

The Techfest

Web Design

Time: 60 mins

Introduction

In this class, the student/s will design a web page using HTML. Student/s will learn to use the heading, paragraph, and image tags, to add the headings, content, and images respectively on the webpage.

HTML Tags Introduced

- `<html></html>`
Html tag is used to declare the opening and closing of the html document. All other tags come inside it.
- `<head></head>`
Head tag contains information such as the webpage title, links to CSS style sheet and other metadata that describe the HTML document. The information in this tag is not displayed in the web browser when the page is loaded. Rather it is used to render the document correctly.
- `<body></body>`
Body tag contains all the content of an HTML document such as paragraph, heading, images, etc.
- `<h1></h1>`
Headertag is used to add headings into HTML document.
- `<p></p>`
Paragraph tag is used to add paragraph into the HTML document.
- ``
Image tag is used to add images into the HTML document.

Vocabulary

- **Tags** are used to create HTML elements such as heading, image, paragraph etc. They define how a web browser will format and display the content on webpage. Tags are enclosed inside angular `<>` brackets.
- **Attributes** are special words used inside the opening tag to control the element's behaviour.

Learning Objectives

Student/s should be able to:

- **Explain** the basic structure of HTML.
- **Demonstrate** the usage of the tags..
- **Explain** how to add headings , paragraph and images to the webpage..

- **Create** and display the webpage for Techfest.

Activities

1. Class Narrative: (2 mins)

- Brief the student/s that school is organising an interschool tech fest and they have to create a digital flyer to invite other schools.
- Let the student/s explore different ways of sending an invitation.
 - Use commercial calling and inviting for the Tech fest.
 - Drop a message over chat or email
 - Use digital flyers
- Let the student/s explore the more feasible ways of sending invitations.
 - Commercial calling will require alot of capital as the call costs can differ.
 - Dropping a message over a chat or email requires lots of man hours.. Also a large population doesn't check their mails on daily basis.
 - Creating a digital flyer and sharing it over the internet is a feasible way as everyone has access to the internet.

2. Concept Introduction Activity: (5 mins)

- Let the student/s run the explore-activity and observe different elements in the webpage.
- Brief the student/s that they will learn to create a webpage for Techfest using HTML and CSS.
- Using the slides, explain:
 - how to add heading to the webpage
 - how to add information to the webpage
 - how to add images to the webpage

3. Activity 1: Add headings to the webpage: (10 mins)

Teacher Activity: (5 mins)

- Explain to the student/s the basic structure of the HTML.
- Explain to the student/s how to add title for the webpage.
- Explain the heading tags. Use a heading tag to add the heading "About the Techfest" and a heading of one of the activities at tech fest "Automated car demonstration".

Student Activity: (5 mins)

- Guide the student/s to add the title and headings of the other activities on the web page using the heading tags.

Probing question: What is the correct syntax for opening tag in html?

Expected answer: <tag name> is used to create the opening tag.

4. Activity 2: Add information to the webpage : (10 mins)

Teacher Activity: (5 mins)

- Explain to the student/s about the paragraph tag and use it to add information for "About the fest" and one of the activity.

Note: The content to be added on the webpage is given in the **data.txt** file.

Student Activity: (5 mins)

- Guide the student/s to add the information for the remaining headings using the paragraph tags.

5. Activity 3: Add images to the flyer : (10 mins)

Teacher Activity: (5 mins)

- Explain to the student/s about the image tag and it's attributes.
- Demonstrate the usage of image tag to add images for the banner and one of the activities.
- Explain that the image is a self closing tag and "/" is added at the end of the image tag.
- Show the output with and without the "/"
- Demonstrate the errors that will be shown if the source is wrong for the images.

Note: Press Ctrl + Shift + to inspect, click on console to check the errors.

Student Activity: (10 mins)

- Guide the student/s to add image for the remaining activities using image tag.

6. Introduce the Post class project: (2 min)

- Create a flyer to invite your friends for a summer camp organized by you.

7. Test and Summarize the class learnings: (5 mins)

- Check for understanding through quizzes and summarize learning after respective missions.
- Summarize the overall class learning towards the end of the class.

8. Additional activities:

- Add the image icon and contact number for contact information to the webpage.
- Add the date and time for the event

9. State the Next Class Objective: (1 min)

- We will style the webpage with CSS.

U.S. Standards:

CSTA: 2-AP-11, 2-AP-12, 2-AP-14

Links Table		
Activity	Activity Name	Link
Class Presentation	The Techfest	https://s3-whjr-curriculum-uploads.whjr.online/989e11c1-084e-4d55-b804-0af3183f013b.html
Explore Activity	The Techfest : Explore Activity	https://tynker.com/code/view/62f24d96f953604f78307792/
Teacher Activity 1	Introduction to tags	https://tynker.com/code/project/6364dde69f6ea24a3977b4f2
Teacher Activity 1 Solution	Introduction to tags: Solution	https://tynker.com/code/project/63

		64dd4969c47506f05d38b2
Student Activity 1	Add Headings for the Activities	https://tynker.com/code/project/6364deca1dea794c286f3e52
Teacher Reference: Student Activity 1 Solution	Add Headings for the Activities : Solution	https://tynker.com/code/project/6364dea4c4ec0909072d40d2
Teacher Activity 2	Paragraph Tag	https://tynker.com/code/project/6364e1191259d95160145762
Teacher Activity 2 Solution	Paragraph Tag: Solution	https://tynker.com/code/project/6364df83006cdf02b51092c2
Student Activity 2	Paragraph Tag	https://bfs-dev.tynker.com/code/project/6364e1734f89822200694b72
Teacher Reference: Student Activity 2.2 Solution	Paragraph Tag: Solution	https://bfs-dev.tynker.com/code/project/6364e14fa9f5c94e4a792222
Teacher Activity 3	Adding Images	https://tynker.com/code/project/637c583d539b9753657d3ab2
Teacher Reference: Student Activity 3 Solution	Adding Images : Solution	https://bfs-dev.tynker.com/code/project/637c58793334a7179c35f802
Student Activity 3	Add Images to Web Page	https://tynker.com/code/project/6364e363c48d7b702258fb52
Teacher Reference: Student Activity 3 Solution	Add Images to Web Page: Solution	https://bfs-dev.tynker.com/code/project/6364e257e3c23f56542a97b2
Student's Additional Activity 1	Debug to Display Contact Details	https://tynker.com/code/project/6364e84909257b0686152e42
Teacher Reference: Student's Additional Activity 1 Solution	Debug to Display Contact Details: Solution	https://tynker.com/code/project/6364e806896c8478081d0512
Student's Additional Activity 2	Add Social Media Icons	https://tynker.com/code/project/6364e9a4aca34875d8226cb2
Teacher Reference: Student's Additional Activity 2 Solution	Add Social Media Icons : Solution	https://tynker.com/code/project/6364e6a8db988b709e05bd92
Post Class Project	Summer Camp	https://tynker.com/code/project/636bf65d69d20e2cf91fe4f2
Teacher Reference: Post Class Project Solution	Summer Camp : Solution	https://tynker.com/code/project/636bf38c8b0a6b308d45b922