

***DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE***

***5CS023 Assessment Brief***

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| Module | 5CS023 Web Development |
| Module Leader | Mary Garvey |
| Semester | 1 |
| Year | 2018-2019 |
| Assessment Number | 1 |
| % of module mark | 100% |
| Due Date | See below |
| Hand-in – what? | See below |
| Hand-in- where? | See below |
| Pass mark | 40% |
| Method of retrieval |  |
| Feedback | Face to face demonstration |
| Collection of marked work | See below |

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| **Learning outcomes:**  LO1 - Demonstrate knowledge of the concepts, approaches and technologies involved in dynamic website construction and web security.  LO2 - Be able to design and construct dynamic and secure websites using appropriate tools and technologies.  LO3 - Evaluate the effectiveness and usability of websites. |

Your portfolio is made up of 3 tasks:

* In tasks 1 and 2, you are required to build a “dynamic” website featuring the technologies taught in the lectures.
* Task 3 is an in-class test.

Please see below for a detailed description of each task.

**Task 1 – Database creation and first access**

**When: Week 6 during the usual Workshop Session**

**Weight: 20%**

**Choose a topic**

The topic of your site can be any of your choosing. Pick something you have an active interest in, a hobby, a sport you play, a group or club you belong to, or any similar topic. Once you have selected your topic YOU MUST CONFIRM THIS WITH YOUR TUTOR.

You will not be allowed to proceed with your topic of choice without tutor agreement. You may not change your topic without further consultation with your tutor.

**In-class test**

You will have 1 hour to perform various coding tasks in a time-constrained environment.

Topics will include:

* Basic PHP programming concepts
* Creating a table in MySQL via phpmyadmin
* Accessing a database from PHP and retrieving/displaying/formatting data
* Committing work to GitLab.

**Learning resources**

During the test you will have access to the following resource:

* https://mi-linux.wlv.ac.uk/wiki/index.php/Main\_Page
* http://www.w3schools.com/
* Your own PHP source code on mi-linux
* Your own notes relevant to PHP and MySQL

**Tools**

Your site must be coded in a simple text editor, such as Notepad or PSPad. You **cannot** use any Integrated Development Environments (IDEs), CMS, Web Frameworks, or similar tools to construct your site. The use of any tools which construct any part of the website for you is strictly forbidden – usage of these tools will result in a FAIL grade. If you are in any doubt about whether the tool you wish to use is not acceptable, speak to your tutor BEFORE you begin to construct your site.

Failure to present your work **will result** in grade of 0 for this task.

**Task 2 – Full site implementation**

**Due date: Week 11 Thursday 6th December**

**Weight: 50%**

**Full site implementation – Submit on mi-linux.wlv.ac.uk**

Please submit a fully working website, keeping in mind the following points:

* Your website must be developed using PHP and MySQL, and hosted on the school’s student server.
* Users should be able to read, add, amend and delete records stored in your MySQL database.
* Users should be able to search for records stored in your MySQL database (extra points will be earned if searches on several criteria are possible, e.g. list all Sci-Fi books published in 2018)
* Cookies have been used to save relevant user information between visits (e.g. user name, favorite style sheet, shopping basket)
* Sessions have been used to save state during current visit (e.g. to allow users to log in into their account)
* HTML code should be fully compliant on **all** pages.
* Ajax has been used to provide useful functionality (e.g. autocomplete search, form filling assistance etc.)
* The website shows features of usability (e.g., has a professional finish, prevents user errors, provides help)

**Evaluation of Website – Submit to Canvas**

Write a short report that evaluates the usability of your website (one-page maximum). See this website: <https://www.nngroup.com/articles/ten-usability-heuristics/> for a set of guidelines by Jakob Nielsen. Pick two heuristics that you consider are important and describe how your website demonstrates these requirements.

See the marking grid for further details on the breakdown of marks.

**Submitting and presenting your work**

The practical work above should be published on the school’s student web server and presented to a tutor during workshop hours.

Your work will be automatically collected from mi-linux on Thursday 6th December and the presentations will start in Week 11’s Workshop sessions (7th December).

Upload the evaluation of your website to Canvas by Thursday 6th December, bring a copy of this to the presentation.

Failure to submit your work will result in a grade of 0 for this task.

**Task 3 – In class test**

**Due: 4th January 2019/Time and Lab TBC**

**Weight: 30%**

You are required to attend an in-class test that will cover all the material taught in the lectures.

The test will be made up of 30 multiple-choice questions. Detailed instructions will be provided closer to the date.