

### 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 <u>NOT</u> be\_provided by Helpdesk staff

| Module code                                   | CN4000  |  |     |
|---|---|--|-----|
| Module title                                  | Information Systems Modelling and Design  |  |     |
| Module leader                                 | Arish Siddiqui  |  |     |
| Assignment tutor                              | Arish Siddiqui, Solomon Alexis, Mahmud, Hisham Abougrad,<br>Nabeela Berardinelli, Madhav, Mayank, Riazul, Reena |  |     |
| Assignment title                              | Coursework: Group Assignment  |  |     |
| Assignment number                             | One   |  |     |
| Weighting                                     | 80%   |  |     |
| Handout date                                  | 21-Oct-2024   |  |     |
| Submission date                               | 18-Dec-2024   |  |     |
| 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                        |   | , -  | 1   |



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| Form of   | f assessment:   |  |  |
|---|---|--|--|
| Indi  | vidual work   |  |  |
| _   | <b>up work</b> assessment which requires members to submit both individual and group spects for the assignment, the work should be submitted as:                                    |  |  |
|   | Consolidated single document Separately by each member  |  |  |
| Numbe   | r of assignment copies required:  |  |  |
| $\boxtimes$   | Other Other   |  |  |
| Assignn   | nent 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:   | <b>lote:</b> 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 co   | ργ:   |  |  |
|   | (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 **24-10-2024**. 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%)

Task 1. Select an organisation of your choice which could be an Insurance company, Events Venue, Banks, Holiday booking, Retail etc.

Your chosen organisation seeks to employ information systems (IS) and technology (IT) specialists in order to support its objectives. Considering the chosen organisation, you are required to:

Task 1.a Briefly introduce the chosen business, and then, identify the types of IS and IT specialists that the organisation is likely used to support its business, including both inhouse and online (outsourced). Describe the system in detail, identifying the hardware, software, data and people resources it utilises.

(5 Marks)

Task 1.b Select one of the systems identified in (1.a), conduct detailed system analysis using various techniques and suggest improvements to make the system more efficient for the identified business purpose. For example, Online bookings, Schedule, HR management (employee app) ...etc

(5 Marks)

Task 2. 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)

Task 3. Since the organisation has a large amount of data, what security measures are in place to safeguard such data? Highlight the social, ethical and legal issues associated with managing the organisation's data to ensure data privacy.

(5 Marks)

- Task 4. Explain the roles undertaken by the group members, and every member should write their own responsibilities to complete this project as a group, and explain, how the overall project was managed. You should also provide evidence in different forms as following:
  - Task 4.a The software package used, e.g. MS Project
  - Task 4.b Work breakdown structure (WBS) and Gantt Chart
  - Task 4.c Minutes of the meeting.

(5 Marks)

### Task 5. Modelling and Designing of the proposed system (Above):

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

The company may have single or multiple branches across the country or globally. Each branch will have staff who will assist their customers with their operations both in the branch and over the phone. Each branch will have at least a Manager and an Assistant with other roles needed for their operations, including sales, admins, ...etc. Based on your selected system, consider the company's conditions, from flexible orders to VIP deposits (or booking fees), cancellations, modifications charges, payments...etc.

## Task 5.a Draw an Entity Relationship Diagram (ERD)

Identify the entities you would require for developing an information system app for your organisation and management for the given scenario. Show how these entities relate to each other in an ERD, including any assumptions.

(10 Marks)

**Task 5.b List all the attributes you have identified in each Entity:** You could use Draw.io or 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)

#### Task 5.c Use Cases and/or DFD

Undertake an analysis of the system's requirements **and produce a list of use cases and case descriptions**. Also, consider security issues, such as what privileges a customer can have when logging into the system instead of asking the employee to do for them either in-person or over the phone. For example, a customer may need a PDF copy of deposits/bookings, receipts. In contrast, an employee may want to print these. However, refunds can only be authorised by the receptionist or the manager. Repeat the same process by creating a more detailed level 0 DFD. You may include one of the processes at level 1.

(10 Marks)

Task 5.d Your work must demonstrate an appropriate understanding of academic writing and integrity (e.g., use of Harvard Referencing, Turnitin report, etc).

(5 Marks)

| Task 5.e Group presentation (15 Mins). | The presentations will take place during your |
|--|---|
| Tutorial sessions in Week 11.          |   |

**(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            | 2024 |

You just need to put these details in your report. The Form is for your future reference.

# **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 <i>to</i> Very Good       |
| Adequate coverage of issues with little exemplification  | 50-59%                         |
|  | Satisfactory <i>to</i><br>Good |
| Unclear coverage of issues but little exemplification  | 40-49% Pass<br>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%<br>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%<br>Satisfactory <i>to</i><br>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%<br>Pass standard <i>to</i><br>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.   | 0-39 <b>Fail</b>                                  |
|--|---|
| 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. | 70-100% Excellent                                 |
| 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.  | 60-69%<br>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.   | 50-59%<br>Satisfactory to<br>Good                 |
| Very little or no iteration. There may be a number of redundant use cases. The standard of documentation is generally weak.  | 40-49%<br>Pass standard <i>to</i><br>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.   | 0-39 <b>Fail</b>                                  |

| UNIVERSITY OF EAST LONDON                         | Group: |
|---|--------|
| School of Computing, Architecture and Engineering |        |
| Assessment form for Presentation                  |        |
|   |        |
|   |        |

| CN4000 Information System | ms 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 points and the following is a checklist of things that MUST be present in order that this assessment points are the following that the following the following that the following that the following the following that the following the following that the following the followin |  |

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  | 2 Marks |
|---|---------|
| active part   |         |
| Business introduction                               | 4 Marks |
| Use Case  | 5 Marks |
| ERD   | 5 Marks |
| Project plan  | 2 Marks |
| Ability to handle questions/include presentation in | 2 Marks |
| report  |         |

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|---------|--------|--|---|
|         |        |  |   |
|         |        |  |   |
| Overall | Mark:  |  |   |
|         |        |  |   |

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

Signed: As Assessors Date: