

ClothingStore

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Software Project

e.g., Develop a PC or Sports shoe website

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# Introduction

The overall aim of the project is to develop a working web app, also to work on researching, designing reporting and project management skills. I’ll be using multiple coding languages like, Php, Bootstrap, Html, Css, SQL, Sass, and JavaScript. Also with the help of multiple applications to assist in using the skills for example, Visual Studio Code, PhpMyAdmin,Figma,Git & Github.

# Business Concept

## Business Idea

The Business is an alternative clothing store. There are some competitors specializing in a similar style of clothing also focusing their brand on suppling to alternative styles. The site is a brand-new edition for the company as they have many stores and they want to add onto them all with a online webstore. Users can browse, buy and mainly choose whether they want a delivery or send it to a nearby store for pickup. Users are also able to log in, register for an account. Users can purchase a monthly premium service, with faster support times, notifications about upcoming exclusives and a better overall experience.

## Business model

The business will see increased traffic from the implementation of a online store, the main business is a clothing store so profits are seen from selling licensed merch and originals. The premium subscription also is an increase in income.

## Market Research

## Marketing/Advertising

Most consumers use internet traffic to discover business’s and thus they’d likely find the webapp first before they discover the physical store. Customers will be encouraged to order through the site and pickup items to save money on both the consumer and the business

## Suppliers

All our suppliers are fully sustainable and make sure to have fully compensated workers. This provides a safety guarantee to all the customers that the product that they are purchasing is a morally friendly item.

## Competitors

The biggest competitors for the alternative webstore are places like Rebel Rebel, Rebirth Of Cool and Fresh limited. Our webapp would provide services like the premium subscription and the instore collection which our competitors don’t provide, this makes us standout and allows us to lead in innovation in the market

# Requirements

## Introduction

The project is a online web application extension of a imaginary store. It will make customers have the option to browse, purchase and choose delivery type; either home delivery or pickup. The store specializes in alternative clothing in the growing market in Ireland

The business sells clothes to the irish alternative market, the main competitors in the business are Rebel Rebel and Fresh limited who already have a following. Our webstore provides services that fill a service that customers are looking for

## Requirements gathering

### Interviews

Q: Where would you usually shop for clothes?

A: I prefer to search through shopping centers and find items that I like  
Q: How often would you online shop over going to a physical store?  
A: I enjoy the experience of going to the physical store, but I prefer online shopping as they usually have a bigger selection of items and is easier to find items I like

Q:Would you prefer to wait a few days for a delivery or go to a store to pick up the items?

A: If I have one or two items I would prefer to get the items sooner and pick them up but if it’s a bulk order the ease of having it be delivered to my home is perfect

## Requirements modelling

### Functional requirements

The webapp will have full crud Functionality. Users will need to be able to browse through the pages, select items  
Administrators can add, change, delete items from list of apparel   
basic readable ui for the basic users. Role permissions are a necessity to make sure people get their right roles  
unlogged users can register or login to their accounts

### Non-functional requirements

Users can view items in further detail  
A simple and legible UI pleseant to the eye

## Feasibility

The programs I plan to use are Github, Miro,Figma,Bootstrap,Laravel and Xampp  
I use github to manage my code and have a easy way to track where I have progressed in my project  
I will use Miro to keep my ideas and research.

Figma will be used to develop my wireframes and designs of the webapp.

I use xampp to host my database for the webapp

Laravel and bootstrap are to make my webapp function. Laravel is a php framework and Bootstrap is a Css Framework

# Web application Design

## Layout

The webapp will be using bootstrap. Using Sass to customize bootstrap when necessary. I will need to add bootstrap dependency to Laravel. The webapp will have a bootstrap grid with responsiveness

## Interaction

The webapp has login and register on the homepage for unregistered users, Any users are given Logout options inplace of it. Adminstrators have clear buttons to add, change , delete content. All users have a clear button to view a product

# Database Design

## Description

My webapp will need a database to store items available to purchase, and user information on registered users. all passwords are encrypted. Adminstrators can create new products. The new apparels have the name, the series its from, its price, the items reference number and finally the image for the item

## Business Reporting Requirements

Substitute in here the information the users of your application will want to be able to view.

1. Admins need to be able to create, view,change,delete posts from the available apparel
2. Users need to be able to view products and purchase them
3. Unregistered users must be able to view the homepage
4. Unregistered users must be able to register for an account
5. Unregistered users must be able to log in to their accounts

## Textual Representation of Dataset

Substitute in here the tables for your database

**apparels** (id,name,series,price,refnumber,image\_name)

**roles** (id,name,description)

**users** (id,name,email)

## Business Rules

 A series has many apparels

 A apparel has one series

 A apparel has one price

 A apparel has one referencenumber

 A apparel has one or many images

 A User has one role

 A Post has one Title

 A Post has one Series

 A Post has Price

 A Post has one Reference Number

 A Post could have one image

# System Design/ Architecture Overview

* 1. Model View Controller

A user make a request for a page from the server. The controller handles the request. The controller checks the model for the data requested. The Model is responsible for interacting with the database and it validates the data requested. Once the controller has the data it displays it to the view. The view is responsible for the UI of the webapp. The controller interacts with both the model view and handles requests from them due to them not having a direct communication between them

* 1. User Authentication

When setting up a Laravel project I create 2 roles, Administrators and Users. users can view the webapp and Admins have full CRUD functionality. Each user is given a user role which is stored in the database table “user\_role”. The UserSeeder acts as a template for users. the user model checks the user’s role and see if they are authorised to do the action. When a user registers for an account they are automatically assigned the default user role. Users are given a user ID, which is linked to a role id in the role table. A user with a role id of 1 will have administrator permissions and a user with an ID of 2 will have only default user permissions. When a user goes to a page, the pages controller and middleware will check if the user is authorized to visit the page.

* 1. Routing

When a user logs into the webapp they are directed to a homepage within a user folder . this is done through routing. When the user clicks on the link to go to the homepage, the route in web.php gets the user/home page, it then goes to the home controller and calls the index function. The index function then returns the users correct view

# Testing

* 1. Introduction

My webapp is experiencing functional testing. Im planning to test different parts of the website such as the CRUD functionality, user login and registration , the navigation. These are all key functional requirements for the webapp.

* 1. Functional Testing

Im going to test the login, registration , CRUD and navigation . Im recording the test results.i will log the test number, input and what I expect the test result to be and the actual outcome of the test. Its very important that the outcome is what you expect otherwise I will debug it and solve the issue

* + 1. Login/Registration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test No | Description of test case | Input | Expected Output | Actual Output | Comment |
| 1 | Testing if users can register for a account | Users enter a name,email,password and a confirmation password | An account is created | An accounted is created and can be seen in the database | Test successful |
| 2 | Testing if a user can log in to their account | User enters their email and their password | Successful login | User can successfully login | Test successful |

* + 1. Navigation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test No | Description of test case | Input | Expected Output | Actual Output | Comment |
| 1 | A user can successfully navigate from the homepage to the view item page | A user clicks on the view button on a product | User successfully is brought to the right page | User is brought to the right view page |  |

* + 1. CRUD

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test No | Description of test case | Input | Expected Output | Actual Output | Comment |
| 1 | Create Product works | Admin can add an item to the list | Product gets added to the database and the list of items | Successful creation of product |  |
| 2 | Item can be changed | Admin can change an item from the list | Product gets a successful change on the list | Successful change of the product |  |
| 3 | Item can be deleted from the Page | Admin can delete an item from the list | Product gets successfully removed from the list | Successful deletion |  |

### Discussion of Functional Testing Results

Testing the functionality of the webapp led me to the conclusion that everything works like intended. All data that was created or updated was successful and true. When deleting there was no leftover data that would take up unnecessary space.Login and log out had no problems either

* 1. User Testing

While doing the Usertesting, all the frontend application worked as intended. Checked the pages loaded correctly and smoothly. All the buttons navigated properly.

* 1. Conclusion

There was no issues with the testing phase all worked how I expected it to and saved me a lot of time not having to figure out what went wrong. Going through the process of recording my expectations and findings made me easier to review and change parts when necessary.

# Project Management

## Introduction

Project management is important so that my project can be mangaged properly, the resources and scheduling are balanced so my project can expect outcomes on time and I can deliver on my set goals. If a project is mismanaged, it will drag on and will be put off wasting time and resources

## Project Phases

### Requirements

Requirements are everything I need for the project. Its broken down to functional and nonfunctional. Such as CRUD is functional but a easily understood design is non functional

### Design

Design includes typescales, wireframes, colour pallets and other front end developer duties

### Implementation

For a good Implementation stage its important to have a good project management system.a backflow system is the most useful tool during the implementation stage

### Testing

Its important to leave time for testing otherwise any mistakes that you could’ve made would be left behind and the user would experience.

## Project Management Tools

### GitHub Project

Github project was used to manage my project, I can create tasks for my project I can add items I need to do. I can drag items to what im currently working on and once its completed I can bring it to the Done stage. This is very useful to keep track of what work I need done and what stages I am at.

### GitHub

Github is the best tool for storing my code publically . every time I work on code I was able to commit the changes at the end of the session and it would automatically sync to the public server. And if it was required I could pull the code down to my own local code.

# Reflection

## Your views on the project

I feel the work I have submitted was done to a good enough degree, all my CRUD functionality was achieved, although a lot of my aspirations didn’t translate to the final product such as the premium subscription or the buy option, I final product is good.

## How could the project be developed further?

I would add more functions such as the premium customer feature and the buy option for the stores and a store locator for when choosing delivery

## Assessment of your learning.

I feel like my design skills have greatly improved making design choices have gone from crazy aspirations to more realistic outcomes. My understandings of the model view controller relationships are better than from the start of the project. The one fault is my project management, and specifically my time management haven’t changed I still leave projects to the last minute and fail to provide work in on time, I believe some personal challenges are to be faced if I am to improve but also some personal problems are the issue to why I couldn’t hand in work on time this year.

## Completing a large software development project

I learned that staying on top of my work is the most important challenge to face when working on a large software project. Managing the entire project is also important, keeping track of what work you have completed and what you are working on now.

## Technical skills

My Html, Css,Js ,SQL and Php skills especially have improved the most during this project. Finally having a full understanding of the Laravel framework and how multiple pages relate and communicate with eachother. From going from hand making each page and writing each page line by line then going to using frameworks was daunting and I didn’t fully understand it at first

## Further competencies and skills

Researching other sites in the market helped greatly in inspiring me on a design on my site and also creating ideas for what my site could contain.

# References

Laravel: <https://laravel.com/>  
Bootstrap: <https://getbootstrap.com/>

The Department of Technology and Psychology in IADT uses APA 7th referencing style.

Use alphabetical order for your references.

This site gives details about how to cite websites using APA:

https://www.wikihow.com/Cite-a-Website-in-APA

The following is a useful site for creating citations for APA for websites.

<http://www.citationmachine.net/apa/cite-a-website>

You can also use the Referencing tab within Microsoft Word to enter reference information manually. Word then creates an APA style reference