

SEG 3125 (Analysis and Design of User Interfaces) Summer 2017

Lab 2: Electronic Commerce Website Prototype

June 12th to July 9th

Introduction

For this lab, you will create an online book store website prototype. The website must allow visitors to:

- 1. Browse through books by category
- 2. Search for a particular book
- 3. Add books to a shopping cart
- 4. Check out by providing payment and shipping information

Website Pages Description

The number and structure of the pages that constitute your website is left to your discretion. Nonetheless, to give you some ideas on how to start, the following is a description of the main pages of your website.

Page	Description
Home Page	 Showcases the latest bestsellers, new releases, books coming soon, books on sale, month's top picks etc Provides a search function to look for books by title, keyword or author (more search categories can be included). Provides a menu of book categories to allow the user to browse for items by category.
Book Category Pages	List the books in a particular category (e.g. politics, history, fiction, health, science, kids, teens). The books can be sorted by popularity. But also, you can highlight new releases in a special section. If there is a large number of books in a category, pagination might be required.
Book Information Pages	Display information about a book. These pages come up whenever the user clicks on a particular book on the website (after a search, while browsing by category or directly from the Home Page). The information page should at least include: • A description of the book • The price of the book • A suggestion of related books (to entice the user to make further purchases) • A mechanism to add the book to the shopping cart

Search Page	Appears after a search and catalogs the found books in order of relevance to the search query (in your implementation, most likely this will be a mockup and you will not implement the backend functionality).
Shopping Cart Page	Lists the contents of the shopping cart and allows the user to change the quantity of each item added to the cart (in your implementation, most likely this will be a mockup and you will not implement the backend functionality). By default, the quantity should be 1. Also, this page allows the user to "Proceed to Checkout".
Checkout Page	Provides a form to allow the user to enter the necessary information for purchase. This information must at least include: • General information about the user (first, last name and e-mail address) • Delivery address • Shipping options • Payment information Note that the form can be broken across several pages.

The descriptions above *possibly* do not summarize all the pages on the website. Nor should they restrict your creativity in designing your website prototype. They are merely suggestions. You are free to structure the website in any way you want as long as you include all the functions described in the **Introduction**.

Implementation

Obviously, since this is a prototype and you are not expected to implement a fully functional website (running on a web server with a database to store the books' information and receipts of purchases). This is a user interface course and therefore, the focus is on the design of the user interface. Consequently, at the very least, this is what you have to do:

- You must build an HTML website that showcases your user interface design.
- You must support dynamically generated **error messages**. You should handle all the possible error scenarios, especially when it comes to entering information into a form (e.g. incorrect format, missing mandatory field...). It is your task to identify these error scenarios and handle them gracefully. Javascript (or any Javascript based APIs) can be used to generate these messages.

This is what you do **not** have to do:

- Any content that is supposed to be pulled from a database can be coded statically into the website. Therefore, when the user searches for a book, the Search Page will always show you the same list of books regardless of your search query. This is a mockup of the search function. Also, the books shown in the Book Category Pages are also statically coded in HTML.
- You do not have to support the function of a shopping cart. Accordingly, the Shopping Cart Page displays the same statically coded list of items every time.

Evaluation

This lab is not intended as an exercise in website building. That is why we have drastically simplified the task of implementing the website prototype. Nonetheless, your focus should be on your user interface design. You are expected to apply the design principles we have learned in class. Pay particular attention to consistency (e.g. fonts and colour schemes), icon design, use of metaphors, general page layout (maybe you can apply some of the patterns seen in class), error prevention mechanisms and user feedback. It is strongly recommended that you produce paper sketches for your first design ideas. Evolve these sketches into the eventual website using the procedure studied in class. For the

demo, you do not have to show your paper sketches or storyboards. Simply present the completed prototype.

This is the marking scheme:

- Website supports all the functions specified in the Introduction (30 points)
- User interface is well designed and follows the Heuristic principles seen in class (40 points)
- TA questions are answered correctly (30 points)

Frequently Asked Questions

What to submit?

Nothing! You will simply show a demo of your application to the TA. The TA will also ask you questions about your design decisions.

When can I demo?

You have four lab sessions to complete and demo your application. Demos are performed on a first come first serve basis. Therefore, the TA might have lots of demos to go through on the very last session. Consequently, if you finish early, it is advisable to demo your work immediately and not way until the end.