



Kilkee Krafts is a West Clare based art and crafts co-operative who specialise in handmade products of the highest quality. They sell their artworks from their base in Kilkee on Ireland's Wild Atlantic Way. Due to the current pandemic, they desire to build an online presence which will allow customers (members) to browse their extensive product catalogue from where they will be allowed to purchase items through a shopping cart.

Kilkee Krafts also require "back-office" functionality to be included. This will allow an administrator access to functionality such as adding a product to the system as well as removing/editing existing products details. Administrators will also be able to monitor and amend orders currently within the system.

The required functionality for a customer and administrator of the site can be broken down further:

Note: A member is a registered, authenticated user of the site

Members/Non-members (43%)

1. Users of the site can register with Kilkee Krafts and become a member. To register a customer must provide some personal information along with an email address and password. The email address will double as their username for the site. Security is of paramount importance to Kilkee Krafts so any passwords that are stored in the database must be encrypted. (7%).
2. Members must be able to login/logout of the site (this should include a "remember me" function which uses cookies, once clicked the user should not have to log in again on this machine). (9%).
3. Both members **and** non-members must be able to browse products which Kilkee Krafts are currently selling. They must also be able to search the database for a particular product. The ability to drill down on an individual product for further information is also required. (8%).
4. Members must also be allowed to add products to a wish-list (which will be available to them every time they visit the site – i.e. stored in a table). (7%).
5. Members must have the ability to add/remove items from a shopping cart using session data. (7%).
6. Members will also be able to view and amend the details of any order they currently have within the system. (5%). They can only access their own orders.

Administration (20%)

1. Administrators (there might be more than one) must be able to login/logout of the system. (5%) There is currently no table to store administrator's details – this will have to be resolved.
2. Administrators must be able to add new products to the system as well as edit and delete existing products. (5%). Any addition or update (of existing records) must include the upload of an image. A thumbnail image of the image must also be created.
3. They must also be able to search the database for a product as well as drill down on an individual product for further information. (5%). The information presented to an administrator when browsing product should be more detailed to the view that is presented to customers.
4. Administrators will also need to monitor and amend orders (for example to add a note/comment to an existing order) currently within the system. (5%). Administrators can access all customer orders.

Additional Features (17%)

Kilkee Krafts would like you to enhance the application with some additional feature(s). The feature(s) can be added to either the members or the administration side of the application. You are free to change the structure of the database to achieve your aims. The following are only suggestions as to what you might look to implement.

- Review the CodeIgniter user guide for ideas on how to implement extra functionality via CodeIgniter
- Gift card functionality
- Featured Products
- News articles
- Payment Processing
- Perhaps you might allow members the facility to retrieve their username/password (should they forget it) as well as the ability to update their details (delivery address etc.). This could be developed using the CodeIgniter's Email class – email users password to them should they forget it.
- Perhaps administrators would like to be able to discount certain categories of products by a given amount. For example, they notice that ceramics are not selling well so they decide to discount all ceramics in the system by a given percentage value.
- Perhaps you would like to include functionality for supplier processing. In this case the supplier is the artist or craftsperson.
- Meet the artist/craftsperson – bio with links to their art

Note that 17% is a considerable amount of marks and so a considerable amount of work must be done to achieve this.

General Issues (8%)

- The application must be secure and any sensitive information must be encrypted (credit card details are currently not encrypted). Access to the database must be restricted using a password
- The user interface must be aesthetically pleasing as well as easy to use and intuitive. Any colour schemes or styles sheets used must be consistently rolled out over the entire application. Clicking on the logo must lead to the home page
- All errors must be handled in a graceful fashion and the application must not crash at any point.
- User input must be validated where possible and the use of required fields is advised to ensure that the database is not left in an inconsistent state. Forms that contain required fields must be repopulated should they be submitted incorrectly.

Weekly Demonstration of Your Work in Class & Weekly Upload (12%)

You are required to demonstrate your code weekly in class to me between now and the final submission on the **Sunday 7th of February**. The demonstrations are scheduled to take place on the following dates. If your timetable is different in Semester 2, the demo will take place during your 2-hour lab.

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|-----------------------------------|---|
| 1. Sun 6 th December – | This week does not have a demo as it is the week of CA2, upload zip of project & upload progress record |
| 2. Tue 12 th January - | upload zip of project & upload progress record & demo |
| 3. Tue 19 th January - | upload zip of project & upload progress record & demo |
| 4. Tue 26 th January - | upload zip of project & upload progress record & demo |

3% is allotted to each demonstration; clear progress will be expected from week to week. Failure to demonstrate your work in a given week will see you forfeit your marks for that demonstration.

To gain maximum marks you must

- Upload to the correct Moodle weekly upload slot **AND**
- Demonstrate (**all but the first upload**) during the allotted time **AND**
- Make clear progress. This must be documented in the project progress record, outlining what you have completed this week

NOTE – IF YOU DO NOT DEMO & UPLOAD & MAKE PROGRESS YOU WILL FORFEIT YOUR 3%

Final Upload

For the final upload **all** of the following must be included

- Zipped folder of your project
- SQL dump of your database – your project cannot be tested without this file
- Word document outlining your additional features – if this is not submitted, it will be assumed that you have no additional features

Test your final upload on a different machine. **IF I CAN'T TEST YOUR PROJECT YOU WILL LOSE MARKS**

Things to Note:

Kilkee Krafts have a comprehensive database of their existing customers, orders and products. Up until recently, customers were able to pay for purchases using cheques. However, since 1/9/2018 payment by cheque is no longer possible and all purchases must be made via credit card.

You will have to bear in mind the various relationships that exist between the tables in the system as you develop your code. For example, when a member places an order, it will impact on four tables (orders, orderdetails, payments and products (to reduce the quantity on hand by the order quantity)). Because of the relationships that exist across the tables in the system, careful attention will have to be paid to the deletion of records. E.g. you cannot delete a product that has an order on the order table.

If a member attempts to purchase more items than are currently in stock, the order cannot be fulfilled and they should be informed of this.

When a member places an order, they can (obviously) order more than one product at a time. The member must be able to see a summary of their shopping cart at all times (perhaps locate it in the top right hand corner of the application);

A customer does not have to use same payment details for every order.

Kilkee Krafts have only photographed a small number of their products. These images are available for you. They have built their database over a number of years but they are aware that anomalies may exist within it.