

Assignment Brief
Academic Year 2019-20

Module code and title:	CO550 Web Applications	Module leader:	Derek Peacock
Assignment No. and type:	CW2: Team Project Implementation	Assessment weighting:	65%
Submission time and date:	Before 14.00, 31 st January 2020	Target feedback time and date:	Before 12.00, 14th February 2020

Assignment task

In this assignment, you are asked to begin to think about the design of a simple web-based system that provides data management functionality for a business organisation of your choice.

Some of the tasks the organisation will want to carry out include collecting, storing and retrieving external data (from a database). The information below guides you through the stages involved.

You will be assessed on both a demonstration of the finished web application (during which you will be asked questions) and the way you have designed and coded the system.

Deliverables

1. A digital copy of the team's source files for an ASP.NET Web Application with a database back-end that automates a complete business system – provide this via a public code repository such as GitHub or BitBucket.
2. A demonstration in class of all the functionality of the web application with suitable test data.
3. A team evaluation of not more than 1500 words of the web application and the tools, techniques used to produce it as a word document or an Open Office document. This evaluation should also discuss changes to the design of the application that were made during the implementation phase, and suggested improvements to be added in future versions.
4. An individual evaluation of not more than 1,000 words focussed on where the individual team member's views differ from those in the team evaluation.

This assignment has been designed to provide you with an opportunity to demonstrate your achievement of the following module learning outcomes:

LO 1	Display a good level of proficiency in the design and creation of consistent web forms and data-driven applications.
LO 2	Implement and deploy web applications that provide user-friendliness, scalability, flexibility (mobile) and SEO optimisation
LO 3	Design a complete web and database application to automate a business process.

Task requirements

- Create an ASP.NET Web Application shared on GitHub with all the team members and the tutor. This should be an ASP.NET MVC 5 C# Project or an ASP.NET Core Razor Pages or MVC Project
- The project should be a code-first development with at least 2 fully annotated model classes per team member.
- The project should contain database migrations that have been used to create a relational database model in SQL Server that contain at least 2 entities / team member seeded with suitable test data.
- The project should contain suitable CRUD web pages that can be used to maintain the database model.
- The web application should offer users/customers useful public and private functionality based on some chosen business processes.
- The application should contain a security system that authenticates users access to certain pages based on their assigned system roles such as Admin or Customer
- Create a team and an individual evaluation of the completed web application, the tools and techniques used to produce it as a word document or an Open Office document. Include an evaluation of how the application could be extended or expanded in the future.

Referencing and research requirements

The web application should demonstrate best practice for a modern ASP.NET C# Razor Pages or MVC application with a SQL Server database back-end as illustrated on the official <https://dotnet.microsoft.com/> Microsoft website

How your work will be assessed

Your work will be assessed on the extent to which it demonstrates your achievement of the stated learning outcomes for this assignment (see above) and against other key criteria as defined by your programme team.

See marking criteria grid provided below for how each element/task of the assessment will be marked and the corresponding weighting of marks for each element/task required.

Each member of the team should clearly identify responsibility for individual web pages, classes and appropriate testing of those pages.

The web application will be marked for following best practice particularly for:-

1. Consistency in the user interface and the coding
2. Usability and functionality of the application
3. Ease of understanding the code and the user interface.
4. Closeness to ASP.NET C# coding conventions
5. The quality of the underlying database design and implementation
6. How well the seeded data demonstrates the applications functionality in automating business processes
7. How easily the application can be extended and enhanced
8. How well the application adapts to a mobile platform

The marks will be broken down as follows:-

1. 15% Authorised CRUD Pages used to maintain the database
2. 15% Public pages that customers have access to
3. 5% User Login system to provide user authentication and secure access to particular pages
4. 10% Database design, flexibility and extensibility
5. 10% Demonstration of the completed application with sample data
6. 5% Team evaluation of the demonstrated application
7. 5% An individual Evaluation of the demonstrated application

Submission details

- You are reminded of the University's regulations on academic misconduct, which can be viewed on the University website: https://bucks.ac.uk/__data/assets/pdf_file/0024/9546/Academic-MisconductPolicy.pdf. In submitting your assignment, you are acknowledging that you have read and understood these regulations
- Please also note that work that is submitted up to 10 working days beyond the submission date will be considered a late submission. Late submissions will be marked and the actual mark recorded but will be capped at the pass mark (typically 40%), provided that the work is of a passing standard. Work submitted after this period will not be marked and will be treated as a non-submission.

Before you submit

- Please use the provided checklist below to make sure you are 'fit to submit' your work
- We recommend you use this checklist as soon as you get this assignment brief to help you plan your work

Fit to Submit: Assignment Checklist

This brief **assignment checklist** is designed to help you avoid some of the most common mistakes students make in their coursework.

HAVE YOU READ THE ASSIGNMENT BRIEF? IF NOT, DO IT NOW!

In it you will find details of the assessment task, word count, the assessment criteria your work is marked against, and the learning outcomes – the basis for the assessment strategy in each module.

Students often lose marks by forgetting some of the more straightforward elements of their assignments. We recommend that you "tick off" each of the points below as you prepare your work for submission. If you need any help, ask your tutor and / or visit

<https://bucks.ac.uk/students/academicadvice/assessment-and-examination>

TICK

- Have you read and understood the assessment criteria?
- Have you **met** the learning outcomes? You will lose marks and your work may even be failed if you have not.
- Have you demonstrated you can think and write **critically** in the completed work? This means you have supported your arguments/explanations appropriately e.g. using relevant academic sources and you have offered discussion points which extends your own or others' viewpoints to make reasoned conclusions/judgements.
- Have you maintained an *academic tone* throughout your work? Is your work formal, focused, developed and clear?
- Have you checked that the referencing in your assignment is in line with your programme requirements?
- Have you proof-read your work and used spellcheck software to check your spelling and grammar?
- Have you checked the presentation of your work is as specified by your tutor, for example, are font size, colour, style, line spacing and margins as the tutor specified?
- Have you kept to the word count (or equivalent)? *If you are not sure, check with your tutor.*
- Can you confirm that the work submitted is your own and not **plagiarised**?