



The Hashemite University - Department of Architecture
Architectural Design V - Fall 2017

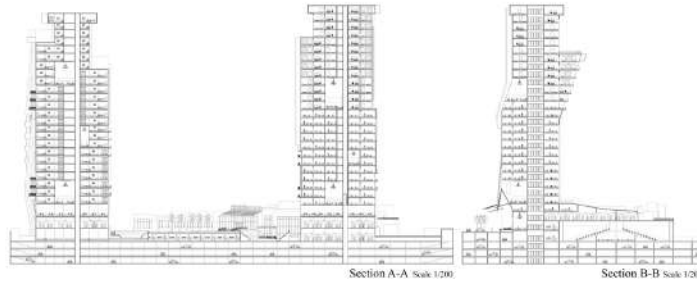
Project: Twin Towers

St. Name: Ammar Sawan

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.



Concept

CONCEPT 1

GROWTH of the Tree = Mixed used GROWTH

The growth of the tree starts from roots horizontally and extends

continue the growth towards the vertical to the top and branch growth and remains linked to trunk



EXPANSION

The buildings were horizontally expanded then converged and merged then vertically expanded from random and horizontal to vertical and regularly



HOW ?

11 The growth of the tree starts from the bottom (roots) HORIZONTALLY and RANDOMLY



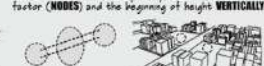
21 Construction began to expand HORIZONTALLY and RANDOMLY



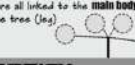
12 The tree continues to grow from main NODE in the ground VERTICALLY and begins to FORMULATE



22 The beginning of the approach of the buildings from each other and the participation of a common factor (NODES) and the beginning of height VERTICALLY



13 The growth of the tree continues with the PRODUCTION of the branches and are all linked to the main body of the tree (leg)



23 The INTEGRATION of buildings to form one MAIN BODY with several functions



SPECIFY

Seed

The link between the podium and tower

Podium

Veins → Circulation

Chaos → Circulation

Shell → Circulation

Form

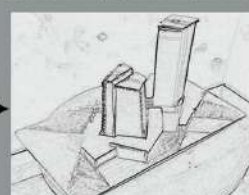
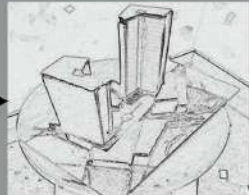
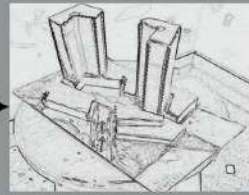
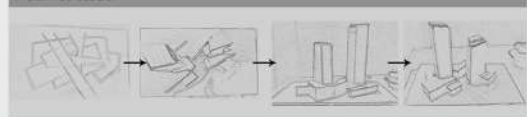
The branches and roots are from the top and bottom only and the body of the tree pure without impurities

Form

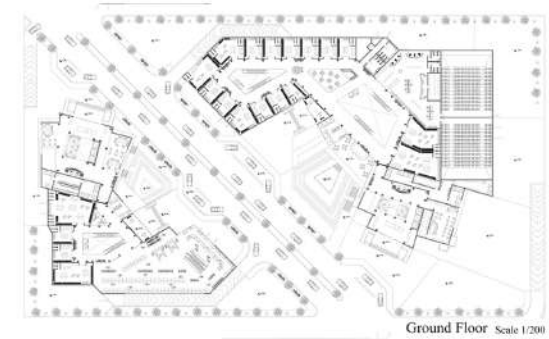
Form

Form

RESULTS



Rendered site plan





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Hotel and office plan



Level 4

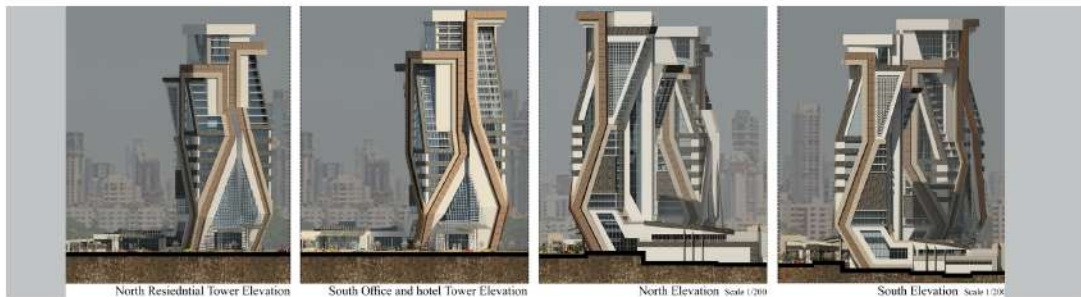


First Floor Scale 1/200

Residential plan



Level 4



North Residential Tower Elevation

South Office and hotel Tower Elevation

North Elevation Scale 1/200

South Elevation Scale 1/200



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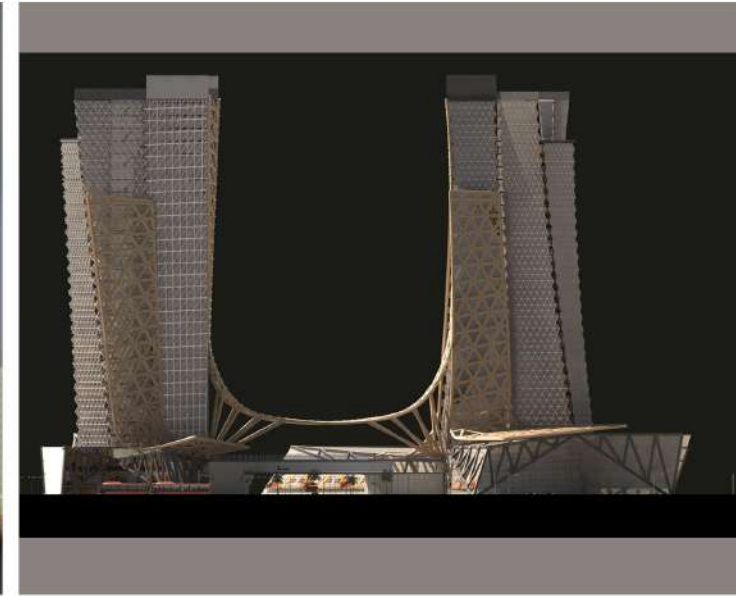
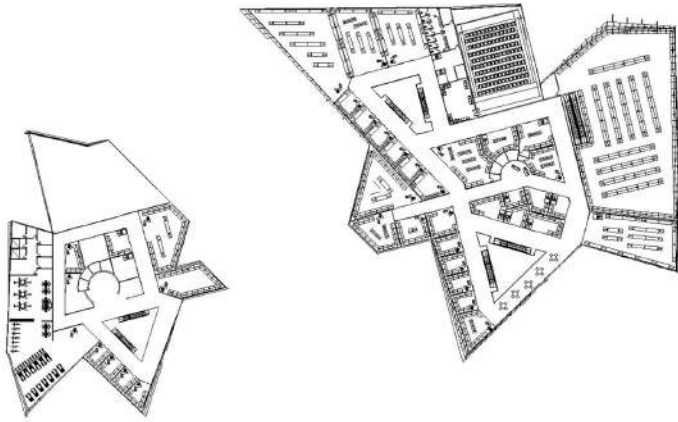
Project: Twin Towers

St. Name: Mohammad AL-Masaafah

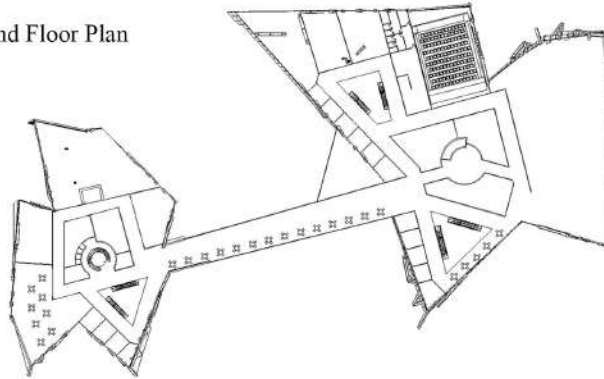
Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

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First Floor Plan



Second Floor Plan



Residential Typical



Hotel Typical



16 TH FLOOR

Office Typical



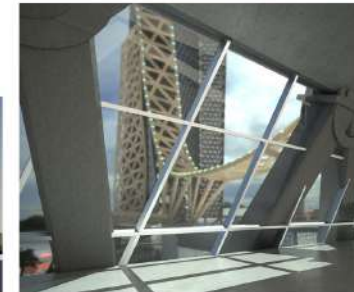
1 TH FLOOR



SOUTH ELEVATION

WEST ELEVATION

EAST ELEVATION





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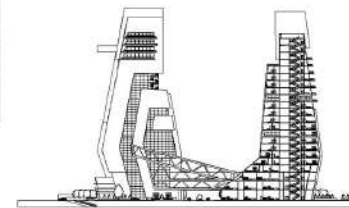


Project: Twin Towers
St. Name: Ahmad Al-Khateeb
Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

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Sections Scale 1/1000



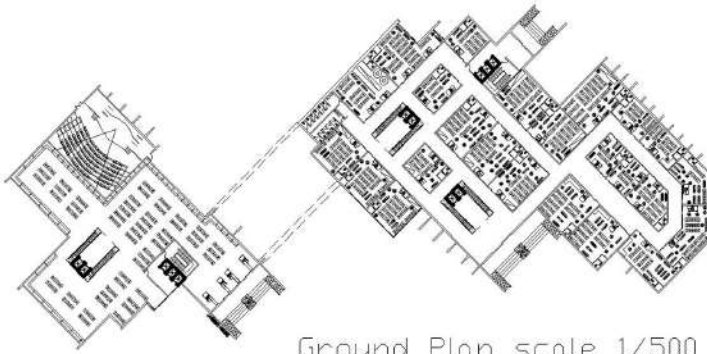
Section A-A



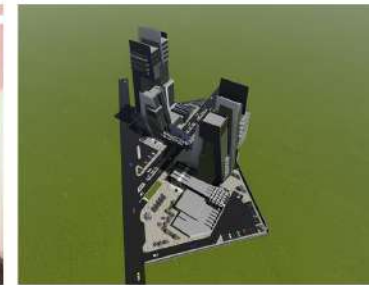
Section B-B

CONCEPT OF THE PROJECT

<p>DESIGN 5 Concept Submission Drawn By: Ahmad Al-Khateeb</p> <p>1. SPINE OF SKY</p> <p>It will be the spine connecting the two towers to the ground.</p> <p>To have a central structure that will provide a vertical connection.</p>	<p>DESIGN 5 Concept Submission Drawn By: Ahmad Al-Khateeb</p> <p>2. CRACKING THE RIGIDITY OF AMMAN CITY</p> <p>Cracking to the rigidity will provide different needs for the top of the skyscraper.</p> <p>Initial Plan</p> <p>Initial Elevation</p> <p>3D Sketch</p>	
<p>DESIGN 5 Concept Submission Drawn By: Ahmad Al-Khateeb</p> <p>2. CRACKING THE RIGIDITY OF AMMAN CITY</p> <p>When you see many skyscrapers in Amman you will see that they are cracking the rigidity of Amman city which will affect the shape of the skyscraper itself.</p>		

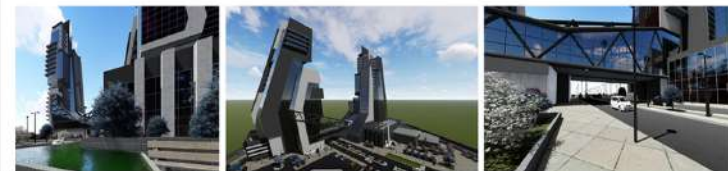
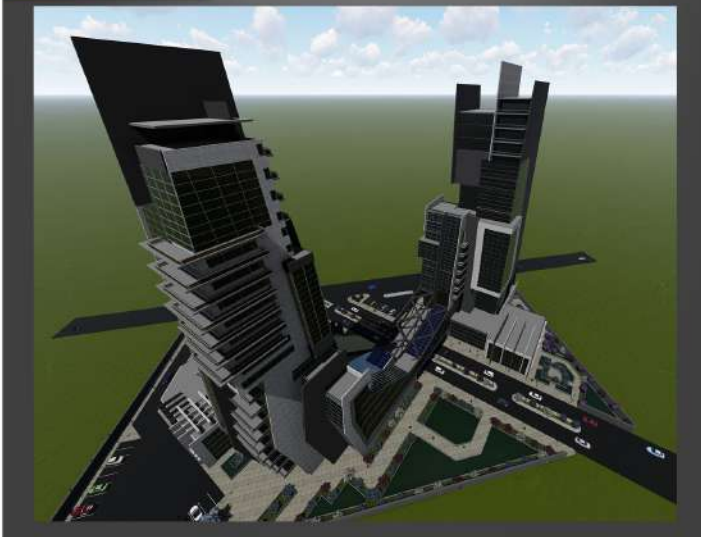


Ground Plan scale 1/500



RENDERED SITE PLAN

BIRD EYE VIEW





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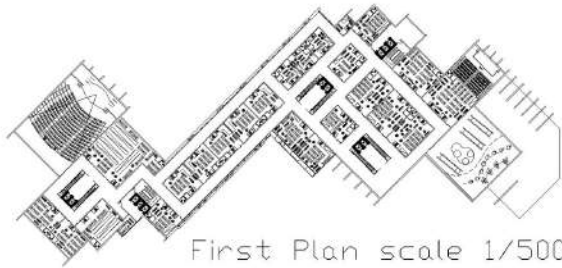
Project: Twin Towers

St. Name: Ahmad Al-Khateeb

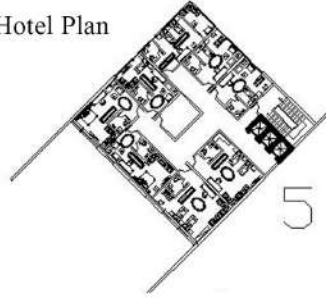
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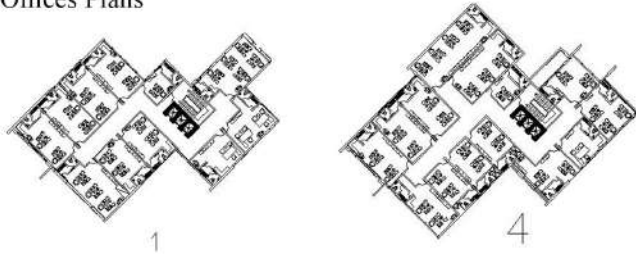
Hotel Plan



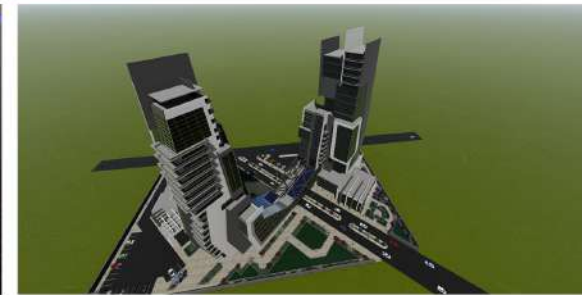
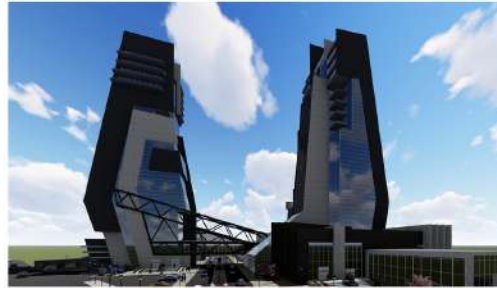
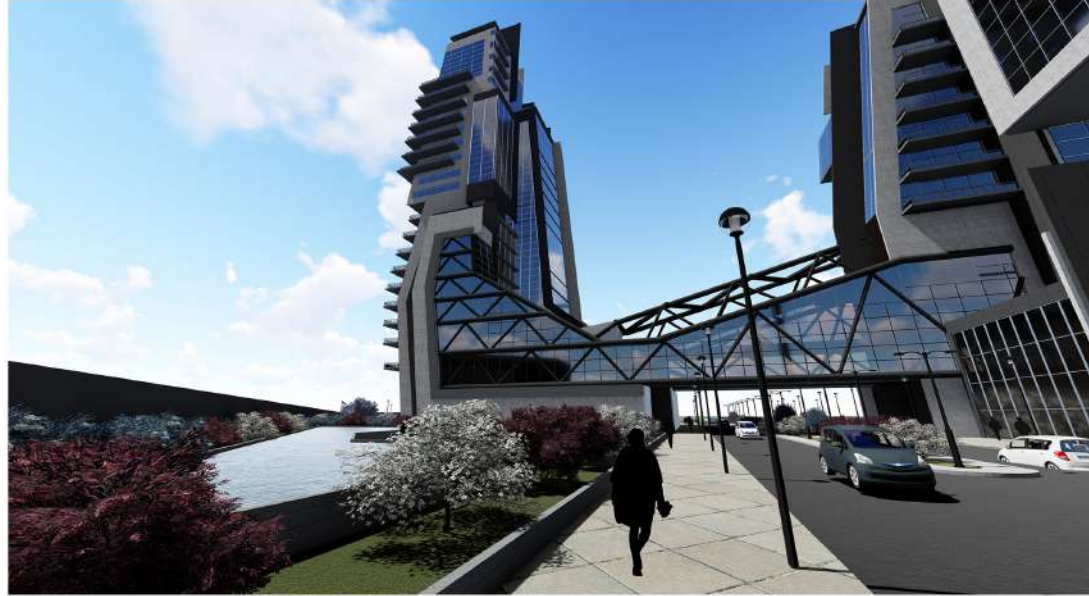
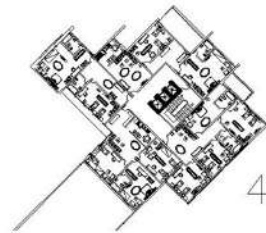
Residential Plan



Offices Plans



Residential Plan



ELEVATION



NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION



The Hashemite University - Department of Architecture
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Project: Twin Towers

St. Name: Hatem Noimat

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.



WEST 2 ELEVATION
SCALE 1/200



TOWER 1 ELEVATION
SCALE 1/200

What

A military building tall enough to require the use of a system of mechanical vertical transportation such as elevators.

Have two or more functions maximize the number of people that can live and work on a fixed space of land.

Who

A user is someone who has access to tower with associated permissions and credentials

Tourists: Usually visit tower at weekends and holidays

Business man: Usually visit the tower to work or to have a meeting

Workers: work at Star The 24 hours

Families: weekly and monthly and in the special events

Why

We chose this project because airport access has got an airport and connects many places together in urban yet lacks the commercial areas

Where

Our site is an Queen Alia International airport near to the site and is near to the al regional university

How

Consistent with the site context and project nature

A form that follows the wind loads

A structure that holds the form

A user system that has a circulation around it

Edges treatment for the wind loads, plane modifications, functions relationships

ACCORDING TO CONCEPT ANALYSIS STATEMENT

"we have stability, continuity and control"

Why?

we seek control tower with its polygonal shape application for the side view of the surrounding and for the control of the movement that what our project aims to

FORMATION

polygons in distinct form part of the airport control towers

BASIC FORM LINES

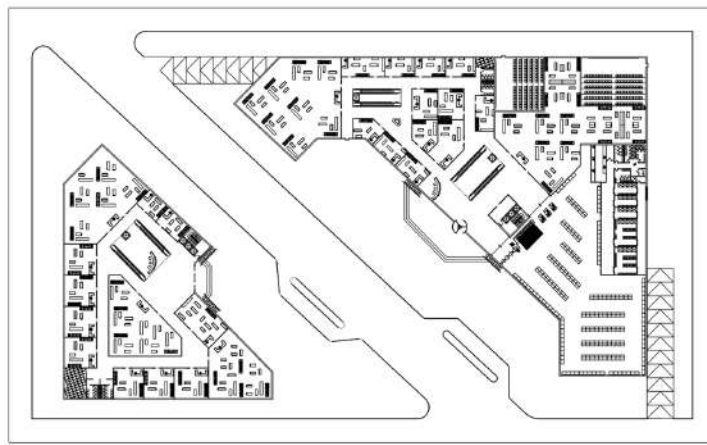
Reflect 30 or 36 by abstract the polygonal shape



RENDERED SITE PLAN SCALE 1/500



Ground floor plan SCALE 1/200





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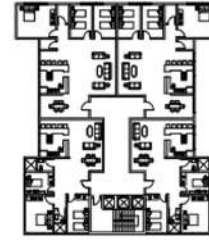
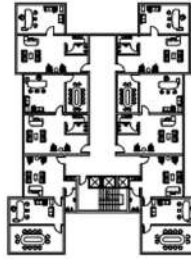
NORTH ELEVATION
SCALE 1/200

SOUTH ELEVATION
SCALE 1/200

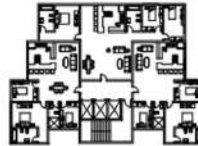
Commercial tower Plans

Residential tower Plans

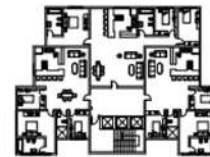
4-9



10-15



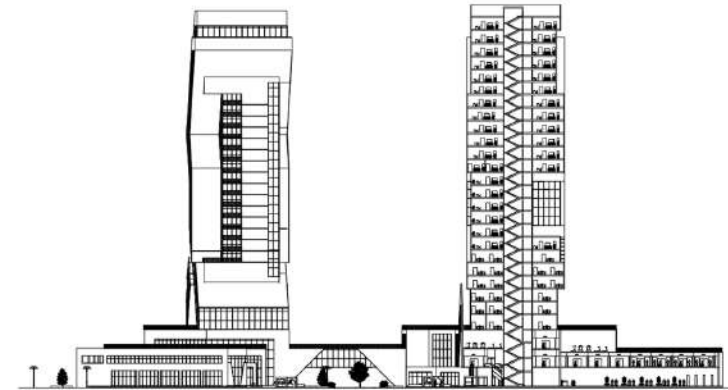
16-21



22-27



SECTION A-A
SCALE 1\ 200





The Hashemite University - Department of Architecture
Architectural Design V - Fall 2017



Project: Twin Towers

St. Name: Majdouleen Al-Nadi

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

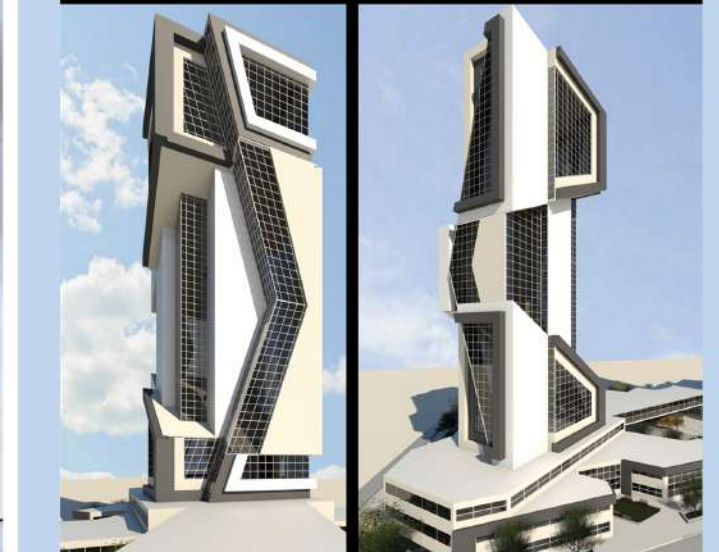
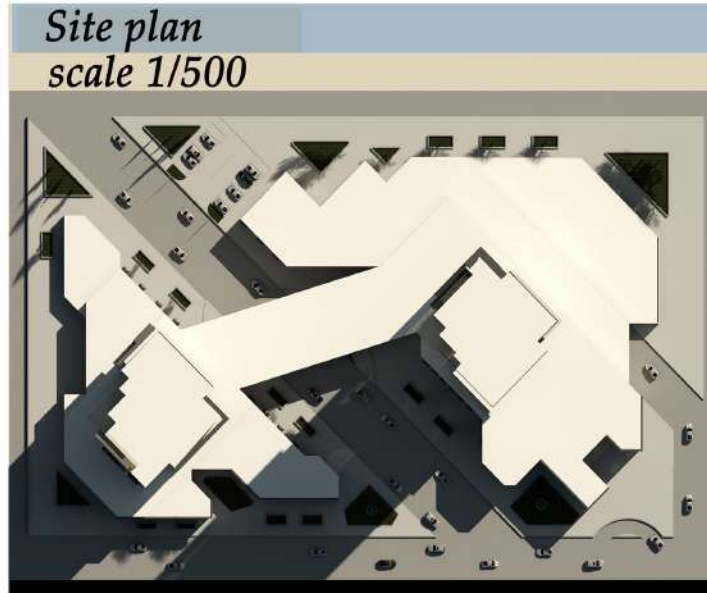
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Nature of project

<h4>1. HISTORY OF HIGH RISE BUILDING</h4> <p>From the ancient Egyptian pyramids to the modern skyscrapers, the history of high-rise buildings is a testament to human ingenuity and the desire for verticality.</p>	<h4>2. ARCHITECTURAL EVOLUTION OF TOWERS</h4> <p>The evolution of towers from simple vertical structures to complex, multi-faceted forms reflects changes in architectural style and structural technology.</p>
<h4>3. FORM MANIPULATION</h4> <p>Exploring various forms and their impact on the building's structure and aesthetics.</p>	<h4>4. GUIDELINES FOR SKYSCRAPER DESIGN</h4> <p>Key considerations for designing tall buildings, including structural integrity, wind resistance, and sustainability.</p>

Concept :The Tectonic Plates

The main node creates a crack in the tower and the podium





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Project: Twin Towers

St. Name: Majdouleen Al-Nadi

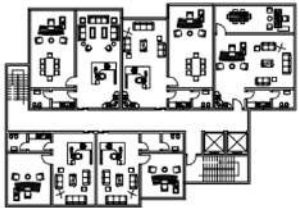
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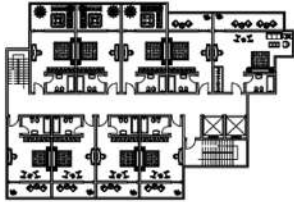
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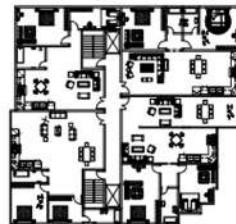
4th Residential Floor Plan
 Scale 1/200



22nd Office Floor Plan
 Scale 1/200

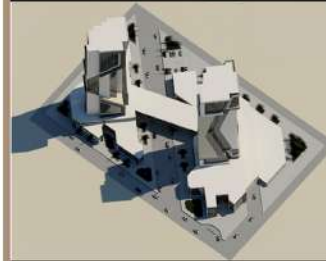


4th Hotel Floor Plan
 Scale 1/200



13th Residential Floor Plan
 Scale 1/200

Bird Eye View



TOWER ELEVATIONS





Project: Twin Towers
St. Name: Maryam Atiyat
Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

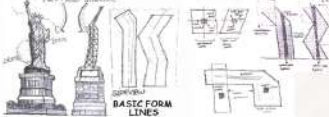
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CONCEPT 01

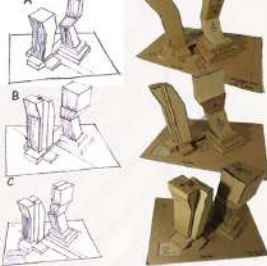
STATEMENT
"status of liberty: education, propriety and evolution"

WHY?
as the status of liberty considered to be a focal point at it's position in the city, the tower should work in the same manner. three main elements are abstracted from the status: book, the flame and the dress as they respicilling respectively education, evolution and propriety.

FORMATION
the form developed as the life organized by the power of education and evolution.



MASS DEVELOPMENT

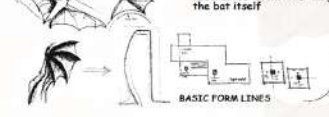


CONCEPT 02

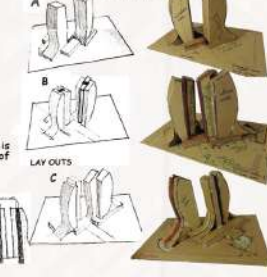
STATEMENT
"the bat : body smooth flow"

WHY?
fluidity of bat body is a significant feature, as the bat going up into the sky the form of the tower in accordance of this reflects the smoothness of the bat's body that is emphasised by the sky. also the elasticity of the structure of the bat body is also reflected in the form as an integration between the podium and the tower body.

FORMATION
the curvature of the tower is abstracted from the wing of the bat itself.



MASS DEVELOPMENT

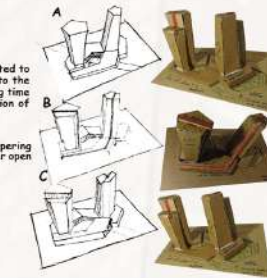
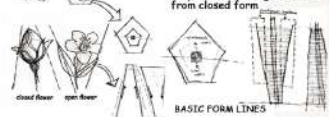


CONCEPT 03

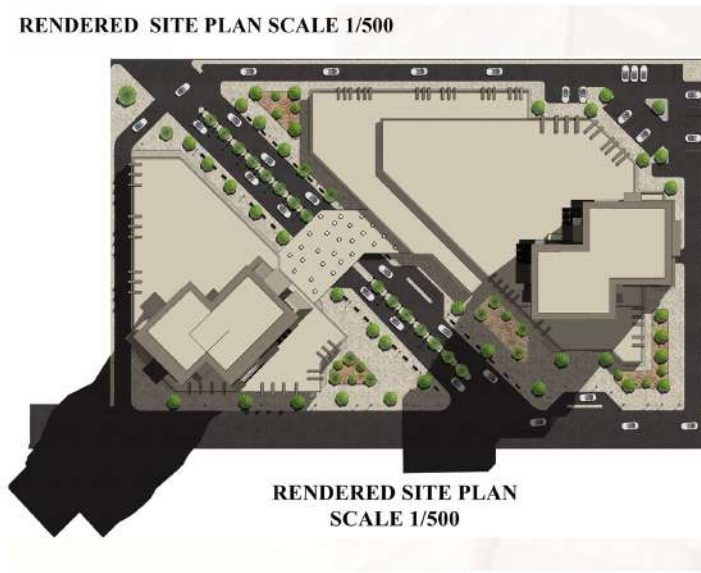
STATEMENT
"the flower : waking up"

WHY?
within a long period of time through the day, flowers are subjected to variation on their forms from the early hours of the morning to the evening, which makes the idea of tower valid as it reflects this long time of variation. pentagon "plan" form was choosed as the distribution of function could be workable and valid

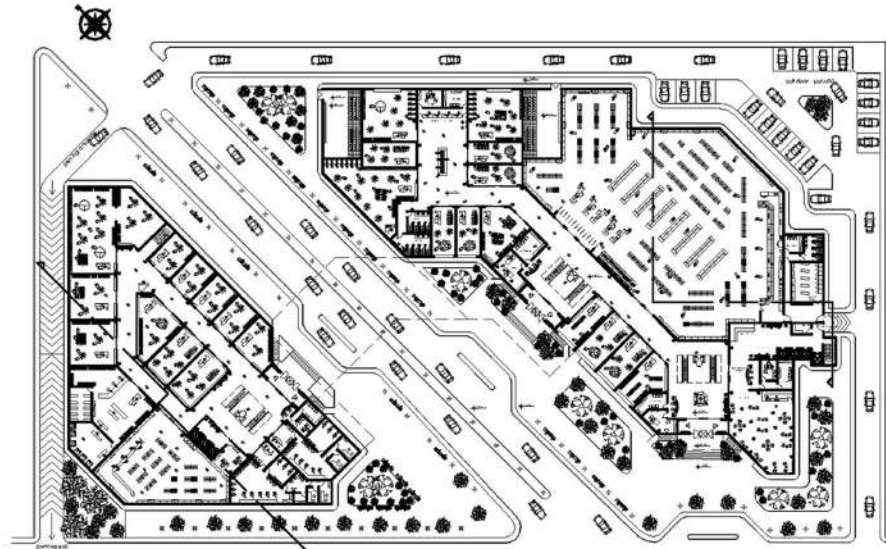
FORMATION
the form of the tower take the tapering shape of the pentagon as the flower open from closed form.



RENDERED SITE PLAN SCALE 1/500



RENDERED SITE PLAN SCALE 1/500



GROUND FLOOR PLAN SCALE 1/200





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Project: Twin Towers

St. Name: Maryam Atiyat

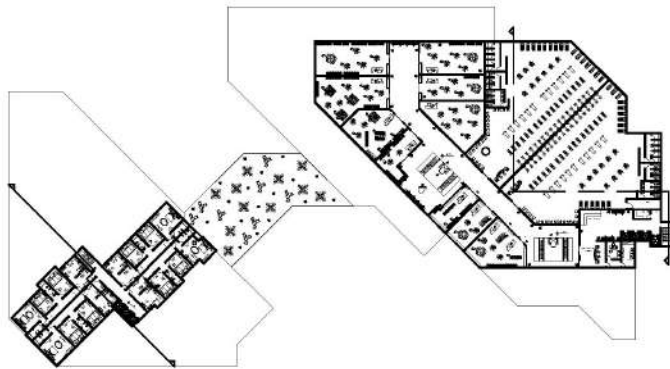
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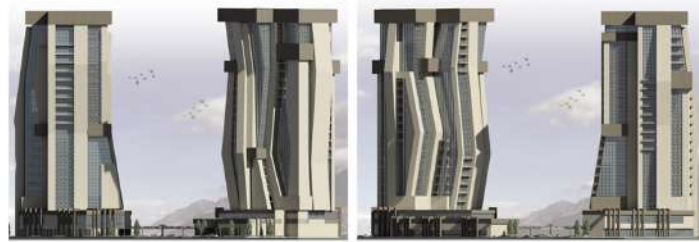
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FIRST FLOOR PLAN
 SCALE 1/200

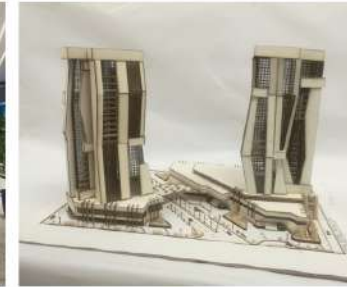
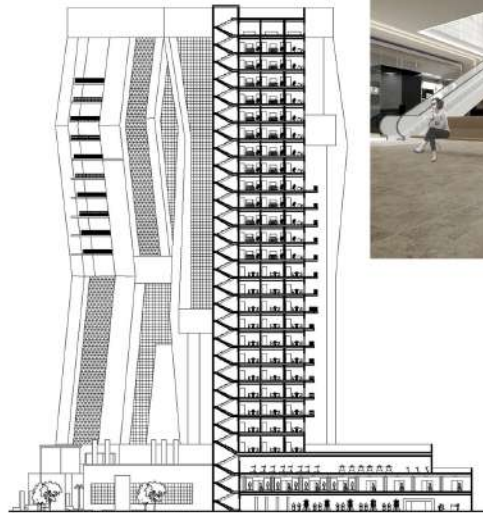
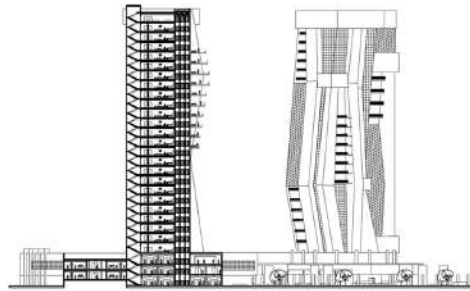


SECOND FLOOR PLAN
 SCALE 1/200



NORTH ELEVATION
 SCALE 1/200

SOUTH ELEVATION
 SCALE 1/200



TOWER 1 ELEVATION
 SCALE 1/200



WEST 2 ELEVATION
 SCALE 1/200



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Project: Twin Towers

St. Name: Mohammad AL-Shawwa

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

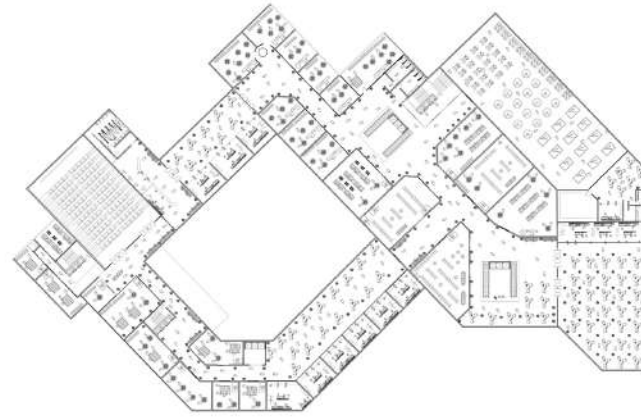
Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.

Residential Plans

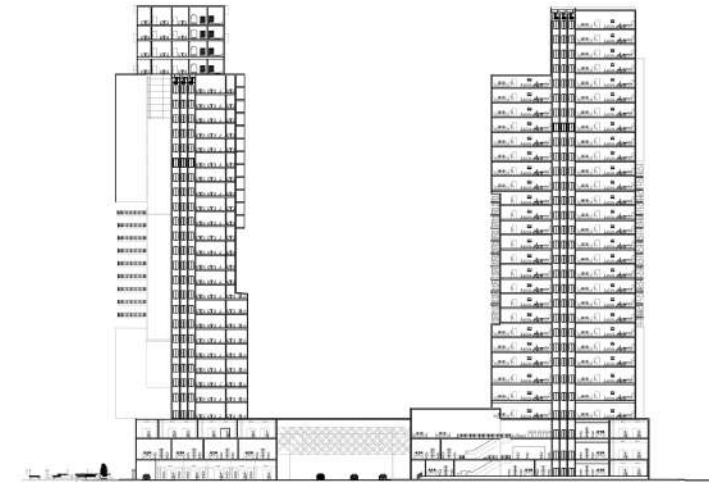


First-Floor Plan

SCALE 1/200



Hotel-Office Plans



SECTION A-A
scale 1/200



The Hashemite University - Department of Architecture
Architectural Design V - Fall 2017

Project: Twin Towers

St. Name: Othman Othman

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.

CONCEPT BUILDING UNIVERSE

ESSENCES CONCEPT



IDEA FORM



PURE MASS



WHY ?
TWO HEXAGONAL CLINDERS AS CONCEPTUAL IDEA TO EXPRESS GROWTH AND BUILDING DEVELOPMENT REFERS TO RAISE AND CONNECT WITH HIGH TO SKY

HOW ?
FROM NATURE OF THE PROJECT... TOWERS ARE BUILT FOR EXPRESS HEIGHT AND VERTICAL SO I CHOOSE THIS CONCEPT FOR TO CLARIFY CONSTRUCTION.

TAPERING SHAPE TO EXPRESS GRADUALLY BUILDING OPERATION
DIVIDED ONE MASS FOR TWO MAIN PARTS FUNCTIONALLY REASON AND TO BALANCE COMPOSITION

ON PODIUM
HEXAGONAL SHAPES ADJACENT TO EACH OTHER FOR EXPRESS BUILDING AND GROWTH... THIS FACTOR FOR MAKE PODIUM

ON TOWER
BUILDING IS GRADUALLY SO THE MAKE MASS TAPERING GRADUALLY FROM DOWN TO UP
RESULT HEXAGONAL SHAPE TO EXPRESS BUILDING AND INCREASE HEIGHT



TO EXPRESS STABILITY AND INTEGRATION WILL MIX BETWEEN TRIANGLE AND RECTANGLE

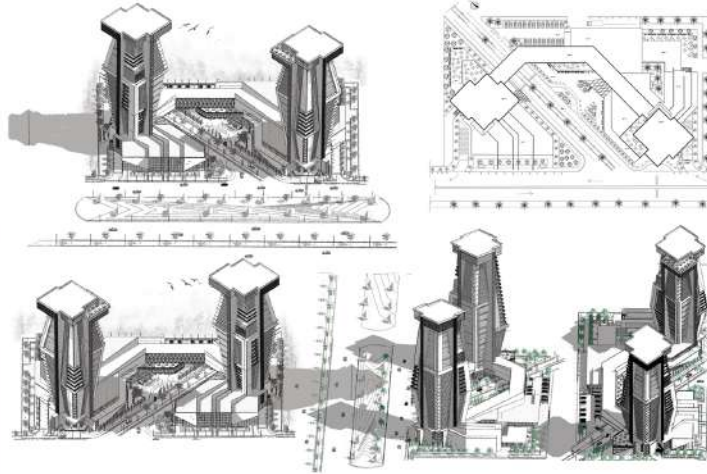


DIAMOND-SHAPE

BIRD EYE VIEW

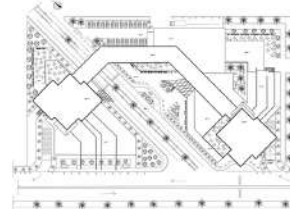


SKETCHY IMAGE



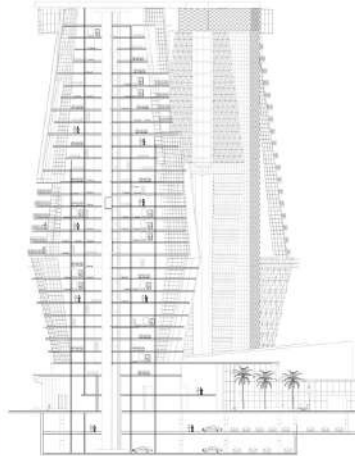
SITE PLAN

SCALE 1/500



SECTION B-B SCALE 1/200

HOTEL KORFFICES



SECTION C-C SCALE 1/200

APARTMENTS





The Hashemite University - Department of Architecture
 Architectural Design V - Fall 2017

Project: Twin Towers

St. Name: Othman Othman

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.

HOTEL & OFFICES

SCALE 1/200



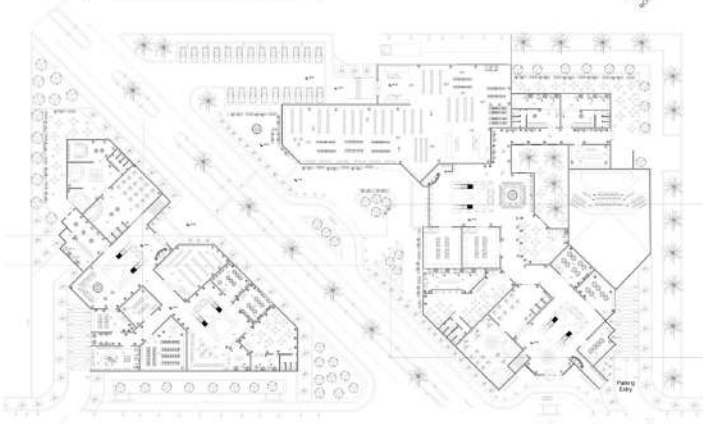
RESIDENTIAL TOWER

SCALE 1/200



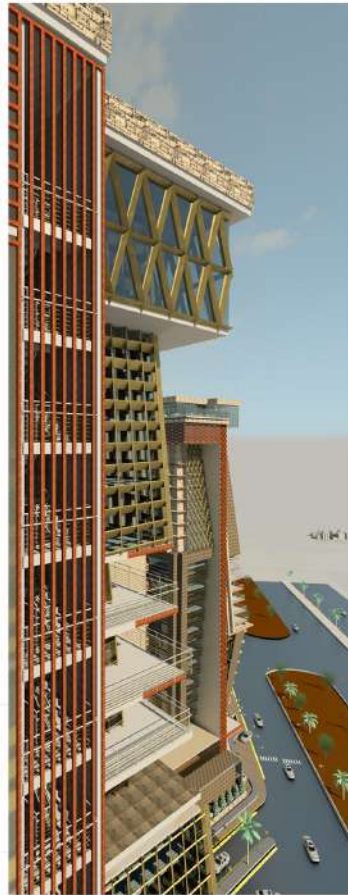
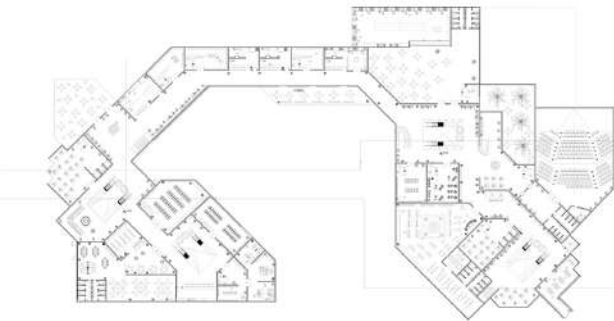
GROUND FLOOR

SCALE 1/200



FIRST FLOOR

SCALE 1/200



ELEVATIONS

SCALE 1/200

WEST ELEVATION

NORTH ELEVATION





The Hashemite University - Department of Architecture
Architectural Design V - Fall 2017

Project: Twin Towers
St. Name: Rula Ajaj

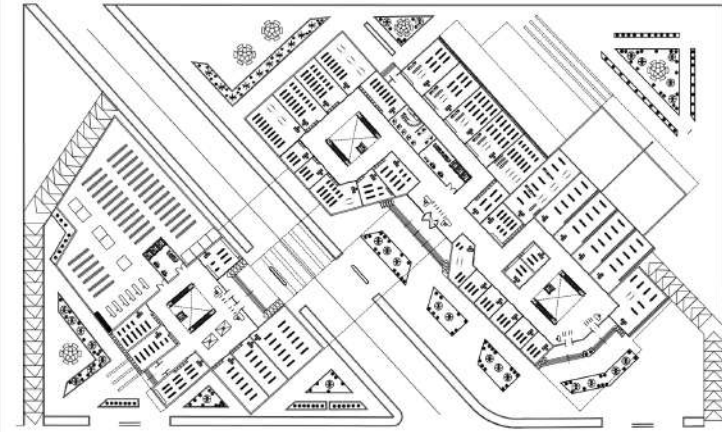
Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



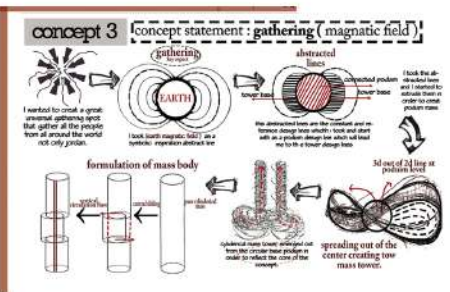
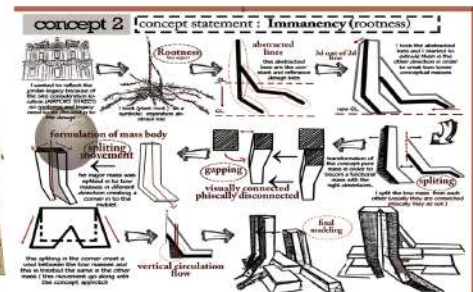
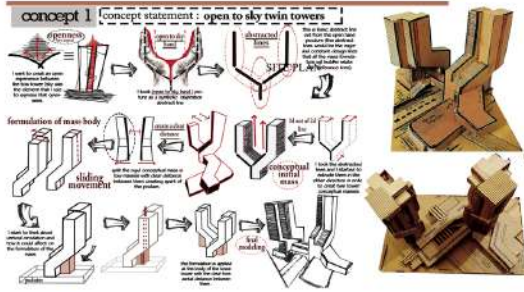
Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.



Ground Floor plan



Elevations





The Hashemite University - Department of Architecture
 Architectural Design V - Fall 2017

Project: Twin Towers

St. Name: Rula Ajaj

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra



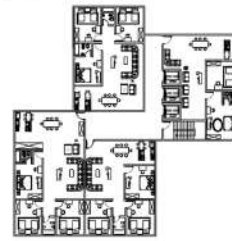
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Typical Hotel Plan



Typical Apartment Plan



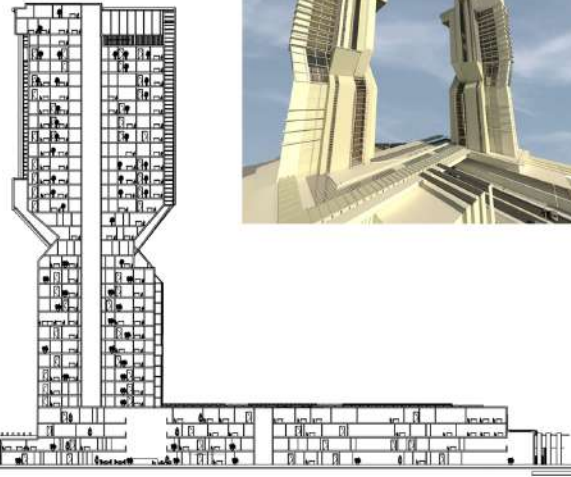
Typical Hotel Plan



Typical Office Plan



Section



SECTION A-A





Project: Twin Towers
St. Name: Yasser Mosallam
Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

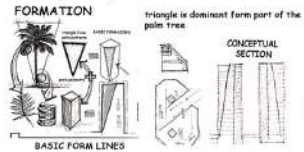
Design of a modern medium to high-rise multi-functional building in the urban context by using comprehensive design methodology including integrating design, building interior, function, circulation nodes, structural, environmental, and construction systems, services core, flow spaces, exterior envelopes, electro-mechanical systems and supporting services, materials selections, life-safety provisions, active/ passive energy systems, site planning, regulations, and principle of sustainability.

ACCORDING TO CONCEPT ONE ANALYSIS

STATEMENT
"palm tree: the glory of the vertical element"

WHY ?

palm trees are dominant visual signages at their media especially if this media is "desert" as the case in our site. the form takes the shape from the tapering form of the palm tree and triangular patterns that's comparable to form the general image of the tree.

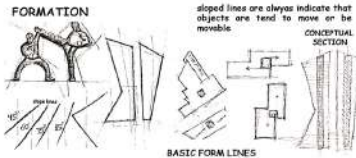


ACCORDING TO CONCEPT TWO ANALYSIS

STATEMENT
"the taekwondo position : dynamic and suspension"

WHY ?

taekwondo players usually seen at the position of flying in the air when they do their trainings. the effect of the dynamic feeling when looking to the picture of taekwondo player is coming from the nature of the inclined body. the body is going up and high which make this valid to be copied the tower.

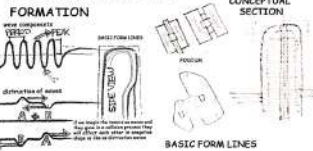


ACCORDING TO CONCEPT THREE ANALYSIS

STATEMENT
"Destructive wave : the inverse effects"

WHY ?

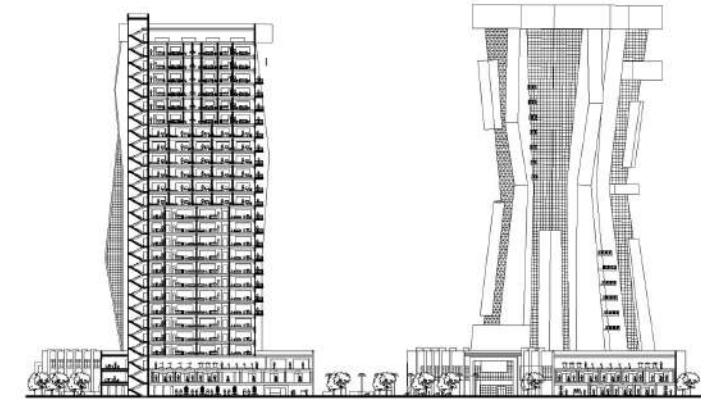
waves are physical quantities those have vertical variations at their top and bottom. also they have different frequencies. when low or more waves intersects at a point they affect each other either by building or destruction. at destruction process the wave "negatively" affect the other one and give a net zero wave. as this negative effect happens the tower masses should interact in this manner.



RENDERED SITE PLAN SCALE 1/500



TOWER 1 ELEVATION SCALE 1/200





The Hashemite University - Department of Architecture
 Architectural Design V - Fall 2017

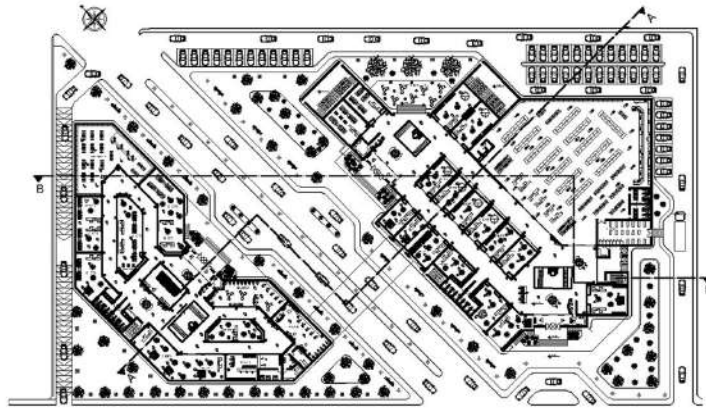
Project: Twin Towers

St. Name: Yasser Mosallam

Supervisor: Dr. A. Al-Husban Arch. E. Khassawneh Arch. L. Shqra

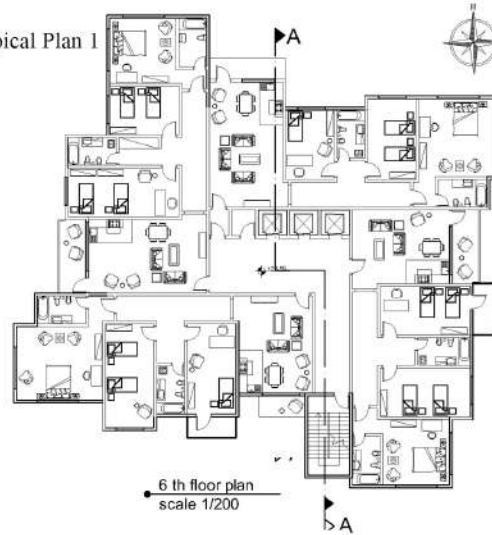


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GROUND FLOOR PLAN SCALE 1/200

Typical Plan 1

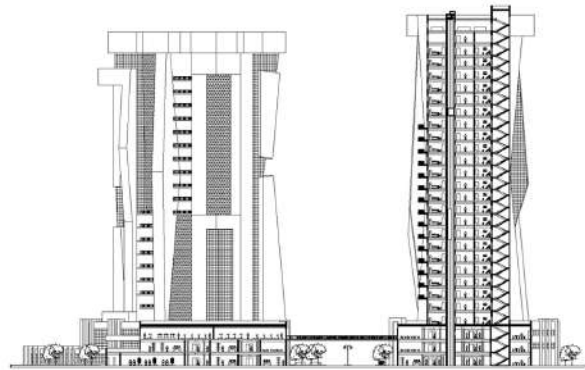


6 th floor plan scale 1/200

Typical Plan 2



14th floor plan scale 1/200



BIRD EYE SHOTS

