RMIT UNIVERSITY

SCHOOL OF SCIENCE, ENGINEERING AND TECHNOLOGY

ASSIGNMENT 1:
STATIC WEBSITE

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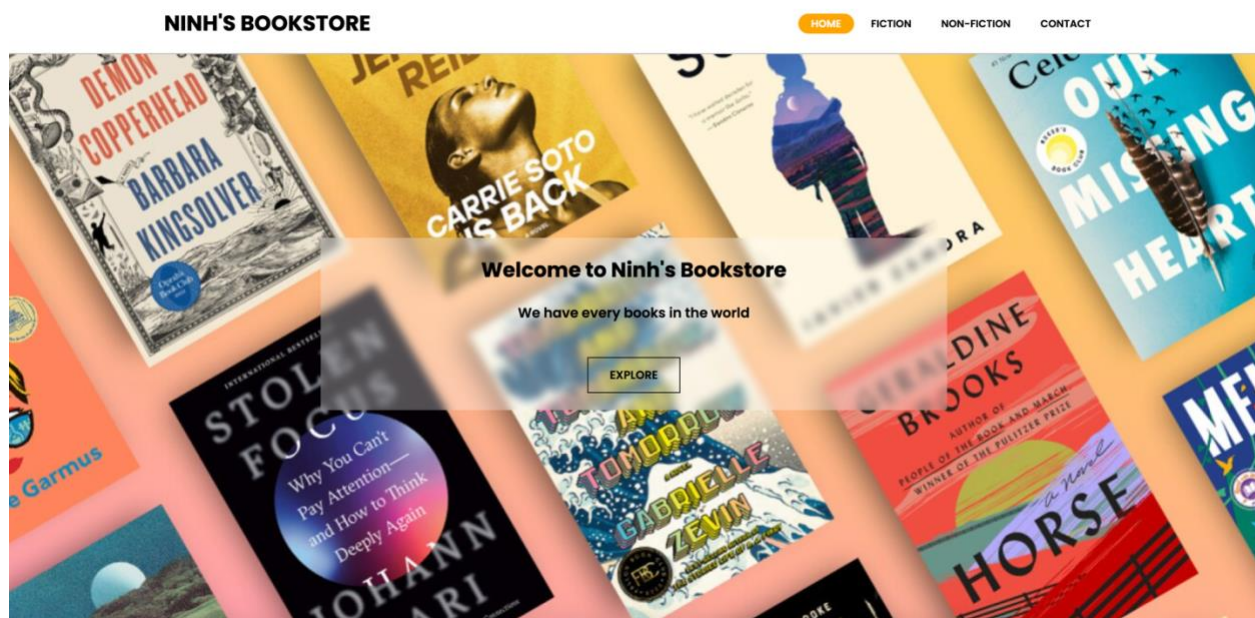– SEMESTER 1, 2023

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INTRODUCTION

This document is a report on the website project for a building bookstore. The website is designed to showcase the products and services of the bookstore, as well as to provide information and contact details. The website project is Assignment 1 of the course COSC2430 (Web programming).

The scope and objective of the website project are to create a static and responsive website that can be accessed from different devices and browsers. The website should have a clear and consistent layout, with easy navigation and user-friendly features. The website should also deliver a good user interface (UI) and user experience (UX), with attractive and relevant images, fonts, colors, and animations.

The purpose of this document is to report the process of making the website, from the initial planning and design stages to the development and testing phases, to the final deployment and maintenance steps. The document will describe the methods, tools, techniques, and best practices used in each stage of the website project, as well as the challenges, solutions, and lessons learned along the way. The document will also provide screenshots, code snippets, and links to demonstrate the features and functionalities of the website.

Homepage

PROJECT DESCRIPTION
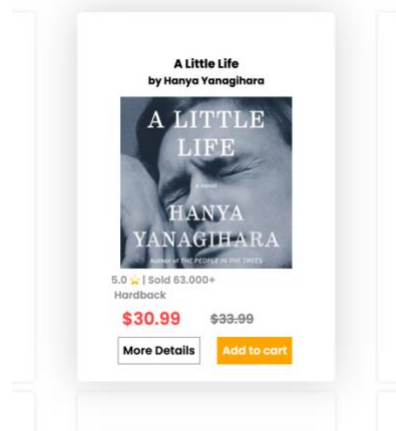
General features on every page of the website:

The website contains 5 files of HTML corresponding to 5 pages of the sites which are the Homepage, Fiction (Category 1), Non-fiction (Category 2), Contact page, and Book Details page. Users can access these pages from any site of the website by the navigation bar in the Header. Below are some features of each page:

Navigation Bar in the Header

Homepage: The landing page where users first access the website. There are two sections users can find here: About and Best Sellers. The About section is the introduction and an illustration video for the bookstore's story. The Best Sellers section demonstrates 6 best sellers' books in two categories. The user can click on the button "More Details" to visit the Book Details page.

Fiction (Category 1) and Non-fiction (Category 2): From these pages, users can browse and explore books from a wide range of fiction genres and authors. Users can interact with the sites by two buttons "More Details" and "Add to cart" below each product.
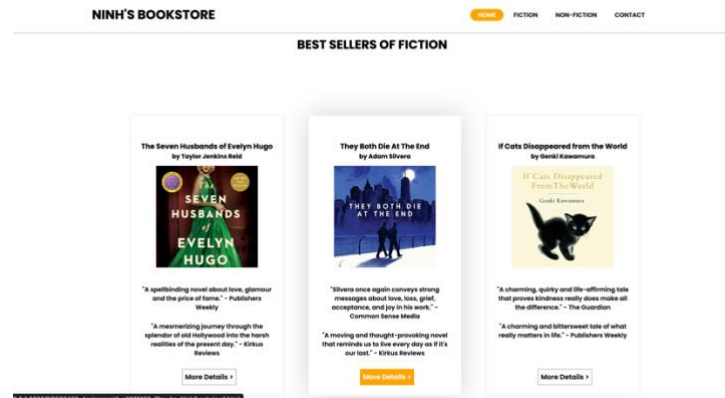

"More Details" and "Add to cart" button

Contact page: There is a form for the user to send admin feedback, questions, or suggestions via email or phone.

Book Details:
- View the cover image, title, author, publisher, and price of the book
- Read the summary, synopsis, and subsidiary information of the book

- Check the availability, price, and buy options of the book

The Book that has been chosen to feature is *"They Both Die At The End",* **users can find this book on the Homepage/Best Sellers of Fiction or go to Fiction/Young Adult, and click on "More Details" to access the Book Details page. This is the only book that content Book Details page.**

Besides, on every site, there is a Footer at the end of the page where users can find information about the website such as Privacy, Terms and Policies, Location, links to social media of the bookstore, and phone number.

Reflection

Sharing personal thoughts of the author in the process of making the website.

Writing the reflection for this project is a valuable opportunity to demonstrate the lessons I have learned from building a bookstore website.

My coding skill has been massively improved by working on different features and functionalities of the website, such as adding books, displaying books, and creating different categories of sites,… The most important lesson is that I have learned to be patient and persistent when fixing code errors and bugs. Sometimes, the code would not work as expected or produce unexpected results. I have learned how to debug the code by myself with several attempts, I have also learned how to ask for help from my peers and mentors when I was stuck or needed guidance.

During the process of making the website, acquiring more CSS tricks to make the website look more appealing and professional is the best price. Now, I know how to combine different HTML/CSS elements of flexbox, and grid layouts to make the website responsive with good-looking fonts, icons, and color scheme gradients. I have also learned how to follow web design principles and best practices, such as consistency, simplicity, and usability,…

The specifications (technical details) that are important [1] (W3Schools 2019)

Using elements to make sections in HTML and CSS is important for creating a clear and semantic structure for a web page. Elements such as <section>, <header>, <nav>, <article>, and <aside> can define different parts of a web page and make it easier to understand and maintain. Using elements to make sections can also help with accessibility and responsiveness.

For example, using an <section> element can group related content together and provide a heading for that content. Using an <nav> element can indicate that the links inside it are for navigation purposes. Using an <header> element can mark an independent section for the navigation menu bar and logo on the head's page.

The division tag, or <div>, is one of the most important and powerful tools for creating sections in HTML and CSS. It allows web developers to group related elements together and apply styles and layouts to them. By using the division tag techniques, such as class and id attributes, web developers can create semantic and modular code that is easy to read, maintain and reuse. The division tag also enables web developers to create responsive and adaptive web pages that can adjust to different screen sizes and devices.

IMPLEMENTATION DETAILS

Technical detail of design decisions

To design the bookstore website, the author followed the principles of responsive web design, which aims to create a user-friendly and adaptable interface for different devices and screen sizes. Some of the design decisions I made during the process of making the website are:

Coding design:
- Using semantic HTML elements to provide meaningful information to the browser and the users, such as <header>, <nav>, <main>, <section>, <article>, <footer>, etc. This helps to improve the accessibility of the website and makes the code easy to read.

```
<header>
    <div class="header-container">
        <h1>NINH'S BOOKSTORE</h1>
        <nav class="navbar">
            <input type='checkbox' id='check'/>
            <span class="menu">
                <li><a class="active" href="index.html">HOME</a></li>
                <li><a href="fiction.html">FICTION</a></li>
                <li><a href="non-fiction.html">NON-FICTION</a></li>
                <li><a href="contact.html">CONTACT</a></li>
                <label for="check" class="close-menu"><i class="fas fa-times"></i></label>
            </span>
        </nav>
        <label for="check" class="open-menu"><i class="fas fa-bars"></i></label>
    </div>
</header>

<main>

    <!-- showcase -->

    <section id="home" class="showcase">
        <div class="showcase-content">
            <h2>Welcome to Ninh's Bookstore</h2>
            <p>
            We have every books in the world
```
Using semantic elements in html file

- Creating flexbox and grid to create flexible and responsive layouts for the website. Flexbox allows the author to align and distribute the book products along a single axis, while the grid help creates two-dimensional grids with rows and columns.
- Media queries are used to adjust the layout according to different breakpoints, such as mobile, tablet, and desktop.
- Sometimes using relative units, such as percentages, and rems, to size the elements of the website. This ensures that the website can adapt to different screen sizes and zoom levels without breaking or overflowing.
- Adding transitions and icons to add some interactivity and visual effects to the website. For example, I added a hover effect to the button links and a blur effect to the background image on the Homepage.

Aesthetic design:
- The bookstore website is designed with minimalism in mind, to create a clean and elegant look that showcases the books and their covers.
- The font Poppins is used for the headings and navigation, as it is a modern and geometric sans-serif that complements the minimalist style.
- The color board consists of white and orange, to create a contrast between the background and the elements. White is used for the background, as it creates a spacious and bright feel, while orange is used for the buttons, links, and accents, as it adds a warm and inviting touch.
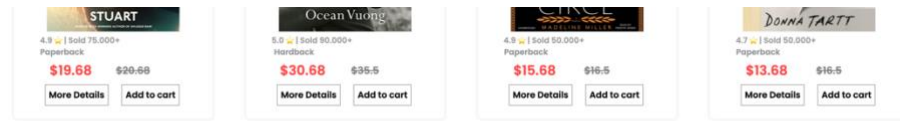
Work implement beyond the required features

There are many links to social network sites inserted in the About section and the footer. In addition, the rating section has been added to the Book detail page, and the hover selector is used frequently to increase interactivity.

Although the CSS responsive requirement of the assignment is just to support at least two types of devices mobile (width <= 960px) and desktop (width > 960px), there is a wide range of screen sizes (from max-width 420px to max-width 960) that have been coded in effort to make the website more responsive. However, there are still some bugs related to responsive work, which will be explained in more detail on "The list of known bugs/problems has not been fixed"'

The list of known bugs/problems has not been fixed.

There are important bugs that have not been fixed in this project.

The first bug is that the distance alignment between the Sub-categories is uneven. The space between sub-categories is sometimes too narrow or too broad. This bug does not affect the user experience but will reduce the aesthetics of the website.

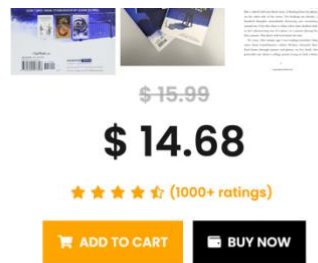*There are not enough space on top of the heading*
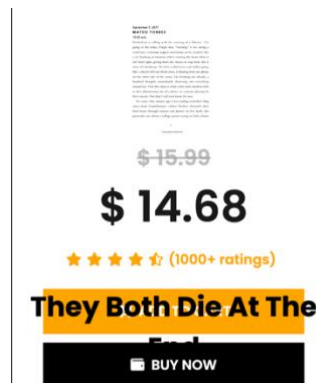

There are many spaces around the heading

The second bug is that the responsiveness of the Book details page is not optimized for many phone models. When minimizing the screen of the Book details page, the name of the book will

The expected responsive screen size on mobile phone

The screen of iPhone SE (The screen is too small compared with other mobile devices nowadays)

be overridden in the payment section. This causes an unpleasant experience and reduces the aesthetics of the site for users.

CONCLUSION

In summary, this report has demonstrated the project description and the implementation details of the report. However, the report also acknowledged some drawbacks and limitations of the project. After the working process of creating a website, lessons from drawbacks to improve the future path of the project are concluded.

One of the main drawbacks was spending too little time doing the website, which resulted in a website that still did not meet the responsive satisfaction criteria. These drawbacks affected the quality and functionality of the website and prevented it from achieving its full potential. Another drawback is the lack of HTML and CSS coding skills. This caused the author to take a lot of time to create the website. This limits the author's creativity, flexibility, and customization options. Sometimes it can also make it harder to troubleshoot problems, update the website, or optimize it for different devices and browsers.

Therefore, in future work, the author intends to continue to improve their web-programming skills and to apply them to upgrade the website. Specifically, the author plans to learn more advanced JavaScript concepts and frameworks and to use them to enhance the user interface and user experience of the website. Moreover, the author aims to implement more responsive web design techniques, such as media queries and flexbox, to make the website adapt to more different screen sizes and orientations. By doing so, the author hopes to create a more professional and engaging website that can better showcase a true bookstore.

REFERENCE

[1]W3Schools (2019) *HTML Layouts*, *W3schools.com*, https://www.w3schools.com/html/html_layout.asp