

XML

Overview

XML (Extensible Markup Language) is a metalanguage that was designed to describe information. Its main function is to help us organize content and that makes XML documents portable to different types of applications. It was developed by the World Wide Web Consortium (W3C) and is used to store data in readable form.

Unlike other languages, XML supports databases, being useful when several applications must communicate with each other or integrate information. At present it has a very important role since it allows compatibility between systems to share information in a safe, reliable and easy way.

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Project Requirements

- Create a clear and orderly directory structure
- Both the code and the comments must be written in English
- In the case of using HTML, never use online styles
- In the case of using different programming languages always define the implementation in separate terms
- Remember that it is important to divide the tasks into several sub-tasks so that in this way you can associate each particular step of the construction with a specific commit
- You should try as much as possible that the commits and the planned tasks are the same
- Delete files that are not used or are not necessary to evaluate the project

Risk Management Plan

Every project has risks. These risks must be taken into account to improve the workflow of the project. I've listed the risks for the project, along with the impact they might have, and the priority of them.

iD	Risk	Consequence	Prob. (1-5)	imp. (1-5)	Pri. (1-25)	Mitigation approach
1	Breaking my computer	Can't do anything	1	5	5	Keep my repo work to date, look for other computers
2	Getting sick	Wouldn't be as productive	2	3	6	Eat and sleep well
3	Not concentrating enough	Won't com	2	5	10	Focus on the Minimum Viable Product.
4	Unrealistic deadlines	Deadlines wouldn't be	2	3	6	Be more organized with the

		met + development shortcuts would have been taken affecting the robustness of the code				tasks, set new deadlines.
5	Being unfocused	Loss of control over the development flow of the project	4	5	20	Focus on finishing the most important tasks only.

Project Tasks

Defining this part is crucial to the development of the project. It is important to make a good analysis of the situation to organize the project in a good way:

#	Task	Priority (1-5)	Description	Difficulty (1-5)	Estimation
1	Reading the description	4	Reading the description of the project	1	30 min
2	Create Repo	3	Creating git repo for the project	1	2 min
3	Working on the theoretical section	5	Answering the questions asked	4	1 hr
4	Working on the practical section	5	Working with the .xml file for the restaurant exercise	5	1 hr
5	Review	2	Review Project	2	30 min

Theoretical Section

- **What is a markup language?**

A markup language is a computer language that uses tags to define elements within a document. Tags are used to indicate what should be displayed when the page loads.

- **What is a metalanguage?**

From a programming perspective, a metalanguage is a language used to make statements regarding statements made in another language, known as an object language. Metalanguage helps in describing the concepts, grammar and objects associated with a particular programming language.

- **Differences between XML and JSON**

Json is a lightweight data-interchange format and it's completely language independent. It is based on the JavaScript language and it's easy to read and understand.

XML (Extensively Markup Language) on the other hand was designed to carry data, not display data. It is a W3C recommendation. XML is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.

- **Define five cases in which XML is used**

1. RSS: *RSS Feed technology* is based on XML.
2. XML-RPC: XML-RPC is a Remote Procedure Call protocol which uses XML to encode its calls and HTTP as a transport mechanism.
3. XHTML: eXtensible HTML is a part of the family of XML markup languages. It mirrors or extends versions of HTML.
4. SVG: Scalable Vector Graphics (SVG) is an Extensible Markup Language vector image format for two-dimensional graphics with support for interactivity and animation.
5. XMLoader:

- **What is the relationship between AJAX and XML?**

In some cases, the answer received by Ajax can be the content of an XML document. This working method is used by API applications to transfer data

from one server to another (from an external server of the site that solicited the transfer). Using Ajax you can read an XML document directly.

Git Workflow

For this project, all commits we'll be pushed directly to the Master branch. All commits will use a descriptive message, so that myself or other users can easily go to the Git version that they need to. This is very important for working in teams as it increases communication and efficiency between all members.

Technologies used

For this project, we will use the following technologies:

- XML
- Visual Studio Code

Lessons learned

- XML is used to describe data, not display data.
- XML tags are not predefined. You can create your own tags.
- XML documents form a tree structure

Incidents

- Difficulty understanding the basic concept of what is XHTML, and what it is for.
- Difficulty understanding how to implement XML, and how to write .xml files.

