Deadlines:

Task	Deadline	Marks
Prototype of the User Interface using CI Template	6 November 2020	20%
(Header, Footer, View, Body)		
Stored Procedures to support all functionality	20 th of November 2020	20%
Secure Login and registration	4 th of December 2020	10%
Selecting and Displaying Fabric, Notions, Classes	16 th of January 2021	25%
Purchasing Fabric, Notions, Classes (Shopping Cart)	31st of January 2021	25%
Final Project Upload	8 th of February 2021	

Copying or Plagiarism will result in 0% allocate for ALL parties involved.

Project Details

You are required to develop a database driven website for a company called **GiddyGoat** which sells craft material and craft classes. Today all sales are in person but the owner wishes to move a large portion of their business online.

GiddyGoat sells different types of fabric and notions (scissors, rulers needles etc.) that can be used in the craft of quilting. The fabrics range from cotton, silk, batiques, poplin etc. fabrics. There is an ever ending amount of fabric types and the owner currently has over 1,000 fabric in her collection.

She also sells notions such as needles, thread, rulers, pin cushions etc. Again she have over 500 different notions all of different types (threads, rulers etc.)

At specific dates the owner runs classes on various crafts such as felting, quilting, ticker tape etc. She wishes to allow people to book these courses / workshops online.

You are required to design a web application that can be used by GiddyGoat to support the functionality outlined in Appendix A.

To see an example of a similar website please reference - https://www.quiltyarnstitch.com/

Database Structure

GiddyGoat holds information on the following:

- Fabrics
- Notions (scissors, needles, fabric markers etc.)
- Fabric types
- Notion types
- Classes
- ClassBookings
- Members
- Shopping Cart
- Purchases
- PurchaseDetails

Types of products:

Giddygoat sells fabrics, notions and classes.

Fabric Type:

New fabric types can be added when required. There are a number of different types of fabrics (cotton, silk, rayon, poplin etc.). Each fabric type has a unique id and is an auto increment, a name and a description (silk, cotton, rayon etc.). All of these are mandatory fields.

Fabrics:

Each fabric has a unique id associated with it which is an auto increment. Each fabric is of a fabric type (cotton, silk, linen etc.). Each fabric has a name, description, cost, primary colour, secondary colour, ternary colour and image of the fabric is stored. All of these are mandatory fields.

NotionType:

Each Notion is of a notion type (rulers, pens, needles etc.) New notion types can be added when required. There are a number of different types of notions (rulers, pens, needles etc).

Each notion type has a unique id (notion_type_id) and is an auto increment, name and a description (rulers, pens, needles etc.). All of these are mandatory fields.

Notions:

Each notion has a unique id associated with it which is an auto increment. Each notion is associated with a notion type (rulers, pens, needles etc.). The description, cost and image of the notion is stored. All of these are mandatory fields.

Classes

Each class has a unique class id which is an auto increment. The name, description, date of class, time of class, price and maximum attendees allowed is stored for each class. All of these are mandatory fields.

ClassBookings

When a member books a class the class_id, the member id, whether they have paid in full and the balance due is stored. All of these are mandatory fields.

Members

Each member has a unique member_id which is an auto increment. The first name, surname, password, phone No, email, AddressLine1, AddressLine2, AddressLine3, city, county, country, and whether they subscribe to a news letter is stored. This defaults to 'Y'. The only valid values allowed in this field are 'Y', 'y', 'N' or 'n'.

Shopping Cart

The owner of Giddy goat would like to include the concept of a shopping cart to their new website. The shopping cart would securely identify the transactions for the current browsing. Each entry in the cart is uniquely identified by an auto increment number shopping_cart_id, session_id product_id, name of the product, description, quantity, price date_added and a path to the image of the product. All of these are mandatory fields.

Purchases:

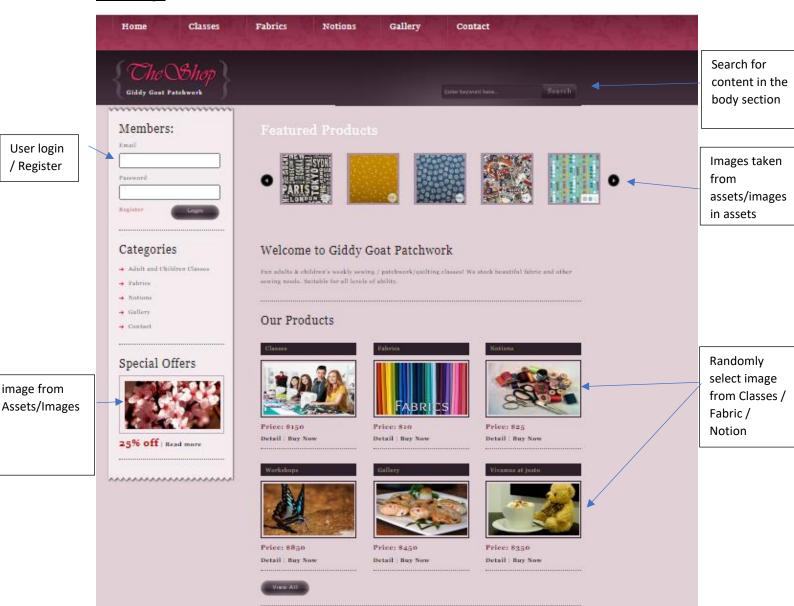
For all products (classes, notions, fabrics) that are sold an entry is entered in the purchases table. Each purchase has a unique purchase_id. The member_id and the date of the purchase is stored. These are all mandatory fields.

PurchaseDetails:

Once the user selects to purchase the items in the shopping cart these items are moved to the Purchase table and Purchase details table. Once purchased the details are removed from the shopping cart table. Multiple items can be purchased at the one time. Each purchase has an entry(entries) in the PurchaseDetails table. Each PurchaseDetail has a unique purchase_detail_id, the purchase_id of the purchase. The details of each purchase are also stored such as the id of the product purchased (class_id, notion_id or fabric_id). The qty of the product purchased. It defaults to 1. The cost of the purchased item. All of these are mandatory fields.

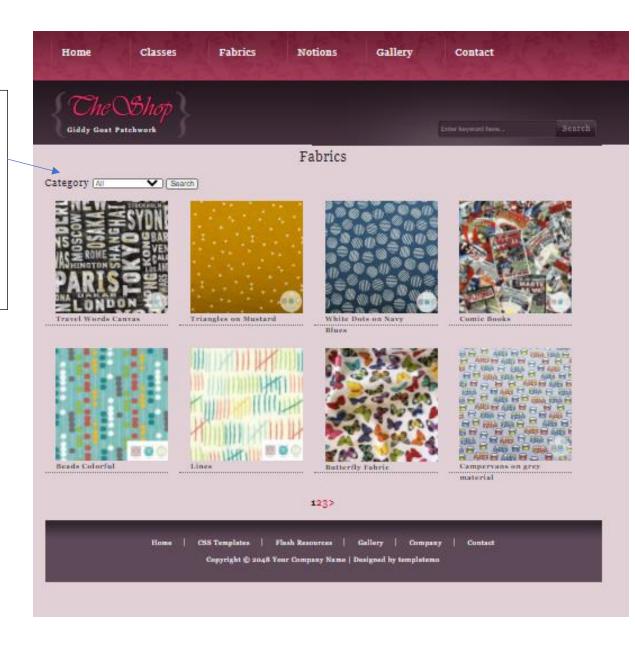
Appendix B – Preliminary User Interface

Home Page

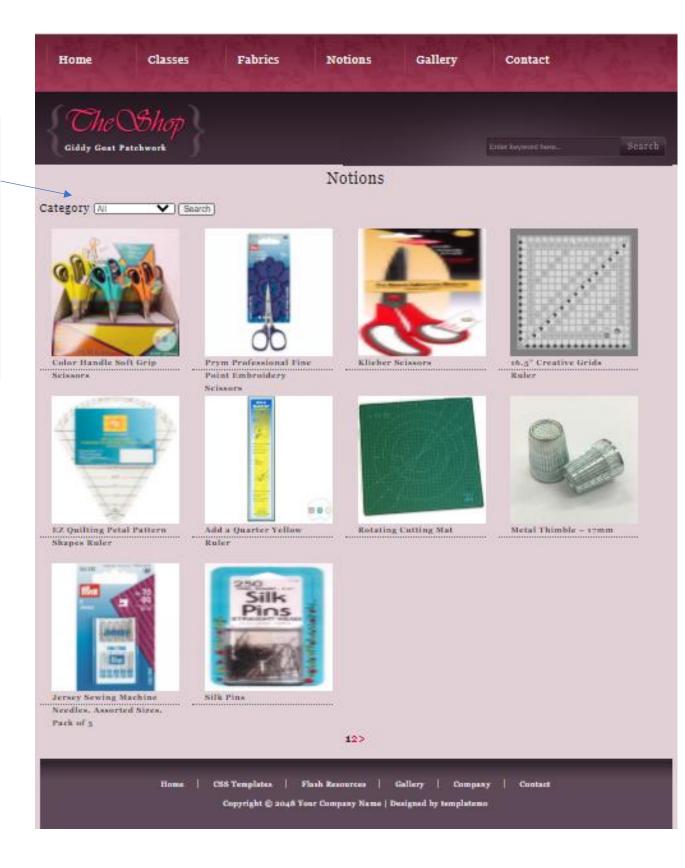


Fabric

Search button - search and display fabrics of type entered – only fabrics for this type are displayed. The Fabric container should be displayed in the body section



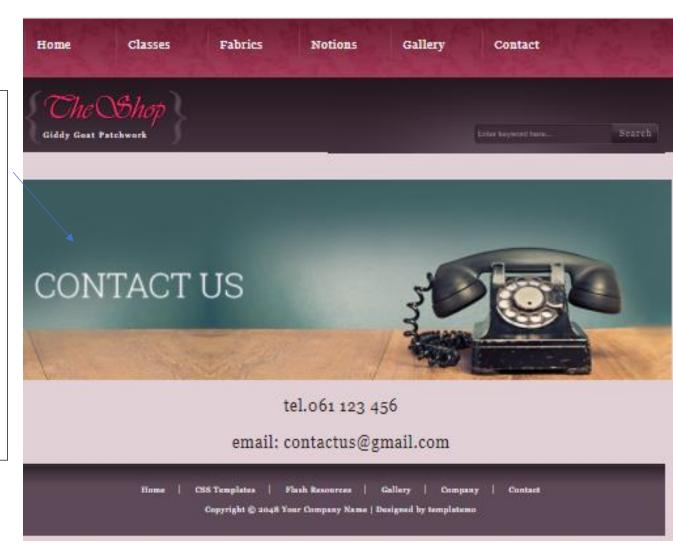
Search button
- search and
display
notions of
type entered —
only Notions .
The Notions
container
should be
displayed in
the body
section.



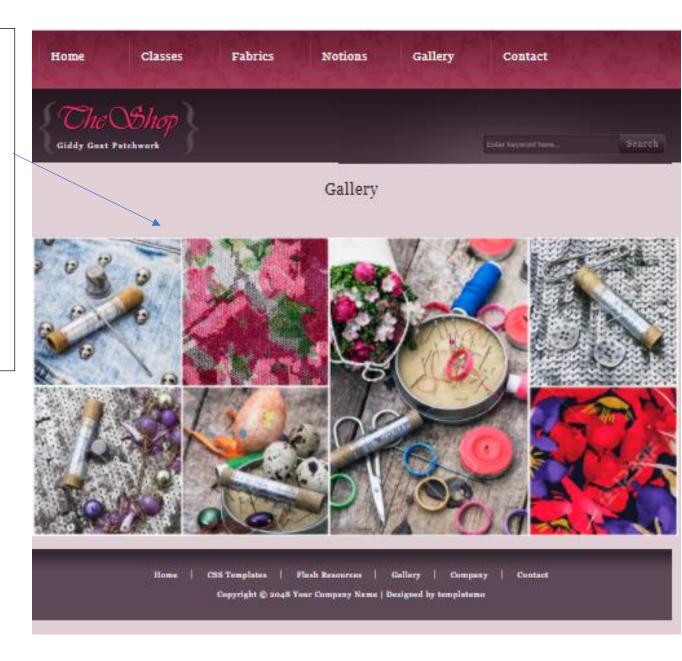
You have to display the classes on a calendar in this page. The classes section should be displayed in the body section of the template. Check out the free software you can use.



The contacts page should display contact details and a map of where the shop is. This is the details for the body section of the template. You can use a gallery to display these images check out the free software you can use.



The Gallery page is dynamically created displaying the images in the assets/images folder. You can use a gallery to display these images — check out the free software you can use



Project Tasks

- 1. Create the database and its relevant tables in mysql using the resource 'SQL Statements to Create GiddyGoat Database & Tables' on Moodle.
- 2. Insert the test data into the GiddyGoat tables create in Step 1 using the resource 'SQL Statements to Insert into the GiddyGoat Tables' on moodle.
- **3.** Using Codelgniter Templates create a user interface prototype for your GiddyGoat Project. The user interface should have a Heading, Footer, SideBar and body section on each page. The Header, Footer and Sidebar section will be the same on all pages. The body will change dynamically depending on the users selection. The body section of the page can be one of the following:
 - a. Home
 - b. Fabric
 - c. Notions
 - d. Classes
 - e. Gallery
 - f. Contact
 - g. Registration

The header contains the banner with the menu options and the search bar.

- **4.** Identify and write the Stored Procedures (SQL code) you require to support the functionality in Appendix A.
- **5.** Write PHP code in Codelgniter to support the functionality provide in Appendix A.
 - a. You MUST add form validation and error handling where necessary (all input).
 - b. You MUST comment all your code.
 - c. Do not hard coded values for dropdown options these must be retrieved from a database.
 - d. Use good coding practices use variable for directory paths etc.
 - e. Don't display primary key values users won't remember what products 5 is. Therefore display the descriptions rather than the primary key values.
 - f. Error handling and validation should be catered for within your code.
- **6.** Testing of your project.

Appendix A - GiddyGoat Online Shop Functionality

The following functionality should be implemented in the GiddyGoat online shop.

1. Secure user Login using sessions. User logs in using a username and password that is verified through a database lookup. The user should be able to register here also. The input should be validated (required, valid email). When a user successful logs in put a message on the top right hand side "Welcome Carol ".

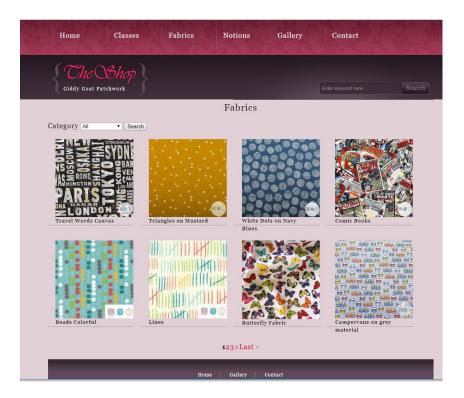


2. On the Home page the featured products are dynamically displayed by displaying of the featured products found in the folder assets/featured. These are displayed using the scrollbar on the Home page.



3. All links to the relevant pages are properly referenced. For example when you select Classes either from the menu, sidebar or under the Classes image on the Home page it renders the body of the template with the classes page details.

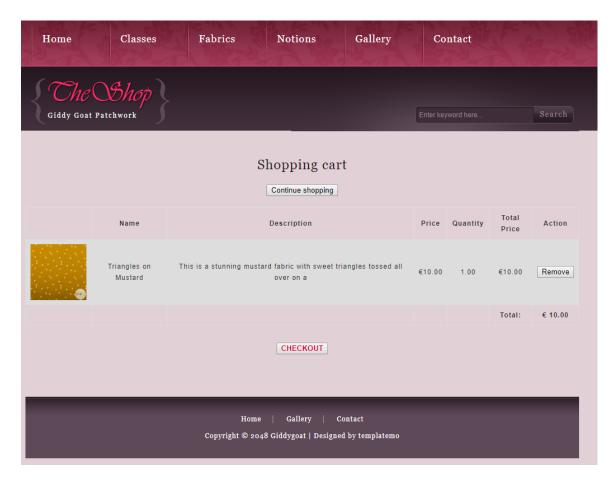
- 4. In the Classes page, display all the classes that are available (don't display classes in the past). Display the details of the class and allow a member who is signed in to book a class from this page. Make sure it gets added to the shopping cart. Display the shopping cart afterwards. When booking a class make sure the max attendees is not reached. If it has just display a message notifying the member that the class is full.
- **5.** In the Fabrics pages display all the fabrics that are available (8 per page) as shown below. Use pagination.



6. When a user selects a fabric by clicking on it display the details of the fabric as shown below.

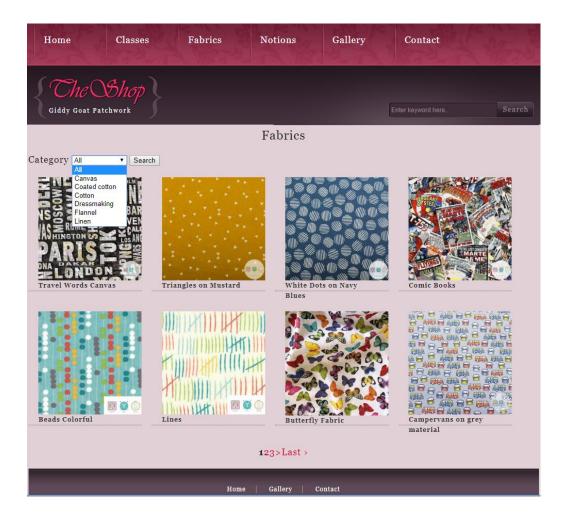


7. When a user selects add to cart – the details of the item are added to the shopping cart. The shopping cart is displayed.

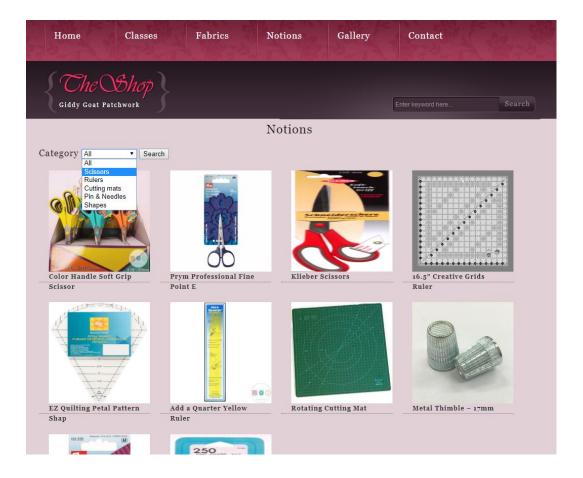


8. When the user selects continue shopping the user is redirected the previous page.

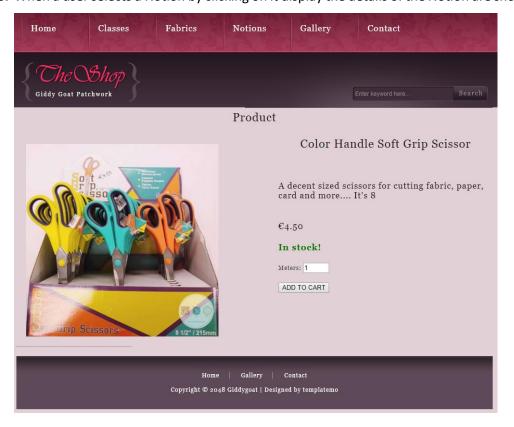
- **9.** When the user selects checkout the details of the shopping cart are added to the Purchase and purchaseDetails tables. A confirmation message is displayed before adding to the purchase and purchaseDetails tables.
- **10.** You should allow the user to be able to delete items from the shopping cart, as shown above.
- **11.** In the Fabrics page you should allow the user to be able to search by fabric type. The dropdown is filled from the fabric_type table. The name is displayed in the dropdown box (as shown below).



12. In the Notions page you should allow the user to be able to search by notion type. The dropdown is filled from the notion_type table. The name is displayed in the dropdown box (as shown below).

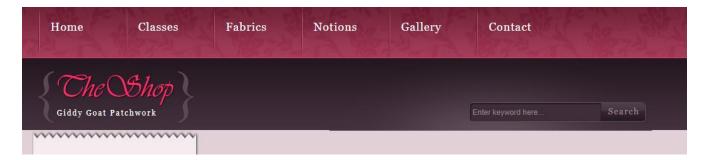


13. When a user selects a Notion by clicking on it display the details of the Notion are shown as below.



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- **14.** When a user selects add to cart the details of the item are added to the shopping cart. The shopping cart is displayed.
- **15.** In the search button on the header, when a user enters in a keyword in this textbox. A/I details of the fabric, notion, classes matching this keyword are displayed (as in the fabrics and notions pages).



- **16.** When a user selects the gallery page images of product made at classes are displayed in the gallery.
- **17.** When a user selects the contacts page Giddygoat contacts details are displayed.