## Logos - London Metropolitan UniversityCourse Submission Cover Sheet

Module: CS6004ES Application Development

Assignment no: 001

Weighting: 30%

Deadline: TBC

**Module Leader: Mr. Chamila Karunathilaka**  **Student ID:**

Please note that there are specific regulations concerning **the use of AI and Academic Misconduct**. Below are extracts from these regulations. By signing, you acknowledge that you have read and understood these extracts.

(signature:) Date:

This header sheet should be attached to the work you submit.

Academic Integrity means being honest in your academic work and your studies and making sure that you acknowledge the work of others and giving credit where you have used other people's ideas as part of presenting your arguments. Your assessment submissions must therefore always be entirely your own work, based on your own learning and appropriately referenced including how you have used Generative AI. The University regards the use of Generative AI applications by students to deceive to gain unfair advantage as **academic misconduct**. This usage includes:

* **Plagiarism**, where AI tools are used to generate output and ideas that are presented or submitted as if they were the student's own work, without proper citation or references.
* Where a complete assignment is created using Generative AI and represented as a student's own work, this will be regarded as contract cheating in the same way as commissioning an 'Essay Mill' or other third party to complete your work. Further information can be found on : [Guidance on the use of Artificial Intelligence.](https://student.londonmet.ac.uk/your-studies/student-administration/guidance-on-the-use-of-artificial-intelligence/)

**Academic misconduct:** The University takes academic misconduct very seriously and seeks at all times to rigorously protect its academic standards. Plagiarism, collusion and other forms of cheating constitute academic misconduct, for which there is an explicit range of graduated penalties depending on the particular type of academic misconduct. The penalties that can be applied if academic misconduct is substantiated range from a reprimand to expulsion in very serious cases and for repeated instances of misconduct. You are also responsible for ensuring that all work submitted is your own and that it is appropriately referenced. The University does not tolerate cheating of any kind. You are strongly advised to familiarise yourself with the Academic Misconduct Policy and Procedure ([Academic Misconduct](https://student.londonmet.ac.uk/your-studies/student-administration/rules-and-regulations/academic-misconduct/)), which list a range of categories of academic misconduct and associated penalties, covering instances of academic misconduct (plagiarism, collusion, exam cheating).

# Software Development Task

You are employed as an Application Developer for a large IT development company. The company has been approached by a Household goods shifting company called e-Shift has grown to a level where they need to have an automated system to handle day today operational activities to meet customer demands. You are given the job to design and developing a Software solution for e-Shift to meet their business requirements.

The company transports Household Goods from one location to another on behalf of registered customers. Each customer is given a unique customer number and his or her details must be recorded in the system. Each transport operation is called a job, which involves picking up one or more loads of the products from a customer requested start location and delivering it to a customer requested destination. A unique number is given for each job and for each load when they are created. A Load is transported using a particular transport unit, which consists of a lorry, a driver, assistant, and a container (for carrying the product).

The final system should be able to provide the required information for management decision making and to handle daily operations efficiently and effectively

***Note****: You may add extra features - both data and functionality to the application, if you wish.*

***Your software implementation should demonstrate/provide the following features***

1. Use of appropriate data types (built-in and programmer-defined) to handle the application data
2. Define and use your own class or classes
3. Provide window-based user interface for your application
4. Store the data related to the application

**Deliverables**

Your submission should include the software project and a reflective essay as described below.

1. Your software artefact in the form of a Visual Studio 2015 project, which should include the program’s source code, compiled classes, the executable file and data file (if any).
2. A reflective essay (1000 or more words), which concisely documents:
   1. Detailed instructions to run the program
   2. The architecture of your software in terms of software classes, clearly indicating which classes to be of your own work and which classes from other sources (e.g., From textbooks, online sources such as MSDN etc.).
   3. Detailed description of the classes’ properties and methods
   4. Your reflection of own experience of using c# and visual studio for the development task, which feature you like and why, what issues you experienced and your solution to overcome it.

**Marking Scheme for the CS6004ESIndividual Coursework**

This individual coursework counts for 30% of the module mark. The following are guidelines for marking. Mark each item listed below on a scale 0 to 5 where the marks correspond. Then multiply the mark by the weighting indicated, total and divide by 2 to get the total mark.

|  |  |
| --- | --- |
| Mark | Characterised by |
| 0 | No work or work totally irrelevant |
| 1 | Work started on right lines but no result |
| 2 | Some result, with major lack and/or errors |
| 3 | Acceptable result but incomplete, or some good result with minor errors |
| 4 | Good result but can be further polished |
| 5 | Excellent result |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Item** | **Weight** | **Marks** | **Weight X Marks** |
|  | **IMPLEMENTATION** |  |  |  |
| 1 | The application user interface | 2 | 5 | 10 |
| 2 | Task1: Customer details and Management | 2 | 5 | 10 |
| 3 | Task2: Only Admin Can Manage Admin Details. | 2 | 5 | 10 |
| 4 | Task3: Admin Login and Customer Login. | 3 | 5 | 15 |
| 5 | Task4: Customer Transport operation detail Management. | 2 | 5 | 10 |
| 6 | Task5: Only Admin can Accept/Decline and update Customer Transport operation. | 3 | 5 | 15 |
| 7 | Task6: Customer Dashboard. | 3 | 5 | 15 |
| 8 | Task7: Admin Dashboard. | 2 | 5 | 10 |
| 9 | Task8: Only Admin can manage Product details. | 2 | 5 | 10 |
| 10 | Task9: Only Admin can generate various reports | 2 | 5 | 10 |
| 11 | Task10: Admin Dashboard | 2 | 5 | 10 |
|  | **DOCUMENTATION** |  |  |  |
| 1 | Detailed instructions to run the program | 1 | 10 | 10 |
| 2 | The software architecture | 3 | 5 | 15 |
| 3 | Detailed description of the classes’ properties and methods | 2 | 5 | 10 |
| 4 | Explanation about search algorithms used in the project | 2 | 5 | 10 |
| 5 | Reflection of own experience | 1 | 5 | 5 |
|  | PROGRAMMING STYLE |  |  |  |
| 1 | Clarity of code which shows the underlying algorithm | 1 | 5 | 5 |
| 2 | Sensible naming of programmer-defined variables, classes, properties and methods | 1 | 5 | 5 |
| 3 | Useful comments in code | 1 | 5 | 5 |
| 4 | Data validation and exception handling | 1 | 5 | 5 |
| 5 | Interface design and usability of the system | 1 | 5 | 5 |