# Designing a web application for a client

Due: 11:55 PM, Friday April 4<sup>th</sup> Weight: 10%

# Aim: To design a web application for a client based on a chosen scenario

### **Learning Outcomes:**

- Apply ethical practices to development of the websites
- Illustrate the various principles used in website design
- Demonstrate the use of scripting and markup languages used in website development

### **Objectives**

The assignment will allow you to demonstrate and exhibit that you:

- Can analyze requirements and design a website that caters for those requirements
- Can conduct independent research as part of your requirements analysis
- Can demonstrate creativity in your choice of website graphics etc.
- Have understood the basic principles of website design and have applied them to your design

#### **Scenarios**

WebNova Solutions (WNS) is a web application development company specializing in dynamic, database-driven, responsive, and accessible web solutions for businesses and organizations.

As an employee of WNS, you have been assigned the task of developing a web application for one of the clients listed below.

- Virtual Mental Health & Wellness Support Platform
- Online Marketplace for Handcrafted & Local Goods
- Sports & Fitness Class Booking System
- Sustainable Farming & Local Produce Trading Hub

### What you need to do

- 1. This assignment must be done in teams of four. You are required to choose team member(s) and an appropriate team name. Teams consisting of more than four students will need approval from the coordinator. If it is found that a team of more than four students worked on this assignment, each student in this team will get a mark of ZERO (0).
- 2. Select a client from the above list.
- 3. Research current websites/web applications for companies/organizations that operate in the same industry as your chosen client. For example:
  - If your chosen client is a Virtual Mental Health & Wellness Support Platform, your research should focus on features such as secure therapy session booking, mental health self-assessment tools, confidential chat support, and therapist profiles.
  - If your chosen client is an Online Marketplace for Handcrafted & Local Goods, your research should cover best e-commerce design practices, user-friendly product listings, secure checkout systems, and customer review integration.
  - If your chosen client is a Sports & Fitness Class Booking System, your research should explore popular sports training platforms, class scheduling systems, online coaching features, and fitness progress tracking tools.
  - If your chosen client is a Sustainable Farming & Local Produce Trading Hub, your research should investigate existing local farming marketplaces, real-time produce availability tracking, online ordering systems, and community discussion platforms for farmers and buyers.
- 4. Research the domain name registration process.
- 5. Research web hosting companies and costs associated with hosting similar sites.

### What your report will contain

Your web application design proposal should include the following sections:

1. Introduction— This should contain information about the mission or purpose of the company/organization chosen. You will need to come up with a name for your client e.g. for Virtual Mental Health & Wellness Support Platform the name could be Wellness Haven. The name should be reflective of the business purpose of your client yet catchy and creative. You will also need to come up with a URL for your client e.g. www.wellnesshaven.com.fj i.e. will it be a .com, .org, .ac etc. and justify your choice of URL.

- 2. Content Goals identify the content goal or type of Web site. Examples of website types are: Billboard, Publishing, Portal, Special interest, public interest, and nonprofit organization, Blog, Social networking, Wikis, RSS (Real Simple Syndication), Virtual gallery, E-commerce, catalog, and online shopping, Product support, Intranet and extranet. Your site may have more than one content goal. You will also need to justify the chosen content goal/goals.
- 3. **Audience**. List the site's target audience and the needs of the different audiences. Describe the audience based on gender, age-group, and nationality.
- 4. **Site Content and Functional Requirement**. What type of content and functionality will the website provide? Itemize the major types of content that your web site will provide. Functional requirements refer to the functions a website must provide. These requirements could be search functions, checkout functions, subscription, booking, and registrations functions etc. This is where your research of current similar websites come into play. Justify your choice of site content and functional requirements.
- 5. **Site Structure**. Create a site storyboard that shows the structure and logic behind the content presentation. List of site structures includes Linear, Tutorial, Web, Hierarchical, Web, Cluster and Catalog. See lecture notes for more details.
- 6. Site Navigation. How will the Web site allow the user to answer navigation questions such as:
  - a. Where am I?
  - b. Where can I go?
  - c. How do I get there?
  - d. How do I get back to where I started?
- 7. Layout of the web site. Draw the page template that the website will use. State the areas of active/passive white space used. Your Web site may use more than one page layout. Your Web site may be using one layout for major/section pages including the Home page while another layout for the content pages. Provide a sketch of each type of layout the website uses. Unified design and smooth transition are two very important aspects of a successful website. Explain how you will implement these aspects in your design.
- 8. Accessibility Discuss how your design will promote accessibility, for instance identify how potential users will be accessing the site, will they be accessing it on desktop or mobile devices. Discuss design considerations that will need to be made to accommodate the different ways in which the site will be accessed to ensure effective and efficient accessibility.

- 9. Domain name registration and hosting costs Based on your research discuss the domain name registration process for Fiji or for your country and highlight the costs associated with such a process. Discuss based on your research costs associated with hosting the site.
- 10. A static Home page for your client Based on your design, you will be required to create an HTML5 static home page that will contain the major elements stated in your design. This home page will be required to be validated using the W3C Markup Validation Service.

#### **Submission Instructions**

Submission in this particular case would mean to finish constructing a report (Web Site Design Proposal) by the due date set for this assignment - Friday, 4thst April, 2025. 11:55 PM (Fiji Standard Time (FST)). Ensure you have submitted your report in assignment 1 Dropbox hosted on IS1221 Moodle page. Your report name should be in accordance with the team name the members of your team have selected, for example; Orions Belt.docx. Your report can be in any word processor format or in pdf format. Only one member of the group needs to submit the report. Your report should also contain the names of your group members. We will not accept "corrected versions" submitted through other channels, nor will we accept late assignments.

## **Plagiarism**

Any kind of plagiarism or cheating; like submission of work that is not your own will lead to a ZERO

(0) score AND you will be subject to disciplinary action. Discussing is permitted however you must avoid giving your working copy or the final assignment file to anyone. This increases the risk of your assignment being cited as a plagiarized work.

For this course, plagiarism detection software will be actively used to identify similar assignments. ALL detected assignments will receive a mark of ZERO and will be referred to the disciplinary committee.

Note: If you need clarifications while doing this assignment, you may post a message on the Assignment 1 Help! Forum located on the IS221 Course Page under the Assessments block. Students are advised to read through the responses for postings made by other students before posting their own to avoid repetition of the queries.

