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| **Department of Computing** | **Assignment 2 – Website Project**  **ISCG 6420** **IWD**  **Semester 2, 2016** | **2** |
| Assignment Due: 6nd November  Presentations: class time, 2th or 4th November  Total Marks: 100  Course Weighting: 50% | |

# Aim

In groups of 3 you will plan, develop, implement and present a website for **one** of the following clients who want to present, popularise and sell their products online.

1. [NZ Painting](http://www.kiwipainting.co.nz/) was established in 1904 with the dream in mind of being able to supply high quality artworks at an affordable price to the public. Currently, our artworks being displayed in over 150 local cafes, restaurants, and show homes around New Zealand. Our dream is to make these beautiful works of art to everyone not only in New Zealand but all over the world. As we work with a great number of artists, NZ Painting has the advantage of being able to provide high quality artworks in a wide variety of styles at reasonable and affordable prices. Our paintings come under the following categories: Abstract, Christmas, Landscape, Pop art, Portrait, Quote and Text, Sculpture, Split Canvas, Sticker and Still life.
2. Auckland City Books was established in 1971 and our book shops are in every little town in New Zealand. We stock books on a wide variety of subjects including Art, Drama, Humour, Music, Photography, Biography, Sports, Business, Careers, Investing, Cooking and Food, Education, Fiction and Poetry, Travel, Health and Self-Help, Medicine, Nutrition, Psychology, Recovery and Addiction, Relationships, Gardening, Interior Design, Sustainable Living, Humanities. However, with the popularity of internet, the habits of book reading and buying are rapidly decreasing. We therefore change our strategy and want to make our books available on the World Wide Web so that we don’t have to have all the physical book shops. We just want to run the business from a warehouse.
3. Wall Street Wines opened in June 1860, the product of David Smith's and Jamie Dacey's idea that Dunedin might support a shop that indulged their love for naturally made wines from artisanal small producers. There are very, very few brand names here. We choose wines that express their origins, the talent and commitment of the growers and winemakers, and the inherent quality of the vintage. Every wine we stock is tasted, re-tasted, debated.... this is a shop where everyone who works here actually loves wine, drinks wine with food, and knows at least a little bit about what we're selling. Particular strengths here are the Loire Valley, Burgundy and the Rhone, Piedmont, Austria and Germany; we are always working to improve our selection, and we want our wine to be available to all new Zealanders to begin with who would like to buy them over the internet.

# Instructions

Students are reminded to read pages related to assessment rules including rules for dishonest work in the Student handbook. You are allowed to seek advice from any source, but your written submission must be your own work, except where clearly referenced.

# Tasks

##### Part A: Documentation (20 marks)

* The title of the site, a short explanation of its purpose, the target audience
* A site map of all pages showing how the site is organised
* A diagram/scenario of all the paths/functions that users can take/do on the site
* Evidence of research carried out to understand the present web designs for business purposes and how usability is implemented in the website you have developed.
* Page designs for each page showing the layout, design metaphors and technical details of the media used on the page. Specify which elements are static and which are dynamic
* A short explanation about where and how JavaScript/JQuery/Ajax and CSS have been used on the site
* Evidence of testing on at least 3 browsers. Details of any user and browser-tests that were carried out
* A list of future improvements (i.e. problems identified in user and browser tests that you didn't have time to implement)
* Reference the use of any external code/media element

**Part B: Website (70 marks)**

**XML or jSON**

You need to design structure of xml or jSON to store details of 20 products

* For each product, your xml or jSON should store following information:
  + product id
  + product name
  + category
  + description
  + popularity: acceptable values are high or normal
  + onsale: acceptable values are yes or no
  + price

<books>

<book>

<id> 1<id>

<title>Harry potter</title>

<category>novel</ category >

<desc>story of wizard and his friends</desc>

<popularity>high</popularity>

<onsale>high</onsale>

<price>50</price>

</book>

<book>

…..

</book>

<books>

Figure 1 example of xml file

**The Basic layout**

Each page should have the following section in the structure.

* Header – contain a heading or banner for a web page
* Nav – contain a navigational link
* Footer – contain a footer for a web page

**Home page**

This is an initial page for the online shopping website. It consists of 3 sections including introduction, featured items, deal of the day. The requirements are as follows:

* Introduction section should provide a welcome message to your customers.
* Featured items section contains 5 popular items in your online store. You need to use the Ajax technique to retrieve popular items from your xml or jSON file
* Deal of the day section contains 5 onsale items. You need to use the Ajax technique to retrieve onsale items from your xml or jSON file
* For both featured items and deal of the day section, you have to display product image and name for each product.

**Product page**

In this page, you need to provide a web user interface to allow users to browse and select products. The requirement are as follows:

* Use Ajax technique to display items dynamically on the product page
* For each product, you must display a product image, name, description and price
* Allow users to browse products based on category using Ajax technique
* Allow users to interactively add, and remove items from the shopping cart. You need to calculate a total price if users update a cart.

**Membership signup page**

In this page, users can register for a membership. You need to provide a web form so that a user enters their information. The form comprises of the following components:

* A textbox for name
* A textbox for surname
* A textbox for email address
* A date input for date of birth
* A radio button for gender
* A checkbox for user agreement
* A submit button

Once users submit the form, you are required to provide a JavaScript form validation to ensure that user enter their information correctly. The requirements of the validation are shown as follow. Please note that JavaScript validation must be your very own implementation.

* All input fields must be completed or selected
* Name must be at least 5 letters
* Surname must be at least 8 letters
* Email format must be correct
* Users must agree with the term of service
* If a user makes some mistake, you are required to display an appropriate error message.

**About page**

In this page, users can find contact details of your online store. You need to provide the following information:

* provide a brief background about your online shop
* provide physical address, email address and phone number
* In addition, you need to use google map API to display an interactive map

**Additional requirement**:

* + Use external JavaScript
  + Use your own external CSS in conjunction with a bootstrap CSS framework (you have to learn to use it by yourselves)
  + Make sure you adhere to web design good practices i.e. easy to navigate, consistent layout.
  + Your website must pass HTML5 and CSS3 validation

Html validator: https://validator.w3.org/

Css validator: <https://jigsaw.w3.org/css-validator/>

##### Part C: Presentation (10 marks)

The whole team must take part in the presentation. The presentation should contain:

* An introduction to the client, the purpose and target audience
* Demonstration of the website including key design features
* Demonstration of the technical features
* Details of challenges during the production process
* Details of future improvements

**Delivery**

* Your website and the documentation should be uploaded by 6th November, 2016.
* Your website must be uploaded to the *docHyper* web server using FTP.
* If you have problem logging into *docHyper*, please contact Lei Song (lsong@unitec.ac.nz, ext 6152)Your documentation must have a standard cover sheet (see the Student Handbook for standard assignment requirements and cover sheet format). The cover sheet must include a declaration that “this submission is my own work, except where clearly referenced”.
* Your documentation should include the URL of your website.
* Only a softcopy of the documentation is required.
* The softcopy of your documentation should be uploaded to Moodle.
* Presentations will be held during the normal class time in the week of 6th November 2016.

**Late Submissions & SAC**

* Assignments submitted after the due date and time without having received an extension through Special Assessment Circumstances (SAC) will be penalised according to the following:
* 10% of marks deducted if submitted within 24hrs of the deadline
* 20% of marks deducted if submitted after 24hrs and up to 48hrs of the deadline
* 30% of marks deducted if submitted after 48hrs and up to 72hrs of the deadline
* No grade will be awarded for an assignment that is submitted later than 72hrs after the deadline
* Assignments received after that time will not be marked
* Students who, due to circumstances beyond their control, miss a test, exam or an assignment deadline or consider their performance in a test, exam or assignment to have been adversely affected, should complete the form available from Student Central. Within any semester, a student may have only one SAC per course. When requesting an SAC for an assignment, the SAC application form must be submitted (along with work completed to date) within the time frame of the extension requested i.e. if the Doctor's Certificate is for one (1) day, then the SAC and work completed must be submitted within one (1) day.
* A copy of your submission will be kept by DOC for future reference and audit purposes.

**Have a query? Want to improve your grades next time?**

You could:

* Talk it over with your lecturer or programme director.
* Visit Te Puna Ako for learning advice and support.
* Visit the Centre for Pacific Development and Support.
* Contact USU Advocate for independent advice.

# For contact details and more information, go to [www.usu.co.nz](http://www.usu.co.nz/)

# Appendix 1

**IWD Assignment - Individual Contribution Review**

This form is to be completed **once** by the group as a whole and included with your documentation.  You may use several forms if necessary. If the form is missing or empty, it will be assumed that all students contributed equally.

**Each group member must sign this form as evidence that they agree with its content.**

**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Enter the task and/or sub-topic and the name of the student to whom it was assigned. Should a task have been shared, then enter an agreed estimate of percentage involvement beside each name. If only one name appears then it is assumed that the individual contributed 100%. Each task should require approximately the same amount of effort.

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| Task/Sub-topic | Names | **%** |
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| **Department of Computing** | **Marking guide Assignment 2 – Website Project**  **ISCG 6420 IWD**  **Semester 2, 2016** |

# Part A: Documentation (20 marks)

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| The title of the site, a short explanation of its purpose, the target audience | 1 |  |
| A site map of all pages showing how the site is organised | 2 |  |
| A diagram/scenario of all the paths/functions that users can take/do on the site | 3 |  |
| Evidence of research carried out to understand the present web designs for business purposes and how usability is implemented in the website you have developed. | 2 |  |
| Page designs for each page showing the layout, design metaphors and technical details of the media used on the page. Specify which elements are static and which are dynamic | 3 |  |
| Elements of each page and links to other pages clearly shown and labelled | 1 |  |
| A short explanation about where and how JavaScript/JQuery/Ajax and CSS have been used on the site | 3 |  |
| Evidence of testing on at least 3 browsers. Details of any user and browser-tests that were carried out | 2 |  |
| A list of future improvements (i.e. problems identified in user and browser tests that you didn't have time to implement) | 2 |  |
| Reference the use of any external code/media element | 1 |  |

# Part B: Website (70 marks)

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| Structure of XML or Jason | 5 |  |
| The basic layout- header, navigation ,footer | 5 |  |
| Homepage   * 3 sections * Ajax technique for popular product and on sale section | 10 |  |
| Product page   * Ajax technique to display products * Browse product by type * Add or remove items in a shopping cart * Calculate price in a shopping cart | 15 |  |
| Membership page   * Form inputs * Form Validation | 10 |  |
| About page   * Details of your online shop * Google map implementation | 10 |  |
| Creativity or other features | 5 |  |
| Use external JavaScript | 2 |  |
| Use your own external CSS in conjunction with a bootstrap framework | 2 |  |
| Html 5 validation (deduct 1 mark per error) | 2 |  |
| CSS validation (deduct 1 mark per error) | 2 |  |
| Adhere to web design good practise | 2 |  |

# Part C: Presentation (10 marks, a student does not present will get 0)

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| In introduction to the topic of the website | 1 |  |
| An introduction to the client, the purpose and target audience | 1 |  |
| Description/Demonstration of the website including key design features | 2 |  |
| Description/Demonstration of the technical features | 2 |  |
| Details how you interacted with each other on a regular basis | 1 |  |
| Details of challenges during the production process | 2 |  |
| Details of future improvements | 1 |  |