

**CS6004ES –Application Development Group Coursework - 2**  
**(2023/24)**

This assessment is a group coursework and should be done in a team of a maximum of 2 students.  
It requires developing and documenting a **Web Application** using **ASP.NET MVC** with **C#** Programing Language in **Visual Studio** 2017. Application development mythology will be **Object Oriented** **Design** and cording practices. You should comply following when cording

1. Use encapsulation techniques
2. Use Abstraction
3. Use Inheritance
4. Achieve high cohesion and loose coupling

**(Marks will only be awarded if above criteria are complied)**

Your software artefact must be submitted as a Visual Studio project with Visual Studio Solution. It will be marked using Visual Studio 2017 or higher. The coursework carries **30% of the module mark**.

Submission Deadlines: ***16/06/2023***

In-class demo: 23/06/2023

Groups not meeting the deadline must submit their work to the Undergraduate Registry with a completed *mitigating circumstances form*.

Case study

e-book pvt. Ltd is a leading used books selling company in Srilanka.

Over the last three years it has emerged as a prestigious and the foremost network of bookshops in Sri Lanka

with rapid development and expansion of its business activities both in terms of quality and quantity.

It presents a vast collection of Sri Lankan and foreign used books covering an array of multiple disciplines

to meet the diverse needs of their wide readership that ranges from little kids to higher academics.

In order to expand their business activities, they plan to develop an online web application with

following functionalities.

Customer

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->New Customer must register their details.

->Only logged in customers can order books.

->Only logged in customers can manage their orders (view/delete)

->Any users can search for books details.

->Only logged in customers can provide feedback about books.

Admin

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->Register/Login

->Manage Books Details

->Manage Customers

->Manage Orders

->Generate Reports

->Admin Dashboard

Deliverables

1. Use case diagram
2. Class diagrams
3. ER diagrams
4. ASP C# code base
5. Database scripts
6. Comprehensive Application Installation Guide
7. Application Configuration and Run Manual

Marking Scheme for the CS6004ES Group Coursework

This group 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 | Characterized 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 |

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|  | **Item** | **Weight** | ***Mark***  ***(0 to 5)*** | ***Weight x Mark*** |
| **Software Implementation** | |  |  |  |
| 1 | The application user interface and menu | 2 | 5 | 10.00 |
| 2 | User access control (Different roles) | 2 | 5 | 10.00 |
| 3 | Task 1: Customer Account management ( CRUD operation) | 2 | 5 | 10.00 |
| 4 | Task 2: Books item management (CRUD operation) | 4 | 5 | 20.00 |
| 5 | Task 3: Cart Management. | 5 | 5 | 25.00 |
| 6 | Task 4: Order management. | 3 | 5 | 15.00 |
| 7 | Task 5: System should be able to generate the reports | 4 | 5 | 20.00 |
| 8 | Task 6: Dashboard | 3 | 5 | 15.00 |
| 9 | Task 7: Should provide the Use case diagrams, Class diagram, ER diagram related the given system. | 5 | 5 | 25.00 |

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| **Reflective Essay** | |  |  |  |
| A | Installation Guide and Configuration and Manual | 1 | 5 | 5.00 |
| B | Concise description of your logical solution to each of the implemented function of the application. | 1 | 5 | 5.00 |
| C | The software architecture | 1 | 5 | 5.00 |
| D | Detailed description of the classes’ properties and methods and the class diagram | 1 | 5 | 5.00 |
| E | Individual member own reflection of own experience | 1 | 5 | 5.00 |
| **Programming style** | |  |  |  |
| 1 | Clarity of code which shows the underlying algorithm | 1 | 5 | 5.00 |
| 2 | Sensible naming of programmer-defined variables, classes, properties and methods | 1 | 5 | 5.00 |
| 3 | Useful comments in code | 1 | 5 | 5.00 |
| 4 | Data validation and exception handling | 1 | 5 | 5.00 |
| 5 | Interface design and usability of the system | 1 | 5 | 5.00 |
|  | **Total** |  |  | **200.00** |