Data Format Description

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Markup Languages

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Author Note

This project is for Markup Languages, subject taught by the Department of Information Technologies of the Business and Economics Faculty.

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**Website Description**

Our Latin American Music Magazine website offers an exploration of Latin American artists and their music, articles and news about it. The homepage welcomes visitors with a banner and a navigation menu, facilitating browsing through various sections like articles, artists, events, and more.

Featured articles showcase insights into the Latin music scene, from in-depth profiles of renowned artists like Bad Bunny to discussions on emerging trends like the ongoing rap and dembow improvisations. Each article is presented in the home page with each of their titles and a small summary, inviting readers to go deeper into the content.

The latest news section keeps visitors informed about current events in the Latin music industry, ranging from concert announcements to discussions on cultural phenomena. With each news article tagged using structured data, our website ensures enhanced visibility and relevance in search engine results.

The layout is intuitive, with a responsive design that adapts to various device’s screens. The use of microdata and Open Graph tags optimizes social sharing and search engine indexing, maximizing the reach and impact of our content across digital platforms.

In the footer, visitors can find essential links to the privacy policy and terms of service.

**Data Format Description**

To create and structure data for the magazine into the JSON output, a variety of fundamental files were used. These files developed in both XML schemas and XSLT style sheets. Schemes that allowed defining the hierarchical structure of the data, specifying the key elements and their interaction. On the other hand, XSLT style sheets will be a crucial tool when transforming data from one format to another, thus facilitating the conversion and manipulation of information, so the combination of these files will provide the necessary bases for the creation and effective maintenance of data in JSON format, ensuring its consistency and compatibility with established standards.

**List of Requirements**

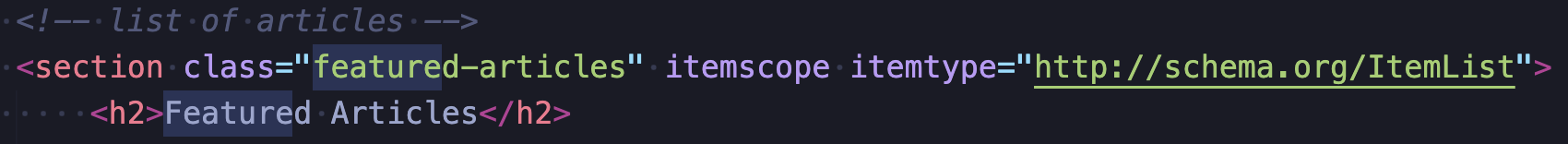
Website part

* 1x HTML file
  + Home page
  + Min. 5000 characters (source code)
  + Includes min.
    - A computer screen shot of a program

      Description automatically generatedFull header and navigation
    - Various article lists.

A computer screen with text and images

Description automatically generatedA computer screen shot of text

Description automatically generatedIn order the screenshots are: starter section of featured articles, 2 examples of such articles and our list of news section.

* + - Social media links
    - About info
    - Fat footer

A screenshot of a computer program

Description automatically generatedWe used Awesome Icons for our social media section. And decided to set up About Info inside the footer as well as a “Suscribe to Our Newsletter section” with an input type so the user can leave their email.

* 1x CSS file
  + External file
  + Min. 50 lines of code, maximum 100
* Valid HTML5 and CSS
* A screenshot of a computer

  Description automatically generatedSyntactically and semantically correct
* NO frameworks and templates are allowed
* Metadata descriptions
  + Basic meta elements in head
  + Microdata (+ schema.org)
    - min. 7 properties
    - min. 2different itemtypes
    - A computer screen shot of a program

      Description automatically generatedor equivalent using JSON-LD

A computer screen with white text

Description automatically generated

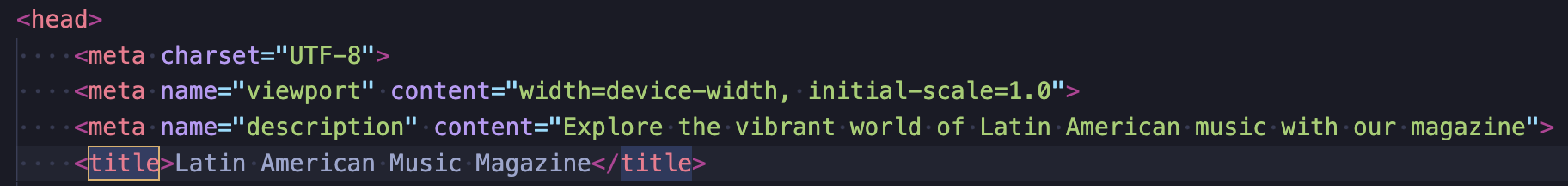
A screen shot of a computer code

Description automatically generated

* + A screenshot of a computer

    Description automatically generatedOpengraph.org for Facebook
* Contains properly used at least each of the following elements
  + head, meta, title, header, section, article, aside, time, footer, p, ul/ol, li, a, img, h1, h2, h3

All of these elements can be seen in the previous screenshots except for:

Title

A computer screen shot of text

Description automatically generatedAside

A black background with colorful text

Description automatically generatedh1

* Files and names
  + 1x index.html file
  + 1x style.css file
  + optionally Assets folder for any other media

XML part

* 1x main XML file, including data
  + 5 demonstrational records (at any level of XML file)
  + A screenshot of a computer program

    Description automatically generatedA computer screen shot of a computer program

    Description automatically generatedmin. 4 levels of nesting

A screenshot of a computer

Description automatically generated

* 1x XML Schema that defines
  + 30 different elements (30 unique element names),
  + 10 unique attributes
  + 5 custom, different restrictions (not generated)
    - A screen shot of a computer program

      Description automatically generatedMarked by comments

A screen shot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A screenshot of a computer

Description automatically generated

* 1x Functional transformation (XSLT) into JSON
  + use: for-each, sort, choose, if

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer

Description automatically generated

* Files and names:  
  + 1x XML file (data.xml)
  + 1x XML schema file (schema.xsd)
  + 1x XSLT transformation file (transformation.xslt)
  + 1x JSON result of the transformation (transformation\_result.json)

**Use of Generative AI**

A purple and black logo

Description automatically generatedAs for the website part (HTML & CSS) generative AI, specifically ChatGPT was used to explain certain concepts I did not have very clear, like microdata and opengraph. Canva’s AI was also used to create our logo and banner.

A close up of a text

Description automatically generated**Logo**

**Banner**

As for the XML part generative AI , the use of this was a great help to establish bases when developing the documents and codes, in addition to allowing us to solve errors in the functioning of the code or directly syntax errors, which optimized the time to develop the 4 files, in addition to that, code checkers were used to validate these syntaxes in addition to a clarification when developing the JSON conversion as a final product that was complex to carry out