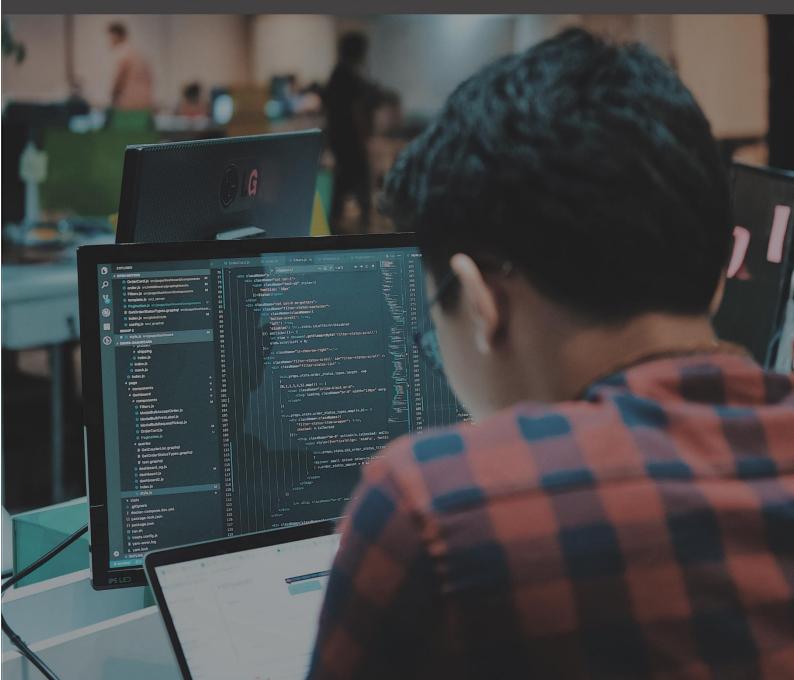




# TRAINING PLAN SMALLCODES SRL



This document is a result of the project:

# BUILDING THE VOCATIONAL TRAINING OF THE FUTURE: COMPANIES AND EDUCATIONAL CENTERS FACING THE CHALLENGE OF THE ORGANIZATION AND INTEGRATION OF A MORE INCLUSIVE AND DIGITAL VET

This project has been funded with support from the European Commission.

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Programming and monitoring notebook of the training plan
Trogramming and monitoring notebook of the training plan
Student:
Educational institution:
Empresa: SMALLCODES SRL
Training start date:







PART 1		TRAINING PLAN			
Course		Empresa. SMALLCODES SRL			
Training degree/specialization course/professional certificate		Microcomputer Systems and Networks Technician			
Student			Email:	Telephone	
Training Center			Email:		
Tutor at the training centre			Email:	Telephone	
Tutor in the company			Email:	Telephone	
Particular features			1	'	
In-house training perio	od	Calendar/Schedule	e/Period		
Total hours					

Learning outcomes in in-house training periods					
Professional Module	Code	Learning Outcomes (Company)	Evaluation criteria		
Web Applications	0228	Ra1 Installs contemanagement system identifying the applications a	requirements to install		







configuring them according systems have been to requirements. identified. b) Users with different roles have been The managed. c) content manager interface has been customised. d) Functional tests have been carried out. e) Tasks have been carried out to update the content manager, especially those of security. f) The necessary modules and menus have been installed and configured. g) The security mechanisms provided by the content manager itself have been activated and configured. h) Forums

have been set up and access rules have been

Functional tests have

been carried out. j)

Backup copies of the

contents

established.

manager's

have been made.







Ra3 installs web file	a) The usefulness of a
management services,	web file management
identifying your	service has been
applications and verifying	established.
their integrity.	b) Different web file
	management
	applications have been
	described. c) A web file
	management tool has
	been installed and
	adapted. d) User
	accounts have been
	created and classified
	according to their
	permissions. e) Files and
	directories have been
	managed. (f) Additional
	information files have
	been used. g) Indexing
	criteria have been
	applied to files and
	directories. h) The
	security of the file
	manager has been
	checked.

Signed: Tutor in the company

Signed: Student

Signed: Tutor at the training

centre







PART 2 Workplace. Overview		
Task Title:	Folder/Server:	Date:
Construction of a simple web page from scratch using HTML and CSS		

### **Short Description**

HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) are the two most important languages for a new web developer to learn and provide the basic knowledge for building webpages. Every webpage on the internet is built using code. There are many different programming languages that can make website do various things, but the two most important to learn are HTML and CSS. In fact, even people who plan on specializing in another type og coding should have at least a basic knowledge of both languages. As in many companies, by now programmers can make use of complex technologies, and often the way may be to rely on no-code programs, nevertheless in order to act effectively at any level on a webpage or application, it is necessary to possess the basics of these two languages. In our case the pages to be created will be a series of landing pages for a bike tour operator, our client, within their marketing campaign in the launch of new products. The graphic appearance of these pages should therefore accord with the style of the main site but at the same time show elements of innovation. All information necessary for the sale of products should be contained in the pages. The company will provide the texts and images, but student groups will be left free to study an original way of arranging them.

### Area of the company or project in which it is framed:

The work of our company is classified in the area of software development, and therefore all our programmers have a basic knowledge of the two languages that are the subject of this project. Then in detail, each of them specialized in other genuine and more specific programming languages at a later stage.

Our software development always starts form HTML files, and this is the way we begin structuring our web pages' content. In a second stage, we add CSS styling in order to accommodate our customers' requests in terms of graphic appearance.

### **Objectives**

- That the student develops basic skills in HTML and CSS, applying what they have learned in a real project.
- Encourage creativity and organizational skills by allowing you to choose how to structure content and apply visual styles.
- Introduce the student to **basic web development**, making them understand how to create and optimize a website for a real client.







# Hypotheses, solutions that can be anticipated and expected results (to be filled in by the student)

### **Equipment / Machinery**

PC Internet access

Gimp or other image editor

HTML editor such as:

- CoffeCup
- Atom
- Visual Studio Code
- ... or others

### Elements of occupational risk prevention

Upon arrival at the company, the student will be provided with the company's occupational risk prevention manual.

### Waste management.

Smallcodes is a technology company that is very attentive to the ecological issue. The ecological practices they carry out are very similar to those carried out by the technology companies in the network:

Control energy consumption:

- Adjust the temperature of the air conditioning and air conditioning to the minimum. In 2022, the Government of Italy passed a bill, known as "Operation Thermostat", for the regulation of heating and cooling temperatures.
- Replacement of light bulbs with low-consumption alternatives: LED bulbs.

### Reduce paper use:

- Use of digital files whenever possible.
- Share digital documents for meetings.

### Implementing a recycling program:

- Proper waste management through recycling bins (paper, plastic, organic).
- Recycling of electrical and electronic equipment (toner cartridges and printer ink, dead batteries) through ECOTAPPE collection points.
  - They are collection points located in different parts of Florence.







**Available procedures** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder indicating here the name or reference of the file)

Include pages as needed

PART 2 Workplace. Conceptual issues.
Explain the concepts clearly and concisely and solve the exercises collected in the following
cells.
What is HTML and why is it essential for website development?
What are the main HTML tags used to structure the content of a page?
How should an HTML page be organized so that it is easy to understand and maintain by other
developers?
What elements are important for the creation of a clear and logical structure on a landing
page?
What is CSS and how is it used to control the visual appearance of a web page?
How can you style HTML elements using CSS selectors?
What CSS properties are essential for designing a visually appealing landing page?







What is the box model in CSS and why is it important to understand it? What is Flexbox and how does it help you organize the design of a website? How can you create a responsive design that works well on mobile and desktop? Why is it important to optimize a web page to load fast, and how can this be achieved? What key usability aspects should be considered when designing a landing page? How important are forms on a landing page and how can they be implemented in HTML? What relationship should there be between the landing page design and the customer's visual identity? What are the most important skills a web developer should have when working on real projects for clients? What role does feedback play in the development of a web project, and how can you use it to improve your work? Bibliographic search: Include in this cell the Think and write very briefly how you have reference where you have studied these decided on one type of bibliographic source concepts, it can be a website or a chapter of a or another







textbook or some notes from a subject of your	
training center.	

### PART 2.- Workplace. Technical Information.

Look for the following data or technical characteristics.

Why is it important to test the website on different browsers and devices?

How can you debug errors in HTML and CSS using browser development tools?

What does it mean to "validate" HTML and CSS code, and how does it help ensure the quality of a web page?

What structure should a valid HTML document have? Describes the required tags and their function.

What types of data can you include in HTML forms, and how are they specified in the code?

How can external scripts and stylesheets be included within an HTML document? Explains the technical characteristics of using link> and <script> tags.

What units of measurement are used in CSS to define sizes, and what are the differences between relative and absolute units?

What are the main differences between CSS layout systems: Flexbox and Grid?

What is the display property in CSS and what are its main values? How do they affect page flow?

What are "Cascading Style Sheets" (CSS) and how does cascading affect the performance and readability of a web page?







How can you optimize the size of images on a web page without compromising visual quality?

Which code editor will you use to develop the project, and what are the advantages of using a specialized editor for HTML and CSS?

What is the difference between a "static" and a "dynamic" design of a website, and which is more appropriate for this project?

Why is it important for websites to be accessible to all users, including those with disabilities? What guidelines can you follow to ensure good accessibility in your project?

How can you perform compatibility testing to ensure that web pages work correctly on different browsers and devices?

Bibliographic search: Include in this cell the reference where you have studied these concepts, it can be a website or a chapter of a textbook or some notes from a subject of your training center.

Think and write very briefly how you have decided on one type of bibliographic source or another

### PART 2.- Workplace. Processing and storage and presentation of results.

Do the following exercises.

What types of data can be manipulated on a web page using HTML and CSS? How are HTML data entry forms treated?

What are the differences between local storage and cookie storage within a website? When is it convenient to use each one?

What are the best practices for handling and protecting sensitive data in web applications that use local storage (localStorage or cookies)?

What storage options are available on the server side, and how do they relate to the presentation of data on a web page?







What data presentation formats are available in HTML/CSS and which is best suited for each type of content (graphs, tables, lists, etc.)?

What tools or methods can you use to efficiently store and manage multimedia resources (images, videos) on a website?

What performance metrics are important on a web page (load time, file size, number of HTTP requests) and how can you measure them?

Why is it important to turn off caching for certain types of sensitive data, and how can you do it?

Bibliographic search: Include in this cell the reference where you have studied these concepts, it can be a website or a chapter of a textbook or some notes from a subject of your training center.

Think and write very briefly how you have decided on one type of bibliographic source or another







# PART 3.- Activities. Task 01 Task Title: Planning the Structure of Landing Pages Folder / server \*: Date:

### **Brief** description

- Analysis of the content provided (texts, images, etc.).
- Define a basic structure of landing pages: header, main body, footer, specific sections (tour features, photos, calls to action).

### The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

### Methodology and work plan:

**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

PART 3 Task results 01					
Title: Planning the Structure of Landing Pages	Folder / server :	Date:			
Additional information obtained during the task: Alte which to contrast the data obtained, etc. Include the indicating here the name or reference of the file.	· ·	•			

**Experimental protocol** (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)

<b>PART</b>	3 -	Rasıı	ltc	of	tack	Ω1
PANI	э	nesu	I LS	OI.	Lask	$\mathbf{u}_{\mathbf{I}}$

Title: Planning the Structure of Landing Pages Folder / server \*: Date:







**Experimental results** (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)

(add as many pages as needed, copying the entire table)

### PART 3.- Analysis of the results of task 01

Title: Planning the Structure of Landing Pages Folder / Server \*: Date:

**Assessment of the result:** Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?

Is the result accepted?

Notes on conversations with the supervisor or other team members

**Conclusions** (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)

### PART 3.- Activities. Task 02

**Task Title:** Creating the HTML Skeleton | **Folder / server \***: | **Date**:

### **Brief description**

- Create the basic HTML structure for the first landing page.
- Insertion of texts and images according to the planned structure.
- Add internal navigation links (e.g. between sections of the same page).

The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

Methodology and work plan:







**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

### PART 3.- Task results 02

**Title:** Creating the HTML Skeleton

Folder / server :

Date:

**Additional information** obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.

**Experimental protocol** (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)

### PART 3.- Results of task 02

**Title:** Creating the HTML Skeleton

Folder / server \*:

Date:

**Experimental results** (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)

(add as many pages as needed, copying the entire table)

### PART 3.- Analysis of the results of task 02

Title: Creating the HTML Skeleton

Folder / Server \*:

Date:

**Assessment of the result:** Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?

Is the result accepted?

Notes on conversations with the supervisor or other team members







**Conclusions** (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)

### PART 3.- Activities. Task 03

Task Title: Adding CSS to the ProjectFolder / server \*:Date:

### **Brief description**

- Create a separate CSS file for the landing page.
- Stylize the landing page header, paragraphs, and images according to the client's guidelines (consistent with the main site).
- Trial and error to understand how CSS affects the appearance of elements.

### The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

### Methodology and work plan:

**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

### PART 3.- Task results 03

Title: Adding CSS to the Project Folder / server : Date:

**Additional information** obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.

**Experimental protocol** (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)







### PART 3.- Results of task 03

**Title:** Adding CSS to the Project

Folder / server \*:

Date:

**Experimental results** (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)

(add as many pages as needed, copying the entire table)

### PART 3.- Analysis of the results of task 03

Title: Adding CSS to the Project

Folder / Server \*:

Date:

**Assessment of the result:** Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?

Is the result accepted?

Notes on conversations with the supervisor or other team members

**Conclusions** (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)

### PART 3.- Activities. Task 04

**Task Title:** Applying Flexbox to the Landing Page

Folder / server \*:

Date:

### **Brief description**

- Rearrange the HTML structure to implement Flexbox.
- Create a clear layout of page sections: header, main content, footer, image gallery, etc.
- Adjust case sizes and alignment to support the customer's aesthetic.

The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

Methodology and work plan:







Initial information available (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

### PART 3.- Task results 04

**Title:** Applying Flexbox to the Landing Page

Folder / server :

Date:

Additional information obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.

Experimental protocol (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)

### PART 3.- Results of task 04

**Title:** Applying Flexbox to the Landing Page

Folder / server \*:

Date:

Experimental results (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)

(add as many pages as needed, copying the entire table)

### PART 3.- Analysis of the results of task 04

**Title:** Applying Flexbox to the Landing Page

Folder / Server \*:

Date:

**Assessment of the result:** Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?

Is the result accepted?

Notes on conversations with the supervisor or other team members







**Conclusions** (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)

PART 3 Activities. Task 05		
<b>Task Title:</b> Apply Responsive Design to the Landing Page	Folder / server *:	Date:

### **Brief description**

- Implement media queries to ensure that the landing page works well on mobile devices.
- Adjust text, image, and section sizes for small screens.
- Perform tests on different screen sizes (simulator or browser tools).

The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

### Methodology and work plan:

**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

PART 3 Task results 05		
Title: Applying Responsive Design to the Landing Page	Folder / server :	Date:

**Additional information** obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.

**Experimental protocol** (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)







PART 3 Results of task 05						
Title: Applying Responsive Design to the Landing Page	Folder / serv	er *:	Date:			
<b>Experimental results</b> (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)						
(add as many pages as needed, copying the entire table,	)					
PART 3 Analysis of the results of task 05						
Title: Applying Responsive Design to the Landing Page	Folder / Serv	er *:	Date:			
Assessment of the result: Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?						
Notes on conversations with the supervisor or other team members						
<b>Conclusions</b> (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)						

PART 3 Activities. Task 06				
Task Title: Sty Experiments	le Enhancements ar	nd Innovation	Folder / server *:	Date:

### **Brief description**

- Explore more advanced CSS properties (shadows, gradients, transitions).
- Experiment with the arrangement of images and texts to innovate within the limits of the client's style.







The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

Methodology and work plan:

**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

### PART 3.- Task results 06

**Title:** Style Enhancements and Innovation Experiments | **Folder / server** : | **Date**:

**Additional information** obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.

**Experimental protocol** (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)

### PART 3.- Results of task 06

Title: Style Enhancements and Innovation Experiments | Folder / server \*: Date:

**Experimental results** (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)

(add as many pages as needed, copying the entire table)

PART 3.- Analysis of the results of task 06

Title: Style Enhancements and Innovation Experiments | Folder / Server \*: Date:







**Assessment of the result:** Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?

Is the result accepted?

Notes on conversations with the supervisor or other team members

**Conclusions** (propose here the solution to the problem posed, but also the detailed conclusions about the task itself, about the experimental procedure, suggestions for new tests, etc.)

### PART 3.- Activities. Task 07

Task Title: Final Tests

Folder / server \*:

Date:

### **Brief description**

- Perform extensive landing page testing on different browsers (Chrome, Firefox, Edge, Safari).
- Verify that pages are fully responsive and look good on mobile devices.
- Test links, forms, and interactive elements to make sure everything is working properly.

The problem at hand.

Hypotheses, solutions that can be anticipated, and expected results.

### Methodology and work plan:

**Initial information available** (include a brief summary or notes of the documents already available, include the documents in annexes in the work folder, indicating here the name or reference of the file)

Include the pages you need

### PART 3.- Task results 06

Title: Final Tests | Folder / server : | Date:

**Additional information** obtained during the task: Alternative testing methodologies, sources in which to contrast the data obtained, etc. Include the related files as attachments in the folder, indicating here the name or reference of the file.







<b>Experimental protocol</b> (if there is already a written protocol in the company, just indicates its reference; if not, briefly detail the steps of the experimental procedure)				
PART 3 Results of task 07				
Title: Final Tests	Folder / serv	er *:	Date:	
Experimental results (if written by hand or printed by the device, photocopy or scan and copy them here as an image. Videos, photographic images, and other material will be added as attachments in the work folder, writing the name or reference of the file here)  (add as many pages as needed, copying the entire table)				
PART 3 Analysis of the results of task 07				
Title: Final Tests	Folder / Serv	er *:	Date:	
Assessment of the result: Assess the reproducibility of the assay; does it match what was expected? If so, what is the reason why a result very different from the one found was expected?				
Notes on conversations with the supervisor or other te	am members			
Conclusions (propose here the solution to the probler	_		_	







### **PART 4.- Training content**

Explain the concepts clearly and concisely and solve the exercises collected in the following cells. The questions are sorted by topics related to the training outcomes we hope to achieve during your time at the company. Before you start writing, you'll need to look up information about the topic and study that information.

### Module 0228

**Bibliographic search:** Include in this cell the reference where you have studied this topic, it can be a web page or a chapter of a textbook or some notes of a subject from your training center.

Think and write very briefly how you have decided on one type of bibliographic source or another

What is a content management system (CMS) and what is its usefulness in the creation and management of websites?

What are the steps to install and configure a CMS on a local server? What software and hardware requirements must be met?

Research the most commonly used CMSs (such as WordPress or Joomla). What characteristics differentiate these content managers?

What is an FTP server and what is its role in managing a website's files?

What other web file management methods, apart from FTP, can be used, and in what situations would it be wise to opt for one or the other?

What problems or limitations could arise when using web office applications and how could they be solved or mitigated?

What are the differences between web apps and desktop apps in terms of installation, usage, and maintenance?







In what situations would it be more beneficial to use a desktop web application versus a conventional web application?				
Investigate how to install a web application that can run in a desktop environment (such as Electron or PWA). What characteristics does this type of application have?				
PART 5 Self-assessment				
The following questions are based on the evaluat	ion criteria set out in the Royal Decree establishing			
the title of your training cycle. Think about wh	ether what you have studied in relation to each			
question and the exercises you have done seems	sufficient for you to master each of these aspects.			
Enter a comment to this effect in the box on the	right.			
Do you know what the minimum requirements (hardware, software, and server) are to install the content manager you used?				
Have you checked if the server and work environment meet the necessary requirements for the CMS you installed? How did you verify it?				
Have you created user roles in the CMS and what specific permissions does each one have?				
How did you ensure that each user only has access to the functions and areas that correspond to them according to their role?				
What changes did you make to the look and feel of the CMS to adapt it to the needs of the project?				







Have you tried customizing the interface on different devices and browsers? How was the user experience in each case?	
What types of tests did you perform to verify that the CMS is working properly?	
What steps did you take to update the CMS, and how did you verify that the updates don't affect the overall operation of the site?	
How did you set up the CMS menus to make navigation clear and accessible?	
What security mechanisms built into the CMS have you activated to protect the website and its users?	
How often have you scheduled CMS backups and what method did you use?	
What are the advantages of web file management over other methods of file storage and transfer?	
What differences and similarities did you find between the web file management tools you researched?	
How did you define access and permission levels for users?	
What kind of metadata or additional information can be added to files on the system you used?	







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