



## Web-Based Application Design and Development (ITIS 3135)

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### Assignment 1 Interactive Web Application Requirements and Design Document Due 11:59pm – Monday Oct 5, 2020

Your web application should provide a service for an individual, group, or a business. The web application should provide a service that does not yet exist, or implementation of an extension of an existing service. The web application can improve the visibility of the stakeholder, enable better communication among the individuals in the stakeholder group, improve the recruitment of people and funds to the stakeholder group, or provide a service to individuals learning a subject.

Please follow the following two steps to select a client and category for your project.

**Step 01:** Choose **one** of the following **client categories** for your project:

1. Category 01(client - peer/classmate): Under this category, your client will be a peer or classmate in this course and you will be developing the website according to their requirements.
2. Category 02 (client outside of the class): Under this category, you need to contact an external client who is not enrolled in this course and you have to develop the website according to their requirements.

**Step 02:** Choose one of the following **project (website) categories** which you will develop for **your client chosen in Step 01**. Please discuss the categories with your client(s) and select one of the following according to your client's requirements.

1. Design and develop a web-based application for an individual (client) that you know to promote their professional or community projects.
2. Design and develop a web-based application for a community group (client) to encourage communication about activities and projects.
3. Design and develop a web-based application for a student group (client) at UNCC that encourages participation and communication such as 49ers Security division or HCI Interact.
4. Design and develop an online game for a student (client) who would like to learn about the basics of JavaScript, CSS or any other programming language.

For this project, you need to **find a real-life client** for whom you are going to design and develop the website. This will help you in two ways. First, you will experience developing a website for a different person/group according to their need/requirement, similar to a real-life project. Second, the client can provide you the content including texts and pictures, and you can focus on designing, developing and improving (according to your classmates and client) the website.

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Please keep in mind that this project will also require you to **plan** the timeline of “when and how” you are going to communicate with your client so that you can submit all the project assignments in time according to its **deadlines**.

Once you have *selected your client*, think about the proposed content and interaction for the application. You may want to look into website with similar purposes that you choose, and talk with your client.

Make a list of the categories and specific examples of your *users*: users are the people those will look at and interact with your web application.

Identify the *categories of content* that you will have on the web site, such as people, events, projects, information about the organization, goal of the organization, gallery of photos.

Identify the kind of *interactivity* that you plan to implement. This can be described by including links to existing web pages that you have found that have interactivity that is inspiring for your web application. At a minimum you will need to include a gallery or interactive images and you will need to include forms for collecting information.

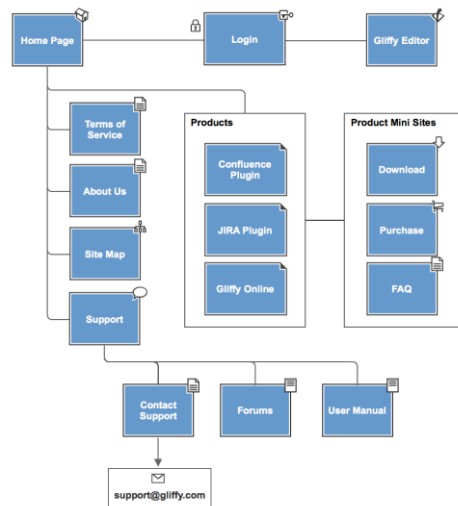
### **Develop a Requirements and Design Document:**

Use the Assignment 1 Template provided to you to complete the document. *Technical writing is required with no grammatical and/or spelling errors for this document.* Include the following things:

1. **Project overview:**
  - Describe your application and its purpose.
  - Intended users of the website.
  - Overview of the content of the website
2. **Client Information:**
  - Name of the client
  - Organization/Institute/Business the client/s are associated with
  - Client’s valid email address
  - Client’s phone number (if they are willing to share)
3. **Site Map:** Before you start coding, you need to understand what pages you will need to create and how you will navigate between them. Below is an example of a site map. Please produce a site map for your application: (you can use <https://www.gloomaps.com/> or something similar).

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- Your website must have a minimum of 4 pages:  
At least 4 individual web pages that must include:
  - a. A home page (name it as index.html) and 3 other webpages
  - b. Navigation Bar that is consistent across web site
  - c. Header and Footer sections that are consistent across the web application (Footers should include HTML and CSS validation links)
  - d. Interactivity using JavaScript/jQuery
  - e. jQuery-UI widget and other plugins
  - f. AJAX functionalities
  
- 4. **Page Design:** For each page listed in your site map, provide *at least* the following information:
  - The name of the page
  - Purpose of the page
  - Audience/Users of page (customer, admin, etc.)
  - What will be content of the page?
    - Is this a page where you are asking users to enter data on the page?
    - Will those data fields need any validations (if any)?
    - Will the page contain buttons or hyperlinks or drop downs?
    - What actions will happen in the page? (such as, when user clicks on a button - data saved, navigate to other page, search based on value, etc.?)
    - Any special notes regarding the page (if any)?
  - If you choose to do so, you can accompany each page with a mock up or prototype that shows how the page will be laid out (figure showing the design of the webpage). Some of these, like Axure, can even be used to generate your requirements/design content. You can use the following for this:
    - <http://www.justinmind.com/>
    - <http://www.axure.com/>



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- <http://balsamiq.com/products/mockups/>

You are highly encouraged to take this option. This will help you to design the website before developing it. It will also earn you extra credit points.

5. **Dynamic Functionality on the website:** Describe the dynamic functionality you will implement using JavaScript- this is a description of the interactivity, for example, forms, calculators, interactive images, photo gallery that you wish to implement on your website. Specify the name of your webpage where you plan to use a certain interactivity and explain the reason. Provide example of URLs of web pages/websites where you found the interactivity that you would like to implement on your website.