

Software Project

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Software Project

Produce a software solution for a business case study or a non-commercial client you identify.

Year 2 2022-23

DL836 BSc (Hons) in Creative Computing

Link to resources created as part of the project.

| GitHub | <https://github.com/y2-SW-project/swproject23-ac-png.git> |
| --- | --- |
| Miro | <https://miro.com/app/board/uXjVPsp37ug=/?share_link_id=281630697980> |
| Figma (Project) | <https://www.figma.com/files/project/81876427/Software-Project?fuid=1026808025755109748> |
| Video | Link to your video file (MS Stream, YouTube) |

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# Introduction

**Overall aim**

Using what we have learnt over the last two years, we must build a Laravel web application with CRUD (Create, Read, Update and Delete) functionality.

**Technologies**

I connected to the server and database using PHP.

I created and organized my database using MySQL.

Bootstrap is the CSS framework I used to style my website.

I styled the website using CSS.

I built the website using HTML.

**Tools**

For my database, I used phpMyAdmin to design a sample structure.

I used this to do research and come up with ideas, Miro.

To wireframe my website, I used Figma.

For my project, I used TablePlus as my database tool.

**Project management**

I frequently saved my code on GitHub and added comments so my lecturers would know what I was working on.

# Business Concept

## Business Idea

DietOnline is an online grocery store that sells specialised food based on different diets. We sell dairy-free, meat-free, gluten-free and other products in ready-to-go packages. Our food will substitute traditional food but still provide the same great taste and nutrition.

We only want to provide nutritional, ready-to-go food, which is why our food is over half the price of regular shops. We sell everything from bread to sausage and offer services linked to specialised food.

Some of the products and services are;

* Meat-free products (sausages, rashers, burgers, etc.)
* Dairy-free products (milk, butter, cheese, etc.)
* Gluten-free products (bread, biscuits, etc.)
* Products for other diets (low fat, low cholesterol, etc.)
* Recipes for specific diets
* Guides and advice for each diet

## Business Model

Our business model is through service charges for manufacturers, regular customer purchases and any donations we get.

## Market Research

Their customers are individuals and families of all ages on specialised diets and those thinking of going on one.

The customers in this target market are interested in buying healthy, cheap and sustainable for their diets. To appeal to their target market, they sell affordable meals in recyclable packaging and with easy-to-read ingredients and instructions.

## Marketing/Advertising

We will market on social media and in newspapers, buses and bus stops.

We will also reach out to various dietary groups and influencers to spread the message of our food.

## Suppliers

Our suppliers would be food manufacturers who share our value in diet-friendly and sustainable food. We will do a background check on all suppliers before officially contracting to ensure they use proper practices.

We will also offer a way to sign up as a supplier via our website, although they will be required to come in for a meeting later.

## Competitors

| **Product / Service** | **Strengths** | **Weaknesses** |
| --- | --- | --- |
| Aldi (Plant Menu and Free-from Ranges) | * Cheap * Easy-to-make | * No online shopping option * Scattered around the shop and website |
| The Happy Pear | * All food vegan * Easy-to-make * Website has recipes and guides | * No online shopping option * In very few shops * Only one shop in all of Ireland (Greystones) |

## 

## Employees

Our business operates as a warehouse-like business. When customers order food from our website, our warehouse employees go through our various warehouses with an iPad and pick out all the food.

When the food is picked out at the warehouse, one of our truck drivers will drive to your location and deliver the food to you.

## Environmental Impact

Since most of our target market is vegans, we made sure that our products were packed in all recyclable materials.

We also do our best to ensure that all our manufacturers use sustainable means when making and preparing food.

# Requirements

## Introduction

## Requirements gathering

## Similar applications

## Interviews

## Requirements modelling

## Functional requirements

## Non-functional requirements

## Use Case Diagrams

## Feasibility

# Web Application Design

## Layout

## Interaction

## Colour schemes

## Font choices

## Wireframes

# Database Design

## Description

## Business Reporting Requirements

## Textual Representation of Dataset

## Business Rules

## Entity Relationship Diagram

## Tables

## Database Dictionary

# System Design/ Architecture Overview

## Introduction

## Model View Controller

## User Authentication

## Routing

## Templating

# Testing

* 1. Introduction
  2. Functional Testing

## Login/Registration

## Navigation

## Calculation

## CRUD

## Discussion of Functional Testing Results

* 1. User Testing
  2. Conclusion

# Project Management

## Introduction

## Project Phases

## Requirements

## Design

## Implementation

## Testing

## SCRUM Methodology (optional)

## Project Management Tools

## GitHub Project

## GitHub

# Reflection

## Your views on project

## How could the project be developed further?

## Assessment of your learning.

## Completing a large software development project

## Technical skills

## Further competencies and skills

# References