

1- Using the palace as a medical museum belonging to the Egyptian Ministry of Health, which was not the talented side of this palace.

2- The periodic maintenance is necessary for the survival of the effect in a good condition

3- The lack of a strict guard on the palace

4- High humidity in wet areas, continuous moisture leads to the growth of fungi and algae that contribute to surface damage

5- The wind winds with particles such as sand or dust, which causes the erosion of the external surfaces of the antiquities for a long time.

6- Drinking: erosion, which occurs as a result of weather factors (such as wind, rain and snow), leads to the disintegration of surface materials slowly over time, which leads to the loss of architectural and technical details.

7

There are limited efforts to raise awareness of the importance and preservation of the palace.

To preserve it, it requires a set of procedures and techniques to maintain its historical and cultural safety.

1- Re-use and cultural employment:

There are future plans to convert the palace into a cultural center or a museum, but this did not

It is fully implemented so far.

2- Attention to periodic maintenance, which is very necessary for the survival of the effect in a good condition.Modern surveillance cameras in each corner of the palace to record any abnormal activity

3- Registration and documentation of holdings ((digital documentation))

Create a comprehensive database of all statues and holdings in the palace, including detailed images, dimensions, and historical descriptions.This helps to track any stolen piece and easy to restore.

4- Using moisture insulating materials on the walls and foundations to protect it.

5- Restoration of the external facades, the restoration of the damaged stone and the damaged brick using original materials, and covering the surfaces with protective layers that protect against wind and erosion caused by wind and weather factors.

Have you ever wondered how old building restoration works?It is a wonderful process that requires skill and dedication in order to become properly .... buildings restoration and installations are operations aimed at preserving buildings and installations affected by any damage caused by time and external factors, i.e. stopping the collapse of the building by raising the engineering structure of the building, and rebuilding the parts thatIt requires intervention.The restoration works usually include the building's external structure, processing of cracks, doors, ceilings, windows and strengthening of insulation, in addition to renewing the sewage network

Electricity supplies

Among the types of restoration:

Restoration for the purpose of processing

Restoration for the purpose of renewal

Restoration for the purpose of reinforcement

Development

The foundations of buildings

Development

Pillars

Buildings

Restoration of bridges and contracts

What are the restoration methods?

The degrees of the risk that the building is exposed to and accordingly vary, the methods used to restore the various types of cracks differ, and these methods include:

Restoration of the foundations of buildings: This method depends on increasing the load on the ground through the concrete mass used, and the aim of this method is to strengthen and strengthen the lower bases of the buildings

.

It is done through the drilling style and then cleaning concrete surfaces, followed by a layer of layers

Protection to avoid iron rust.

Development

Building columns:

The dilapidated columns are restored by adding some layers that are not less than 10 cm thick of reinforced or metal concrete, after making sure of cleaning and drying the surface

The concrete well.

Restoration of bridges and contracts:

The restoration of bridges is based on increasing concrete fish from the bottom of the building and from the top, then adding a layer of iron skewers to increase the strength of concrete.

Stages of restoring archaeological buildings

In order to prepare the restoration project of the archaeological building, three important stages must be achieved

as follows:

The first stage: the current situation studies.

The second stage: soil, foundations and building materials.

The third stage: the restoration project.

Below is an explanation for each stage:

The first stage: the current situation studies

she

This stage includes studies of the current status of the impact, and includes registration, surveying, architectural and photographic documentation, and studies at this stage as follows:

1- Historical studies and architectural analysis of the effect.

2 lifting and surveying

The architectural lifting of the current situation

4- Photography documentation

1- Historical studies and architectural analysis of the effect:

A- Historical studies of the effect and architectural formation during its life, and the knowledge of the events that the building was exposed to throughout the Sunnis so that it can be easier to understand the circumstances that led to the damage that the building suffers from, and many damages can have been formed due to various transformations that affected the building over time.

B- The changes and additions that occurred, whether archaeological or non-archaeological), and not necessarily that the study works with the aim of returning the building as it was exactly or completing the parts

The missing, but this is done according to the state of the building and the element as mentioned previously.T - The previous restorations conducted and identifying their places and dates.

2- Lifting and surveying

Surveying of the general website:

The connection of the archaeological building with the levels surrounding the site includes, raising the external borders of the archaeological building and the borders of the surrounding buildings, as well as raising surveyors for all facilities networks

In the scope of the effect.

B- The surveying of the effect:

Directing the impact building with the archaeological buildings on the site, making a network budget for the impact and linking it with a fixed point attributed so that they are specific and accurately known, as well as making a network budget for the final effect surfaces and linking it with a known point on the site.

W- survey monitoring:

C- It includes monitoring columns, walls and construction elements, as well as raising surveying to the places of cracks in the walls, whether internal or external.

3- The architectural lifting of the current situation:

The preparation of horizontal projections, interfaces, sectors, floors and ceilings details, door models, windows, cupboards, veils, doors, platforms, wooden, metal and plaster elements, and the identification of locations of damage, damage and cracks with the impact on the horizontal projections, sectors and facades, as well

And details of all kinds.

4- Photography:

Photography of the impact from the inside and outside, architectural and decorative details and clarify its current condition so that it includes walls, floors and ceilings, and accompanies with pictures a guide for the footage in the form of drawings shown on numbers and places of photography

The second stage: soil, foundations and building materials:

It includes technical, laboratory and field tests, and is carried out by studying soil, foundations, building materials, monitoring and balance elements, and health and electrical works.1- Handic and mechanical work works to study soil, foundations and groundwater, and it includes the following: A- The work of a number of horses (manual horses are preferred in depth of at least 15 meters, with a number of a general per 250 to 300 square meters so that the number of horses is not less than two Justin,Samples are taken according to the technical assets to determine the nature of the soil, its endurance, properties, and groundwater level

B- Make embryos to detect the foundations.

Pesomics work to study the movement of water and its level periodically during the study.W - Complete reports on soil tests and groundwater levels.

C- Make a full report on the status of the foundations through sensors.

2- Building material tests:

A- Tests for all building materials used with impact and identifying their specifications and properties.B do tests on material samples within 4 samples for each material.

Laboratory tests are conducted

W- Chemical analysis.

C-

Pressure and tension for wood.

H - mechanical tests.

G- Natural tests.

D - X -ray tests.

Results are submitted to the form of reports shown as a result of tests, recommendations and methods

Treatment.

3- Monitoring moisture and cold water

The places of deployment of humidity are determined in the building elements as well

Treatment methods.

4- Monitoring construction elements:

It includes monitoring the construction elements of the building and the analysis of loads and forces

And the stresses of all construction elements and their weaknesses.As well as the work of a construction study on the current effect and the suggestion of the construction solution with the monitoring of the monitoring system, and a mathematical note is made for the construction elements, and in the construction solutions it is taken into account the following:

A- Preserving the architectural character of the effect.

By preserving all

The decorative and artistic elements are intact without distortion or distortion.

T - Commitment to international covenants and customs in preserving and restoring antiquities.W - Take advantage of the traditional materials and methods used to create these types of archaeological buildings in the restoration work.

C- Benefiting from historical studies and the available documents or drawings.H- Reference on the results of the study of studies and research that have been conducted in order to determine the optimal method of restoration.

5- Water and sanitation feeding

Study the case of water and sanitation networks in the current situation, and study

The method of developing it and providing proposed solutions and studies, as well as a fire resistance network in a manner that does not harm the impact.6- Lighting works and networks: studying the current network and providing a study of its development or its dust

Fire.

7- Preparing a study of the work and requirements of careful restoration of all archaeological, decorative and artistic elements.

8- Preparing the curriculum and philosophy of the restoration and preservation project.

Adopting the philosophy of preserving a three -step methodology:

A- The values ​​carried by the building and the architectural restoration project are determined to achieve the highest amount of preservation, due to two types of values

The first: archaeological values ​​- historical.

The second: architectural values ​​- technical.

In order for the restoration project to achieve a balance in preserving the previous values ​​without prejudice

With any of them.

B- Make a list of problems facing the preservation of the archaeological building, so that it is not limited to

The manifestations of deterioration, but rather to determine the reasons for this deterioration.

T - Determining a strategy for preservation in general, so that the most preservation of the various values ​​that the building carries the archaeological values ​​- architectural values) and so that all the causes of deterioration are confronted and then the treatment of the manifestations of this deterioration, and therefore the strategy of preserving is done by setting priorities and then proposingRecommendations to address these problems.The third stage: Restoration Project: A- The restoration plan directs the restoration process, while avoiding rapid decisions that can take place in the same workshop, and in this way sudden events that work to increase the cost are reduced.

1- The proposed restoration plan for the project based on previous studies and the completion of the collapsed areas in the light of archaeological studies, the completion of the extinct elements from holes and the replacement of damaged parts.

2- Making the proposed construction solutions based on previous studies, as well as addressing cracks and weak points in the walls.

3- Finding appropriate solutions for the results of water effects and detection

The foundations.

Work in preserving and restoring antiquities requires that there are principles and general foundations, organizing work and representing practical guidelines for all its stages, which constitute technical rules and standards for quality

Work and perfection.These professional principles differ from the legislation, which countries approve in the form of systems or laws of antiquities.And the importance of such principles and foundations, some of which have indicated international conventions, agreements and recommendations.

These principles include how to deal with antiquities, or heritage elements, fixed and transmitted, whether before the interventional preservation procedures, or during it, or after completing it.It lacks

The profession of preserving and restoring antiquities in the Arab world to the existence of such principles and professional guidelines, which can be guided and follows its approach in various preservation and restoration procedures.

This research is an attempt to root and framing such foundations and professional guidelines, beginning with the determination of the concept and nature of preservation or restoration itself, and the foundations and general guidelines to be taken before starting to preserve procedures or restoration, or before the interventional preservation, as well as related to preservation procedures, or actual restoration.And as well as the foundations that must be followed later on the processes and procedures for interventional preservation or restoration of the traces or heritage elements.Perhaps

This research is an essential brick in adopting professional rules for the profession of preserving and restoring antiquities in our Arab world.Before starting the restoration process, the location of the crack, the steps needed to treat it, then prepare the materials needed to fill this rift;Then we follow the following steps:

1- Treating cracks and cracks

Restoration of surface cracks: it is treated by drying the damaged surfaces, then using one of the chemicals that prevent water leaks.

Deep and widen cracks: it is guaranteed by the drying of concrete surfaces and then expansion

Croats and pouring a chemical, low, viscous or concrete.

Building cracks: The Craft is restructured in the form of V -letter V, then clean the concrete surfaces and remove the parts of the dilapidated buildings, and in the end a special type of mortar is added

The external surface paint.

2- Supporting and reforming the construction elements

Treating the spread of moisture: the damaged areas are eliminated and then cleaned armed iron to protect it from rust. Finally, it is confirmed that the affected area is well dried and covered with concrete materials.Treating floors: The demolition protector is removed and the area is re -filled with a dense layer of clean sand, water, and a soil fixed material, until the floors return to normal.

Treating the tendencies of the towers or balconies: they are treated by strengthening them from the bottom with a layer of concrete and iron, then installing steel screws to support. The challenges facing the restoration process face the process of restoration and maintenance of heritage real estate many challenges, including:- Lack of financing: Many countries face a shortage ofThe necessary funding for the restoration and renewal of heritage real estate. Development pressures: Heritage real estate faces great pressure due to urban expansion and economic transformations. Decreased experiences and competencies: There is a shortage of experiences and competencies necessary to restore and renew heritage real estate. Societal awareness: Awareness of the importance of cultural heritage is still limited by some members of society.Climate changes: Climate changes negatively affect heritage buildings, as they increase the rates of erosion and damage. Emergency events: such as wars and natural disasters that cause severe damage to heritage buildings and require great efforts to restore them. Heritage real estate is considered valuable treasures that carry the history of civilizations and certificates of their development.So its restoration and maintenance requires ultimate accuracy and highly craftsmanship, which is affected by maintaining its distinctive authenticity and characteristics.

The importance of restoring and maintaining heritage real estate before going into technical details, from the

It is important to emphasize the importance of restoring and maintaining heritage real estate.This process contributes to:-Preserving the cultural identity: Heritage real estate is a witness to our history and culture, and its restoration contributes to preserving this identity and transferring it to future generations. Activating tourism: Heritage real estate is an attractive destination for tourists, which contributes to stimulating the local economy and creating job opportunities.-Preserving the architectural diversity: Each heritage building has a unique architectural character, and its restoration contributes to preserving this rich architectural diversity. The sustainability of the environment: the reuse of heritage buildings instead of their demolition contributes to reducing consumption from natural resources. Like .... lighting the baron palace with cellsSolar energy and beautification of the surrounding garden, the engineers and the technicians at the Ministry of Antiquities succeeded in lighting the Baron Palace in an electronic circuit operating in solar energy cells, so that no person approaches the minors building lighting the lamps at night and extinguishing them in the morning, as happens in the traditional lighting system in addition to the Egyptian mail.Types: natural lighting (public light

In it, the source of the sun or the moon.It is a great source of lighting, but it is not essential to rely on it completely, so it is necessary to add artificial lighting.The artificial lighting that a person makes, such as LED bulbs, is used to provide vision for some tasks such as reading, writing, or working on the computer. Task Lighting: targets a specific area of ​​the room, and aims to shed light on a specific job, including home areas that require important lightingKitchen tables where food will be prepared;Sitting areas in the living room where the reading will be done;The roofs of home offices where paperwork will be completed.In the kitchen, the lights under the cabinet provide important lighting for the work surface;In the living room, the table lamp is often used to illuminate the tasks to accommodate reading. The theatrical lighting is an accent lighting: It is a type of lighting that attracts attention to a specific object, such as artworks, sculptures, plants or book cabinets, theatrical lighting is used in manyOften in the open air, to highlight a beautiful tree, plant or water feature, or to attract the eye to a specific area of ​​the landscape. Study the importance of lighting modern buildings in recent decades has become a vital element in buildings and has a special place in building facades.Not only does this art give life to buildings, but also creates an amazing visual impact on cities.It also plays an important role in advertising and attracting customers to buildings and shops.

The design and implementation of the building facade ensures the durability and strength of the building and creates an appropriate urban image.This urban view, if it is combined with standard and appropriate lighting, will definitely have a better and more beautiful width at night. The types of lighting methods for the modern building facade are used various techniques and equipment to light the facade of the building.Lighting is done in different layers and in different parts of the building.Lighting lamps are used in various colors and models in the building. Modern linear lighting linear lighting using linear lights adding more beauty and emphasizing the facade of the building.This technology, which uses equipment such as optical fibers, LED tape and LED tube, has the ability to focus on different lines and shapes.Cob LED lamps, as well as their high ability to emission, also consume less energy.This equipment is characterized by high flexibility and can be bent in any direction, so they are very effective to display different architectural shapes and lighting buildings with light lines on the main edges of the building, especially on flat facades without bumps, the building appears well in the darkness of the night.Jetlights are installed with face faces to face and used in tall buildings such as hotels, commercial and residential towers and shopping centers to this. In distinctive lighting, the light is focused on specific parts and details of the building's interface.This emphasizes the different aspects and the beauty of the building for the public.For example, by focusing on the building columns, the building height and strength can be shown to the public.This lighting, based on LED lights and walls of walls, focuses on windows and columns

The balconies and other details of the interface design use low -energy lamps, as well as creating a beautiful effect, also helps in protecting the environment. Bright lights or light dance are examples of dynamic lighting.These lights are especially used on historical buildings, towers and modern buildings with unique interfaces.This method is very attractive and uses different types of lamps and lighting designs.More flexibility in choosing and integrating the lights transforms the facade of the building into a dynamic artwork and their rises in lights and showing a specific building, it must take into account several factors related to lighting and the appropriate distribution of it inside and outside the building 1.Natural lighting: Natural light sources come from the sun, which is an important element in the design of the lighting of the Embe

2. Artificial lighting types of lighting: general lighting: providing equal lighting for the entire space. Topical lighting: dedicated to specific spaces such as offices or kitchens. Antarctic lightColor and bright

Or topical. 3.Distribution and directing lighting must be equally distributed and meet the needs of each space. Ensure that the lighting does not cause unwanted shadows or blind points.

4. Renewing: Use architectural design programs such as DS Max or Sketchup with tools such as V Ray or LUMION to make a realistic visual show of the building with lighting. These programs enable you to experience lighting types, direct them and watch their effect on the actual dates on the building. 5.Factors that affect lighting: materials: the different walls and surfaces reflect light in a different way (such as glass, wood, metal). The colors of the walls: light colors reflect light better than dark colors. The height of the ceilings and the size of the rooms determines how the lighting and the required number of lighting units.

Using the lighting effectively to show the building plays a major role in highlighting the aesthetic design and realizing the architectural scene.I will explain to you how to use lighting to show, and the best lighting types that you can use: 1.Use of lighting in showing the building: 1.1 Natural lighting: Sunlight: The sun is the main source of natural light.You can use it to simulate lighting at a specific time of the morning, back, sunset). In programs such as V-ray and Lumion: You can adjust sun sets to determine time and geographical location, allowing you to control the angles and direction of light. Grunals: Use natural shades with sunlightIt helps in adding depth and realism, especially when mixing light with a soft shade. 1.2 Artificial artificial lighting: General lighting: It is used for general lighting in the scene, without focusing on a specific area. It is preferable to use to distribute the lighting equally on the focus on accurate details.

In V-ray: You can adjust the Global Illumination (GI) that spreads lightly light throughout the scene. Light lights highlights specific areas in the building (such as the entrance or a decorative component (specific. Very useful to highlight architectural details.You can adjust an angle and direction of light, which allows you to add dramatic and directed effects. Reverending lightLinear Lights is good for corridors or ceilings, as it is usually added to the distribution of light along a certain area equally.For the building and make the design look more attractive. In programs like Sketchup and V-Ray: IES lighting can be used that provides realistic lighting files from lighting manufacturers to simulate real lights.

2 The best types of lighting used in architectural show: 2.1 IES lighting: This lighting simulates the shape and reflection of light in the real world, and it is very useful when using realistic lighting units.It adds accurate effects and gives high realism. V-ray and 3 DS Max support IES files, allowing you to choose different shapes of light, such as widespread light or directed light.: V-ray Sun and Sky 2.2 if you want to simulate natural lighting, you canUse V-Ray Sun and Sky settings.These settings mimic sunlight and natural sky, and allow you to adjust the surrounding atmosphere such as clouds and surrounding lighting. Excellent to show the external scenes of buildings, especially in different circumstances of the day (morning, evening, sunset).

2.3: HDRI Lighting (High Dynamic Range Images) 2.3 Used to fully light the environment using the HDRI image This type of lighting gives very realistic results and is often used in external scenes.For the palace and its story, the palace followed a artistic style known as Rococo, a method of interior design that depends on decorative arts and drawing, architecture and sculpture, this concept arose in Paris in the early eighteenth century, but it was quickly adopted throughout France and later inOther countries and kirkuku are the word meaning of chance or irregular conch shape with curved lines from which decorations were derived in that period. The art of inner decorating this model of art appeared in the eighteenth century and is an extension of Baroque, but with aesthetic standards characterized by smooth and tenderness, and this model continued to be flourishing inGermany and France in particular and disappeared from France after the French Revolution, and this art belongs to the decoration in architecture, interior and external decoration, as well as furniture, photography and sculpture, is an art that is emanating from irregular conch, and the beginning of the emergence of this art was in France during the eighteenth century AD, and it returnsTo the classic origins, it is one of the decorative methods that address the static patterns to gain movement and vitality, and this art was drawn from the art of Arab decorative decorations, the Arabeso, as for the architectural aspect, the palace area is about 2698 square meters and was built in most of the palace in the Italian style, where it is considered a model for the art of "Rococo",It is an art that belongs

To the decoration in architecture, interior and exterior decoration, as well as furniture, photography and sculpture, which is an art that is emanated from the uninterrupted shell, and it was the beginning of the emergence of this art in France during the 18th century AD, where an Italian company built it to be a copy of an Italian palace that Habib Al -Sakakini saw and wanted to imitate him orMaking a copy of it in Cairo, the palace consists of 5 floors, the first floor consists of 4 rooms, the second consists of 3 halls, 4 halls and two rooms, while the main hall has an area of ​​about 600 square meters, and contains 6 doors that lead to palace halls, and the total palace room50 rooms, and contain more than 400 windows and door,

And 300 statues, including a bust of Habib Pasha, Sakakini, at the top of the main entrance to the closer, a palace, overlooking a balcony with a round dome that leads to the summer recovery room.It also contains a circular garden around it rich in trees and roses, and although the garden surrounding the palace is not widely expanded, it helped to isolate the palace a kind of modern buildings in the vicinity of the palace around it 6 and the palace contains statues of Sidin with the front of the palace, girls and naked children, and the palace has a conical domes with a design.Bizantine and belonging to the Middle Ages, as there is a beautiful fountain of marble in Durinettic, Habib Pasha Pasha Sakakini Palace from 5 floors, as it combines a number of architectural models known technically among architects, the most famous of which is the romantic style and also the Italian, Roman and Greek style, which is evident in the glass, and we have monitored within the palace elementsHistorical and important decorative belonging to the style of the Rakuko and Baroque, in addition to Islamic decorative elements represented in the niches and the furnished element in the reception hall on the wooden fence, and the palace is topped by a beautiful conical domes and is characterized by the Sakakini Palace.

Information about the Sakakini Palace: The site: The palace is located in the Sayyida Zainab area, and it is close to many other tourist attractions. History: Betty Palace in the nineteenth century, and it is believed that it was the seat of the number of prominent figures in Egyptian history.The Islamic conversion and European attitudes contain a wide courtyard and beautiful gardens.Uses: The palace was used as a residence for many political and social figures, and today it is considered a famous tourist destination. Restoration has been restored in recent years to become a tourist and cultural destination where many events and exhibitions are held. How to build the palace: planning and design has been planned based on the Islamic architectural styleWith the combination of elements of European architecture, it was designed to be a luxurious residence and a place to receive guests. The materials used: as previously denied, limestone, wood, gypsum and brick in construction were used.These materials were available locally and easy to use.Employment: Then the employment of many craftsmen and skilled workers in construction, including builders and sculptors who were responsible for decorative details. The construction period: There is no accurate information about the period that took the construction of the inhabitant palace, but usually large construction projects at that time took severalYears, Rima from 3 to 5 years or more, depending on size and complexity.

Architect: There are no documented information about the name of the architect who designed the Al -Sakan Palace.Often, the major projects were managed by teams of engineers and motives, and not by one person. The surrounding area: Al -Sakan Palace is located in the Sayyida Zainab area, a historical area in Cairo.This region is famous for its mosques and traditional markets, in addition to being close to other landmarks such as: Al -Sayyida Zainab Mosque and one of the most prominent mosques in Cairo. Khan Al -Khalili: a famous historical market that reflects Egyptian culture and history of types of furniture: Wooden furniture: It includes pieces made of high -quality flying, such as carved furnitureThe doors and windows are usually used as cedar or teak wood. Seats and chairs: The halls contain chairs and decorative seats, often covered with luxurious fabrics such as silk or velvet.Tables: There are multi -use tables, including food tables and coffee tables, often decorated with inscriptions and decorations. Decorations and details: inscriptions and decorations: furniture is characterized by accurate motifs, including Arabic inscriptions and vegetable decorations, which highlights the Islamic architectural style. Colors: often: oftenThe colors are rich and warm, with the use of golden colors and bronze in some decorations. Fabrics:

Luxury fabrics are used to cover furniture, such as silk and velvet, and often decorated with beautiful patterns. Lighting: rooms contain chandeliers and lampshades made of stained glass or mineralIt is filled with paintings. The period. Technical: in some places artistic paintings that reflect culture and art in those uses: furniture is designed to be practical and aesthetic at the same time, as it is used to receive guests and establish activities to preserve and restore furniture restoration operations to maintain its original condition, which contributes to preservingOn the cultural and architectural heritage of the palace. The function: the furniture in the palace was not just a piece of decoration, but rather it had multiple functions, from reception to use today the external color: Limestone: the color of the limestone used in building a light gray or beige gray, which gives an appearanceNatural and elegant. Bright colors in some parts, touches of bright colors, such as blue or green, may be found, especially in decorations and inscriptions. Interior colors:

Warm colors: warm colors such as beige, brown, and gold are often used, which reflects luxury and comfort. Colorful fabrics: colored fabrics such as red, blue, and green are used in curtains and furnishings, adding a touch of vitality to the rooms.Colorful decorations: The walls and ceilings contain colored decorations, where gold and silver colors are used in the inscriptions to add a touch of luxury. Decorative details: arches and windows: may contain colored glass, which creates beautiful light effects inside the palace. Walls: may be decorated with different colors that fit withDecorations, such as dusty colors or dark colors that enhance the beauty of design. The story started when Sakakini was a simple factor in the Suez Canal, and his life turned when he found a simple and natural solution to the problem

The rodents of the foundations of the buildings, so Ibn Syria suggested bringing hungry cats and releasing them on the foundations, to eliminate all rodents out of the instinct of survival.This caught the attention of Khedive and caught his admiration, and from that day the life of Sakakini turned from the life of misery to the world of achievements and major architectural innovations. After his solution, the problem of rodents, Khedive assigned Habib Al -Sakakini to a large project, which is the establishment of the Khedive Opera House in the Azbakeya neighborhood in central Cairo.Al -Sakakini used the presence of European engineers who contributed to the drilling of the Suez Canal, to create a palace that combines European palaces and the Islamic style, including his superior ability to integrate various architectural patterns.

Then Habib Al -Sakakini built his unique private palace, which is known today as "Sakakini Palace".He also merged the Egyptian architectural spirit with the European touch in the design of his palace, as he added a half statue for him at the top of the palace and his name was recorded with the history of construction - Habibalkkini 1897- At the entrance to the palace, thereby violating his mark in the history of Egyptian architecture.Then his grandchildren, who gave the palace after the July 1952 revolution to the Ministry of Health to use it as a medical museum and in 1961 until 1983 the Health Education Museum was transferred from Abdeen to the Sakakini Palace to be its own headquarters and followed the Ministry of Health, by order of the Governor of Cairo, while in 1983 a decision was issuedMinisters from the Ministry of Health to transfer the Health Education Museum to the Technical Institute in Imbaba, and some important exhibits were transferred to Imbaba and the rest were stored at that time in a base below the palace. In 1987, the palace was registered among Islamic and Coptic antiquities, according to the Prime Minister No. 1691,To be placed under the auspices of the Supreme Council of Antiquities. Habib Pasha has chosen for his palace an attractive location in Cairo, specifically in the Al -Zahir area, which radiates 8 important and distinctive main roads, and therefore the palace has become a central point in the Al -Zahir area, now in its place in its place in modern buildings, extreme crowds and the view of the palaceFrom the outside, the correct impression will never be given to its vast area, and in the Al -Zahir neighborhood there are many churches, in addition to the well -known Al -Zahir Baybars Mosque, which is one of the largest mosques in Egypt, and it has an altar for the British,

Napoleon Bonaparte fought with him during the French campaign of popular resistance in Al -Husayniyah Street. The phenomenon of Al -Zahir Baybars was established by the Mamluk Sultan Al -Zahir Baybars Al -Bandadiri in 1268/667 AH in the neighborhood that bears his name in the heart of Cairo, and Al -Zahir Baybars is considered the true founder of the Mamluk naval state, similar to planning the Al -Zahir Mosque Baybars, the Prophet’s MosqueIn Medina, Saudi Arabia, which is the same planning that the Ahmed Bin Tulun Mosque came in terms of the plate, surrounded by 4 holes, and the mihrab is above.In the mosque, it reaches the original form, maintaining its historical dye, and restoring its 60 marble columns, and the palace faces several urban problems related to the area surrounding it, including: 1.\* Cracks in the walls \*: many parts of the palace, especially the walls, suffer from cracks resulting from environmental changes and moisture.These cracks affect the structural structure. 2.\*Corrosion of motifs\*: wonderful architectural decorations that decorate the palace, such as inscriptions and colors, have been eroded due to the factors of time and pollution.

3.\* The effect of humidity \*: high humidity in the area around the palace contributed to the damage of parts of the walls and floors, which leads to the formation of mold and fungi. 5.The effect of traffic \*: The proximity of the main streets led to the vibrations of traffic, which contributed to damage the construction structure of the palace. 6.\* Negligence and maintenance \*: The lack of periodic and effective maintenance plans that led to the exacerbation of problems, as the damage is left without treatment for long periods, for example, in the year 2016, Fares Salim Al -Faris, the owner of an import and export company, says in the building opposite the palace directIt appears that the palace was applied to the lime and damaged this color other than the effects that were stolen.Important architecturally, the statue of "angel" and the statue of "Dora Al -Taj, which represented a girl wearing a crown and is considered one of the closest to the statues of the knives and the statueMysterious 8.\* Urban pressure \*: Urban expansion around the palace added additional pressure on the building, which affected its stability.

9. Raising real estate prices \*: Increasing prices may lead to the displacement of the local population, which changes the demographics around the palace. 10.\* Unorganized commercial activities \*: The spread of unlicensed shops may lead to chaos and affect the general view. 11.\*The absence of cultural awareness\*: The lack of awareness of the importance of the historical palace may lead to a reduction in the interest in preserving it, for example, in the year 16, one of the residents of the Sakakini neighborhood, which is called Saeed Taha, said that the palace is surrounded by garbage permanently, because the people of the region throw it around it, while workers may be absentCleanliness is about collecting garbage surrounding garbage for several days. While Mamdouh Mohamed, one of the owners of the shops in front of the Sakakini Palace, said that the palace administration is affiliated with the Ministry of Culture, stressing that it maintains the cleanliness of the palace from abroad, but the people are they who are throwing garbage and garbage workers come

To remove it periodically.Souad Hussein said that she was entering the palace since she was a child, but with time, it was damaged from the inside and outside as a result of neglect, explaining that the piles of garbage surrounding the palace are present.They are just rumors that are not true. 12.\* Loss of green spaces \*: The decline in green areas around the palace due to the random construction can affect the local environment.

13.\* Great Urban Projects \*: The implementation of large projects close to the palace may lead to changing the urban scene and affecting the historical values ​​of the place. 15\* Environmental pollution \*: Increased industrial and commercial activities around the palace contributes to air and water pollution, which negatively affects the state of the building. 16.\* Urban renewal \*: Some new projects may not be commensurate with the historical nature of the region, causing identity loss. 17.Neighboring construction works: near construction activities can affect the stability of the building and cause damage to the facades. 18.\* Institutional negligence \*: The absence of a clear management plan for the site can lead to a continuous deterioration "ignoring the officials about it from the icon of beauty for the shelter of the bats."You have a three -dimensional world simulated by computer, where you can interact with the environment around you as if you actually exist.This is usually done using a special headphone that displays 3D images and a peripheral sound. How can virtual reality be used in projects?

The virtual reality can add a large value to a wide range of projects, here are some examples: education and training, the simulation of realistic work environments to train employees on certain tasks. Explore historical or scientific environments in an interactive way. Providing enjoyable and attractive educational experiences for students. Marketing and sales: displaying products in three dimensions,Which allows customers to see the product from all angles and interact with it. Establishing attractive virtual shopping experiences. Interactive presentations of customers. Real estate: Allowing customers with virtual tours within real estate before buying or renting them. Design and photographing real estate more realistic. Games and entertainment provide immersive and exciting games experiences.Virtual worlds for entertainment and social communication. Engineering and design: Building 3D models and depicting projects before implementing them. Cooperation with the work team in a common virtual environment. Health care students in the field of medicine to perform surgical operations.Treating some mental disorders, such as fear of highlands. The advantages of using virtual reality

An immersive experience: Virtual reality provides a more realistic and interactive experience compared to traditional media. Providing time and costs: Virtual reality can reduce the need for physical and protruding models, which saves time and costs. Increased productivity: Virtual reality can improve the training and learning process, which leads to increased productivity.Communication: Virtual reality can facilitate communication and cooperation between individuals in various places. Virtual reality technology (VR) can be used in projects in several ways, and one of the most prominent areas in which it is used: training and education is used to provide interactive educational experiences, such as training employees in the fields of aviation,Medicine, army. Design and engineering: Engineers and designers can use VR to imagine their projects before implementation, which helps improve designs and discover potential problems.Medical therapy: VR is used in psychotherapy, such as phobia treatment or patient rehabilitation after injuries. Marketing and advertising: Companies can create interactive experiences for consumers, such as virtual tours in stores or products exhibition.Virtual Tourism: It allows people to explore tourist places without leaving their homes.In short, VR technology offers wide opportunities to improve experiences and interact in many industries.

A principle plan for Temmim and reusing the palace: 1- Take a look at the site 2- Simple sketches for what the palace can be turned to (an open museum 3- Work on adjusting the facades and lighting and focusing on using the same materials used to build the palace. 4- VR video manufacture with the resultThe final is a tour of the palace to put an integration of the form of parks and internal decoration.And its artistic moderation.Wi -Back.

E- Trevor Mostyn.Egypt's Belle Epoque... .. an archive of the valuable 2020-03-14.See it on 199-18-6-6- Al-Assafi 22.Arab tourism.Exhibition from the original in 12-12-12.See it on 199-04-17.