

**Assignment Cover Sheet**

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| **Qualification** | | **Module Number and Title** | |
| HND in Computing/ HND in Software Engineering | | SED52010 Windows Application Development | |  |
| **Student Name & No.** | | **Assessor** | |
|  | | Aruna Indika | |
| **Hand out date** | | | **Submission Date** |
| //2016 | | | //2016 |
| **Assessment type**  Coursework | **Duration/Length of**  **Assessment Type**  Practical project/report | | **Weighting of Assessment**  **100%** |

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| **Learner declaration** | |
| I certify that the work submitted for this assignment is my own and research sources are fully acknowledged. | |
| |  |  |  |  | | --- | --- | --- | --- | | **Marks Awarded** | | | | | First assessor | |  | | | IV marks | |  | | | Agreed grade | |  | | | Signature of the assessor |  | Date |  | |

**Feedback Form**

**International College of Business & Technology**

**Module:** Windows Application Development

**Student:**

**Assessor :**

**Assignment:**

**Strong features of your work:**

**Areas for improvement:**

**Marks Awarded:**

**Learning outcomes covered**

* Critically evaluate and select appropriate windows platform and development tools
* Design and develop Windows applications
* Critically test and deploy Windows applications

**Scenario and the Task**

**“Total Fitness”** is the largest and very busy pharmacy in Matara. They are the sole agent for the Cipla product in the region.

They have number of suppliers to supply verity of medicine and some types of milk powders. Some of them are cash and some of them are credit. For the credit suppliers you have to pay your total bill within 3 weeks. As well that must notify when the particular date comes closer. As well they can terminate any supplier at any time.

As **“Total Fitness”** is the sole agent for the Cipla, they have separate transport division to distribute Cipla products to all over the region. When they deliver particular products to distance pharmacy they will keep following records.., Pharmacy name, contact person, contact number (mobile/fix) product(s), quantity, price and any other required details. Normally end of the year they will awarding pharmacies that are having best selling performance for Cipla products and that should automatically calculate and display by the system.

Also **“Total Fitness”** having two types of customers they are register and non register. Register customers always get 2% discount for their every bill when they buy more than LKR 750.00. To register; every customer have to pay LKR 2500.00 per year. If someone unable to update their registration automatically they will remove form the registered customers group. As well register customers are allowed to buy products for a 1 week credits, but it only for below LKR 1500.00 bills. Customers cannot buy any thing with out paying previous credit bills. As well registered customers can check their purchase history.

All purchasing order invoices, purchasing bills, customer bills have to maintain and in any case **“Total Fitness”** wants to find that particular record by all possible ways…

Finally **Total Fitness** wants to keep all medicines, Cipla product’s, Milk powder product’s inventory up to date…

**Tasks**

1. Critically compare different windows or other platforms and select the suitable platform for different user groups? (Word count 500 [+- 50] ) (10 marks)
2. Critically compare and select development tools and technologies for the above mention application? (Word count 500 [+- 50]) (10 marks)
3. Design a solution for above mention requirements. (30 marks) Provide
   1. System architecture diagram
   2. UML diagrams (Class, Use case, sequence etc...)
   3. Data model design (ER diagram)
   4. Sample UI designs (Wireframe will be fine)
4. Develop suitable application based on the design. Should be able to demonstrate and provide all source codes. Need use proper coding standards and must focus on reusability and maintainability of the application. (30 marks)
5. Select appropriate test technique(s). Test and provide proper test cases and critically evaluate the test result. (10 marks)
6. Explain deployment techniques that are selected and critically evaluate suitability of the selection. ( 10 marks)

**Submission Guidelines**

* Submission format Report
* Paper Size: A4
* Words: 3000 words
* Printing Margins: LHS; RHS: 1 Inch
* Binding Margin: ½ Inch
* Header and Footer: 1 Inch
* Basic Font Size: 12
* Line Spacing: 1.5
* Font Style: Times New Roman
* **Referencing should be done strictly using Harvard system**

**Source code, database backup and installation packages should be submitted in a single zip file.**

**Assessment Criteria**

**Task 1 contains 10 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 10** |
| **Excellent**  Excellent level of understanding of platforms, critical comparison technically and also focusing other environment factors, Higher level of depth and breadth of study with extensive reading and integration of information from a wide range of sources. | **7-10** |  |
| **Good**  Reasonable level of understanding of platforms and critical comparison technically, Good level of depth and breadth of study, | **6-7** |  |
| **Satisfactory**  Reasonable level of understanding of platforms and comparison, satisfactory level of depth and breadth of study | **4-6** |  |
| **Poor**  Limited understanding of platforms and poor comparison. Limited reading, lack of depth and breadth of study | **0-4** |  |

**Task 2 contains 10 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 10** |
| **Excellent**  Excellent level of understanding of platforms, critical comparison and proper justification for the selections, Higher level of depth and breadth of study with extensive reading and integration of information from a wide range of sources. | **7-10** |  |
| **Good**  Reasonable level of understanding of platforms and critical comparison technically, Good level of depth and breadth of study, | **6-7** |  |
| **Satisfactory**  Reasonable level of understanding of related tools and comparison with correct selection, satisfactory level of depth and breadth of study | **4-6** |  |
| **Poor**  Limited understanding of related tools and poor comparison. Limited reading, lack of depth and breadth of study | **0-4** |  |

**Task 3 contains 30 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 30** |
| **Excellent**  Excellent level work shown on design, Complete set of UI designs focus on easy navigation and proper structure , Exceptional solution focus on reuse, maintainability, use of proper architecture, and error free, correctness and completeness of the UML diagrams. | **21-30** |  |
| **Good**  Good set of diagram with proper separation of layers and communication, Correct notations and evidence of effort to design user friendly design. Detail diagrams. | **18-21** |  |
| **Satisfactory**  Reasonable level of diagrams, has identified basic data requirements and evidence of basic UML diagrams. | **12-18** |  |
| **Poor**  Limited or no of evidence given for design, incorrect use of notations and diagrams are incomplete. No proper architecture | **0-12** |  |

**Task 4 contains 30 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 30** |
| **Excellent**  Exceptional solution focus on reuse, maintainability, use of proper architecture, error free and innovative features, demonstration with proper planning, proper flow and good presentation skills with clear explanations. | **21-30** |  |
| **Good**  Good solution complete application satisfying all user requirements, Proper error handling, Proper demonstration planed and well structured | **18-21** |  |
| **Satisfactory**  Basic application that can run without any build errors, fulfil the basic requirements. Presentation and demonstration is reasonable but flawed in structure or in some other way | **12-18** |  |
| **Poor**  Develop solution run with build errors, lack of error handling and validation, the presentation and demonstration is incoherent, incomplete or seriously weak in other ways | **0-12** |  |

**Task 5 contains 10 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 10** |
| **Excellent**  Excellent justification for the selected test techniques. Proper set of test cases to conduct a comprehensive test for the develop solution with proper test data. Selection of appropriate test data. Conduct test and critically analysis test results. | **7-10** |  |
| **Good**  Good justification for the selected test technique. Test cases to cover testing of entire application with meaningful data. Conduct test and a critically analysis test results. | **6-7** |  |
| **Satisfactory**  Reasonable justification of test techniques and test cases to test the basic functionalities successfully. Analysis of test results. | **4-6** |  |
| **Poor**  Limited justification for test technique selection and incomplete set of test cases, improper set of test data. Poor analysis of test result. | **0-4** |  |

**Task 6 contains 10 marks**

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| **Criteria** | **Marks** | **Marks obtained by the student for the answer provided** |
| **Out of 10** |
| **Excellent**  Excellent justification for the selected deployment techniques, by critically comparing with other available deployment options. Excellent explanation on selected technique. | **7-10** |  |
| **Good**  Good justification for the selected deployment techniques, by critically comparing with other available deployment options. Proper explanation on selected technique. | **6-7** |  |
| **Satisfactory**  Reasonable justification for the selected deployment techniques, by comparing with other available deployment options. Satisfactory explanation on selected technique. | **4-6** |  |
| **Poor**  Limited justification, limited comparison with poor explanation | **0-4** |  |

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| **Total Marks** | **Out of 100** |  |