# NEW COLLEGE LANARKSHIRE

Instrument of Assessment Internally Verified by:		Date:
	Assessor: Fiona McGregor	Date:
	IV Sampled by:	Date:
		Result
CQA1.1.9: Assessment N	laterial Cover Sheet	
Unit Number: <b>HF56 35</b>		
Unit Title: Web Developm	ent: Producing a Data Driven Si	te
Verification Group: <b>358</b>		
Outcome(s): <b>1 - 2</b>	Version: 2	
Student Name:		
	not taken place under controlled to indicate agreement with the	
other authors has been clear	on is entirely my own work, and a ly acknowledged and referenced e taken by the college if this is n	d. I understand
Student Signature:	Date:	

#### **Assessment Instructions**

- You must submit this assignment no later than
- This is an open book assessment. There are no restrictions on the materials you may use.
- This assessment will be graded Pass or Fail
- To achieve a Pass you must complete both tasks successfully

If your work is graded as "Fail" you will be given a re-sit. If your work is graded as "Fail" on your second attempt, you may be given a third and final assessment **but only if agreed by the members of your staff course team**. For detailed information on the college's assessment policy please refer to the college intranet policies area or ask your Lecturer.

If you are not satisfied with the grade awarded by your Lecturer, you should speak to your lecturer in the first instance. If you are not satisfied with this response then the Lecturer or Curriculum & Quality Leader will refer you to the college's appeals procedure.

Impartial advice about the college appeals procedure is available from your student advisor.

### **Unit Outcomes**

- 1. Implement and test a prototype relational database from a client brief
- 2. Design, implement and test a web interface with a data driven search facility

#### **Assessment instructions**

This assessment is based on the Bike King Borders website that you have completed for the units HF5834, HF3K34 and H18234.

The owners of Bike King Borders have requested additional functionality to their website. They want an events page to advertise national Mountain Bike events and a search facility so users can search for events based on particular criteria.

Complete Tasks 1 and 2 on the following pages

#### Task 1

- (a) Using the data dictionary supplied in *appendix 1*, develop a relational database:
  - Create the database
  - Create 2 table structures for Events and Prices
  - Add sufficient event and price information to enable testing. You may use
    the data in appendix 2 as a starting point, but you will need to add to the
    events table for thorough testing Events table requires a minimum of 15
    records

### (b) Test the database

- o Create and run SQL test queries that will display the following results:
  - List of all event information
  - List all event information for events in Price band B only
  - List only the event name and participation prices for all adult events
  - List all details of events in September 2022
  - List all events in Scotland showing event name, location, date, participation and spectator prices
- For each test query complete an entry in the test plan showing evidence of problem solving and error correction. This must show the query and the resilt

LEARNER CHECKLIST	
	Completed
Requirements Document      Client requirements     Website objectives     Target end users     Functional and non- functional requirements	This has been completed and can be evidenced in the assessment submissions for Web Development: Essential Content HF58 34 on Moodle
Database  • 2 table structures • Sufficient event information for testing	
Test Plan	
<ul> <li>Record of all SQL tests carried out, results and any corrections. (This must be evidenced in a test log format. There is a sample in the appendix that can be adapted and used)</li> </ul>	

## **Submission:**

- Requirements Document completed for Web Development: Essential Content HF58 34
- Data Dictionary (Structure of your database)
- Completed log of testing

#### Task 2

Add an additional page into your Bike King Borders website to hold the Event information and a search facility.

The event page should display a list of all the current event info in the database – Event Name, Location, Date, Suitability, Participation and Spectator prices.

The form for the search facility should also be on this page. (You may require 1-3 additional pages to display the results from the searches)

#### In summary:

- 1. The Events page should display a list of all the upcoming events
- 2. A search is required that will allow users to search for events by their name.

This will return results in the form of an event list showing the event name, date, location and participation and spectator prices

3. A search is required that will allow the **users to search by location**, e.g. Scotland, Wales etc.

This will return results in the form of an event list showing the event name, date, location and participation and spectator prices

4. A search is required that will allow the **users to filter by date**. This could be by month or actual date

This will return results in the form of an event list showing the event name, date, location and participation and spectator prices

- 5. When connecting and searching, implement basic cyber security measures
- 6. Test, log and rectify all search functions to make sure the correct results are displayed

*Note:* You are not required to have an image to match each event, however it always makes the results look more interesting.

LEARNER CHECKLIST	Completed
Web interfaces that match the design specification	
Connection to database	
Working search and result features	
Basic cyber security measures implemented	
Log of testing of all search and results	
(you may use an extension of the test log that you produced in task one for this)	

# **Submission:**

- Working prototype website to be demonstrated to the assessor
- Website and exported database in zipped folder uploaded to Moodle
- Completed test log uploaded to Moodle

ASSESSOR CHECKLIST Task 1	Satisfactorily
Requirements Document	Completed This can be evidenced in the assessment
<ul> <li>Client requirements</li> <li>Website objectives</li> <li>Target end users</li> <li>Functional and non- functional requirements</li> </ul>	submissions for Web Development: Essential Content HF58 34 on Moodle
Database	
<ul><li>2 table structures</li><li>Sufficient event information for testing</li></ul>	
Test Plan	
Record of all SQL tests carried out, results and any corrections.	
Assessor Comments	

ASSESSOR CHECKLIST Task 2	Satisfactorily Completed
Web interfaces that match the design specification	
Connection to database	
Working search and result features	
Basic cyber security measures implemented	
Log of testing of all search and results	
Assessor comments	

Assessor	Date
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# Appendix 1 BKB Events Database requirements

## **Events table**

Event Number – <b>Primary Key</b>	int	6
Event Name	varchar	50
Date	date	2
Location	varchar	50
Suitability	varchar	30
Price Band – Foreign Key	varchar	1

## **Prices table**

Price Band – <b>Primary Key</b>		
Adult Participant	decimal	5,2
Adult Spectator	decimal	5,2
Child Participant	decimal	5,2
Child Spectator	decimal	5,2

Appendix 2
Bike King Borders Database sample data

Event Number	Event Name	Date	Location	Suitability	Price Band
1	Vitus Firsttracks Enduro Cup	10/04/2021	Northern Ireland	Adults	A
2	Aviemore Triathlon	19/09/2021	Scotland	Adults	В
3	Ridelines Enjoyro	18/09/2021	Northern Ireland	Children	С
4	Battle On The Beach	23/10/2021	Wales	Adults	Α
5	Macavalanche	01/11/2021	Scotland	Adults	Α
6	London To Brighton Off-Road At Night	30/01/2022	England	Adults	А
7	10 Under The Ben	14/04/2022	Scotland	Children	D
8	Tweedlove Bike Festival	03/08/2021	Scotland	Children and Adults	С
9	Mountain Bike World Cup	01/10/2021	Scotland	Adults	В
10	Relentless 24	05/05/2022	Wales	Adults	Α
11					
12					
13					
14					
15					

Use the sample data and **add 5 additional records** so that the queries can be tested properly

Price Band	Price(£)	Price(£)	Price(£)	Price(£)
	Adult Participant	Adult Spectator	Child Participant	Child Spectator
Α	35.00	8.00	-	0.00
В	28.00	5.00	-	2.00
С	10.00	0.00	5.00	0.00
D	-	0.00	5.00	0.00

# Appendix 3 Test Log Proforma

This test form only shows a skeleton on what is required and if you choose to use it, you will need to adapt it appropriately

Test	Expected Results	Actual Results	Comments