Assignment Cover Sheet

Qualification	Module Number and Title
HD in Computing and Software Engineering /Network Technology and Cyber Security	CSE 4002 Fundamentals in Programming
Student Name & No.	**Assessor**
Hand over date	**Submission Date**

Assessment type	Duration/Length of Assessment Type	Weighting of Assessment
Coursework	Software Submission and demonstration	100%

Learner declaration

I, …….<name of the student and registration number>, 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 **:** CSE 4002

Student **:**

Assessor **: Mrs. Nisansala Athapaththu**

Assignment **:** Automated system for Master Mind institute

Assessor Feedback:

Marks Awarded:

This assignment is worth 100% of the overall assessment for this module.

Learning outcomes covered

LO1. Explain structured programming concepts
LO2. Design a basic structured computer program
LO3. Developed a modularized computer programme for a prepared design
LO4. Compile software testing and documentation

Scenario

Master Mind institute is a famous institute that dedicated to offer employment-based training programs for the local and international students. Recently they introduced some professional programs such as professional qualifications in Red Hat certifications, Java Programming, Web Development, soft skills development and etc. Now they have noticed that their student enrolment inquiry about courses have been tremendously increased. Marketing and student administration department is always overloaded with work.

Management needs a proper solution to cope and reduce the work load of employees, to get better performance from them and enhance customer satisfaction through better service.

Main requirements are.

- View available Training Programs.
- Manage Course details.
- Manage Student registration details.

Other requirements are.

- User login.
- Logout.
- Exit.
- View Company Details.

Carefully investigate the given scenario and provide the proposed solution.
Attach softcopy of error free program with your documentation.
Keep all the backups

Viva Evaluation TASKS

Task 01. Present system requirements specification and logical diagrams for core functions such as Display, Add and Search Course details according to given scenario. Use appropriate modularization to reduce the complexity of the design. ***(25 marks) (LO2)***

Task 02. Implement and submit a functional C++ program to meet the requirements given in the specification, by following the design created above. ***(50 marks) (LO3)***

a) Evaluate the learner's ability to describe controlling structures used for the implementation with improved coding efficiency (i.e., sequence structure, selection structure and repetition structure). ***(15 marks) (LO1)***

b) Identify the use of modularization with effective data passing between developed modules during the implementation. ***(15 marks) (LO1)***

c) Evaluate the use file handling techniques used for storage and backup requirements and use of appropriate arrays, structs(records) used. ***(10 marks) (LO3)***

d) Provide appropriate guidelines to user, apply validations for user inputs and improve user-friendliness of the software. ***(5 marks) (LO3)***

e) Assess the ease of navigation between modules, accuracy, creativity and completeness of the system. ***(5 marks) (LO3)***

Task 03. Prepare a test document including test plan, test cases and test results. Conduct user acceptance testing and provide feedback with sample questionnaires used. ***(25 marks) (LO4)***

Assessment Criteria

Task 01- System Design **(LO2)**

This submission will be assessed as follows Criteria	**Total marks Allocated** **Out of 25**	**Marks obtained by the student for the answer provided**
Excellent Design • Excellent SRS given in detail • Highly **detailed** diagram • **Use of modularization** concepts clearly visible • **Excellent use of symbols** • **Clarity and Reduce complexity** of the design • Backed by relevant assumptions	19-25	
Good Design • Detail **SRS** including functional and non-functional requirements, data and file structure requirements • **Flow charts** following standard notations in flow charting **and pseudo codes** using proper structured English • **Accurate use** of selection repetition structures • **Logical** and continuous flow of instructions along the design	15-18	
Satisfactory Design • Basic **SRS** including functional requirements • **Clear identification** and **application** of symbols in flow charts • Average level design diagrams given	11-14	
Poor Design • Evidence of lack of understanding systems requirement specification • Poor use of design tools and symbols • Design diagrams with invalid flows, incomplete diagrams with logical errors	0-10	

Task 02 – System Implementation (LO3)

This submission will be assessed as follows **Criteria**	**Total marks Allocated** **Out of 50**	**Marks obtained by the student for the answer provided**
Excellent implementation • Excellent use of **control structures** with improved coding efficiency • Use **file handling** techniques for storage and backup requirements • **Excellent Modularization** with **effective data passing** between developed modules. • appropriate guidelines given to user, user **input validation** and **user-friendliness** of software • Easy navigation between modules, **accuracy, creativity and completeness** of the system	36-50	
Good implementation • Use of **Comments** to improve code readability • good use of **control structures** with proper understanding • **Modularize** according to the given design. • Use of input validations, onscreen help options and User friendliness of the system	29-35	
Satisfactory implementation • **Operational system** according to the requirements of the scenario • Average use of **data types** and **operators** • Average use of **control structures** (selection and repetition)	21-28	
Poor implementation • Poor implementation with syntax errors • Lack of knowledge of the language basics used • Cannot fulfill basic system requirements	0-20	

Task 03 - System Testing (LO4)

This submission will be assessed as follows **Criteria**	**Total marks Allocated** **Out of 25**	**Marks obtained by the student for the answer provided**
Excellent Documentation • Excellent Test documentation with detail **test plan** and **test cases** • Acceptance test with proper questionnaire samples. Well analyzed user feedback which supports recommendations. • **Testing conclusion** with critical review and future recommendations • Appropriate use of language and Standard report format followed • Proper use of Referencing	19-25	
Good Documentation • Detailed **Test Plan** • Appropriate **Test Cases** • Acceptance test with **User feedback** and test **conclusion** • Good documentation	15-18	
Satisfactory Documentation • Basic **Test Plan** • Average **Test Cases** • Average documentation	11-14	
Poor Documentation • Lack of test plan, poor test cases • No proper evidence of testing • Poor report formatting	0-10	

Total Marks	**100**	

This submission will be assessed as follows		Total marks Allocated	Marks obtained by the student for the answer provided
TASK 1		25	
TASK 2	a	15	
	b	15	
	c	10	
	d	5	
	e	5	
TASK 3		25	
TOTAL		100	

Submission Guidelines

- Submission format Report
- Paper Size: A4
- Words: 3000 words
- Printing Margins: LHS; RHS: 1 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**

Final Grading criteria :

Marks	Final Grade
>=70	Distinction
69-55	Merit
54-40	Pass
<40	Fail