



JOHN EDMONDSON HIGH SCHOOL

Assessment Notification

Faculty: Computing Course: IPT Year: 12

Assessment Task: Task 1 - Library Information System

Assessment Weighting: 15% Due: Term 4 Week 9 Date: 6/12/2023

Task Type: Hand in Task In Class Task Practical Task

Outcomes assessed (NESA)

H1.1 applies and explains an understanding of the nature and function of information technologies to a specific practical situation
H2.1 analyses and describes a system in terms of the information processes involved
H2.2 develops and explains solutions for an identified need which address all of the information processes
H3.2 demonstrates and explains ethical practice in the use of information systems, technologies and processes
H4.1 proposes and justifies ways in which information systems will meet emerging needs
H5.1 justifies the selection and use of appropriate resources and tools to effectively develop and manage projects
H6.2 selects, justifies and applies methodical approaches to planning, designing or implementing solutions
H7.2 uses methods to thoroughly document the development of individual and team projects.

Task Description/Overview

Scenario: Currently your school library uses a non-computer card system to hold details on books and customers/borrowers. You are to create a computerised database for the library holding information on borrowers and books. This database will help the users to locate and find books that people have borrowed, returned and are due to return.

Detailed Assessment Task Description

PART A Understanding the problem to be solved

For the planning of the database include the following:

- 1) Context diagram
- 2) Data flow diagram
- 3) Problem statement
- 4) Feasibility Study
- 5) Data Dictionaries for all tables

PART B Producing the solution:

1) You will need to create one database file but with many **TABLES** within it using Microsoft Access. Examples of tables include: book Details, Borrower Details, Loan Details, Postcodes, Genres, Reviews etc. This is just a guideline on the tables you could have – you could include more or differing tables).

- 2) You will need to create a user friendly **FORM** which opens on start up. The form will have ways of entering the data easily, buttons to make tasks easier, buttons for queries and reports.
- 3) You will need to create a number of **QUERIES** that will make it easy for the participants to find out what books are borrowed, available etc. Who has borrowed the book, what is due back today?
- 4) You will need to create a number of **REPORTS** that will look like a printout of most of the queries. A report should also be made to look like a receipt for the customer on what they have borrowed and when it has to be returned.

PART C Testing and Evaluating the Solution:

- 1) Which conversion method should be used to implement the new system? Explain how and why this would be done. (Parallel, Direct, Phased, Pilot)
- 2) What training methods would you implement? Give reasons.
- 3) How would you test the new system?
- 4) How would you evaluate and maintain the new system?

Submission: Due in the SOLE room on the due date from BEFORE Roll Call on a USB drive to your teacher. All parts of the task (theory and databases) are to be submitted electronically on the USB drive.

Any submissions after this time will receive ZERO must go through the Illness/Misadventure form process.

Assessment Marking Guidelines / Criteria

	Marks			ED
	HC	C	D	
<p>The Context diagram, Data flow diagram, Problem statement, Feasibility study and Data dictionaries</p> <p>– 20 marks</p> <p>HC – A detailed description of the problem and of the database that is easy to read and understand. All parts of the diagrams work, are concise and follow the rules on how to create them.</p> <p>C – A detailed description of the database that is easy to read and understand. Most parts of the diagrams work, are concise and follow the rules on how to create them.</p> <p>D – A description of the database that is easy to read and understand. Some parts of the diagrams work, are concise and follow the rules on how to create them.</p> <p>ED – A simple description of the database with little or no understanding.</p>	16-20	10-15	5-9	0-4
<p>The creation of the database with tables – 10 marks</p> <p>HC – Has multiple and detailed tables that ensures all data has data integrity, reduces data redundancy and checks data validation.</p> <p>C – Has multiple and detailed tables that ensures most of the data has data integrity, reduces data redundancy and checks data validation.</p> <p>D – Has tables that ensure some of the data has data integrity, reduces data redundancy and checks data validation.</p> <p>ED – Has simple tables and shows little understanding of how to ensure data integrity, reducing data redundancy and checking data validation.</p>	9-10	6-8	3-5	0-2
<p>The creation of the database with forms – 10 marks</p>	9-10	6-8	3-5	0-2

	Marks			
	HC	C	D	ED
<p>HC – Has a detailed and working form that opens on start up. The form always allows ease of data entry by having buttons for all queries and reports, tab order and an effective screen design.</p> <p>C - Has a detailed and working form that opens on start up. The form mostly allows ease of data entry by having buttons for all queries and reports, tab order and an effective screen design.</p> <p>D –The form sometimes allows ease of data entry by having buttons for all queries and reports, tab order and an effective screen design.</p> <p>ED - The form shows little or no understanding of effective screen design and understanding of form creation.</p>				
<p>The creation of the database with queries – 5 marks</p> <p>HC – Has detailed and working queries that make it easy for the users to find out what videos are borrowed, available etc. The queries allow users to find data quickly and easily and are beneficial for the everyday tasks needed to run the video business.</p> <p>C – Has mostly detailed and working queries that make it easy for the users to find out what videos are borrowed, available etc. These queries allow users to find data for the everyday tasks needed to run the video business.</p> <p>D – Has some detailed and working queries that make it easy for the users to find out what videos are borrowed, available etc. These queries allow users to find data.</p> <p>ED – Has little understanding of how to create queries to ensure that data is found.</p>	4-5	3	2	0-1
<p>The creation of the database with reports – 5 marks</p> <p>HC – Has reports for all the queries. They look like documents that the video store would use. Customer receipts are created and show the necessary detail needed as well as added information to help the user understand the information printed for them. (Labels, headings etc)</p> <p>C – Has reports for all the queries. They mostly look like documents that the video store would use. Customer receipts are created and show the necessary detail needed as well as added information to help the user understand the information printed for them. (Labels, headings etc)</p> <p>D – Has reports for some of the queries. The reports mostly look like the Report Wizard Designs provided by MS Access with little or no added labels, heading or other formatting.</p> <p>ED – Has little understanding of how to modify a report to show extra information.</p>	4-5	3	2	0-1
<p>Testing and Evaluation – 10 marks</p> <p>In relation to the questions:</p> <p>HC – Has detailed and concise explanations demonstrating an deep understanding of testing and evaluating a solution.</p> <p>C – Has detailed and concise explanations demonstrating a good understanding of testing and evaluating a solution.</p> <p>D – A simple explanation demonstrating some understanding of testing and evaluating a solution.</p>	9-10	6-8	3-5	0-2

	Marks			
	HC	C	D	ED
ED – An explanation demonstrating little or no understanding of testing and evaluating a solution.				

Total Marks 60