# **Web Site Project**

**1621ICT**— Web Technologies

School of ICT Griffith University Trimester 1, 2020

Part A (10%) is due at the end of Week 6 (5pm Friday 3<sup>rd</sup> April)

Part B (20%) is due at the end of Week 11 with demonstrations to be conducted in your week 12 workshop. (5pm Sunday 17<sup>th</sup> May)

## **Assignment Description**

This assignment tests your ability to design and develop a website using a combination of HTML, CSS and PHP. In Part A, you will need to produce the design for a website for a fictitious client. Your client could be a small local business, a government agency, a volunteer organisation or any other entity that needs an online presence. Use of an existing real business or organisation is not appropriate for this assignment. The aim of the website is to facilitate your client's online needs which you should describe in your design document. In Part B, you must develop the website as per your design document. The implementation should make use of the technologies discussed and taught in this course over the semester, and should be hosted on the OpenShift platform. You will demonstrate your finished product to your tutor in the week 12 lab classes.

It is important to note that submission of this assignment is a requirement for passing the course.

# **Submission Requirements**

Part A of your assignment must be submitted online via L@G under the assessment page. A single Word document is preferred, though a PDF file is also acceptable. Other formats are not allowed. The filename for your document should start with your student number and be named sensibly. For example:

s1234567\_PartA\_Design.docx

You will be required to present Part B of your assignment in your week 12 lab classes. You will also need to download the source files from OpenShift and upload them as a tar file to L@G before the due date. To obtain the tar file, log in to OpenShift and open your editor. Find the folder for your assignment, right click and select download. Rename the downloaded file to include your student number (example below) and upload it to the submission link on L@G.

s1234567\_PartB\_Site.tar

# Part A – Design documentation (10%)

There are 3 main components to the design document you need to prepare;

## 1) Project plan (500 words minimum)

Your documentation should start with an overview of the proposed project. This should include details about your fictitious client, the purpose and goals of the web site, any requirements (functional, non-functional etc.), your target audience and the scope of the site. This should be presented as a brief report with headings for each of the content areas. Refer to the week 2 lecture on website planning for some more specific examples of information that should be included in the report, and the design document guide on the next page for further information.

## 2) Site Design

Your documentation should then provide a 'wireframe' screen design for your site showing the intended layout and navigation options for the different pages of the site. The purpose of a wireframe is to communicate the layout of a page without getting caught up in colour and design elements. Digital wireframes are required, hand drawn designs/artwork are not acceptable. Screenshots of a website/mock website are also not appropriate. This should be a wireframe design showing the overall layout of the website. You can use simple tools like PowerPoint, or online editors like <a href="http://www.wireframe.cc">http://www.wireframe.cc</a>. Any special functions/interactions/design features should be documented and described.

### 3) Hierarchy Chart

Finally, you should provide a technical diagram that shows how your site pages interact. A hierarchy chart is a diagram that shows the hierarchy of all the pages in your site. This is often presented as a sitemap on some websites. This can be created using Powerpoint or Visio, or an online tool such as http://www.draw.io

# **Project Plan Guide**

This section provides additional information about the written content required in the design document. This is a broad guide, you should consider investigating some of these terms yourself and finding out what they mean in the context of project development and website development.

# Client Background

In this section, you should describe the fictitious client. You should provide some background about the client (who they are, what they do), their existing capabilities and limitations, and what their objectives are.

# **Goals**

The goals of the website are what the **client** wants to achieve with the website. This is a formal listing of goals that are based on meetings the clients' objectives. Note: Slide 6 from the Lecture 2.1 slides indicates that you should ask questions about the client's expectations and goals. (The client is fictitious, you will need to imagine their answers!)

## **Scope**

The scope of the website is what you are prepared, willing, and able to do. Note that there could very expensive and time consuming ways to achieve the customer's goals, but given time and budget constraints, we need to narrow the scope to be realistic. Also note that the scope should be more in the **developer's** terms, i.e. it can be more technical, whereas the goals are higher level and more in the client's terms.

#### **Target Audience**

Who are the primary users of the site? Briefly discuss who you think will be the most likely visitors (demographics), what platforms/technologies/hardware they will be using to access the site and what they will be using the site for.

# Requirements

Website requirements are a list of necessary functions, capabilities, or characteristics related to your website and the plans for creating it. There are many different types of requirements documentation. At a higher level, most can fall within one of the following categories:

**Functional Requirements** provide details of how a product should behave and specify what is needed for development.

**User Requirements** describe how user expectations and how they will interact with the product. Use the features, functions, and content described in your client background, goals and scope to develop your requirements. Your user scenarios should outline the tasks your users want to complete on your site.

**Business Requirements** define the objectives and what problems the stakeholder intends to solve with the product.

**Quality-of-Service Requirements** detail what characteristics a product must maintain in order to maintain its effectiveness and any constraints.

**Implementation Requirements** are used to detail changes in process, team roles, migration from one system to another, etc.

You should write about at least 2 different types of requirements.

# Part B – Web Site Implementation (20%)

You are required to implement the website you designed in part A. If you make significant deviations from the design, you should provide a justification on why the design was not followed as an additional document.

While this assignment is designed to allow you to express your interests and creativity, there are some minimum requirements that must be met.

To achieve full marks, your website must include all of the following:

- A minimum of 5 pages (including the landing/home page)
- Demonstrate an understanding of HTML tags by including at least 1 of each of the following:
  - Images
  - Lists
  - Tables
- A Navigation menu / Navigation bar
- CSS files for layout
- A form for user data entry / database searching
- Use a provided SQL database to retrieve and display some data to the user.

Use of pre-created HTML templates is not allowed and will be easily detectable. Please refer to the Academic Misconduct policy under the assessment section of the website.

In addition to the above site requirements, your website will also be assessed for:

- Use of external stylesheets
- Correct formatting of HTML
- Correct formatting of CSS
- Appropriate layout and navigation
- Consistent 'look and feel'

More details will be provided in week 7. The information above is provided to inform your Part A design. You do not need to start implementation.