Moylish Market is a Limerick based farmers market who specialise in top quality organic food produce. They sell their produce from their base at the LIT Moylish Campus. They currently have a desire to build an online presence which will allow customers (members) to browser their extensive product catalogue from where they will be allowed to purchase items through a shopping cart.

Moylish Market 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 Moylish Market 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 Moylish Market 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 Moylish Market 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). (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%).

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%)

Additional Features (14%)

1. Moylish Market 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.

   - 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 home made jams are not selling well so they decide to discount all home made jams in the system by a given percentage value.

   - Perhaps you would like to include functionality for supplier processing

   - Note that 14% 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).

- 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.

- 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 (15%)

You are required to demonstrate your code weekly in class to me between now and the final submission on the <mark>Friday 7th of February</mark>. The demonstrations are scheduled to take place on the following dates depending on the day of your Group 2 hour lab session.

Week starting
Mon 2nd December
Mon 13th January
Mon 20th January
Mon 27th January
Mon 3rd February

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

- Make clear progress **AND**
- Demonstrate during the allotted time **AND**
- Upload to the correct Moodle weekly upload slot

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

Things to Note:

Moylish Market 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 1/9/2019 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.

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.

Moylish Market 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.