

# Coursework CST1340



## Report

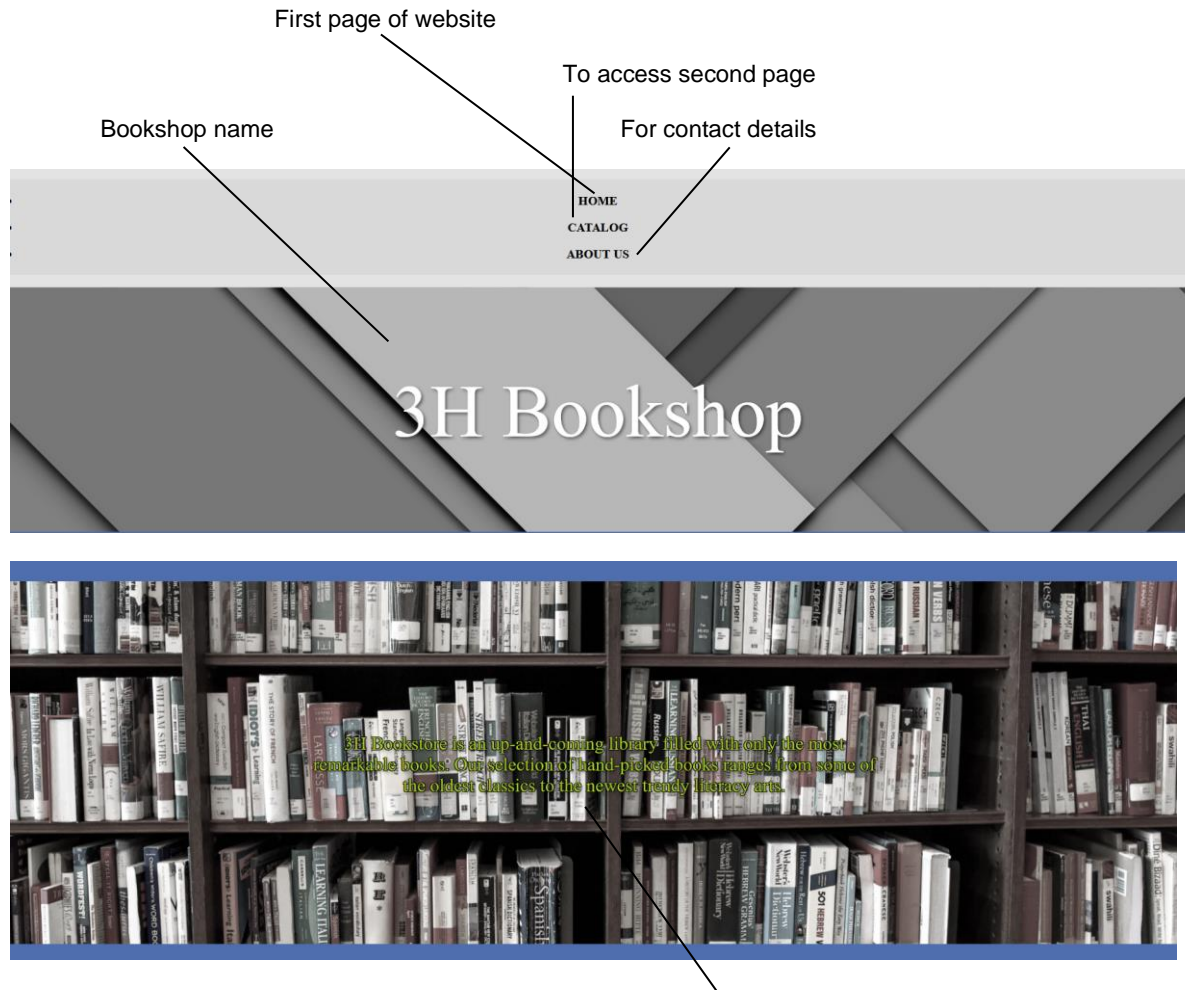
**Group members: Student ID and Names:**

- 1. M00935155 Hemant Mooneea**
- 2. M00953762 Doyal Harshvardhan Vir**
- 3. M00956040 Darish Nursing**

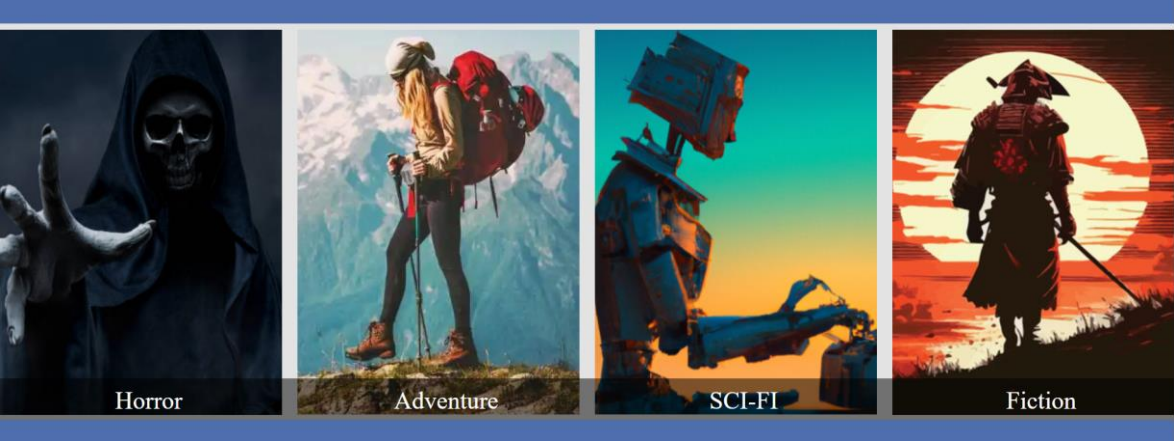
## Section 1 – HTML

This section should contain:

- Annotated screenshots of the first page of your website.



Bookshop description



Our list of genres available at 3H bookshop

Our opening/closing time table

Days	Opening Hours	Closing Hours
Week Days	9:00	17:00
Saturday	9:00	12:00
Sunday	CLOSED	

5420 6900

 tripleh@bookstore.net

 Royal Road Port Louis

Bookshop phone number

bookshop email

location of bookshop

Annotated screenshots of the HTML codes used.

Bookshop title

loading the assets for the website

linking our css file here

## Styling for the footer

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <title>3H Bookstore</title>
    <link rel="icon" href="assets/book-stack.png" type="image/png">
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <div class="image-container">
      <img alt="Book stack image" data-bbox="100 100 250 250" />
    </div>
    <div class="text-container">
      <h1>3H Bookstore</h1>
      <p>Discover a world of knowledge at 3H Bookstore. We have the latest titles in fiction, non-fiction, and more. Visit us today!</p>
    </div>
    <div class="form-container">
      <input type="text" value="Search for books" />
      <input type="button" value="Search" />
    </div>
    <div class="footer">
      <div class="image-container">
        <img alt="Phone icon" data-bbox="100 850 150 900" />
        <img alt="Location pin icon" data-bbox="160 850 210 900" />
        <img alt="Email icon" data-bbox="220 850 270 900" />
      </div>
      <div class="text-container">
        <p>3H Bookstore Inc. 123 Main St. Suite 100, New York, NY 10001</p>
        <p>Phone: (212) 555-1234 | Email: info@3hbookstore.com</p>
      </div>
    </div>
  </body>
</html>
```

```

        height: auto;
    }
    .centered-text {
        position: absolute;
        top: 50%;
        left: 50%;
        transform: translate(-50%, -50%);
        font-size: 96px;
        color: white;
        text-shadow: 2px 2px 4px rgba(0, 0, 0, 0.5);
    }
}
</style>
</head>
<body>
    <header></header>
    <div class="buttons-bar">
        <a class="button" href="Home.html">HOME</a>
        <a class="button" href="Library.xml">CATALOG</a>
        <a class="button" href="#myFooter">ABOUT US</a>
    </div>
    <div class="image-container">
        
        <div class="centered-text">3H Bookshop</div>
    </div>

```

Loading background image

Button definitions

The body cointainer style

inserting bookshop text description

```

<div class="blue-bar"></div>
<div style="width: 100%; position: relative; text-align: center; top: -4px">
    
    <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 24px; color: rgb(172, 199, 50); text-shadow:
        -1px -1px 0 #000,
        1px -1px 0 #000,
        -1px 1px 0 #000,
        1px 1px 0 #000,
        2px 2px 4px rgba(0, 0, 0, 0.5);">
        " 3H Bookstore is an up-and-coming library filled with only the most
        remarkable books. Our selection of hand-picked books ranges from some
        of the oldest classics to the newest trendy literacy arts. "
    </div>
</div>

```

Inserting list of genres images

```
<div class="blue-bar" style="top:-8px"></div>
▼ <div class="image-gallery"> flex
  ▶ <div class="gallery-item"> ... </div>
  ▶ <div class="gallery-item"> ... </div>
  ▶ <div class="gallery-item"> ... </div>
  ▶ <div class="gallery-item"> ... </div>
</div>
<div class="blue-bar"></div>
▼ <div class="container-table" style="top:-2px">
```

Table for opening hours

use of colspan for closed on sunday

```
▼ <table>
  ▼ <thead>
    ▼ <tr>
      <th>Days</th>
      <th>Opening Hours</th>
      <th>Closing Hours</th>
    </tr>
  </thead>
  ▼ <tbody>
    ▼ <tr>
      <td>Week Days</td>
      <td>9:00</td>
      <td>17:00</td>
    </tr>
    ▼ <tr>
      <td>Saturday</td>
      <td>9:00</td>
      <td>12:00</td>
    </tr>
    ▼ <tr>
      <td>Sunday</td>
      <td colspan="2" style="text-align: center;">CLOSED</td>
    </tr>
  </tbody>
</table>
```

Footer data definition

including phone number and location

```
</div>
▼<footer id="myFooter">
  
  <div class="footer-phone-number">5420 6900</div>
  
  <div class="footer-email">tripleh@bookstore.net</div>
  
  <div class="footer-location">Royal Road Port Louis</div>
</footer>
</body>
</html>
```

- Annotated screenshots of CSS codes used.

html, body {

height: 100%;

background-color:#E3E3E3; → color background

overflow-x: hidden;

margin: 0;

padding: 0;

}

.container {

position: relative; → cointainer dimensions

width: 100%;

height: calc(100% - 20px);

```
background-image: url('VIRAL-LIBRARY-superJumbo.jpg');
background-repeat: no-repeat;
background-size: cover;
}
```

```
.black-and-white-overlay {
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  height: 100%;
  background-color: rgba(0, 0, 0, 0.65);
  mix-blend-mode: luminosity;
}
```


```
.content {
  position: absolute;
  top: 50%;
  left: 50%;
  transform: translate(-50%, -50%);
  z-index: 1;
  padding: 20px;
  color: #ffffff;
  font-family: Arial, sans-serif;
  text-align: center;
}
```

→ font and placement for text

```
header {
```




```
background-color: #4E6EAD;  
height: 5px;  
padding: 20px;  
position: relative;  
}
```




defining the color in the header

```
.header-text {  
color: #ffffff;  
font-size: 26px;  
font-weight: bold;  
}
```




text font is bold in header

```
footer {  
height: 5px;  
padding: 20px;  
background-color: #4E6EAD;  
position: relative;  
left: 0;  
top: 0px;  
width: 100%;  
}
```



defining footer dimensions and color


```
.footer-phone-number {  
color: #ffffff;  
font-size: 18px;  
font-weight: bold;  
position: absolute;  
bottom: 4%;  
left: 25px;
```



defining the position of the phone no

```
    transform: translateY(-50%);
}

.footer-email {
    color: #ffffff;
    font-size: 18px;
    font-weight: bold;
    position: absolute;
    bottom: 4%;
    left: 42%;
    transform: translateY(-50%);
}

.footer-location {
    color: #ffffff;
    font-size: 18px;
    font-weight: bold;
    position: absolute;  footer location
    bottom: 4%;
    right: 4%;
    transform: translateY(-50%);
}

.header {
    position: relative;
}

.header-icon-books {
    position: absolute;
    top: 40%;
    right: 20px;
    transform: translateY(-50%);
```

```
width: 50px;
height: 50px;
}

.buttons-bar {
  background-color: #D9D9D9;
  text-align: center;
  padding: 10px;
}

.button {
  display: inline-block;
  padding: 8px 20px;
  margin: 0 5px;
  background-color: rgba(128, 128, 128, 0);
  color: rgb(0, 0, 0);
  text-decoration: none;
  border-radius: 5px;
  font-weight: bold;
}

.button + .button {
  margin-left: 30px;
}

.button:hover {
  background-color: rgba(211, 211, 211, 0);
}

.image-container {
  width: 100%;
```

—————> button dimensions and position

```

}

.image-container img {
    width: 100%;
    height: auto;
}



.blue-bar {
    background-color: #4E6EAD;
    height: 5px;
    padding: 20px;
    position: relative;
    top: -4px;
}


table {
    border-collapse: collapse;
    overflow: hidden;      —————> position table for opening time
    box-shadow: 0 0 20px rgba(0,0,0,0.1);
    padding: 20px;
}

th,
td {
    padding: 15px;
    background-color: rgba(255, 255, 255, 0.2);
    color: #ffffff;
}

th {
    text-align: left;

```

```
}  
  
.container-table {  
    background-image: url('assets/black.jpg');  
    background-size: cover;  
    background-position: center center;  
    background-repeat: no-repeat;  
    height: fit-content;  inserting the black background image  
    padding: 20px;  
    color: #fff;  
    position: relative;  
        left: 50%;  
    top: -4px;  
        transform: translateX(-50%);  
    display: flex;  
    justify-content: center;  
    align-items: center;  
    flex-grow: 1;  
}  
  
.image-gallery {  
    display: flex;  
    justify-content: space-between;  
}  
  
.gallery-item {  
    position: relative;  
    width: 24%;  defining width for images  
}
```

```
.gallery-item img {  
    width: 100%;  
    height: auto;  
}  
  
.gallery-item .caption {  
    position: absolute;  
    bottom: 0;  
    background: rgba(0,0,0,0.5);  
    color: white;  defining position and style of gallery items  
    width: 100%;  
    padding: 10px;  
    text-align: center;  
    font-size: 32px;  
}
```

## Section 2 – XML

Annotated screenshot of the XML file

Xml definition

User defined elements

```
<xml-stylesheet></xml-stylesheet>
<!DOCTYPE library>
<library>
  <book>
    <title>Tintin in America</title>
    <author>Hergé</author>
    <release_date>2004-11-04</release_date>
    <genre>Adventure Fiction</genre>
    <language>English</language>
    <image>
      <file_path>assets/tintin.png</file_path>
      <description>Cover of Tintin in America</description>
    </image>
  </book>
</library>
```

Child element in library

File path of image

```
<book>
  <title>My Hero Academia Vol 1</title>
  <author>Kohei Horikoshi</author>
  <release_date>2014-07-07</release_date>
  <genre>Adventure Fiction</genre>
  <language>English</language>
  <image>
    <file_path>assets/myhero.png</file_path>
    <description>
      Cover of My Hero Academia Vol 1
    </description>
  </image>
</book>

<book>
  <title>Adventure Time Vol. 1</title>
  <author>Ryan North</author>
  <release_date>2012-06-11</release_date>
  <genre>Adventure Fiction</genre>
  <language>English</language>
  <image>
    <file_path>assets/adventuretime.png</file_path>
    <description>Cover of Adventure Time Vol. 1</description>
  </image>
</book>
```

```

  ▲ <book>
    ▲ <title>
      Snow White and the Seven Dwarfs
    </title>
    <author>Wanda Gag</author>
    <release_date>1937-12-21</release_date>
    <genre>Romance Fiction</genre>
    <language>English</language>
    ▲ <image>
      <file_path>assets/snowwhite.png</file_path>
      ▲ <description>
        Cover of Snow White and the Seven Dwarfs
      </description>
    </image>
  </book>

  ▲ <book>
    <title>It</title>
    <author>Stephen King</author>
    <release_date>1986-09-15</release_date>
    <genre>Horror</genre>
    <language>English</language>
    ▲ <image>
      <file_path>assets/it.png</file_path>
      <description>Cover of It</description>
    </image>
  </book>
</library>

```

## Section 3 – Validation

- Annotated screenshot of the DTD file that validates the file created in section 2.



This element carries data

```
<!DOCTYPE library [  
  <!ELEMENT library (book*)>  
  <!ELEMENT book (title, author, release_date, genre, language, image)>  
  <!ELEMENT title (#PCDATA)>  
  <!ELEMENT author (#PCDATA)>  
  <!ELEMENT release_date (#PCDATA)>  
  <!ELEMENT genre (#PCDATA)>  
  <!ELEMENT language (#PCDATA)>  
  <!ELEMENT image (file_path, description)>  
  <!ELEMENT file_path (#PCDATA)>  
  <!ELEMENT description (#PCDATA)>  
>
```

Defines the schema of the data

## Section 4 - Transformation

- Annotated screenshots of the XSL/t file that transforms the data in the XML file to an XHTML file.

Encoding for xsl

linking images

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <!-- The output will be HTML -->
  <xsl:output method="html" indent="yes"/>

  <!-- Match the root element of the XML document -->
  <xsl:template match="/">
    <html lang="en">
      <head>
        <meta charset="UTF-8"/>
        <title>3H Bookstore</title>
        <link rel="icon" href="assets/book-stack.png" type="image/png"/>
        <link rel="stylesheet" href="styles2.css"/>
        <style>
          .footer-image-phone {
            position: relative;
            bottom: 9px;
            left: -20px;
          }
          .footer-image-location {
            position: relative;
            bottom: 12px;
            left: 77%;
          }
          .footer-image-email {
            position: relative;
            bottom: 10px;
            left: 37.5%;
          }
        </style>
      </head>
    </html>
  </template>
</xsl:stylesheet>
```

Style definition

```

<body>
  <div class="container">
    <div class="buttons-bar">
      <a class="button" href="Home.html">HOME</a>
      <a class="button" href="Test.html">CATALOG</a>
      <a class="button" href="#myFooter">ABOUT US</a>
    </div>

    <div class="image-container">
      
    </div>

    <!--
    <div class="search-bar">
      <input type="text" placeholder="Search..."/>
    </div>
    -->

    <div class="blue-bar"></div>
    <div class="black-bar"></div>

    <div class="grey-bar">
      <div class="white-rectangle-small">
        <h1>BOOK COVER</h1>
      </div>
      <div class="white-rectangle-big">
        <h1>BOOK INFO</h1>
      </div>
    </div>
  </div>

```

↓  
Second page info and style

Calling the library

selecting based on position

```
<div class="big-blue-rectangle">
  <xsl:for-each select="library/book">
    <!-- Calculate the top position based on the current position() -->
    <xsl:variable name="topPosition" select="(position() - 1) * 550"/>

    <div class="white-rectangle-cover" style="top: {$topPosition}px;">
      
    </div>
    <div class="white-rectangle-details" style="top: {$topPosition}px;">
      <p>
        <h2 style="text-align: center;">
          <xsl:value-of select="title"/>
        <br/>
        <strong>Author:</strong> <xsl:value-of select="author"/>
        <br/>
        <strong>Release Date:</strong> <xsl:value-of select="release_date"/>
        <br/>
        <strong>Genre:</strong> <xsl:value-of select="genre"/>
        <br/>
        <strong>Language:</strong> <xsl:value-of select="language"/>
        </h2>
      </p>
    </div>
  </xsl:for-each>
</div>
<div class="grey-bar"></div>
<div class="black-bar"></div>
</div>
```

Inputing data in the white rectangle

Loading footer text and images

```
<footer id="myFooter">
  
  <div class="footer-phone-number">5420 6900</div>

  
  <div class="footer-email">tripleh@bookstore.net</div>

  
  <div class="footer-location">Royal Road Port Louis</div>
</footer>
</body>
</html>
</xsl:template>
```

```
<xsl:template match="book">
```

```
  <xsl:variable name="coverImagePath" select="image/file_path"/>
  <xsl:variable name="coverDescription" select="image/description"/>
```

Variables declaration

Selecting image covers

```
<!-- Create the book cover and info elements -->
<div class="white-rectangle-cover">
  
</div>
<div class="white-rectangle-details">
  <p>
    <h2 style="text-align: center;">
      <xsl:value-of select="title"/>
    <br/>
    <strong>Author:</strong> <xsl:value-of select="author"/>
    <br/>
    <strong>Release Date:</strong> <xsl:value-of select="release_date"/>
    <br/>
    <strong>Genre:</strong> <xsl:value-of select="genre"/>
    <br/>
    <strong>Language:</strong> <xsl:value-of select="language"/>
  </h2>
</p>
</div>
<br/> <!-- Add a line break between book entries -->
</xsl:template>

</xsl:stylesheet>
```

Styling the data into the description white rectangle box

# Validator

## Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

### Showing results for styles2.css

Checker Input

Show ☐ source ☐ outline ☐ image report [Options...](#)

Check by [file upload](#) [Choose File](#) No file chosen

Uploaded files with .xhtml or .xht extensions are parsed using the XML parser.

[Check](#)

**Document checking completed. No errors or warnings to show.**

Total execution time 5 milliseconds.

[About this checker](#) • [Report an issue](#) • Version: 23.7.8