Bryan’s café

Requirements Analysis



Author

Table of  
Contents

Website Requirements 1

Website information 1

Procedures for developing websites 1

Further information 1

Client requirements 2

XML document Requirements 3

Legislation and standards 3

Procedures for developing XML Documents 3

Design methodology and iterative development 4

Software and tools 4

# Website Requirements

## Website information

So, Bryan's Café is looking for a snazzy new website that can change and adapt. They want a few key pages:

• The Main Page: Think of this as the backbone of the site. It'll have a menu bar that sticks around no matter where you go, a big space in the middle for all the good stuff, and a footer that'll show up on every page.

• About Page: This is like the welcome mat of the website. It'll have a big eye-catching banner, a section that tells you what Bryan's Café is all about, and a bit of their history with some cool pictures.

• Menu Page: This is where the mouth-watering stuff happens. It'll show off all their meals and drinks, complete with descriptions that'll make your stomach growl, prices, and pictures. All this info will come from a special XML file.

• Contact Page: Here's where visitors can get in touch. There'll be a form to fill out (with must-fill boxes for things like name and email), addresses for all their branches, and handy links to Google Maps so you can find them easily.

• Privacy Page: Since they're collecting info from people, they need to explain how they'll handle it. This page will spell out their privacy policy.

Every page will have some common elements:

• A navigation bar that'll always be there, with the café's logo (which takes you back to the About page) and links to the other main pages.

• The main content area, which will change depending on which page you're on.

• A footer at the bottom with a copyright notice that'll update itself using some clever JavaScript.

And of course, the whole site needs to look good whether you're browsing on your phone or your computer.

## Procedures for developing websites

## I am going to build this site using a mix of HTML (for structure), CSS (for style), and JavaScript (for interactivity). I'll also make sure it's secure, using HTTPS to keep data safe as it travels across the internet, and putting in safeguards against common security risks.

## Further information

*Instruction: What else do you need to find out from the client in order to produce their website?*

*Write down your questions and your client’s response on the space provided. Your meeting with client will be scheduled by your trainer. You may also use the space below to write down your questions and the client’s response outside the meeting.*

|  |  |
| --- | --- |
| Questions | Client Response |
| Are there any specific features or functionalities, beyond those already mentioned, that you'd like to incorporate into the website? |  |
| Do you have a preference for the content management system (CMS) or any particular technologies you'd like us to use in development? |  |
| What are your primary business objectives for this website, and how do you envision it supporting your café's growth? |  |

## Client requirements

Potential outlined requirements include:

* They're excited about having some dynamic content. This means parts of the site will update automatically, pulling information from XML documents. It's like having a menu board that updates itself.
* A consistent navigation menu and footer that appear on every page.
* They want a site that looks good and works well no matter if you're browsing on your phone or your desktop. It's all about being flexible.
* The inclusion ofextra menu items in any sections of your choice.

# XML document Requirements

## Legislation and standards

## In developing Bryan's Café website, adherence to relevant legislation and standards is paramount:

## Legislation: The Privacy Act 1988 (Australia) serves as the primary regulatory framework governing the collection, storage, and handling of user data obtained through the website's enquiry form. This legislation mandates stringent data protection measures.

## Standards: Two key standards guide our development process:

## W3C XML Standard: This standard provides the foundational guidelines for structuring and validating XML documents, ensuring cross-system compatibility and interoperability.

## ISO/IEC 27001: This international standard informs our data security practices, particularly in relation to the secure handling of user-submitted information.

## Procedures for developing XML Documents

The XML document development process follows a structured approach:

Creation of XML documents (e.g., menu.xml and branches.xml) with corresponding Document Type Definitions (DTDs) for validation purposes.

Rigorous validation of XML documents to ensure well-formedness and conformity to their respective DTDs.

**XML documents**

The project incorporates two primary XML documents:

Menu XML: This document encapsulates the café's culinary offerings, including attributes such as name, price, description, and image filename.

Purpose: To provide a structured representation of Bryan Café's menu items.

Expectations: Facilitate efficient parsing, updates, and support advanced functionalities like search and filtering.

Required Functionality: Comprehensive item listing, attribute-based querying, and seamless content updates.

Branches XML: This document delineates branch locations, contact information, and operational hours.

Purpose: To offer a centralized repository of branch-specific data.

Expectations: Ensure data comprehensiveness, maintainability, and updateability.

Required Functionality: Detailed branch information storage, location-based search capabilities, and efficient data update mechanisms.

## Design methodology and iterative development

## The project employs an iterative development methodology, initiating with wireframe designs and progressing through development stages with integrated feedback loops. This approach facilitates adaptive development and ensures alignment with client expectations.

## Software and Tools

The development process utilizes a suite of professional tools:

Integrated Development Environment: Visual Studio Code for XML and HTML coding.

Validation Tools: W3C Validator and similar online platforms for XML validation.

Cross-browser Testing: Chrome and Firefox for ensuring multi-platform compatibility.

Debugging and Validation: Browser Developer Tools for in-depth testing and issue resolution.

**Document Type Definition**

The DTDs for the XML documents serve as structural blueprints:

• Menu DTD: Defines elements such as <meal>, <name>, <price>, and <description>, including data type constraints and mandatory field specifications.  
• Branches DTD: Encompasses definitions for elements like <branch>, <address>, <contact>, and <hours>, ensuring data format consistency and validation.

**Entities, elements and attributes**

The XML documents are composed of the following structural components:Menu XML:  
• Entities: <menu>, <meal>, <beverage>, <otherBeverage>  
• Elements: <name>, <description>, <price>, <image>  
• Attributes: Includes optional attributes such as type="vegetarian"Branches XML:  
• Entities: <branches>, <branch>  
• Elements: <address>, <contact>, <hours>, <mapLink>  
• Attributes: Utilizes attributes like location="suburb" for branch categorizationThis structured approach ensures a robust, maintainable, and scalable XML architecture for Bryan's Café website.