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# REPORT

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All Group Members

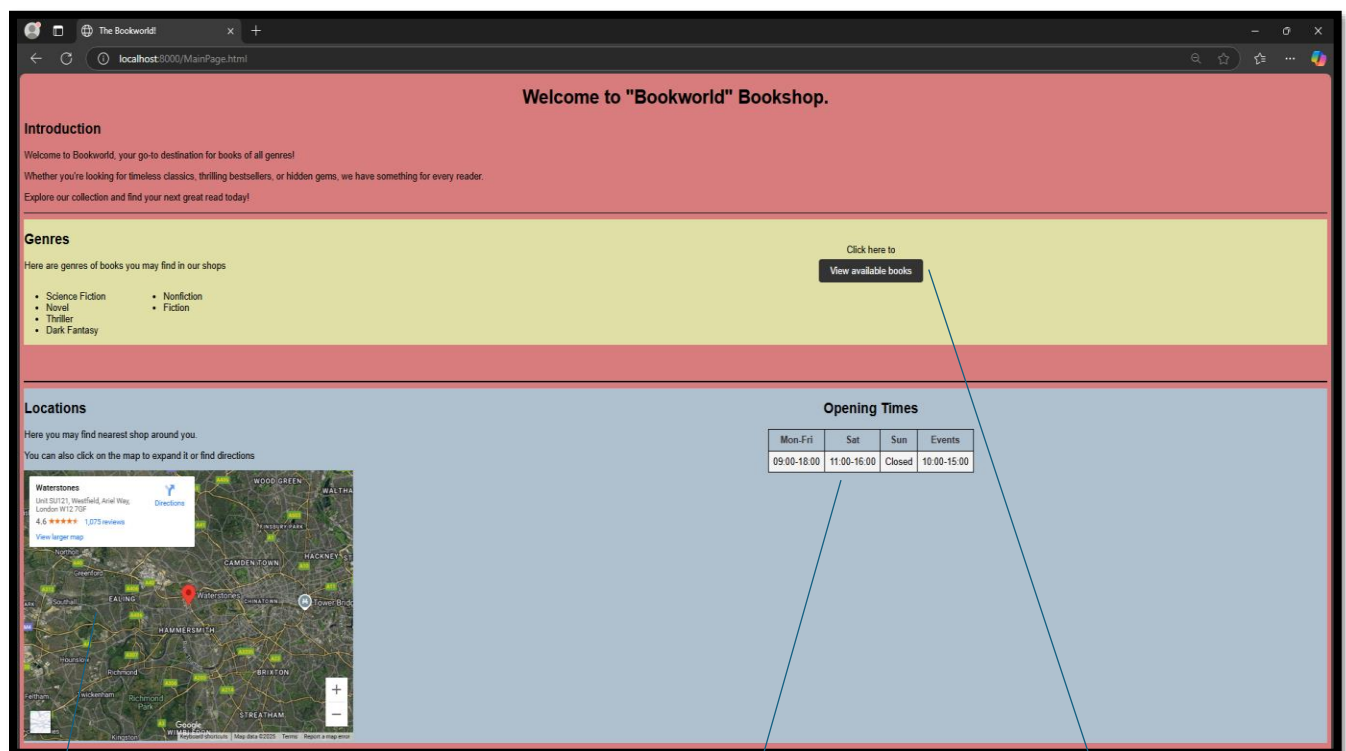


## Group Members:

- Mohssine Deflaoui Harrata (M00930038)
- Valerii Radjabov (M00946003)

## Section 1 – HTML

- Annotated screenshots of the first page of your website:



Button with link to XML page

Table created with store opening times

Map with store address

- Annotated screenshots of the HTML codes used:

MainPage.html - Notepad

File Edit Format View Help

```

<!DOCTYPE html>
<html>
  <head>
    <title>The Bookworld!</title>
    <link type="text/css" rel="stylesheet" href="styles.css"/>
  </head>
  <body>
    <h1>Welcome to "Bookworld" Bookshop.</h1>
    <div>
      <h2>Introduction</h2>
      <p>Welcome to Bookworld, your go-to destination for books of all genres!</p>
      <p>Whether you're looking for timeless classics, thrilling bestsellers, or hidden gems, we have something for every reader.</p>
      <p>Explore our collection and find your next great read today!</p>
    </div>
    <div class="horizontal-line">
    </div>
    <div class="grid-container" style="background-color: #e0e0a5">
      <div>
        <h2>Genres</h2>
        <p>Here are genres of books you may find in our shops</p>
      <div class="grid-container">
        <div>
          <ul>
            <li>Science Fiction</li>
            <li>Novel</li>
            <li>Thriller</li>
            <li>Dark Fantasy</li>
          </ul>
        </div>
        <div>
          <ul>
            <li>Nonfiction</li>
            <li>Fiction</li>
          </ul>
        </div>
      </div>
    </div>
    <div class="book-link">
      <p>Click here to</p>
      <a href="books.xml">View available books</a>
    </div>
    <div style="height: 50px">
    </div>
    <div class="horizontal-line">
    </div>
    <div class="grid-container" style="background-color: #afc0cf">
      <div>
        <h2>Locations</h2>
        <p>Here you may find nearest shop around you.</p>
        <p>You can also click on the map to expand it or find directions</p>
        <iframe src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d131349.7758234336212d-0.3436854955121332!3d51.563694144967805!2m3!1f0!2f0!3f0!3m2!111024!21768!4f13.1!3m3!1m2!1s0x48760f80cab940f583A0xc28"
      </div>
      <div style="text-align: center">
        <h2>Opening Times</h2>
        <table>
          <tr>
            <th>Mon-Fri</th>
            <th>Sat</th>
            <th>Sun</th>
            <th>Events</th>
          </tr>
          <tr>
            <td>09:00-18:00</td>
            <td>11:00-16:00</td>
            <td>Closed</td>
            <td>10:00-15:00</td>
          </tr>
        </table>
      </div>
    </div>
  </body>
</html>

```

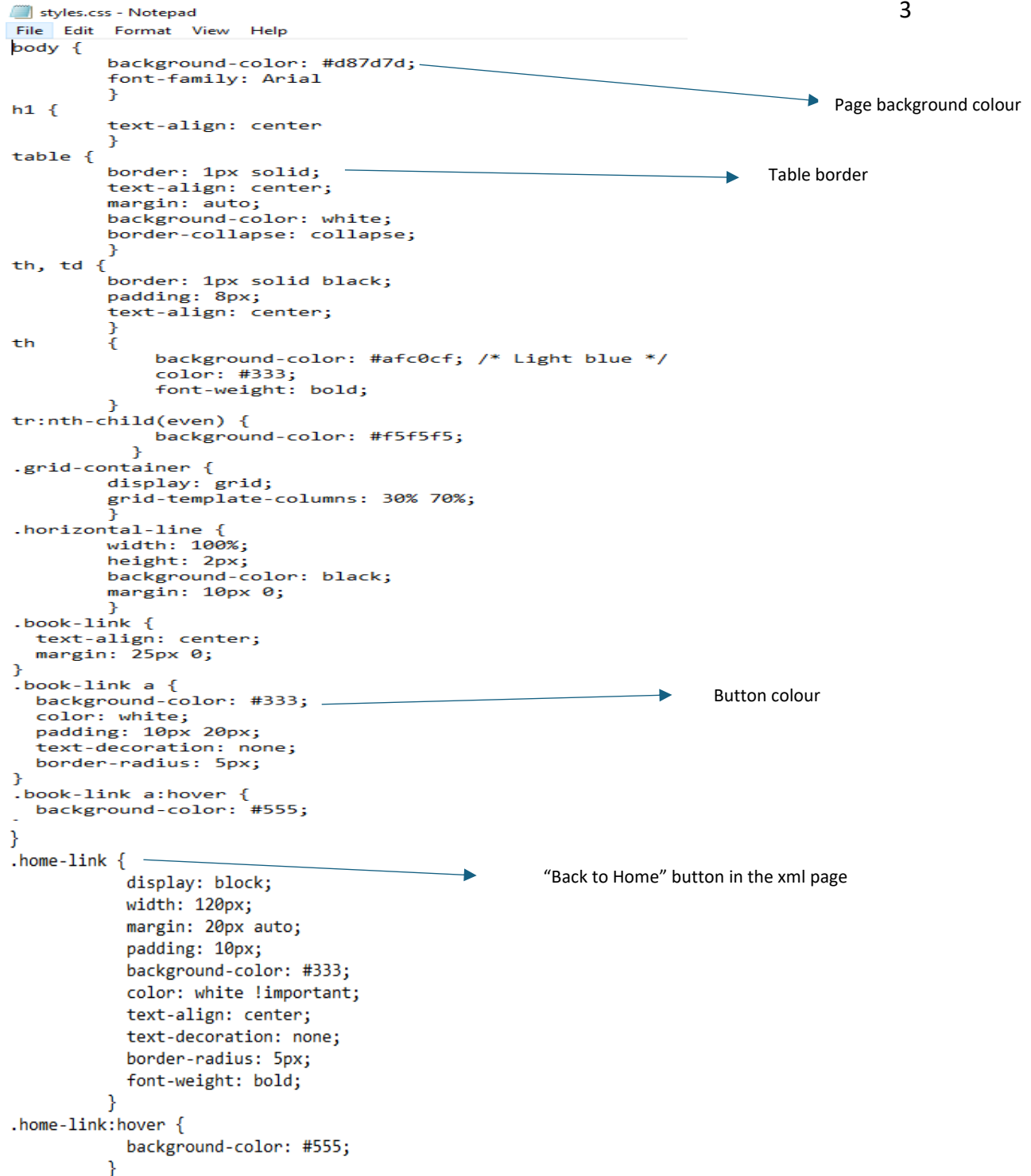
Defines the document as HTML5

Browser tab title

Link to XML page

- Annotated screenshots of CSS codes used:

3



## Section 2 – XML

4

- **Annotated screenshot of the XML file:**

```
books.xml - Notepad
File Edit Format View Help
<?xml version="1.0"?>
<!DOCTYPE bookstore SYSTEM "books.dtd">
<?xml-stylesheet type="text/xsl" href="books.xsl"?>
<bookstore>
  <book>
    <title>1984</title>
    <author>George Orwell</author>
    <price>10.99</price>
    <stock>15</stock>
  </book>
  <book>
    <title>The Hobbit</title>
    <author>J.R.R. Tolkien</author>
    <price>14.99</price>
    <stock>8</stock>
  </book>
  <book>
    <title>Pride and Prejudice</title>
    <author>Jane Austen</author>
    <price>9.99</price>
    <stock>12</stock>
  </book>
  <book>
    <title>Atomic Habits</title>
    <author>James Clear</author>
    <price>10.00</price>
    <stock>22</stock>
  </book>
  <book>
    <title>Meditations</title>
    <author>Marcus Aurelius</author>
    <price>8.99</price>
    <stock>7</stock>
  </book>
</bookstore>
```

XML declaration

DTD reference

XSLT link

ROOT ELEMENT: Contains all book entries

## Section 3 – Screenshot of XML schema

5

screenshot of **XML schema which is the DTD file**

books.dtd - Notepad

File Edit Format View Help

```
<!ELEMENT bookstore (book+)>  
<!ELEMENT book (title, author, price, stock)>  
<!ELEMENT title (#PCDATA)>  
<!ELEMENT author (#PCDATA)>  
<!ELEMENT price (#PCDATA)>  
<!ELEMENT stock (#PCDATA)>
```

Root element

4 child elements IN ORDER

## Section 4 - Transformation

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

Annotated screenshot of the XSL/t file:

books.xsl - Notepad

File Edit Format View Help

```
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">  
  <xsl:template match="/">  
    <html>  
      <head>  
        <title>Available Books</title>  
        <link type="text/css" rel="stylesheet" href="styles.css"/>  
      </head>  
      <body>  
        <h1>Available Books</h1> <!-- Now in black text -->  
        <table>  
          <tr>  
            <th>Title</th>  
            <th>Author</th>  
            <th>Price</th>  
            <th>Stock</th>  
          </tr>  
          <xsl:for-each select="bookstore/book">  
            <tr>  
              <td><xsl:value-of select="title"/></td>  
              <td><xsl:value-of select="author"/></td>  
              <td><xsl:value-of select="price"/></td>  
              <td><xsl:value-of select="stock"/></td>  
            </tr>  
          </xsl:for-each>  
        </table>  
        <a href="MainPage.html" class="home-link"><!-- Back to Home -->  
      </body>  
    </html>  
  </xsl:template>  
</xsl:stylesheet>
```

XSLT Stylesheet Declaration

MAIN TEMPLATE - Matches the root node and Processes the entire XML document

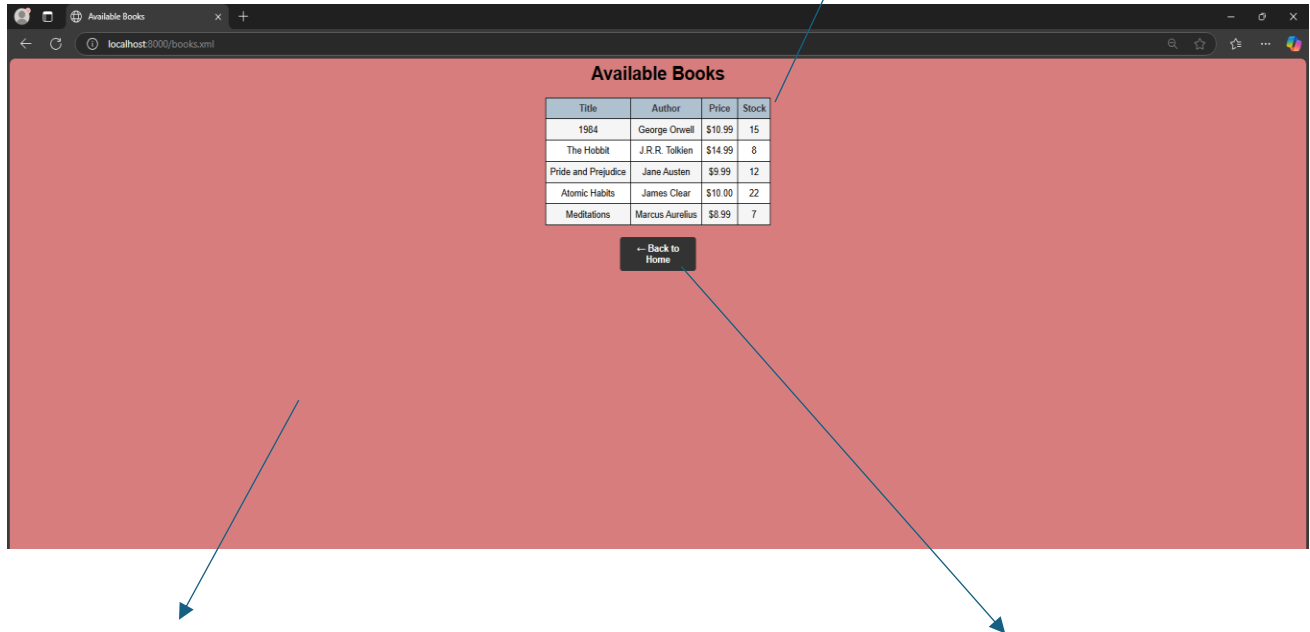
HTML OUTPUT STRUCTURE

Return link

Table with content of books, matches table structure of main page

b

### Annotated screenshot of program page:



Background colour is the same as main page

Button that takes user back to main page

## Section 5 – Author Contributions

For this project, we divided the work into two key components: the program page and the main page. Mohssine developed the program page, creating the XML data structure (books.xml), designing the XSLT transformation (books.xsl), and implementing the DTD schema (books.dtd) for validation. Valerii handled the main page, building the HTML structure (MainPage.html) and styling it with CSS (styles.css). After completing our individual sections, we integrated both pages by linking them together and consolidated all styling into the shared styles.css file removing redundant CSS from the XSLT file to ensure visual consistency across the entire website.

Mohssine Deflaoui Harrata(M00930038) is the one who will submit all work on behalf of Valerii Radjabov (M00946003)