



**University of
East London**

Pioneering Futures Since 1898

SCHOOL OF ARCHITECTURE, COMPUTING & ENGINEERING

Submission instructions

- All group member ID's to be included on the first page of assignment.
- All pages to be numbered sequentially
- All work has to be presented in a ready to submit state upon arrival at the ACE Helpdesk. Assignment cover sheets or stationery will **NOT** be provided by Helpdesk staff

Module code	CN4000 /CD4000		
Module title	Information Systems Modelling and Design		
Module leader	Arish Siddiqui		
Assignment tutor	Arish Siddiqui, Solomon Alexis, Hisham Abougrad, Umar Mukhtar, Joseph Annan and Madhav Theeng		
Assignment title	Coursework: Group Assignment		
Assignment number	One		
Weighting	80%		
Handout date	18-Oct-2021		
Submission date	16-Dec-2021		
Learning outcomes assessed by this assignment	1-8 in the Module Spec		
Turnitin submission requirement	Yes	Turnitin Grade Mark feedback used?	No
UEL Plus Grade Book submission used?	No	UEL Plus Grade Book feedback used?	
Other electronic system used?		Are submissions/feedback totally electronic?	Yes
Additional information			



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Form of assessment:

☐ Individual work ☒ Group work

For **group work** assessment which requires members to submit both individual and group work aspects for the assignment, the work should be submitted as:

☒ Consolidated single document ☐ Separately by each member

Number of assignment copies required:

☒ ☐ ☐ Other ☐ Other

Assignment to be presented in the following format:

- ☒ On-line submission
- ☐ Stapled once in the top left-hand corner
- ☐ Glue bound
- ☐ Spiral bound
- ☐ Placed in a A4 ring bound folder (not lever arch)

Note: To students submitting work on A3/A2 boards, work has to be contained in suitable protective case to ensure any damage to work is avoided.

Soft copy:

- ☐ (to be attached to the work in an envelope or purpose made wallet adhered to the rear) adhered to the rear)
- ☐ wallet adhered to the rear) adhered to the rear)
- ☒ Soft copy not required

Note to all students

Plagiarism is a serious offence --please do not jeopardise your degree and please submit your assignment before the due date.

Group Work Assignment – 80%

Please read the whole assignment to ensure you understand all the requirements before you begin.

This assessment should be attempted in groups of **4 students**. These groups must be formed within your tutorial groups by 25-10-2021. Please give list of your group members to your tutor or add details in the excel file for your respective groups. Your Group Number Must be Written as **Group 1.1** (where “1” is your main tutorial group and “.1” is your assignment sub group) failure to comply may lead to missing your mark.

You must keep regular minutes of any meetings that you have while undertaking this course work as they will be required if there is a dispute about any members' contribution. Your minutes should:

- be dated
- include a list of all group members present and apologies for any absences
- include allocation of work to be achieved by each member by the next meeting
- include the time, date and venue of the next meeting
- be signed to indicate the agreement of all group members, present or not.

You are required to submit with your Assignment a statement signed by each member of the group stating that you have all participated and that the mark awarded should be shared equally. The original of this agreement goes to your Tutor and an electronic copy goes in your assignment. Refer to the attached template, **Without this statement marks cannot be allocated.**

In the event of a dispute about a particular member's contribution to the coursework, you should make an appointment with the module leader no later than **1 week** before the submission date. All group members will be required to attend this meeting. The module leader's reserves the right to alter an individual's grade in the light of any evidence of unequal contribution. It is envisaged that such occurrences will be rare.

All individuals will receive the group grade for this coursework unless clear evidence is provided of unequal contributions.

The marking criterion for the Coursework is based on the assessment criteria at the end.

Deliverables

Assignment Report of no more than 2500 words (60%)

Q1) Select a Hotel Company of your choice that employs a wide variety of computer-based information systems in order to support their activities. Considering the chosen organisation you are required to:

- (a) Give a brief introduction of the chosen business and then identify the types of computer-based information systems that are likely to be used by the organisation to support its Business that will include both in-house and online. Describe the system in detail, identifying the hardware, software, data and people resources it employs.

(5 Marks)

- (b) Selecting one of the systems identified in (a), conduct detailed system analysis using various techniques and suggest improvements to make the system more efficient for the identified business purpose. E.g. Manual to Online booking or Website to a Mobile Application.

(5 Marks)

Q2. Following the information gathered above, you are proposing a new system to the organisation. Explain the systems development life cycle and the Information System modelling and design methodology) e.g. Agile, Waterfall, etc) that will be applied towards the development of the proposed system.

(10 Marks)

Q3. Since the organisation has a large amount of data, what security measures are in place to safeguard this data? Highlight the social, ethical and legal issues associated with managing such data.

(5 Marks)

Q4. Evaluate the roles undertaken by the group members, every member should write their own evaluation to complete this project as a group and explain how the overall project was managed. You should also provide evidence of the same in the form of the following :

- a) The software package used e.g. MS Project
- b) Gantt Chart
- c) Minutes of the meeting.
- d) Task Allocation
- e) Task evaluation

(5 Marks)

Q5. Modelling and Designing of the above proposed system.

In this section you will be Modelling and Designing the Proposed Hotel Management System that should at least meet the following system requirements:

The Hotel Company may have a single or multiple branches across the UK and the World. Each branch will have staff who will be assisting their customers with their bookings both in the branch as well as over the phone. Each branch will have at least a Receptionist, Manager and an Assistant. The company has a range of rooms and services across all the branches, therefore, it is vital that the system keeps a record of all the room details that they manage in each branch and the details of the person who is responsible for checking the room before handing it over to the customer. A customer shall make single or multiple bookings according to their requirements that may include the type of room and the rental duration. The company would also like to give flexibility to its customers to make and modify their bookings by using the online portal but the cancellations can only be done by either the manager or the receptionists approval. Once the booking has been made the customer must pay the full booking amount before the room can be booked and the invoice can be issued. Payment can be made using cash, card or PayPal. In addition to the rental costs, the customers also have the choice of adding meals, airport/station pickup and additional protection insurance in case of any accidental damage.

1. Draw an Entity Relationship Diagram (ERD)

Identify the entities you would require to construct an IS system for the Room Booking and Management for the given scenario. Show how these entities relate to each other in an entity relationship diagram including any assumptions.

(10 Marks)

2. List all the attributes that you have identified in each Entity using MS Access. You should provide the screenshots of MS Access. You must also highlight the Primary keys, Foreign keys, Data types and null/not null values in a schema table.

(5 Marks)

3. Use Cases

Undertake an analysis of the requirements for the system required by the **Hotel Management System** and produce a list of **use cases** and **use case descriptions**. Also, take into consideration that a customer can also login to the system and make a booking themselves or ask the employee to do for them either in person or over the phone, both Customer and staff can also print the documents. However, cancellations can only be done by the receptionist or the Manager.

(10 Marks)

4. **Your work must demonstrate an appropriate understanding of academic writing and integrity. E.g., References, Turnitin report etc.**

(5 Marks)

5. **Group presentation (15 Min).**

(20 Marks)

Agreement of Participation – Group Assignment CN4000

Please complete this agreement and keep a copy for each member of your group. The original of this agreement goes to your Tutor and the Electronic copy goes in your assignment.

We agree to work as a group (**a group of 4**) to complete the coursework for CN4000 and understand that the grade awarded will be the grade allocated to us individually as a result of our group work.

Student No.	Name (block letters) and eMail Address	Signature

Note: Students should form their groups (a group of 4) within the SAME Tutorial / Practical. This should be part of the report electronically. You need not get it signed manually.

Tutorial / Practical Number: _____

Tutor's Name: _____

Date of agreement _____ 2021

Assessment Criteria

Deliverables

Each of the four elements in the short report will be marked using the following scale:

Short Report elements – Assessment Criteria	Grade Band
Excellent coverage of issues with good exemplification and a complete list of references along with turnitin report.	70-100% Excellent
Good coverage of issues with some relevant exemplification with adequate references.	60-69% Good to Very Good
Adequate coverage of issues with little exemplification	50-59% Satisfactory to Good
Unclear coverage of issues but little exemplification	40-49% Pass standard
No relevant material or very little relevant material	0-39 Fail

Deliverable – ERD	Grade Band
There is a clear indication in the answer that students have fully understood the problem domain and spent a considerable amount of time iterating over different solutions. All relevant entities, data attribute, and relationships have been identified and many-to-many relationships have been eliminated. Documentation is to a professional standard along with a complete list of references.	70-100% Excellent
Most of the relevant entities, data attributes and relationships have been identified. Many-to-many relationships have been eliminated. Any assumptions have been justified in the context of the case study and problem domain. Documentation is of a high standard and there is an evidence of iteration and adequate referencing.	60-69% Good to Very Good
About half of the relevant entities, data attributes and relationships have been identified. The standard of documentation is satisfactory. Evidence of iteration will be patchy.	50-59% Satisfactory to Good
Very little or no iteration. Less than half of the relevant entities, data attributes and relationships have been identified. The standard of documentation is generally weak.	40-49% Pass standard to satisfactory

Significant errors and misunderstandings. Entities, data attributes, and relationships have not been identified correctly. Level of detail is inappropriate. Documentation is poor. Task not attempted or incomplete or fails to identify the most obvious points.	<i>0-39 Fail</i>
Deliverable – Use Case	Grade Band
There is a clear indication in the answer that students have fully understood the problem domain and spent a considerable amount of time iterating over different solutions. All relevant actors and use cases have been identified and their relationships clearly shown. Documentation is to a professional standard.	<i>70-100% Excellent</i>
Most of the relevant actors and use cases have been identified. Any assumptions will be justified in the context of the case study and problem domain. Documentation will be of a high standard and there will be an evidence of iteration.	<i>60-69%</i> Good to Very Good
About half of the actors and use cases have been identified and there will be no redundant use cases. The standard of documentation is satisfactory. Evidence of iteration will be patchy.	<i>50-59%</i> Satisfactory to Good
Very little or no iteration. There may be a number of redundant use cases. The standard of documentation is generally weak.	<i>40-49%</i> Pass standard to satisfactory
Significant errors and misunderstandings. Actors and use cases have not been identified correctly. Level of detail is inappropriate. Documentation is poor. Task not attempted or incomplete or fails to identify the most obvious points.	<i>0-39 Fail</i>

CN4000 Information Systems Modelling and Design (20%)

Students to fill this information. Examiners will not be liable for any mistakes in student ids.

Group No:

Group Member (Student No):

**All students agree to equal distribution of marks? : Yes/No IF
No state percentage for each.**

The following is a checklist of things that **MUST** be present in order that this assessment point may go ahead. If any of the items are missing the student is deemed to have **FAILED**. It is the group's responsibility to have brought the items on the checklist with them.

Item	Present	Not Present
ALL Group Members		
Necessary resources		
All students agreed distribution of marks		

Assessment

Please mark the following criteria. All marks are out of a total of 20.

Clear, concise and all the group members played an active part		2 Marks
Business introduction		4 Marks
Use Case		5 Marks
ERD		5 Marks
Project plan		2 Marks
Presentation submitted with group report and the recording link provided in the report and Teams Group channel?		2 Marks

Overall Mark:

Assessors should show their comments on the back of this form.

Signed:

As Assessors

Date: