



Chapter - 4: Advanced Features of Web - Design

4.1 Code View, Add-Ins, Snippets and Page Transitions

Working with CODE View

Though most tasks can be completed using GUI, at times you may have to insert code manually (for example when you want to integrate with your website, a third party web application, provided as code).

IntelliSense is a feature that automatically provides you a list of codes and attributes as a popup when you work in the code view mode. To understand how to use it, do the following:

- 1) Create a new HTML page.
- 2) Select **Code View**.
- 3) Place the cursor after the **<body>** tag.
- 4) Type angle bracket **<** to open the tag. Notice the list of elements displayed (image below).
- 5) Select a element from the list, for example: **h1**.
- 6) Now place the cursor after the element and press spacebar. Notice the list of attribute related to this element is displayed. Select **align**, (notice the attribute added), select **=** on your keyboard. Notice the value corresponding to this attribute is selected. Select **Center**.
- 7) Close the tag using **>**. Notice the end tag is automatically added.

Though code view can be difficult to use in the beginning, once you have adequate practice, you will gain total control of the coding environment!

To view IntelliSense settings, do the following:

- 1) Select **Tools > Page Editor Options....**
- 2) Select the tab **IntelliSense**.

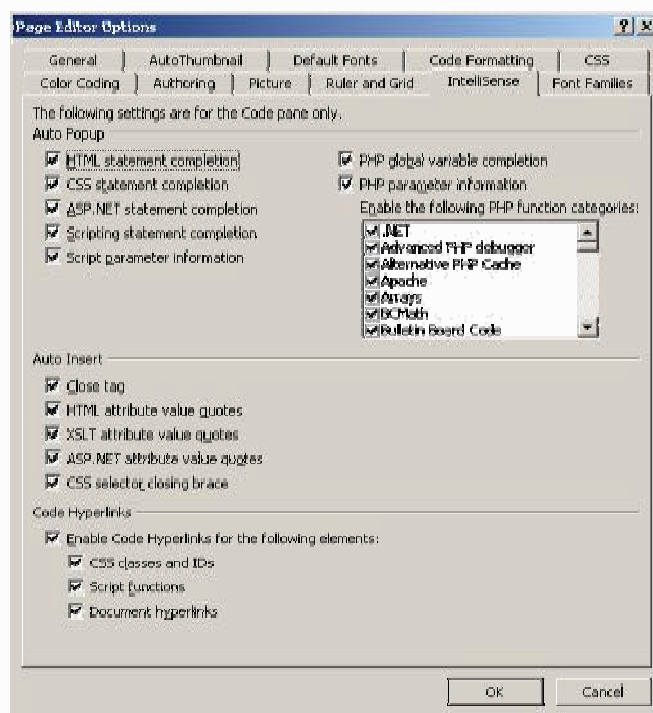


Figure-4.1

- 3) Notice the settings. Note that you need additional technical expertise to work with this area. **Do NOT** change any setting here.

Add-ins

Add-ins extends the capability of the main program by adding enhanced custom commands and specialized features. You can download a variety of Add-ins from:

- <http://msdn.microsoft.com/en-us/expression/jj873995.aspx>
- <http://www.webassist.com/go/xweb-add-ins>
- <http://www.expressionextras.com/products/lightbox.htm>
- <http://www.dotnetcurry.com/ShowArticle.aspx?ID=534>
- Of Course, Use Google to find more Add-ins!

Once you have downloaded an Add-in, use the following procedure to install the Add-in:

- 1) Select **Tools > Add-ins**. The **Manage Add-ins** dialog box appears.
- 2) Select **Install...**. Browse and select the Add-in and then click **Open**.
- 3) Select **Yes**.
- 4) Repeat the procedure to include more Add-ins.

Note: Add-ins may need to be installed through a special procedure. Refer to Add-ins help file for detailed instructions.



Using Snippets

Snippets are pieces of programs re-used by most developers. Snippets are useful as you can keep reusing the code created many times across multiple web pages or web sites saving enormous amount of time and effort. To view and insert the available snippets, do the following:

- 1) Select **Panels > Snippets**. Notice the list of snippets available separated into categories such as CSS, HTML, JavaScript, JQuery, etc.

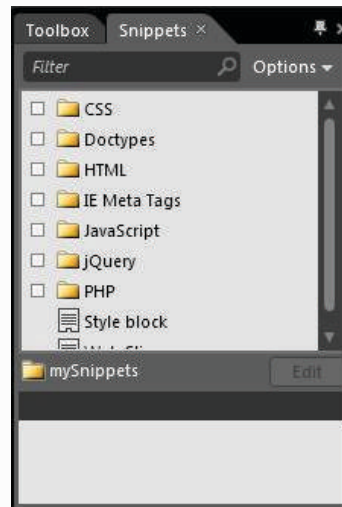


Figure-4.2

2. To insert a snippet, do the following:
 - a) Create a new page. Place the cursor where you want the snippet to be placed.
 - b) Select **View > Page > Code**. (Snippets can be inserted only in Split or Code View).
 - c) Expand **HTML**, expand **Hyperlink folder**.
 - d) Double-click on a snippet, for example: **Add to favorites**. Notice the code is added to the web page.
 - e) Save and preview this page in browser (F12). Switch to MEW and see the source code.

Note: You may require following additional instructions for some of the snippets listed here. Refer to the help file for detailed instructions.

PSD Templates

As a web designer, you need to create pages that are attractive and simple. Remember that along with showcasing content to a visitor and the design also needs to be pleasant, encouraging them to repeat their visit to the website.

When it comes to Web design, you need to maintain a balance between visual design and code. Though it is possible to create simple web designs using standard HTML, it is



always a good practice to research on good designs. Components of some of the attractive websites are usually created using Adobe Photoshop and later integrated into the web site for additional functionality such as text content, forms, etc.

You can import certain parts (or layers) or entire images into your website using MEW. Given here is a list of websites where you can find Photoshop templates (some of them are free!):

- <http://www.psdtemplates.com/templates/>
- <http://www.freepik.com/free-psd/web-templates>

You can browse, select, download and use these files. Refer to website terms and conditions for license information.

LINK PSD & MEW

Also there is a special feature that can be used for updating an image whenever the original (.PSD) Photoshop image is modified. To understand how to use this feature, do the following:

Import a .PSD (Photoshop files use this extension) file and do the following:

- 1) Create a new web page, save the file as **psd.html**.
- 2) Select **File > Import > Adobe Photoshop (.psd)....**
- 3) Browse and select the file. Click **Open**. **Import Adobe Photoshop File** dialog box appears (figure below).

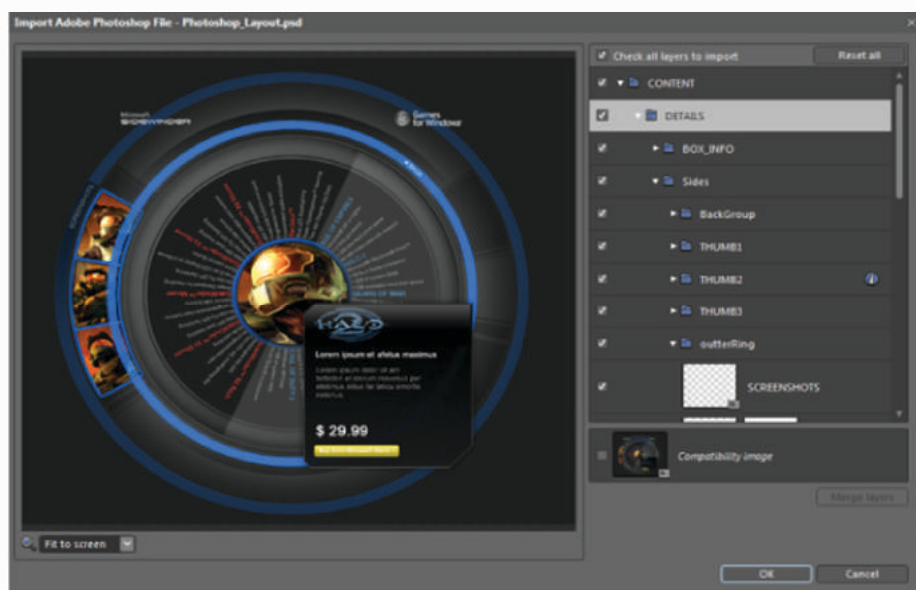


Figure-4.3

- 4) You can select the layers you want to import using the options in the left pane. Select **Compatibility Image** located at right bottom and click **OK**.



- 5) Click **Save** when prompted.
- 6) Right-click on the image, notice the menu item Adobe Photoshop (.psd) (figure below).

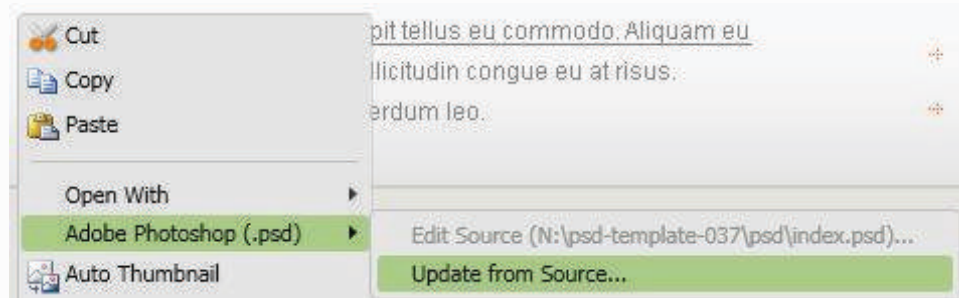


Figure-4.4

- 7) You can update this image whenever the original image is updated by selecting **Update from Source....** This is possible because MEW maintains a link between the image and the original source. This is one feature that is useful for both web developers (who write code) and web designers (who design sites)!

Page Transitions

You can apply special effects to web pages just as in presentation software. This helps present special effects to visitors.

To add transitions, do the following:

- 1) Create a new page, save the file as **trans.html**.
- 2) Select **Format > Page Transition....** The **Page Transitions** dialog box appears (figure below).

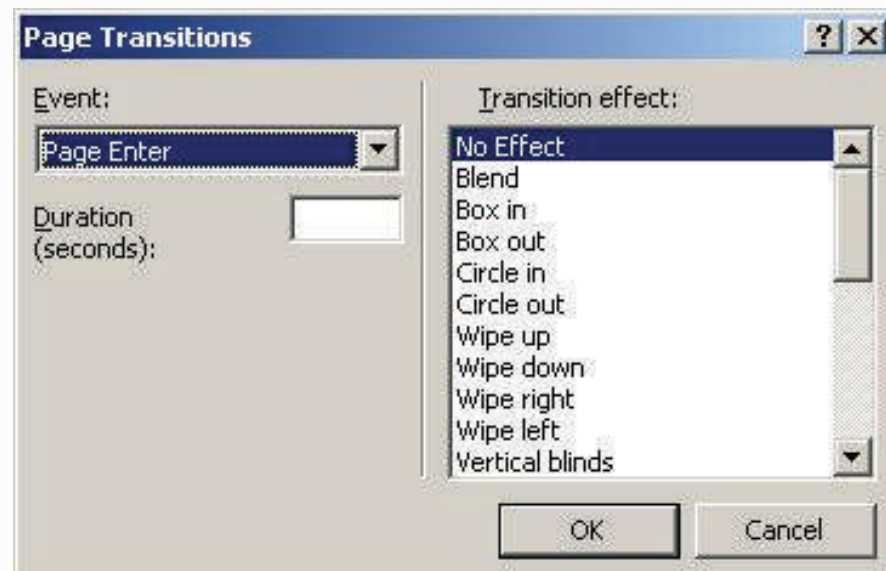


Figure-4.5



- 3) You need to select an event to which the effect should be applied. Select **Site Enter** from **Event:** dropdown and select **Circle In** from **Transition effect:** list.
- 4) Type **5** in **Duration (seconds):** box and click **OK**.
- 5) Save and preview this page in browser (F12). Switch to MEW and see the source code.

Note: Page Transitions will work only on Internet Explorer 5.5 or above.

Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Download and use the following Add-ins:
	a) PayPal ecommerce Toolkit
	b) WordPaste Add-in
	c) Insert Bing Map Add-in
	So think DHTML Menu Addon
2.	Include different snippets in web pages created in earlier sessions.
3.	Set the following transition effects for each web page created in
	earlier sessions:
	a) Random dissolve
	b) Blend
	c) Box Out
	d) Split horizontal in

Assessment:

Answer the following questions:

- Q1. Explain the purpose of Add-ins.
- Q2. List any three website that offer Add-ins for download (use Google).
- Q3. Explain the purpose of snippets with an example.
- Q4. Explain the procedure to import a PSD file with an example.
- Q5. Explain the purpose of Page Transitions with an example.

Fill in the blanks:

1. Add-ins is available _____ menu.
2. Snippets can be accessed from _____ menu.
3. PSD can be imported from _____ menu.
4. Page Transitions is available _____ menu.



4.2 Dynamic Web Templates

Relevant Knowledge

Templates help you organize the entire website to have a consistent look and feel. This is very helpful when you work with large number of web pages.

On your website, you may have some common items displayed on all pages such as the logo, copyright & organization details, navigation menu, etc. but the content may vary on each page. Here, you can create a dynamic web template (DWT) with fixed positions for common elements and modifiable designated portions on each web page.

Unlike standard templates, Dynamic Web templates have the following features:

- 1) When you update the DWT, all web pages in the website are automatically updated to changes.
- 2) You can create multiple DWT and keep changing just the template that affects the entire website.
- 3) You can allow only specific portions of the pages to be edited instead of whole web page resulting in better control and reduced chances of mistakes. This feature is very useful when multiple developers work on the same website.

Creating a Dynamic Web Template

To create a dynamic web template, do the following:

- 1) Create a new web page (to be used as template).
- 2) Add common elements such as a logo (picture), company name, copyright notice at the bottom of the web page, etc.
- 3) You need to add editable regions and that will be the only area in which the content can be modified. To create editable region, do the following:
 - a) Place the cursor where you need to place content (remember, this will be the only area where the content can be placed or changed). Right-click and select **Manage Editable Regions....** The **Editable Regions** dialog box appears (figure below).
 - b) Type a name, for example: **Content**. Click **Add**.
 - c) Click **Close**.

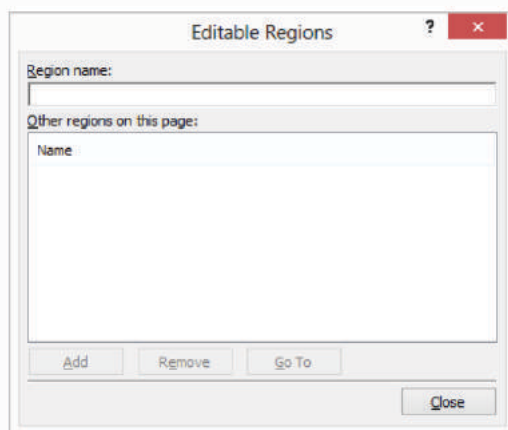


Figure-4.6

4. Select **File > Save**. Select **Dynamic Web Template** from the **Save as type:** dropdown menu (figure below). Type a file name, for example: **MyTemplate** and click **Save**

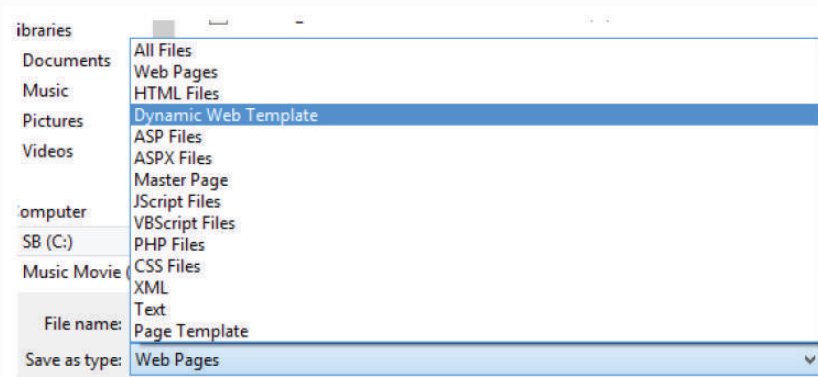


Figure-4.7

Using a Dynamic Web Template

You have created a DWT template. If you want to create web page based on this template, do the following:

1. Select **File > New > Create from Dynamic Web Template....** (figure below)

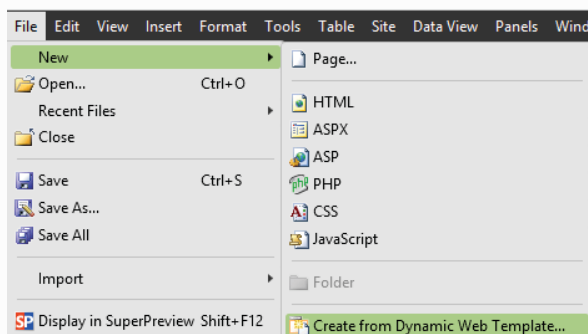


Figure-4.8



2. Notice the template displayed in the list. Select the template, for example: MyTemplate and click **Open**. A web page based on this template will be created and displayed.

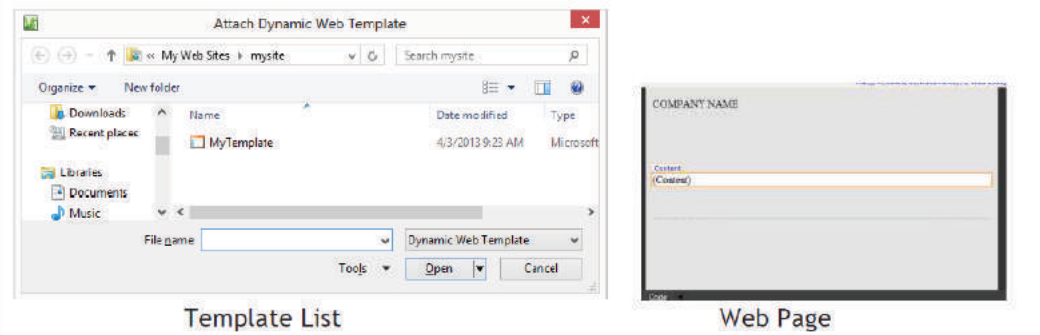


Figure-4.9

3. Notice that you are able to type content only in the editable region specified earlier and rest of the area are not editable. Now type some content in the “Content” area. Save this page as a normal web page. For example, **Page01.html**.
4. Create at least 2-3 pages based on this DWT. Save the files.

Editing a Dynamic Web Template

When you edit the DWT, it automatically updates the changed layout to all the pages created using the DWT (for example, when you want to change to a different layout or update the company logo without affecting the content). To edit a DWT, do the following:

1. Locate the Dynamic Web Template you created earlier (it will be displayed with the file extension .dwt) and double-click on it.
2. Now add another editable region by placing the cursor elsewhere in the web page. Name the region as “Photos”.
3. Now save this DWT (**CTRL+S**). Notice the message displayed (figure below).

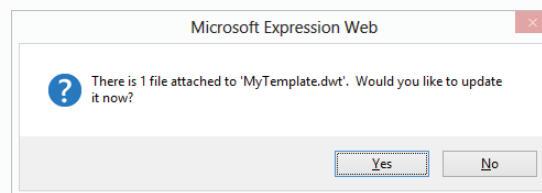


Figure-4.10

4. Select **Yes**. Automatically all the web pages created using this template are updated.
5. Open any of the web pages created using this template and notice the changes.
6. Insert an image in the “Photo” region. Save the web page.



Sometimes you may have to use a completely different layout for entire website. In such cases you can create a new dynamic web template and associate all the web pages to this new DWT. This in turn will (in no time) apply the new structure to all the web page eliminating the need for making layout changes to each web page!

To create a new DWT and associate all web pages (or selected web pages), do the following:

1. Create a new DWT by swapping the “Content” and “Photos” regions:
 - a) Create a region for “Photos” (at the top)
 - b) Create a region for “Content” (below Photo)
2. Save this as DWT with a new file name, example: MyTemplate02.

Note: You need to include the region names as the content has to be retained but placed according to the new layout. Use the same region names when you want to work with different DWTs. Otherwise content may not swap properly leading to issues.

Now, to use this new DWT, associate the web pages to the new template.

1. Select all the web pages (Page0x.html) using the **folder** view (left pane). Use **CTRL+Click** to select multiple pages.
2. Select **Format > Dynamic Web Template > Attach Dynamic Web Template...** (figure below).

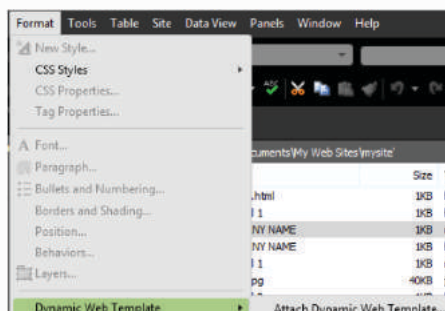


Figure-4.11

3. **Attach Dynamic Web Template** dialog box appears (figure below).

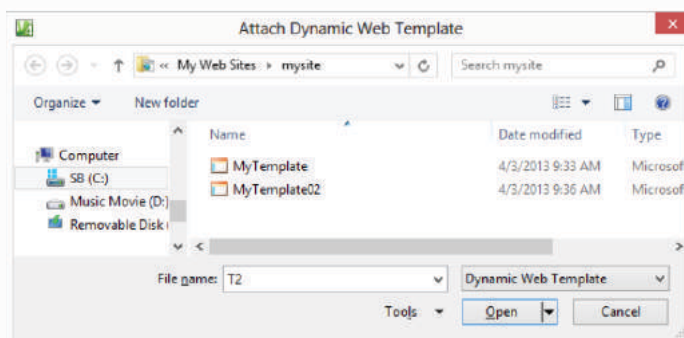


Figure-4.12



4. Select the second template, for example: MyTemplate02 and click **Open**.
5. Notice the results displayed. Content from “Photos” and “Content” are automatically swapped based on the new template.

Remove DWT association with selected or all web pages

When you no longer need to use DWT or are using a HTML editor that may not have support for DWT, you can detach the DWT linked with selected or all web pages.

Note this procedure only removes the relationship and is a one-way process. Content and the layout are left undisturbed. However if you want to associate with a DWT you need to start all over again! If you decide at some point to remove the relationship of DWT and selected or all web pages, do the following:

1. Select all the web pages (Page0x.html) using the **folder** view (left pane).
2. Select **Format > Dynamic Web Template > Detach from Dynamic Web Template**.
3. Notice the message displayed, select **Close**.

Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	1. Create a dynamic web template using the following guidelines: • Use a table to link different pages in a website for navigating to other pages. • Use a table for the content area. • Insert copyright notice at the bottom and a hyperlink to the homepage (default.html)

Assessment:

Answer the following questions:

- Q1. Explain the purpose of dynamic web template with an example.
- Q2. Explain the procedure to link and remove DWT with multiple pages.

Fill in the blanks:

1. Acronym for DWT _____.
- _____ from the Save as type: dropdown menu should be used for creating DWT.



4.3 SEO - Search Engine Optimization

Relevant Knowledge

Search Engine Optimization or SEO refers to the process that affects the website visibility or ranking when displaying search results. Search Engines search contents of a web page and create indexes to display results. As a web developer, you need to understand how search engines work and how to get better search ranking. SEO Checker built-in with the HTML Editor gives detailed reports that help you optimize the website for better ranking.

Anatomy of a Search Engine

Search engines crawl a website (and hence referred to as Spiders) to create index of content. This index helps find a matching web page or link based on keywords entered by visitors.

Search engines index the following components of a web page:

1. Page Title (only the first 70 characters are displayed in search results!)
2. Page Description (at least first 156 characters are displayed in search results!)
3. Page Keywords
4. Page headers (H1)
5. Links to other pages
6. Strong text (bold)
7. Phrases
8. ALT Text in images
9. And many more....

Note: You need to learn more about SEO before taking decisions on optimizing a website. You need to refer to the SEO process of each search engine at their respective websites. However, you can use the SEO Checker to understand what needs to be optimized for a better ranking.

1. Select **Tools > SEO Reports....** SEO Checker dialog box appears (figure below).

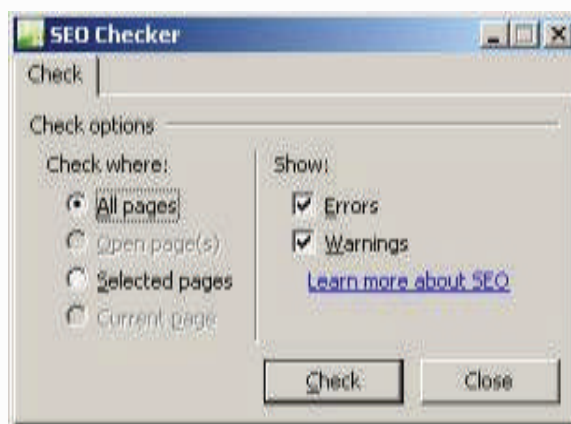


Figure-4.13



2. Select **All Pages**, and the select **Check** .Notice the results (figure below).

Search Engine Optimization					
Problem Summary	Help Topic	Page	Line	Issue Type	
 The description is missing.	WEB1027	weblinks.html (Untitled 2) [1/4]	2	Error	
 The <h1> tag is missing.	WEB1005	weblinks.html (Untitled 2) [2/4]	2	Error	
 No keywords are defined for the page.	WEB1034	weblinks.html (Untitled 2) [3/4]	2	Warning	
 The <title> tag contains placeholder content or text th...	WEB1064	weblinks.html (Untitled 2) [4/4]	6	Error	
 The description is missing.	WEB1027	watermark.html (Untitled 14) [1/4]	2	Error	
 The <h1> tag is missing.	WEB1005	watermark.html (Untitled 14) [2/4]	2	Error	
 No keywords are defined for the page.	WEB1034	watermark.html (Untitled 14) [3/4]	2	Warning	
 The <title> tag contains placeholder content or text th...	WEB1064	watermark.html (Untitled 14) [4/4]	7	Error	
 The description is missing.	WEB1027	The <title> tag contains the text 'Untitled 14', which appears to be a placeholder value, generated by an HTML editor, or is too commonly used to provide search benefit. Consider providing a meaningful, descriptive title for this page.			
 The <h1> tag is missing.	WEB1005				
 No keywords are defined for the page.	WEB1034				

Found 204 searchability problem(s) in 41 page(s).

Found 204 searchability problem(s) in 41 page(s).

Figure-4.14

You can click on each message displayed in the list to find out and fix related issues. For example for a message as “The Description is missing”, you can add a description using the META tags to correct it. Once errors are identified and fixed, run the SEO Checker again to confirm if the website is optimized.

Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Verify the website created earlier using SEO Checker.

Assessment:

Answer the following questions:

- Q1. Explain the purpose of SEO.
- Q2. Explain the purpose of SEO Checker with an example.

Fill in the blanks:

1. Acronym for SEO _____.
2. SEO reports can access from _____ menu.



4.4 Forms - Advanced

Relevant Knowledge

So far, you have been using HTML and CSS for creating simple web pages. These are referred to as Static Web pages. While static web pages are good enough for creating basic web sites, you need to learn and use technologies such as ASP, PHP, etc. for creating dynamic websites. Dynamic Websites allow visitors to search and locate information (such as a search feature of search engines or database listing), submit information (such as feedback, rating, voting) etc.

Advanced Forms

You can create a fully functional form using MEW. Data filled using a form can be stored in a database or sent to a specific email address. But these features require proper support from the web hosting provider, primarily the support for FrontPage Server Extensions.

Special Note:

FrontPage Server Extensions is a technology that provides special functionalities on web servers created using Microsoft FrontPage or Microsoft Expression Web. Though this technology was used for over a decade, it is considered obsolete due to the evolution of other equivalent or better technologies. You may still find a few web hosting providers extending their support to this almost obsolete technology.

Microsoft Expression Web replaced Microsoft FrontPage. Most of the activities in this module can also be done using Microsoft FrontPage. However, Microsoft FrontPage has a limited support for recent developments in web technologies such as CSS3, HTML5, etc. Yet, you can use form functionalities outlined in this module if your web hosting provider supports only FrontPage Server Extension.

If you want to create a form for your Intranet or if your web hosting provider supports FrontPage Server Extensions, you can use procedure in this session to create the form, configure it to save the data in a database and later publish it to the remote computer.

Web Server

You can use the web server in-built with the operating system. Windows includes IIS (Internet Information Services) in both client and server operating systems. IIS in-built with client operating system such as Windows XP, Vista & 7 is usually sufficient for websites having few visitors. You can install IIS on Windows Vista & 7. Use the help file for detailed instructions.

Note: FrontPage Server Extensions is not available in Vista / Windows 7 & Windows 2008. You may download an evaluation copy of FrontPage Server Extensions (FPSE) from www.iis.net. Some web hosting providers still give support for FPSE and you will be able to publish using FPSE.



Creating Forms

You can create forms and use additional functionalities of MEW. To create a form and store the details in a database, do the following:

- 1) Select **File > New > ASP** and save this page as **dform.asp**.
- 2) Insert a form and add the following:
 - a) Insert **Input (Text)**, for visitor's name.
 - b) Insert **Input (Text)**, for visitor's email address.
 - c) Insert **Drop-Down Box**, for collecting visitor's favorite color.
 - d) Insert **Input (Submit)**.

Now your form should look similar to the one below:

Figure-4.15

You need to customize this form before it is displayed to the visitor. Now to customize the fields, do the following:

- 3) Double-click on the first **Input (Text)** field. Type **Name** in **Name:**, click **OK**.
- 4) Double-click on the second **Input (Text)** field. Type **Email** in **Name:**, click **OK**.
- 5) Double-click on the drop-down box. **Drop-down Box Properties** dialog box appears.
- 6) Since you are collecting details of visitor's favorite color, you need to add dropdown values for visitor to select.
 - a) Notice there is a default dropdown with null value (no value); you can remove that by selecting **Remove**.
 - b) Click **Add...**, Type **Red** in **Choice:**, Click **OK**.
 - c) Click **Add...**, Type **Blue** in **Choice:**, Click **OK**.
 - d) Click **Add...**, Type **Green** in **Choice:**, Click **OK**.
 - e) Now change the **Name:** (Select1) by replacing the text to **Color**.

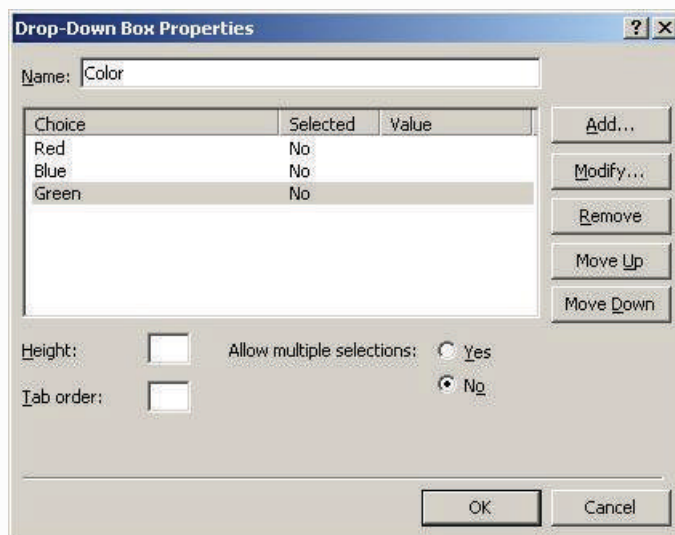


Figure-4.16

7) Click **OK**.

Creating a Database

To save the details collected from the form, you need to have a database with corresponding fields ready. MEW can create a database for you and link these fields to the database automatically. To create and link the database automatically, do the following:

- 1) Right-click on the form, select **Form Properties**. The **Form Properties** dialog box is displayed.
 - a) Select **Send to database** (**Note:** Requires FrontPage Server Extensions).
 - b) Select **Options....** The **Options for Saving Results to Database** dialog box appears (figure below).

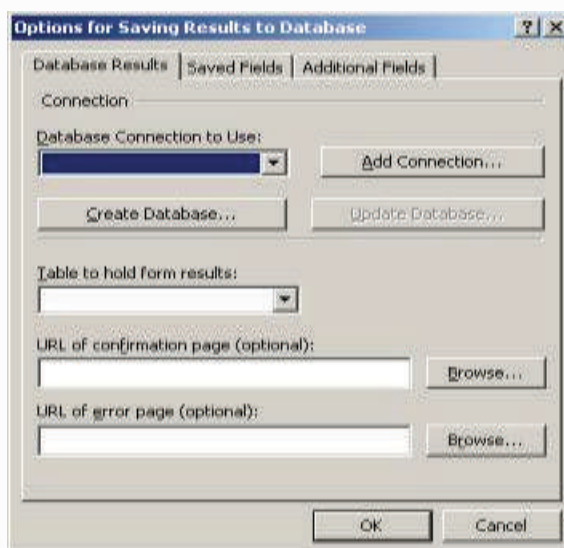


Figure-4.17



- c) To create the database, select **Create Database....** MEW automatically creates an Access database (only format supported for automatic creation). Click **OK** to close the popup.

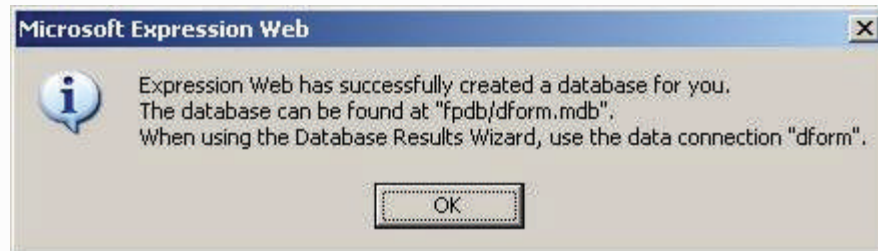


Figure-4.18

- 2) Select **Saved Fields** tab. Note the fields are mapped from form to database automatically. Click **OK** twice

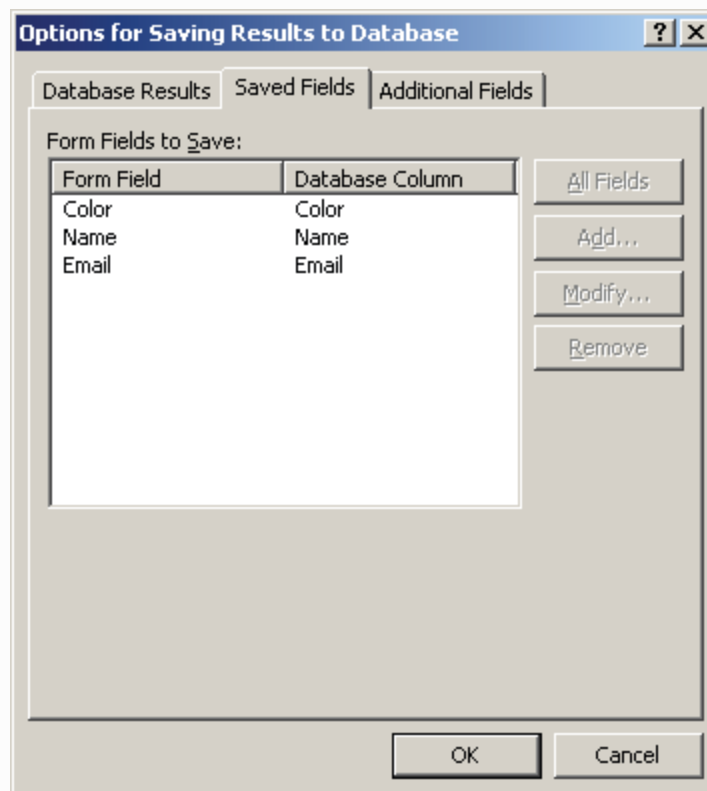


Figure-4.19

Now the form is ready but you need to publish the form to a server that supports FrontPage Server Extensions; otherwise this form will not work. Once publishing is complete, you can use the published URL to view the webpage.

Publish the Form to a Website

Note: Forms are published automatically along with other files in a website.

- 1) Select **Site > Publishing Settings....**



- 2) Select **Add...**
 - a) Type a friendly name in **Name**:
 - b) Select **FrontPage Server Extensions** from **Connection Type**: dropdown menu
 - c) Type the remote location, for example: `www.example.com`
 - d) Type the credentials (Username and password) provided by the hosting provider.
 - e) Click **Add**.
- 3) Click **OK**.
- 4) Select **Site > Publish All Files to...NAME (IP address of the server or computer that supports FPSE)**.

Note: Publishing may take some time.

Viewing the Webpage

Visitors can now view the website or webpage. When they click on the URL that takes them to the form, the form will appear.

A screenshot of a web browser window. The address bar shows a back arrow, a globe icon, and the URL "192.168.1.2/dform.asp". Below the address bar is a form with two stacked text input fields. To the right of the second input field is a dropdown menu with "Red" selected. Below the input fields and the dropdown is a "submit" button.

Figure-4.20

Visitors can fill the form by entering the details and when they click submit, they will see a confirmation page similar to the one below:

A screenshot of a web browser window. The title bar says "Form Confirmation" with a close button. The address bar shows a back arrow, a globe icon, and the URL "192.168.1.2/dform.asp". The main content area has the heading "Form Confirmation" in large bold letters. Below it is the text "Thank you for submitting the following information:". This is followed by the submitted data: "Name: John", "Email: john@gmail.com", "Color: Red", and "Submit1: submit". At the bottom is a blue underlined link that says "Return to the form."

Figure-4.21



The database is stored in a special folder with the name fdbb; this folder is hidden for security purposes and is not accessible to visitors.

You can open this database using your database software to view or modify information within this database. This could be useful when you want to collect all the email addresses and send a newsletter to visitors.

Note: Use Windows Explorer to navigate to the folder that contains this website if you are using a web server within LAN; Access database is stored in a special folder named fpdb. If you are using MEW, then the access database can be retrieved from the fpdb folder in folder list view.

Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Create a detailed form for the following fields and configure it to save the details in a database. a) First Name b) Last Name c) Age d) Email Address e) Favorite Car (Include at least three different vendors, allow selection through Checkboxes – Single Selection) f) City (Create a list and display using a dropdown menu) g) State (Create a list and display using a dropdown menu) h) Pin Code i) Comments

Assessment:

Answer the following questions:

Q1. Explain the procedure to create a form that will be saved in a database.

Q2. Explain the purpose of FrontPage Server Extensions.

Fill in the blanks:

- 1) _____ is the product was replaced by Microsoft Expression Web.
- 2) Acronym for IIS _____.
- 3) Create Database option is available in _____ dialog box of form properties.



4.5 Publishing Webpages or Websites - I

Relevant Knowledge

Preparing for publishing

Before you publish a website, you need to verify the website's functionality. Hyperlinks (internal & external) should be checked and replaced if necessary. Given here is a list of standard procedures to be followed prior to site publishing.

Examining Structure of a website

Create a visual diagram of hyperlinks of a website. This helps you understand the navigation structure or to trap any broken links. To view the structure of a website, do the following:

- 1) Open the website
- 2) Select **View > Site > Hyperlinks**. Notice the visual diagram (sample below).

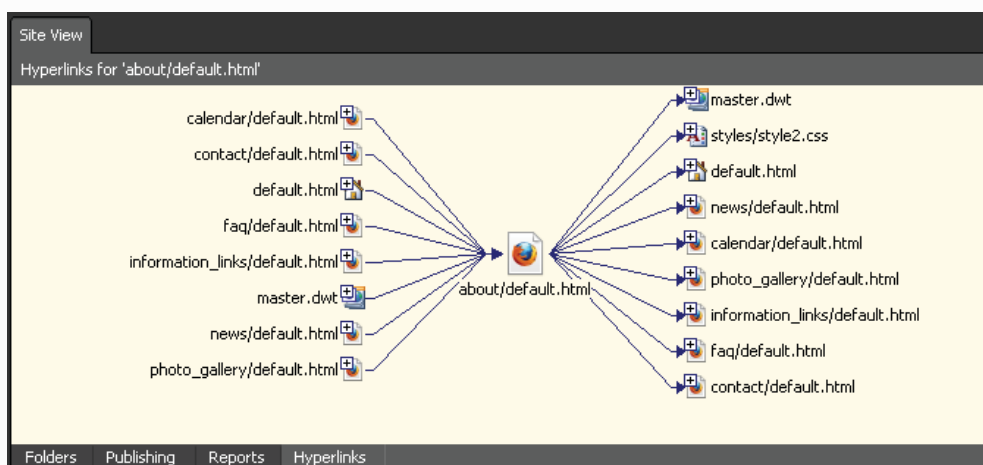


Figure-4.22

- 3) You can further expand and understand the links to other pages. Select the plus symbol next to the link (→+ contact/default.html). Notice the results displayed (figure below).

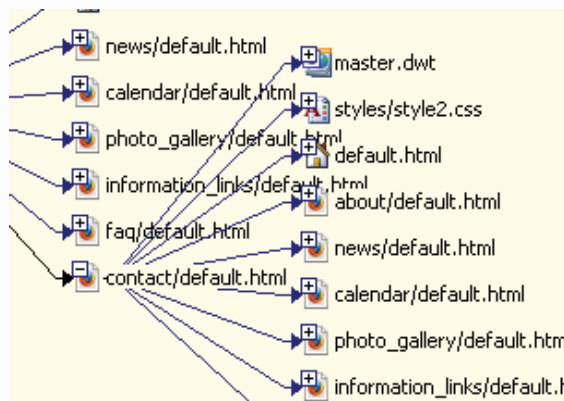


Figure-4.23



Estimating Size of a website

If you know the size occupied by files in a website, you can determine if you have sufficient web space (as allocated by an ISP) or even determine the time. Time taken to download before visitor can view the web page..

- 1) Select **View > Site > Site Summary** (figure below).

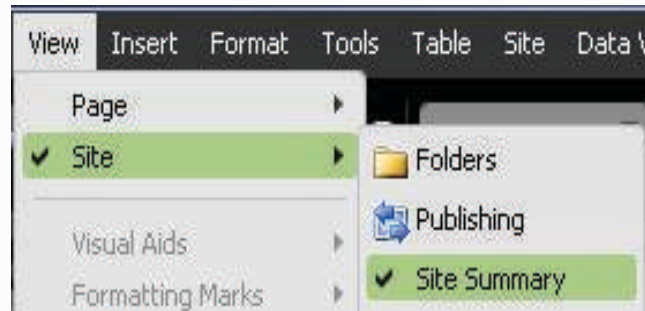


Figure-4.24

- 2) Notice the results displayed (sample below). Look at the list of items analyzed and given below Name, Count, Size and Description.

Site View			
Site Summary			
Name	Count	Size	Description
All Files	16	64KB	All files in the current site
Pictures	3	35KB	Picture files in the current site (GIF, JPG, BMP, etc.)
Unlinked files	3	13KB	Files in the current site that cannot be reached by starting from your home page
Linked files	13	52KB	Files in the current site that can be reached by starting from your home page
Slow pages	2	59KB	Pages in the current site exceeding an estimated download time of 3 seconds
Older files	0	0KB	Files in the current site that have not been modified in over 72 days
Recently added files	16	64KB	Files in the current site that have been created in the last 30 days
Hyperlinks	174		All hyperlinks in the current site
Unverified hyperlinks	0		Hyperlinks pointing to unconfirmed target files
Broken hyperlinks	0		Hyperlinks pointing to unavailable target files
External hyperlinks	0		Hyperlinks pointing to files outside of the current site
Internal hyperlinks	174		Hyperlinks pointing to other files within the current site
Style Sheet Links	12		All Style Sheet Links in the current site

Figure-4.25

Removing slow pages

You can now decide to remove items that may possibly slow down a page.

- 1) Select **Site > Problems > Slow Pages** (figure below)

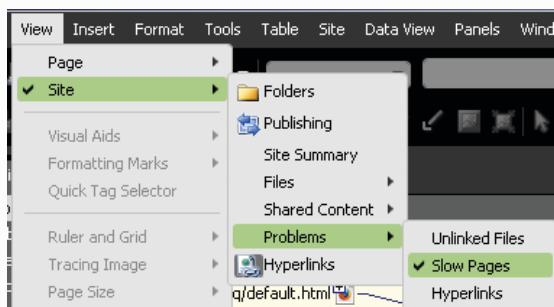


Figure-4.26

- 2) By default, HTML editor assumes and displays only the pages that take more than 30 seconds to load. You can change the value to 3 seconds to list web pages that take more than 3 seconds to download. Select 3 Seconds from the dropdown (figure below).

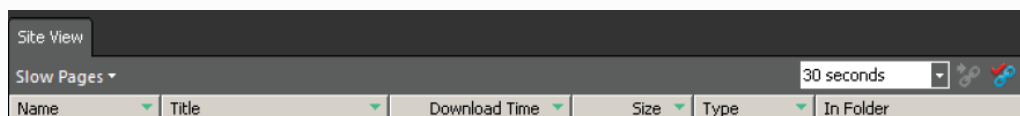


Figure-4.27

- 3) Notice the results displayed (sample below).

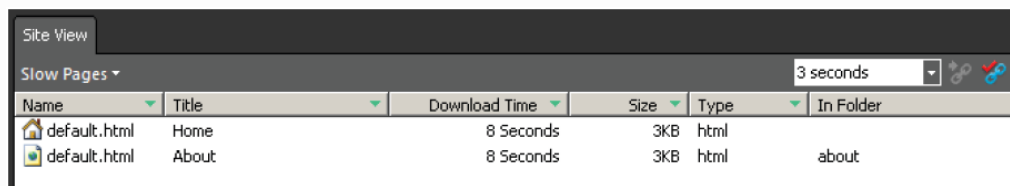


Figure-4.28

HTML calculates based on two parameters; the amount of bandwidth and time taken to download within the set bandwidth. To modify this setting, do the following:

- 1) Select **Tools > Application Options....** Application Option dialog box will be displayed (figure below).

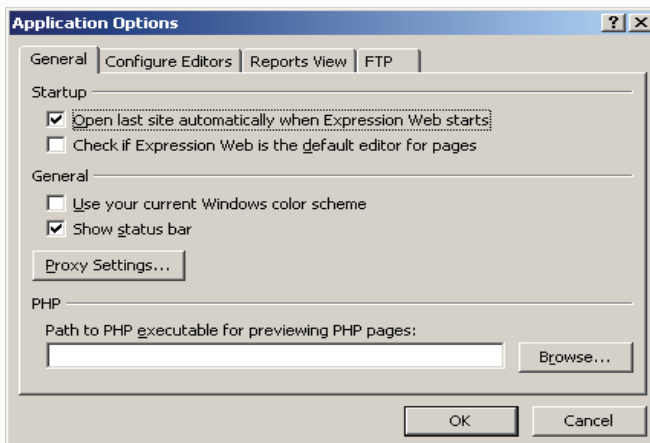


Figure-4.29



- 2) Select **Reports View** tab (figure below)

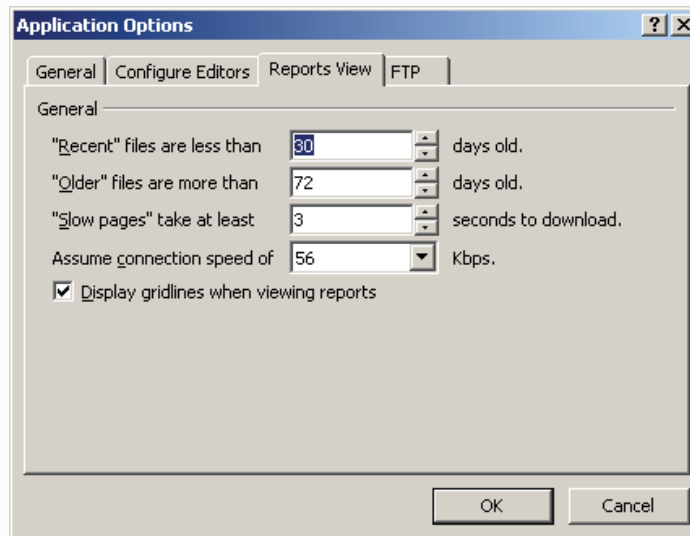


Figure-4.30

- 3) Notice the values of “**Slow Pages**” take at least and **Assume connection speed of** (indicated in kilobits per second)

Note: This is not YOUR connection speed. This refers to the connection speed available at the web hosting end.

DWT

If you have used Dynamic Web Template to create the website, check for updates made to the template. Also you can update all the pages by selecting the **Format > Dynamic Web Template > Update All Pages** option to ensure all page layouts are up to date.

Code Optimization

Before you publish, you need to cleanup your web page for any unnecessary code that can result in reducing page size. This in turn will help in faster downloads. You can use the in-built optimizer tool to remove unnecessary code by:

- 1) Select **Tools > Optimize HTML....** The **Optimize HTML** dialog box appears.
- 2) During development you may have left behind some code such as comments. These might have to be removed before you present the website to an audience. To do so, select **All HTML Comments** in **Remove Comments** section and then select **OK**. All the comments will be removed automatically.

To optimize a web page, do the following:

- 1) Open an existing page (at least 5-10 KB in size, record the size for comparison).
- 2) Select **all** the items under **Remove Components** list.
- 3) Click **OK**. Notice the difference in file size.

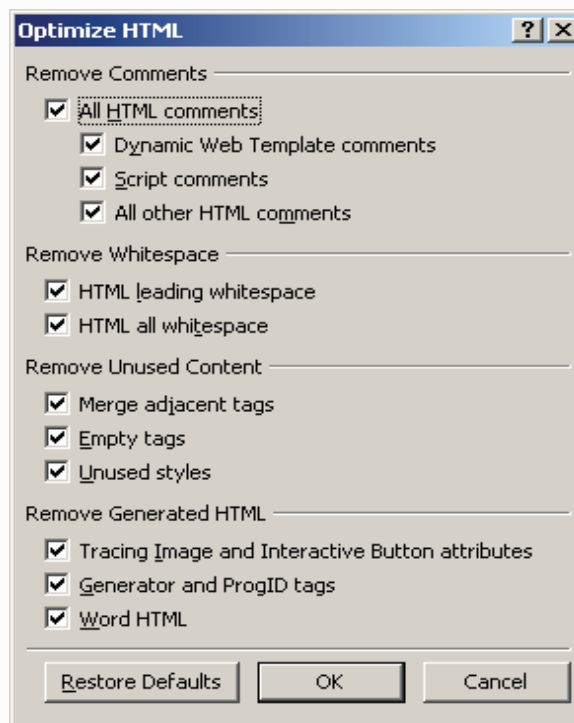


Figure-4.31

Fixing Errors

Before you publish the website, you need to verify if there are any pending issues. This helps you save time and unnecessary problems that may arise post publishing the website.

To verify and fix (if there are any errors), do the following:

- 1) Open the Website.
- 2) Select **Tools > Recalculate Hyperlinks**. The **Recalculate Hyperlink** dialog box is displayed (figure below).

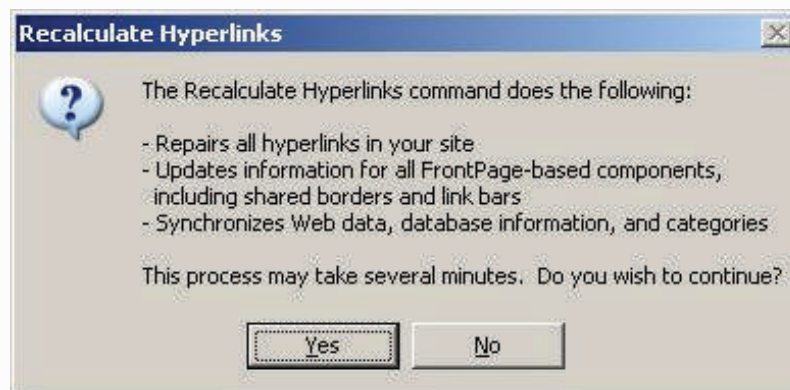


Figure-4.32

- 3) Click **Yes**. If there are any issues, they will be automatically fixed.



Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Create a visual diagram of any of the websites created earlier. Share it with your classmates. Optimize the HTML code in your website, remove all unnecessary code

Assessment:

Answer the following questions:

- Q1. Explain the procedure to create a visual diagram of a website.
- Q2. Explain the purpose of Site Summary with an example.
- Q3. Explain the purpose of Code Optimization with the procedure.
- Q4. Explain the procedure to fix errors in a web page automatically.

Fill in the blanks:

- 1) Structure of website can be viewed using ____ option in ____ drop down menu of ____ menu.
- 2) Site summary is available in ____ dropdown menu of ____ menu.
- 3) Optimize HTML is available in ____ menu.
- 4) Recalculate Links is available in ____ menu.

4.6 Publishing Webpages or Websites - II

Relevant Knowledge

Web Hosting

When you want others to see your content designed using HTML, you need to host the content in a web server to be viewed by the public. There are several free web hosting providers that provide free web space for your content. Though there may be restrictions on the total web space or advertisements posted within your website, the web space is usually sufficient for hosting small websites or practicing HTML! Use Google or other search engines to find a free web hosting provider.

Web hosting providers usually allow publishing through FTP. Some web hosting providers allow other methods such as SFTP, WebDAV, etc. which you can use to upload your website. Some of them allow other methods such as SFTP (secure FTP), WebDAV, FrontPage Server Extensions, etc. and these are detailed usually in the page that displays various plans for comparison.



For web pages created using HTML, you can use any provider that supports FTP.

Note: You can also use your own web server if you have a 24/7 active Internet connection and a static public IP address. Though you need to host the content in a web server for others to view, web pages made with HTML can be viewed from even a folder on your computer by sharing the folder in a LAN environment. Share the folder and provide the UNC path for others to view.

Publishing your website

Once you have created the website, you need to publish it to computers that will be available 24x7 for visitors to view. When you sign up with a hosting provider, generally, you will be given multiple options to publish the content such as FTP, WebDAV, FrontPage Server Extensions, etc.

To publish a website using FTP, do the following:

- 1) Open the website that you need to publish.
- 2) Select **Site > Publishing Settings....** The **Site Settings** dialog box appears.
- 3) Prior to publishing, you need to add details such as the destination computer's IP addresses or domain name, settings and credentials. For example if you have signed up with a web hosting provider who has given you an IP address 192.168.1.200 and FTP as the method for publishing, do the following:
 - a) Click **Add....** The **Connection Settings** dialog box is displayed.
 - b) Enter the following details:
 - (i) Type a name in the **Name:** textbox (usually your domain name or destination computer name or IP address of the destination).
 - (ii) Select **FTP** from the **Connection Type:** dropdown menu.
 - (iii) Hosting providers will provide a path for publishing, for example: **ftp.domainname.ext**. Type the path in **Location:** textbox.
 - (iv) Specify the folder where the content will be stored (Usually directory is auto-selected for websites, use this only if required).
 - (v) Enter the username and password in **Credentials:** section. This will be used when you publish from the HTML editor. Generally multiple files are transferred **simultaneously** between HTML editor and destination resulting in faster transfers. Leave this setting as it is or contact hosting provider for this detail only if required.
 - (vi) Click **Add**.
 - c) Notice the change in the **Publishing** tab (figure below) indicating the remote site is added to the list.

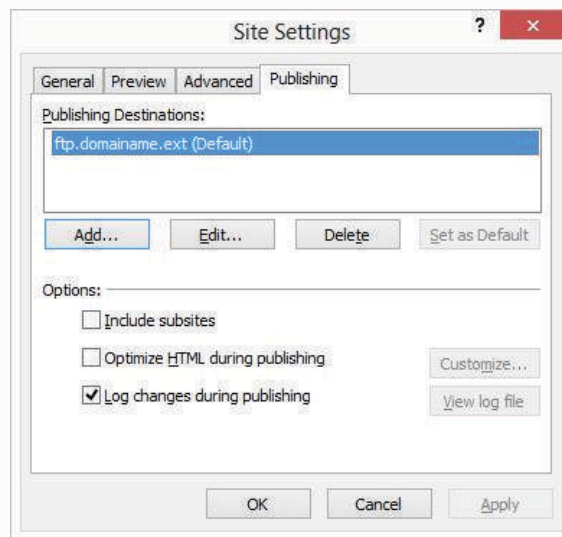


Figure-4.33

- 4) Click **OK**.

Now MEW is ready with the remote site settings for publishing content. Whenever you want to publish (first time or periodic updates), do the following:

5. Select **Site > Publish All files to [NAME]**.

Note that it may take a while for publishing the content depending on the number of files, the size of each file and the connection speed (Upload) you have. Once uploaded, MEW will indicate successful or failed publishing through a popup message similar to the one below.



Figure-4.34 Failed Publishing

To view the website, do the following:

- 1) Open the web browser.
- 2) Type the web server IP address, for example: 192.168.1.200.
- 3) Select **Go**. Notice the website displayed in the web browser.



Web Packages

Another method to take your website to a remote computer is by using the Web Package feature. You can use the Web Package feature to transfer contents of your entire website (preserving the structure) to a remote computer. This is useful when you want to send your website (including the complete structure) for being hosted from a remote computer or, if the existing structure is to be used for creating another website.

To export existing website to a web package, do the following:

- a) Open the website
- b) Select **Site > Export to Web Package....** (figure below).

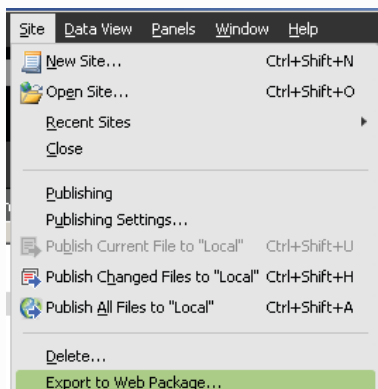


Figure-4.35

- 3) **Export Web Package** dialog box appears.
- 4) You can select individual files or folders or, package the entire website. To package the entire website,
 - a) Place the cursor at the top (image above). Click Add. Notice the entire website is added to the right pane.

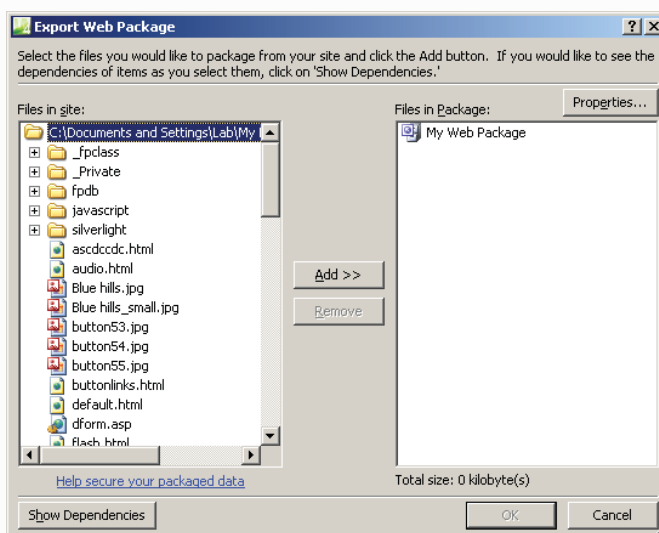


Figure-4.36



- b) You can use a friendly name for this package. Select **Properties...**, and the **Web Package Properties** dialog box appears.
- c) You can enter company name, author, a suitable title for this package. **External dependencies:** has a list of external resources that this website uses. This is helpful when you are using any files, folder or links that need to be verified before sending the package to someone.
 - (i) Enter a title in **Title:** textbox, for example: **WEBPACKAGE**.
 - (ii) Enter a description in **Description:** textbox, for example: **created using MEW**.
 - (iii) Enter your name in the **Author:** textbox
 - (iv) Click **OK**.

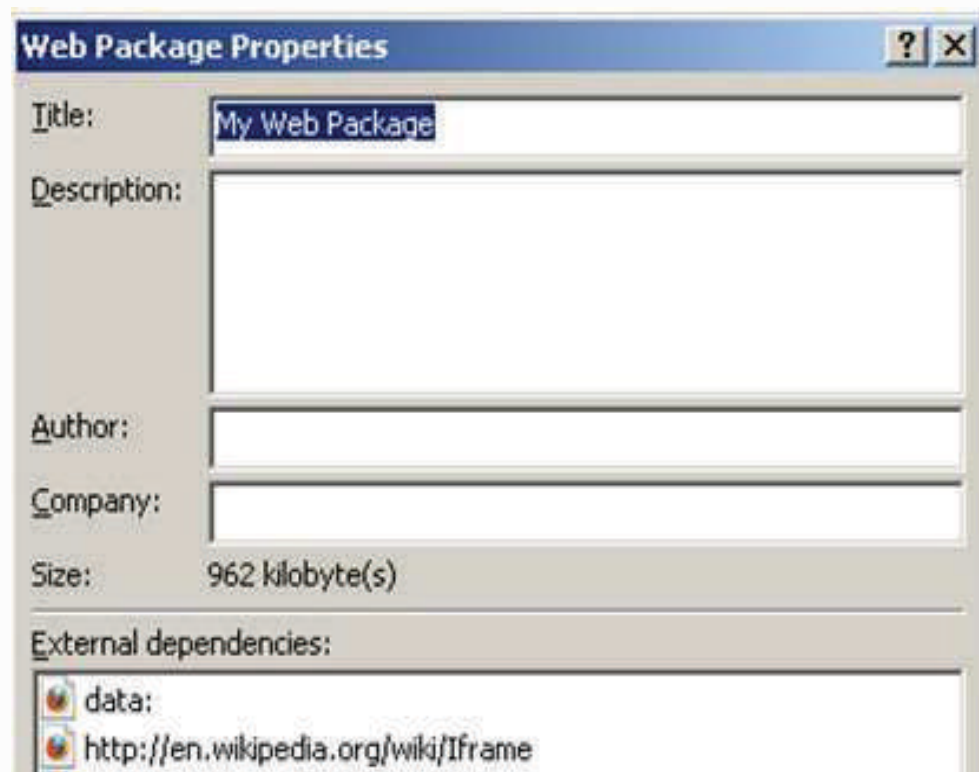


Figure-4.37

- 5. Click **OK**.
- 6. When prompted to save this Web Package, type a filename for example: **MyFirstWebsite_DATE**. Click **Save**. Notice the result displayed (figure below).
- 7. Click **OK**.

Navigate to the folder where you saved this web package and notice the entire website packed as a single file (figure below).

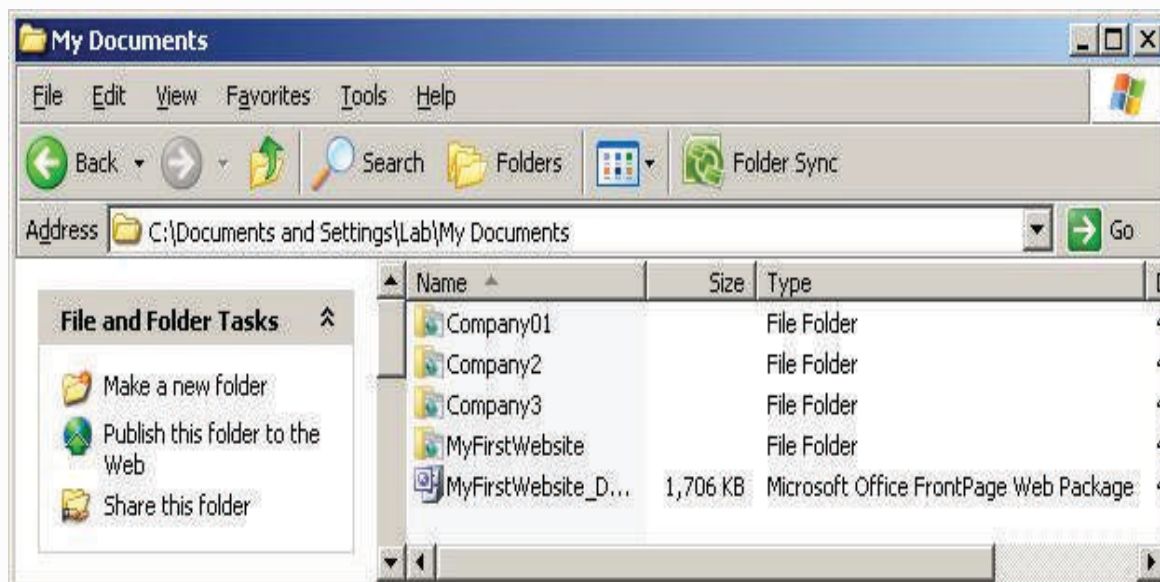


Figure-4.38

Note: Replace the Date by specifying current date or a version number to easily identify the package.

Importing Web Package

If you want to import this web package on another computer, do the following:

- 1) Create a New Site (Empty Site), name this website for example: **MySecondWebsite**.
- 2) Select **Site > Import > Import from Web Package...** (figure below).

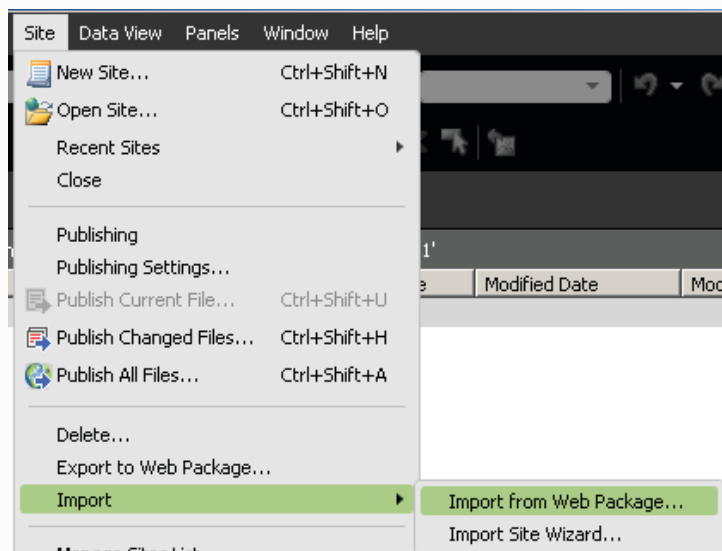


Figure-4.39

- 3) Browse and select the Web Package, select **Open**. The **Import Web Package** dialog box appears (figure below).

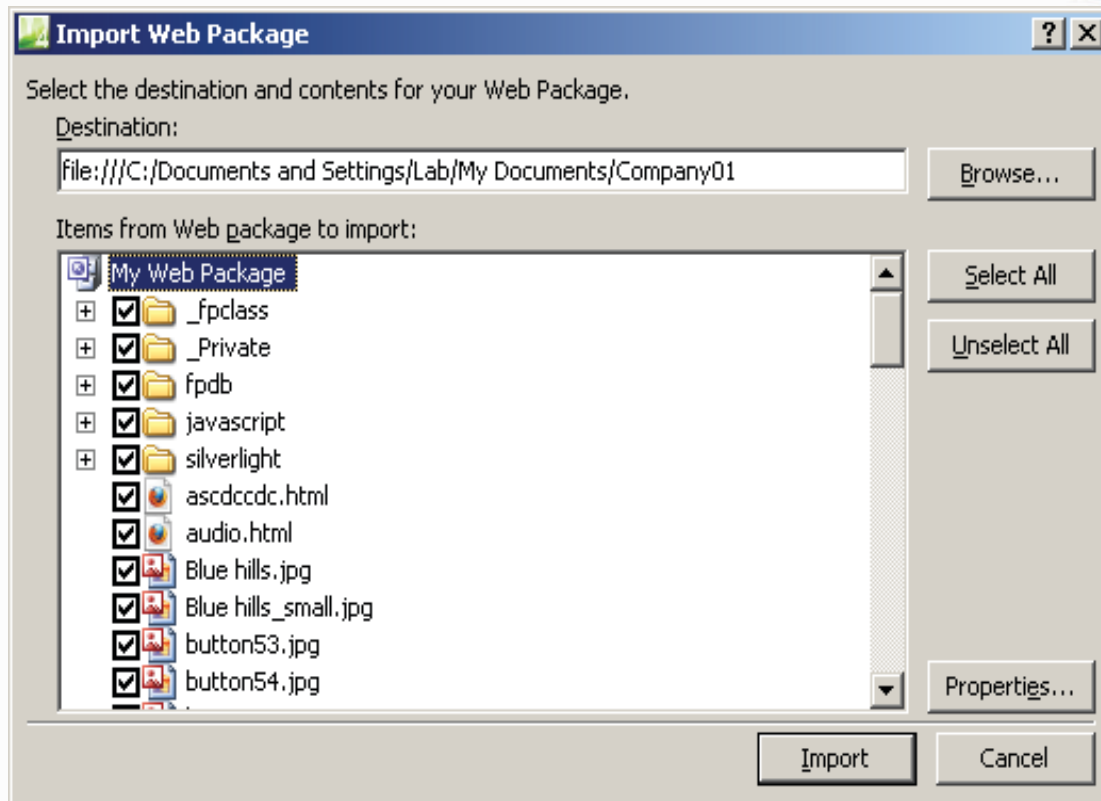


Figure-4.40

- 4) You can either select individual files or folders, or the entire website. Click **Import**.
- 5) Select **Yes to All**.
- 6) Click **OK**.

Now you can edit web pages within this website. Also you can keep a copy of the Web package as a backup for future use.

Backup Websites

It is a highly recommended practice to take periodic (daily, weekly, etc.) backups of websites either using special backup tools or publishing it to another internal source. Whenever you attempt to perform an update on a website, ensure you take a backup of the current site before touching it.

If you only have HTML content (static web pages), use the following procedure to take a backup of the website:

- 1) Go the location where your website is stored (default location is My Documents).
- 2) Select the folder that has the complete website.
- 3) Copy and paste it in another location such as a pen drive or to a folder on another computer.



Exercise:

Perform the following activities till you are confident:

S. No.	Activities																																																																																							
1.	Compare different hosting providers using the worksheet below:																																																																																							
	Feature	Provider 1	Provider 2	Provide 3	ISP				Monthly Price				Setup Fee				Disk Space				Monthly Traffic				Ads				Languages				ASP				PHP				Databases				Access				MySQL				Microsoft SQL				Email				POP3/SMTP				IMAP				Web Mail				Sub-Domains				Templates				FTP Access				Statics IP Address			
	Feature	Provider 1	Provider 2	Provide 3																																																																																				
	ISP																																																																																							
	Monthly Price																																																																																							
	Setup Fee																																																																																							
	Disk Space																																																																																							
	Monthly Traffic																																																																																							
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	Languages																																																																																							
	ASP																																																																																							
	PHP																																																																																							
	Databases																																																																																							
	Access																																																																																							
	MySQL																																																																																							
	Microsoft SQL																																																																																							
	Email																																																																																							
	POP3/SMTP																																																																																							
	IMAP																																																																																							
	Web Mail																																																																																							
	Sub-Domains																																																																																							
	Templates																																																																																							
FTP Access																																																																																								
Statics IP Address																																																																																								

Assessment:

Answer the following questions:

Q1. Explain the procedure to add a remote host for publishing.



- Q2. Explain the procedure to publish a website with an example.
- Q3. Explain the purpose of Web packages with an example.
- Q4. Explain the procedure to backup a website with an example.

Fill in the blanks:

- 1) Publishing Settings is available in ____ menu.
- 2) Web package option should be accessed from ____ menu.
- 3) Import from Web Package is available in _____ dropdown menu of ____ menu.

4.7 Authoring Tools

Relevant Knowledge

You have learnt to work with Expression Web in earlier sessions. There are a variety of other web authoring tools available for use and most of them have similar functionality. Some of the popular authoring tools are discussed in this module.

KompoZer

KompoZer is an open source WYSIWYG HTML editor. KompoZer complies with the W3C's web standards.

- 1) Download KompoZer from **www.kompozer.com**.
- 2) Follow the on-screen instructions and complete installing the software.
- 3) Select **Start > Programs > KompoZer**.

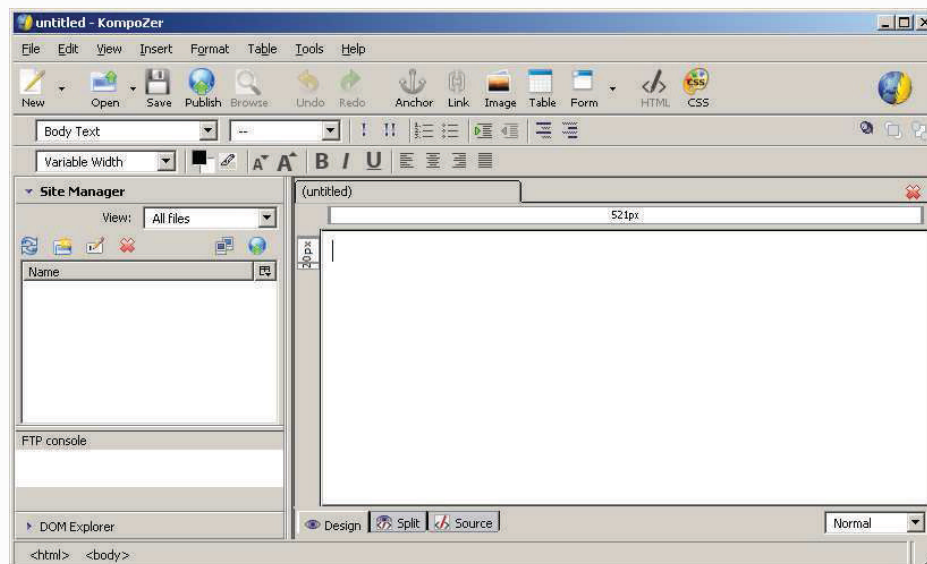


Figure-4.41: KompoZer version 0.8b3

Note: Screen grabs are from kompozer-0.8b3.en-US.win32 (Version).

Now you have installed, create & save pages and view them using different web browsers.



To create a page using KompoZer, do the following:

- 1) Select **File > New....** The **Create a new document or template** dialog box is displayed (figure below).

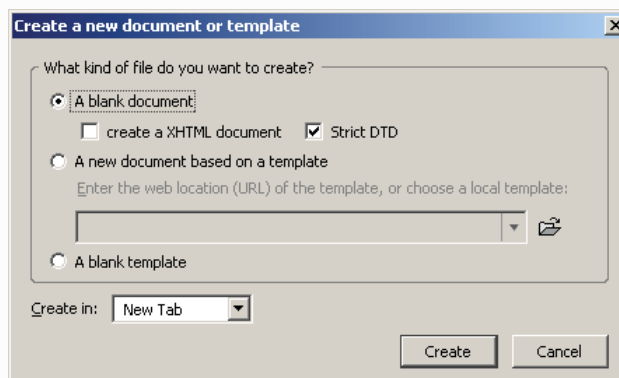


Figure-4.42

- 2) Select **A blank template**, select **Create**.
- 3) Type some content, select **Source** to view the source code.

Use the help file (F1) to learn about using KompoZer.

Dreamweaver

Adobe Dreamweaver is another popular authoring tool used widely. Adobe Dreamweaver supports a variety of scripting languages such as JavaScript, VBScript, ASP.NET, PHP, etc. apart from standard support for HTML & CSS.

- 1) Download Trial edition of Dreamweaver from adobe.com.
- 2) Follow the on-screen instructions and complete installing the software.
- 3) Select **Start > Adobe > Dreamweaver**.

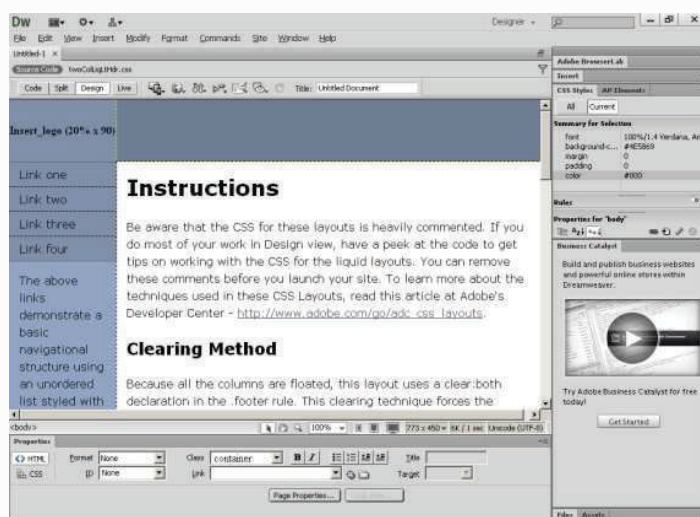


Figure-4.43: Adobe Dreamweaver CS6

Use the help file (F1) to learn about using Adobe Dreamweaver.



Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Download, install and work with Net Objects Fusion.

Assessment:

Answer the following Questions

- Q1. List any three web authoring tools.
- Q2. Compare the features of at least two web authoring tools.

Fill in the blanks

- 1) Examples of web authoring tools are (list three):
- a) _____.
- b) _____.
- c) _____.

4.8 CSS Templates

Relevant Knowledge

Designing a good looking interface can be quite difficult at times as it requires creativity. Also you need to learn additional software to create such designs while focusing on delivering websites that are standard compliant.

When you design websites, you don't have to design a web page from scratch. You can use templates that are available for free or a free to save time and efforts. Though you have learnt to create templates using HTML editors, you can still find and use creative designs for your websites.

CSS Templates

Instead of creating dull and boring websites, you can use templates that are available on the Internet. Popularly referred to as **CSS Templates** or **XHTML/CSS Templates** these templates look attractive while meeting certain standards. Following is a list of websites that offer such templates for your reference:

- <http://html5up.net>
- <http://www.cssportal.com/css-templates/>
- www.freecsstemplates.org



- www.free-css.com
- www.templatemo.com
- www.oswd.org
- www.openwebdesign.org
- and many more....

To use a CSS template, do the following:

- 1) Visit any of the website mentioned above (or use a search engine to locate one)
- 2) Browse and select a template.
- 3) Most website provides an entire site structure consisting of web page(s), style sheets and accompanying images as a single compressed package. Download the compressed file and unzip them to a folder. Also you may notice a link for live preview that allows you to view the template in action before downloading. Always check the design before you download.
- 4) Once you download open the homepage. Homepage is usually titled with names as index.htm, default.htm or home.htm.

Note: Some website may require you to sign up and even have certain terms and conditions. Check the website for requirements.

Customizing Templates

You can use a simple text editor to modify the template. However, if you find it difficult, you can use an HTML editor such as MEW. Also note that if the template is of a recent standard and if the HTML editor does not support that standard, entire template will appear distorted. Confirm if the HTML editor support the standard used in a template.

To work with a template using MEW, do the following:

- 1) Launch MEW.
- 2) Create a New Site (always test the template in a new website).
- 3) Copy all the files from the template folder. (or use import wizard).
- 4) Paste in within the HTML editor (You may receive prompt for files to be overwritten, click yes).
- 5) Open the Homepage (index or default.htm) (sample below).



Figure-4.44: Cool Web Template from CSSPORTAL.COM

- 6) Customize the website.
- 7) To view the source code, select View > Page > Code.

Following is provided as a courtesy:

CSS can also be used for developing attractive navigation menus (sample below).

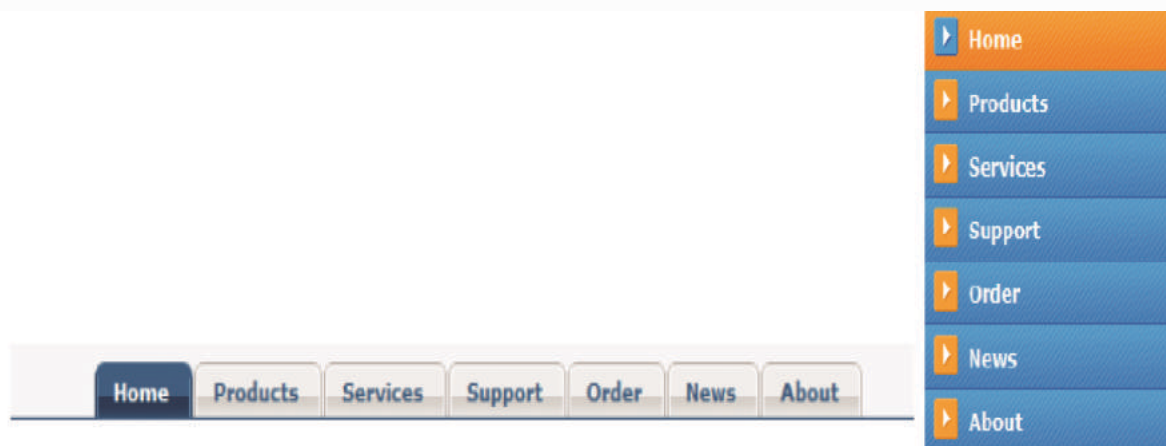


Figure-4.45; Sample Navigation Menus

You can use CSS Tab designer (<http://www.highdots.com/products/css-tab-designer/>) to create navigation menus such as the ones above.



Exercise:

Perform the following activities till you are confident:

S. No.	Activities
1.	Download a CSS template. Use this template as a design for the website created in earlier sessions.
2.	Download CSS Tab designer, create a navigation menu for a website.

Assessment:

Answer the following Questions

Q1. Explain the purpose of using CSS templates.

Q2. Explain the procedure to download and use a template in an HTML editor.

Fill in the blanks:

1) List any three websites that offer free CSS templates (write complete URL).

a) _____.

b) _____.

c) _____.

