

## Project Guidelines

IT 353: Web Development Technologies  
Spring 2021

### Important Due Dates

Website Design Mockup	Tue March 23, 2021	11:55 PM
Project Demo Presentation + Source	Thu April 22, 2021	During Lecture time

### General Description

In this project you will develop a website project where the user can sign up, search for items and write a review on an item.

Undergraduate students will form groups of 2 or 3 members.

Graduate students will do individual project.

Minimum requirements

- Navigation menu
- Footer
- Multiple pages (at least 3 content pages)
- User signup/login capabilities
- Additional form(s) (e.g. discussion board, comments, recipe, profile info, etc)
- Search Feature

Choose your website general theme, for example photo gallery, recipe repository, book review, movie reviews, art gallery, restaurant search, etc.

More details about the features your page should have, regardless of its general theme.

1. Home page displaying Signup and Login options.
2. Signup/login pages with forms.
3. Customized home page after logging in/signing up with a logout option. Clicking on logout should take you to the home page.

Undergraduate students: You are not required to use server-side scripting and store user information in a database. Just redirect the user to a customized homepage after they click submit buttons on signup and login forms. You can use window.location to pass data between pages through JavaScript.

Graduate students: You are required to use server side scripting PHP.

4. The customized homepage should have search and review/comment features.
5. **Search Feature:** JSON data retrieval from a Web Service using AJAX and displaying the response in a specific format (refer to how yelp displays the result items). Below are some web services that you can choose from to get your data:
  - **Movies:** <http://www.omdbapi.com>

Scroll down to usage and parameters sections to learn more about this service for movie data.

For example, you can search for movie details by its title as follows:

<http://www.omdbapi.com/?apikey=78852e23&t=gone+with+the+wind>

To analyze the JSON response you can copy and paste the above URL into the browser. The response is a JavaScript object with various properties. Please sign up for a key and replace this api key with your own.

- **Books:** <https://www.googleapis.com/books/v1/volumes?q=title:web+development>  
You can use this web service for searching books by title. For example, all web development books by using <https://www.googleapis.com/books/v1/volumes?q=title:web development>
- **Photos:** <https://pixabay.com/api/docs/>  
You can use this web service for searching photos. Scroll down to the parameters section to learn more about this service for retrieving photos.  
For example, you can search for photos of yellow flowers as follows:  
[https://pixabay.com/api/?key=15701013-d345344bc05906c8b823eb2d7&q=yellow+flowers&image\\_type=photo](https://pixabay.com/api/?key=15701013-d345344bc05906c8b823eb2d7&q=yellow+flowers&image_type=photo)  
To analyze the JSON response you can copy and paste the above URL in the browser. The response is a JavaScript object with various properties. Please sign up for a key and replace this api key with your own.
- **Museum:** <https://github.com/harvardartmuseums/api-docs>  
You can use this web service for searching **museum collections**. For example, you can search for Vincent Van Gogh's work as follows:  
[https://api.harvardartmuseums.org/object?apikey=YourAPI\\_Key&q=vincent+van+gogh](https://api.harvardartmuseums.org/object?apikey=YourAPI_Key&q=vincent+van+gogh)  
Please sign up for a key and replace this api key with your own.
- There are several web services APIs available through RapidAPI. If you want to use any of RapidAPI, you have to create an account with them.

6. **User review/comments:** Clicking on an item from the result list should take the user to the review/comments page. This page should display information of the selected item along with sample reviews, and let the user write a review on the item. You can use window.location to pass data between the two pages through JavaScript.

## **Website Design Mockup ( March 23, 2021)**

Before you start developing your website, you will create an initial "mock-up" of how your website will look. This is a primitive representation of how each page will look. You may use any graphics editing program, or simply draw it by hand. This exercise is about capturing the initial design on paper.

Your site will have multiple pages, and your mock-up should have one site-page per piece-of-paper. This probably will evolve over the development of the project. Research other sites for inspiration. Do a google search on "Website Mockup Examples," several examples will come up.

Things to consider when creating your website design and include in the design.

**Hierarchy:** One page of your design should be dedicated to describing the website hierarchy. It should be a collection of pages as "nodes" connected with links, with the homepage as the root.

**Navigation:** Each page should have consistent navigation. It can be vertical, horizontal, contain submenus, etc. Make it easy for the user to know where they are. It's easy to get lost in a website, so make it obvious to the user which page they are on. This can be done by highlighting the current navigation link, adding titles to the top of the page, or some other visual cue or combination.

**Color:** Optional at this point, but feel free to choose a preliminary color scheme.

**Logo:** This should go near the top of the page (usually the top left, middle, or right). This should be on every page in the same spot.

**Form Inputs:** Decide where form elements will go (text boxes, drop down menus, checkboxes, radio buttons, submit buttons, etc). Interaction with the webpage should be easy and consistent. If the user inputs bad data, how will you tell them?

**Images:** Images make sites interesting. Decide where they will go, and approximately what they will be.

**Content:** What content will you have?

**Footer:** Your website must have a footer. This is typically where copyright information and perhaps additional useful links are placed.

### **Project Demo Presentation + Source (April 22, 2021)**

Project is worth 15% of your final grade. Grading Criteria:

#### **Undergraduate students**

- Design (3%)
- Use of technologies
  - HTML (3%)
  - CSS (3%)
  - JavaScript/jQuery (4%)
- Demo (2%)

#### **Graduate students**

- Design (3%)
- Use of technologies
  - HTML (2%)
  - CSS (3%)
  - JavaScript/jQuery (3%)
  - PHP (2%)
- Demo (2%)