

## Team Assignment

# E-Commerce Website

## 1 Assignment Description

In a team of 3–4 students, you are to create a fictitious online business, and design and develop a website for it over a number of milestones.

## 2 Marks

This assignment is worth 35% of the overall course marks.

## 3 Due Dates

The assignment is divided in 3 milestones which are due at various points throughout the semester as shown in Table 1.

#	Milestone	Due	Weight
1.	Business Feasibility and Website Design	Week 7	10%
2.	Initial Website	Week 9	10%
3.	Final Website	Week 11	15%

Table 1: Milestone Due Dates

Each milestone must be submitted by the start of your tutorial in the week in which it is due.

Late assignments will be penalised 10% of the possible mark per day. Work submitted more than 7 days late will not be marked and awarded zero marks.

## 4 Assignment Details

Complete the assignment as specified in Section A.

## 5 Assignment Deliverables

For each milestone, you will need to submit your deliverables and present your assignment as a team to your class and tutor. Your team presentation will be during your allocated tutorial in the week in which your milestone is due.

### 5.1 Team Presentation

As the presentation of the final assignment may take longer, presentations will be during the tutorials in weeks 11 and 12. However, the *complete and final* assignment is due at the **start** of tutorial 11.

Your assignment should be ready to be presented to your class and tutor at the start of the tutorial. You should **not** be working on your assignment during the tutorial. If the assignment is not ready to be presented at the **start** of the tutorial, you will be penalised for being 1 day late.

### 5.2 Assignment Submissions

You will need to submit deliverables for each milestone.

For milestones 1 and 2, you will need to submit your deliverables for those particular milestones to Canvas. If you have multiple files, zip all the files together and submit the zip file.

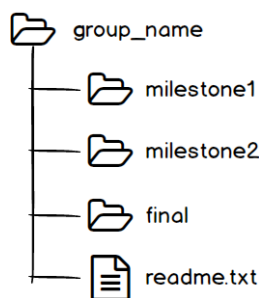


Figure 1: Submission Folder Structure

For the final assignment submission, i.e., milestone 3, submit your *complete and final* assignment to Canvas. **The final submission should be a single zip file containing all the milestones for the assignment.** Zip all your files using the folder structure shown in Figure 1.

Name your zip file (for all submissions) using the following format:  
`<student-number>_milestone-<milestone-number>.zip`.

For example, for milestone 3, a student with ID `s1234567` would submit a file named:  
`s12345678_milestone_3.zip`

## 6 Assignment Guidelines

Your deliverables for the milestones will be marked according to the provided marking guides on Canvas.

**IMPORTANT:** Note that you will **not** receive a team mark. Instead, for each milestone, each team member will receive an individual mark based on the quality of the deliverable multiplied by an `adjustment factor`.

For more details about the `adjustment factor`, please refer to Section 6.1.

### 6.1 Assessment

Just as working in teams can be challenging, so is assessing teamwork. Often, only the product of the team's work is assessed, i.e., the deliverable that the team produces (e.g., the website). However, another important aspect of team work that can be assessed is the process, i.e., how the team members collaborated to create the product. This is much more difficult to assess as tutors cannot be present for every team interaction to judge how effective each team member has been. In this case, *peer evaluation* is used to determine this. That is, each team member assesses how well they think the other team members have performed and contributed to the team. This is a sensible approach as each team member will know best how other team members have performed and contributed throughout the semester.

In terms of assessing a team, there are a number of options. Often, a team is given an overall team mark. That is, the product is assessed and all team members receive the same mark. This can be unfair as sometimes, not all team members contribute equally to the creation and development of the product. To address this issue, in this course an adjusted team mark, based on both the product and the process, is used.

An overall team mark will be determined based on the quality of the product. Each team member will then evaluate each other, which will result in an individual weight, called an `adjustment factor`. Then, team members will be assigned individual marks based on the team mark multiplied by their `adjustment factor`.

**IMPORTANT:** This means that:

- Although the team works together, and a mark is awarded for the overall product, there will be no overall team mark awarded to team members.

- Each team member will be awarded a different mark based on their performance and contributions to the team and the overall product mark.
- Marks allocated to individual team members may be lower than the overall product mark, depending on the individual's adjustment factor.

CATME will be used for peer assessment. You will create your account and practice using this system in Week 5.

## 7 Assignment Advice

This assignment is a large and complex. It is divided into a number of milestones that will guide you to develop the final deliverable: the e-commerce website. It is recommended that you read the entire assignment before making a start. This will ensure that you have a holistic understanding of the assignment and know how each milestone relates to the others. This is important as it will allow you to work on particular milestones while anticipating upcoming ones.

### 7.1 Tutorial Tasks

To facilitate your assignment work, a number of tutorial tasks have been designed as starting points for various parts of your assignment. During these tutorial tasks you should start the work with your team mates and, after the tutorial, continue to work on these for your assignment.

The “assignment starter” tutorial tasks are:

- *Task 3.2 – Team Formation:* Form your assignment team.
- *Task 3.3 – Meeting Minutes:* Record your first meeting minutes as a team.
- *Task 4.6 – Business Idea and Feasibility:* Start working on the first part of Milestone 1.
- *Task 5.2 – CATME: Account Creation and Rater Calibration Exercise:* Create your CATME account, which will be used for peer assessment, and practice using it through a rater calibration exercise.
- *Task 6.6 – Website Design:* Start working on the second part of Milestone 1.

Note that there are other tutorial tasks that also contribute to your assignment, such as the HTML, CSS, JavaScript, and PHP tasks. Some of these include:

- *Task 6.2 – Hosting your Website on a Server:* Publish your website on an RMIT server. Your final assignment deliverable must be published on an RMIT server.
- *Task 8.2 – JavaScript Shopping Cart:* Learn how to create a shopping cart. Your final assignment must have a shopping cart.
- *Task 8.6 – PHP Login:* Create a login to prevent non-authorised users to access your site. Your final assignment must be blocked from non-authorised access.

### 7.2 Teamwork

This assignment requires that you work together with a team of students throughout the entire semester. As teamwork can be challenging, a number of resources will be made available to you for guidance through your tutorial tasks (refer to Section 7.1).

It is important to note that your assignment mark is based on both the product that you deliver (e.g., the website, the quality of the business idea, etc.) and the **process** which you **individually** undertake in your team (refer to Section 6.1).

### 7.3 Tutor Consultation

It is also strongly recommended that you consult your tutor throughout the semester (as opposed to consulting your tutor only at the end). You can ask your tutor for advice or feedback on your particular online business, its design, and its website development.

## A Assignment Specifications

In this assignment, you are to apply and extend the knowledge and skills you have obtained from the course by creating an online business, and designing and developing a website for it. You will need to do this over three milestones:

1. **Business Feasibility and Website Design.** Generate an idea for a new online business and determine its feasibility. Plan and design a website for the business.
2. **Initial Website Development.** Create an initial version of the website.
3. **Final Website Development.** Develop the complete website for the business.

You are free to select any appropriate online business. To ensure that your selection is appropriate, you **must** consult your tutor before you start your project. It is highly recommended that you do the following by the suggested week:

1. Form your team (Week 3)
2. Consult your tutor (week 4)
3. Begin your project (Week 4)

A description of each of the milestones is provided in the following sections.

## B Milestone 1: Business Feasibility and Website Design

As a first step to creating an online business, you must

1. Come up with ideas for the business and undertake some preliminary investigations, such as determining its feasibility.
2. Design a website for it.

In this milestone, you will complete both of these.

### B.1 Business Feasibility

To determine the feasibility of the business, you will need to carry out some simple activities, such as determining your business idea, name, goals, description, and partners. You will need to investigate the availability of suitable domain names, and calculate some basic costing information (e.g., domain name and web hosting costs). Furthermore, you will need to understand the environment in which your business will operate, particularly who your competitors are and what they do.

#### B.1.1 Business Description

Describe your business. Ensure you consider the following.

- **Business Name.** Select a name for your business that is appropriate, catchy, easily remembered and/or associated with the product or services you are selling.
- **Business Team.** Select your business partners carefully and select an appropriate team name. (As this is an academic exercise, you will need to list the student numbers and names of your team members).
- **Business Idea and Description.** Generate a good idea for your online business. Describe both the idea and the business.
- **Customers.** Determine who your customers are and how your website will help them either fulfill their goal or address their problems.

#### B.1.2 Business Feasibility

Once you have identified some rudimentary aspects of your business, you will need to determine if your idea is feasible. While a full feasibility study is out of scope for this assignment, you will need to investigate the following.

- **Availability of Domain Name.** You will need to find an available and suitable domain name for your business. *Note:* As this is an academic assignment, you will not need to buy the domain name, however, you will need to provide a screenshot as evidence that it is available.
- **Setup Costs.** Determine the setup costs for the business. In particular, determine the costs of the domain name registration and web hosting for five years. (There is no need to determine labour costs as your team members have decided that they will implement the website themselves to save on this cost).

#### B.1.3 Competition

Another aspect of determining the feasibility of your business idea is to understand the business environment. In particular, it is important to know who your main competitors are and what they do. Investigate your *main* competitors and provide the following about each them.

- **Name.** The name of your competitor.
- **Website Address.** The website address of your competitor.
- **Summary.** A summary of your competitor, such as what their business is, what they sell, what they do well, and what they could improve upon.

### B.1.4 Website Features

You need to determine what your website will be like and what features it will have. You will need to understand the business environment and current practices and trends in website design.

As you are investigating competition businesses, you should study their websites and identify a list of pages and features that you could incorporate in your website to ensure that is competitive with other websites in this niche. While studying your competitor's websites, you should

- Create a list of pages you should include in your website.
- Observe how orders for goods or services are taken.
- Determine how goods or services are paid for, and the advantages and disadvantages of these methods.
- Create a list of functional features that the websites offer.
- Create a list of design ideas that you should include in your website to impress your customers.

## B.2 Website Design

Once you have determined that your online business idea is feasible, you need to design a website for it. Your design should incorporate the name of the business, the website address, and the features you have identified in your website features (refer to Section B.1.4).

To create your website design, use a wireframing tool, such as [Balsamiq Mockups](#), to create a mockup of your website. Your mockup does not need to show every single page that your website will contain or every single element that will be on your web pages. Instead, it should contain the right amount of detail to give a good illustration of the “look and feel” of your website. It should definitely display the main elements of your website and the most important or interesting features.

For more details about website design using Balsamiq Mockups, refer to *Tutorial Task 6.6 – Website Design*.

## B.3 Deliverables

Develop presentation slides to:

1. Present the feasibility of your proposed online business (as described in the previous sections)
2. Demonstrate your [Balsamiq Mockups](#).

You will also have to complete a peer evaluation of your team members for this milestone. For more details about this, refer to the *Tutorial Task 5.2 – CATME: Account Creation and Rater Calibration Exercise*. You will receive an email instructing you when to complete the peer evaluation.

Submit the following to Canvas by the milestone due date:

1. **Presentation Slides:** Your presentation slides, which includes screenshots of your website prototype in Balsamiq Mockup.
2. **Balsamiq Mockup Project:** Your Balsamiq Mockup Project (.bmxr file).
3. **Meeting Logs:** Any form of communication between team members about the project as evidence of participation by team members. These can be in a variety of formats, including text transcripts or audio files (e.g., if you audio recorded meetings).

## B.4 Advice

### B.4.1 Domain Name Registration

Find domain name registrars by searching online for "domain name registration". Use a number of them to find the best deal for your business.

#### **B.4.2 Web Hosting Costs**

Find web hosting companies by searching online for "web hosting". Review the plans from a number of them to find the best deal of your business.

## C Milestone 2: Initial Website

Once you have completed your business feasibility and website design, you can create the initial version of your website. The initial version does not need to have all the pages and features of your website, but it should have the most prominent ones to give a clear idea of what the final “look and feel” of the website will be like.

At a minimum, your initial website should contain the following webpages.

- Home/Landing page
- “About Us” page
- “Contact Us” page
- Product/Service Catalogue page, including individual product/service pages (but not necessarily a functional shopping cart at this point)

For more details about these pages, and other possible pages that you could include, refer to Section **D**.

### C.1 Deliverables

You will need to present your website to your class and tutor. Presentation slides are not necessary; simply demonstrate your website itself.

You will also have to complete a peer evaluation of your team members for this milestone. For more details about this, refer to the *Tutorial Task 5.2 – CATME: Account Creation and Rater Calibration Exercise*. You will receive an email instructing you when to complete the peer evaluation.

Submit the following to Canvas by the milestone due date:

1. **Website:** All the files for your website.
2. **Meeting Logs:** Any form of communication between team members about the project as evidence of participation by team members. These can be in a variety of formats, including text transcripts or audio files (e.g., if you audio recorded meetings).

### C.2 Advice

This milestone is a stepping stone toward the final version of the website. Refer to Section **D** for details about what you could include in the initial website.

#### C.2.1 Website Template

You can either create your own template, or you can use free templates from the Web. If you do use a template from the Web, you need to be able adapt it to suit your online business. You must also give credit (i.e., attribute) where you got the template.

You will need to use HTML5 for your website. The DocType for this is: `<!DOCTYPE HTML>`

**Important:** While you are allowed to use a **website template**, you are **not allowed** to use a **website builder**. Website builders include but are not limited to: Wix, Weebly, Google Sites, Squarespace, SiteBuilder, and Shopify. You are also not allowed to use Wordpress. If you are unsure about using a website template, check with your tutor.



## D Milestone 3: Final Website

The final website is the culmination of your previous milestones. It is the final **hosted** website that your customers can access online.

Exactly what the website will contain will depend on what the online business is. You should have been discussing this with your tutor throughout the semester. The following sections provide a description of sections and features that could be included in your website. You must implement all the essential sections.

### D.1 Website Template

As with Milestone 2, you may use a website template but not a website builder for Milestone 3. For more details, refer to Section [C.2.1](#).

### D.2 Web Pages

#### D.2.1 Home Page

Design a *home page* that incorporates all the aspects of good home page design. This component will be marked according to the extent to which you have implemented current design principles.

Your home page should validate as correct HTML5, depending on which version you decide to use. (Use an online validation site for this.)

It should have interesting content that is relevant and appropriate for your business, is appealing and is attention-grabbing so that visitors will want to explore more of the site.

#### D.2.2 Content

Your site should include HTML and CSS. You may include JavaScript, PHP, other scripting languages, and technologies as your team decides.

You should study other sites in this niche to determine pages that are usually included in any e-business site and then make sure that you have created these for your site.

Your website needs to provide relevant information about your business; it should be informative so that visitors will want to bookmark your site to return to it often.

All content must be created or written by members of the team. You should not cut and paste from other websites.

What will make your site different? What information will you need to provide visitors? What makes your site so useful that visitors will want to return frequently?

This requirement will be assessed according to how many essential pages you have included and according to the value of the content that you have written on each of these pages. All material on the site must be free of copyright.

#### D.2.3 Graphics

All graphics need to be *created by members* of the team or be *entirely free of copyright* and attributed if downloaded from elsewhere.

Your *logo* needs to be one that you have created and bear no resemblance to any existing company logo.

#### D.2.4 Search Engine Optimisation (SEO)

Conduct some basic research about search engine optimisation (SEO) and apply it to optimise each of your pages. This means that each of your pages should have the correct titles (title tags), description (metatags), correct number of H1 headings, correct number of H2 headings and appropriate use of targeted keywords on the page.

## D.3 Functionality

Your site needs to provide the following functionality at a minimum.

1. Your site will need to provide a way for customers to order products, services, or anything else you may offer.
2. Your site should include a catalogue of products (i.e., a photo gallery) or portfolio (e.g., if your business is a service, a photo gallery of completed work). Where appropriate, these photos may include user-submitted photos, but they must be vetted.
3. The site needs to provide a shopping cart for purchases to be made. The shopping cart must be visible from all pages and located at the top of your site.
4. When a customer checks out the shopping cart, a summary and thank you page should be provided and the shopping cart should be cleared.
5. There should be a *validated form* for getting a customer's name and their email address when they register to receive a *newsletter*. This part should be visible on the home page.
6. Once you have created your web site, include a *login* that prevents outsiders from accessing your site. The login should be before the home page is loaded. (This is only because you may have created a student website that may have a very realistic shopping cart. Normally, you would not block an entire site this way in a real-world situation. Use `inte` and `2047` as the username and password for the login). Refer to Tutorial Task 8.6 for more details.

### D.3.1 Navigation

Design an appropriate *navigation system*. Decide on left or right and/or top navigation. There are always links included in the footer section as well.

Your navigation system will be assessed according to the extent to which you have implemented current design principles.

## D.4 Advanced Features

Decide on extra features that offer a more functional site (above and beyond just content pages). For example, you might include a site search. There are many different features that could be added. You should study other sites as well to find other features that are desirable.

You will be assessed on the degree to which your additional features add to the functionality of the site and its viability as a business.

To be counted and assessed, each of these features *must* be listed in your *Site Map* under the heading “*Advanced Features*”. They should be clickable links that load the page that contains the advanced feature. *No marks will be awarded for the advanced features if links are not provided from the site map to access them.*

Extra credit will be given to innovative designs, designs that “stand out from the crowd”.

## D.5 Deliverables

You will need to present your website to your class and tutor. Presentation slides are not necessary; simply demonstrate your website itself.

You will also have to complete a peer evaluation of your team members for this milestone. For more details about this, refer to the *Tutorial Task 5.2 – CATME: Account Creation and Rater Calibration Exercise*. You will receive an email instructing you when to complete the peer evaluation.

Submit the following to Canvas by the milestone due date:

1. **Website:** All the files for your website.

2. **Meeting Logs:** Any form of communication between team members about the project as evidence of participation by team members. These can be in a variety of formats, including text transcripts or audio files (e.g., if you audio recorded meetings).
3. **Previous Milestone Submissions:** All your previous milestone submissions (refer to Section 5.2 for details).

## D.6 Advice

Developing a website for an online business is a complex and time consuming endeavour. It is also an iterative process in which you develop the website incrementally and get feedback on each new development. The course has been structured such that you get feedback from your classmates and tutor during each presentation. You should start this assignment, especially the website development, as early as possible. You should consult your tutor throughout the development of this project to gain feedback along the way.