

## File Naming

Submit your Milestone 2 work using the naming guidelines provided as below before the Milestone 2 deadline. The document should include the below guidelines. Convert it to PDF and submit it in MST.

**LondonMetID <space> Student Full Name.PDF**

**Example: 2204567 Kushal Sharma.PDF**

## Structure and Formatting

- Use A4 Paper
- Use 1.5 Line Spacing,
- Use the Font – Times New Roman
- Use Font Size
  - 12 Points for Normal Text
  - 13 Points for Sub – Headings
  - 14 Points for Headings
- Leave a blank line between paragraphs
- Justify your Paragraph (Full Justified)
- Use your Spellchecker on to check for Spellings errors
- Use Feature of WORD to create **Table of Contents** with proper Heading and Sub-Heading
- Use Feature of WORD to create **Table of Figures**. **Table of Figure Caption** should be below the **Figure** and Center Justified
- Use Feature of WORD to create **Table of Tables**. **Table of Tables Caption** should be above the **Table** and Center Justified
- Number the **Table of Tables** and **Table of Figures** from the **Introduction Section** of the Report
- Use formal language (Don't use 'don't' or 'wouldn't' etc. – say 'do not' or 'would not'. *Do not use 'lots of' or 'lots', 'basically', or other imprecise words.*)
- Refrain from using First Person (e.g. I, My)
- Refrain from using Page Border
- Put your **Module Id** on the Left and **Module Name** on the Right in the **Header Section** and **Student Id** and **Student Name** on the Left and **Page Number** on the Right in the **Footer Section** on each page. **Header**, **Footer** and **Page Number** should start from the **Introduction Section** of the Report
- Reference correctly with Harvard Style Referencing (a properly structured list at the end of your Report detailing all the books, web sites etc. you have cited)
- *FINALLY, PAY ATTENTION TO DETAIL mention below.*

### 1. COVER PAGE:

It has been provided to you in the resources section of the module inside coursework folder

### 2. SIMILARITY INDEX REPORT:

Check for plagiarism of your Milestone 2 report from **Introduction** section till **Implementation** section using the Turnitin Draftcoach feature of your Microsoft Word Online (NOTE: you must be login using your college email address to use this feature).

After generating the similarity index report, attach the pages of the similarity report (**Cropped of Document Details and Overall Similarity pages**) to your milestone report after the Cover page. (NOTE: **Plagiarism / Similarly index must be below 20%**)

### 3. TABLE OF CONTENTS (Separate Page)

### 4. TABLE OF FIGURES (Separate Page)

### 5. TABLE OF TABLES (Separate Page)

## Milestone 1 Updates

### 6. PART 1: INTRODUCTION

- a. Introduction of the business and its forte
  - i. Choose an Organization / College / School.
  - ii. Introduce the Organization / College / School (Establishment, mission and values etc.) [**at least half a page and maximum of 1 page including photos**]
  - iii. Can include photo / picture of Organization / College
  - iv. Mention about Ms. Mary (Founder/Principal of the college), proposal to develop “E-Classroom platform” at the end of the Introduction Page.
- b. Description of Current Business Activities and Operations
  - i. Explain about the Organization / College / School’s different activities including the physical class (e.g. Sports, Scholarships etc.)
  - ii. Planned new activity of ‘E-Classroom Platform’.
  - iii. In Operations, summarize Ms. Mary’s requirement of designing Database for “E-Classroom Platform”
- c. Business Rules
  - i. List of Business Rules derived from the description of Operational Procedures used in the system from the Coursework scenario of the “E-Classroom Platform”.
  - ii. The rule affects the structure of the database schema and the preparation of Initial and Final ER Diagram.
  - iii. Put the Business rule in the **Bullets**.
  - iv. Business Rules should be based on relationship of the 2 Entities (Both side) or may be Unary and Ternary.
- d. Assumption
  - i. If it is not clearly mentioned in the Coursework scenario of the “E-Classroom platform” then it should be mentioned in Assumption
  - ii. If you are assuming any business rule then it should be mentioned in the **Business Rule** as well as in the **Assumption**.

## 7. PART 2. INITIAL ERD

The initial Entity Relationship Model should be listed in this section and should include:

- a. Identification of Entities and Attributes
  - i. Put the Attribute of the Entity in a Tabular Format:

### STUDENT

S. No.	Attribute Name	Data Type	Size	Constraint
1	Student No	Number	10	Primary Key
2	Student Name	Character	40	Not Null
3	Date of Birth	Date		Not Null
4	Email	Character	30	Unique
.....				

- ii. Mention Data Types as Character, Number, Date or Picture. Do not mention Integer, Varchar etc.
  - iii. Do not mention any **Foreign Key Attributes**
- b. Draw Initial Entity Relationship Diagram with few Real Entities with Attributes, Relationships, Cardinality (**1 to 1** ; **1 to Many** ; **Many to Many**) and Relationship Existence / Modality (**Mandatory or Optional**) – **Go with Crows feet representation for the ER Diagram**

## Milestone 2 Guidelines

### 8. Part 3. Normalization

- a. Normalize from **Un Normalized Form (UNF)** to **Third Normal Form (3NF)** with valid process description.
- b. Produce a set of fully normalized tables for the system as described in the case study. Show clearly all the steps of normalization.
- c. Demonstrate that each of your relations are in Third Normal Form (3NF) by displaying the Functional Dependencies between Attributes in each relation.

### 9. Part 4. Data Dictionary and Final ERD

The Final Entity Relationship Model should be listed in this section and should include:

- a. List of Entities after Normalization and Attributes
  - i. Put the Attribute of the Entity in a Tabular Format:

### STUDENT

S. No.	Attribute Name	Data Type	Size	Constraint
1	Student No	Number	10	Primary Key
2	Student Name	Character	40	Not Null
3	Date of Birth	Date		Not Null
4	Email	Character	30	Unique
.....				

- ii. Mention Data Types as Character, Number, Date or Picture. Do not mention Integer, Varchar etc.
  - iii. Here you need to mention **Foreign Key Attributes**
- b. Draw Final Entity Relationship Diagram with Entities (**without Attributes**) from Normalization, Relationships, Cardinality (**1 to 1**; **1 to Many**) and Relationship Existence

/ Modality (**Mandatory or Optional**). Here you will not have **Many to Many Relationships**. – Go with **Crows Feet** representation for the ER Diagram.

## 10. Part 5. Implementation

For the Implementation part, you are required to create a **user** with your **own name** and **password** as you **LondonMet Id** assign the **privileges** to this user. Login to this user and create the tables here. You must use Oracle SQL PLUS.

e.g. **CREATE USER coursework IDENTIFIED BY year2;**  
**GRANT CONNECT, RESOURCE to coursework;**  
**CONNECT coursework/year2**

### a. Create Tables

- i. Create Tables for the **“E-classroom Platform”** using CREATE Statement
- ii. Ensure that all Constraints including Referential Integrity is established between related tables. Take a snapshot of CREATE Statement.
- iii. Put the snapshot in the Milestone 2 document.
- iv. Put the Table Creating command in a Notepad File. (Need not to upload in Turnitin)
- v. You will have one Notepad file for all the CREATE Statement for the **“E-classroom Platform”**
- vi. You may create tables first and then add the constraints. In this case you need to take a snapshot of the ALTER TABLE statement and attach to the Milestone 2 document. Put the ALTER TABLE statement in a Notepad File. (Need not to upload in Turnitin). You will have one Notepad file for all the ALTER Statement for the **“E-classroom Platform”**

### b. Adding Rows to Tables

- i. Add rows to tables with appropriate test data that is relevant to the questions listed in the Coursework Document using INSERT Statement
- ii. Enter at least 7 rows in each table.
- iii. Take a snapshot of the INSERT Statement used to populate table data
- iv. Show the content of the TABLE using SELECT statements.
- v. Take a snapshot of this SELECT Statement.
- vi. Put the snapshot of INSERT Statement in the Milestone 2 document.
- vii. Put the INSERT Statement in a Notepad File. (Need not to upload in Turnitin)
- viii. You will have one Notepad file for all the INSERT Statement for the **“E-classroom Platform”**
- ix. Put the snapshot of the SELECT statement in the Milestone 2 document.

## 11. References / Bibliography