

Frontend Technologies

Web Development

Entering in Web World

TRAINING AGENDA

A High-Level Overview of Web Development

Introduction to HTML, CSS & JavaScript

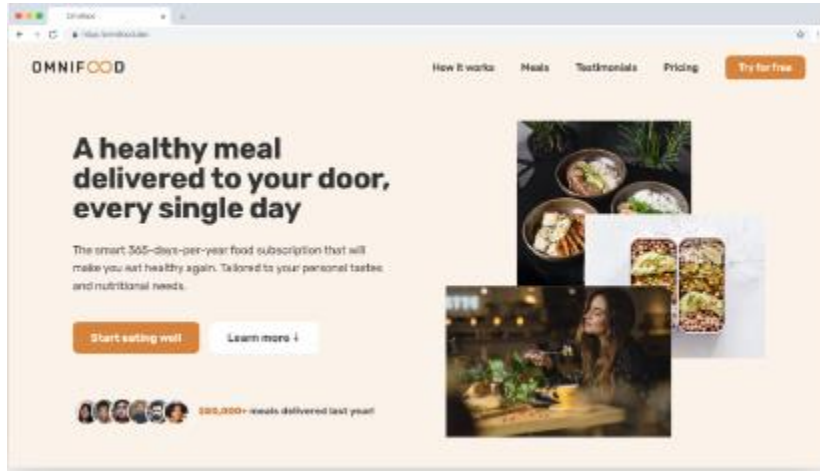
HTML Elements – Block and Text

Overview of Web Design and Website Personalities

Responsive Design Principles

HTML APIs –Storage, Socket, Canvas, Drag/Drop, Audio/Video etc

FRONTEND VS BACKEND DEVELOPMENT



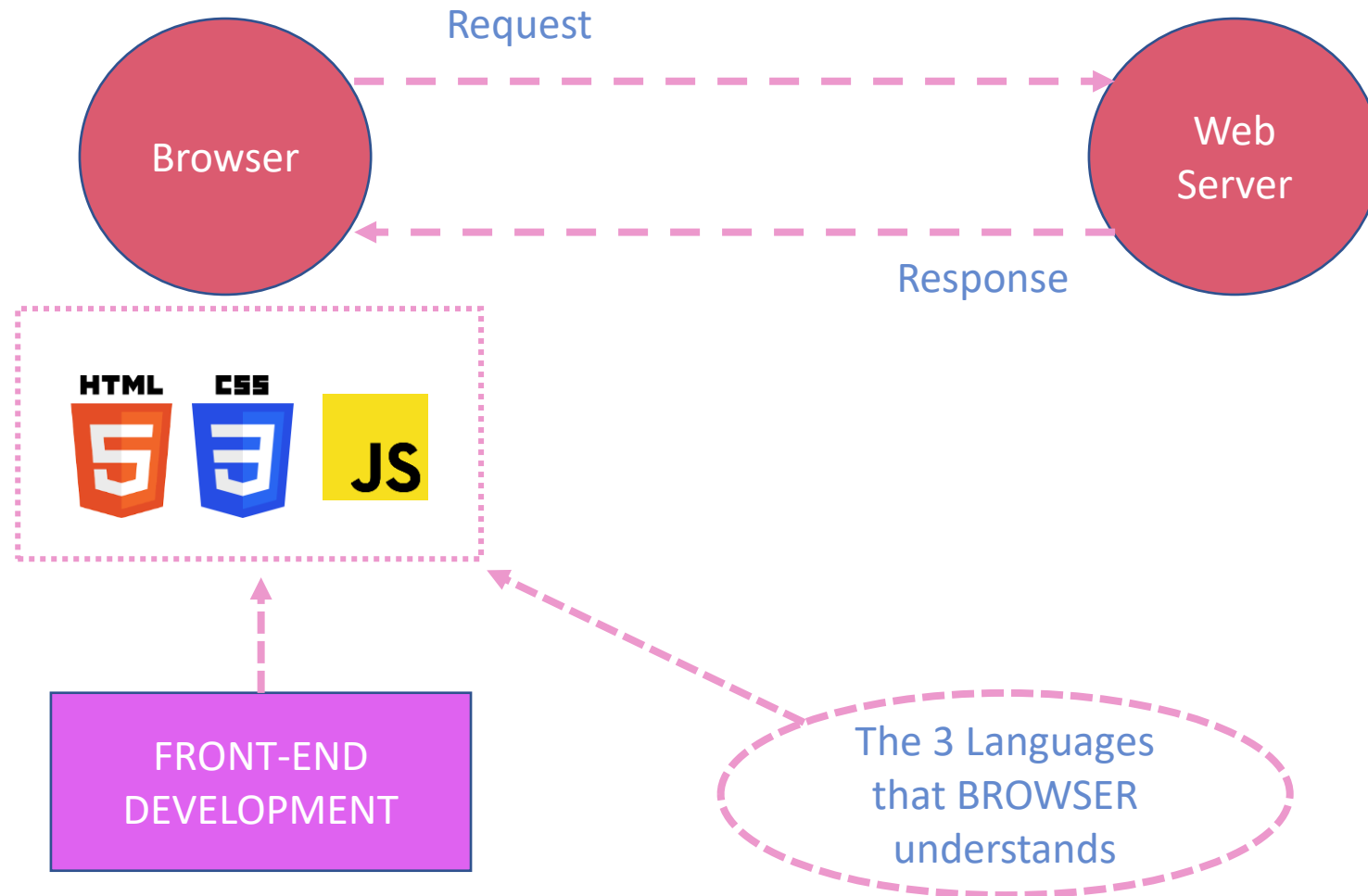
index.html

styles.css

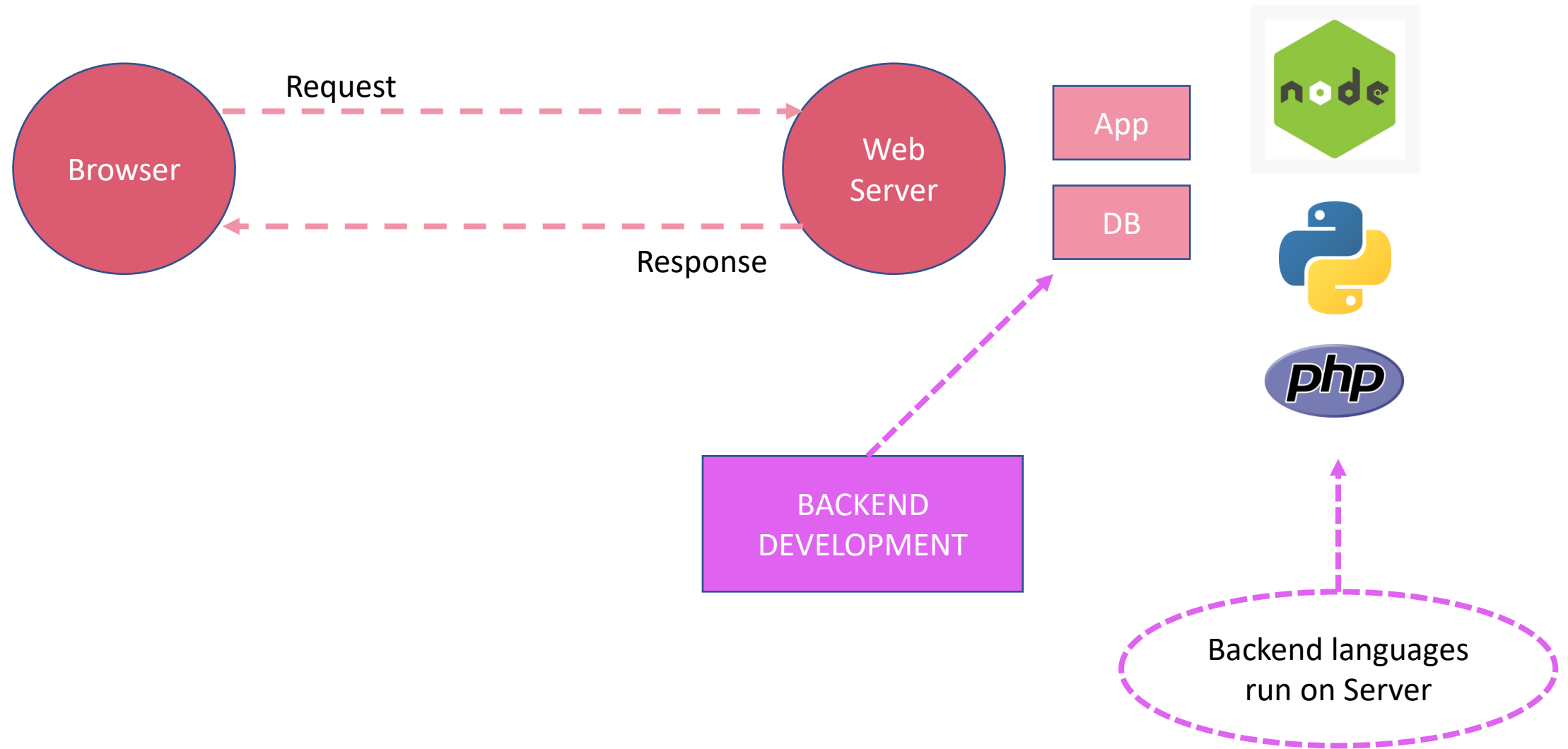
script.js

Images / links

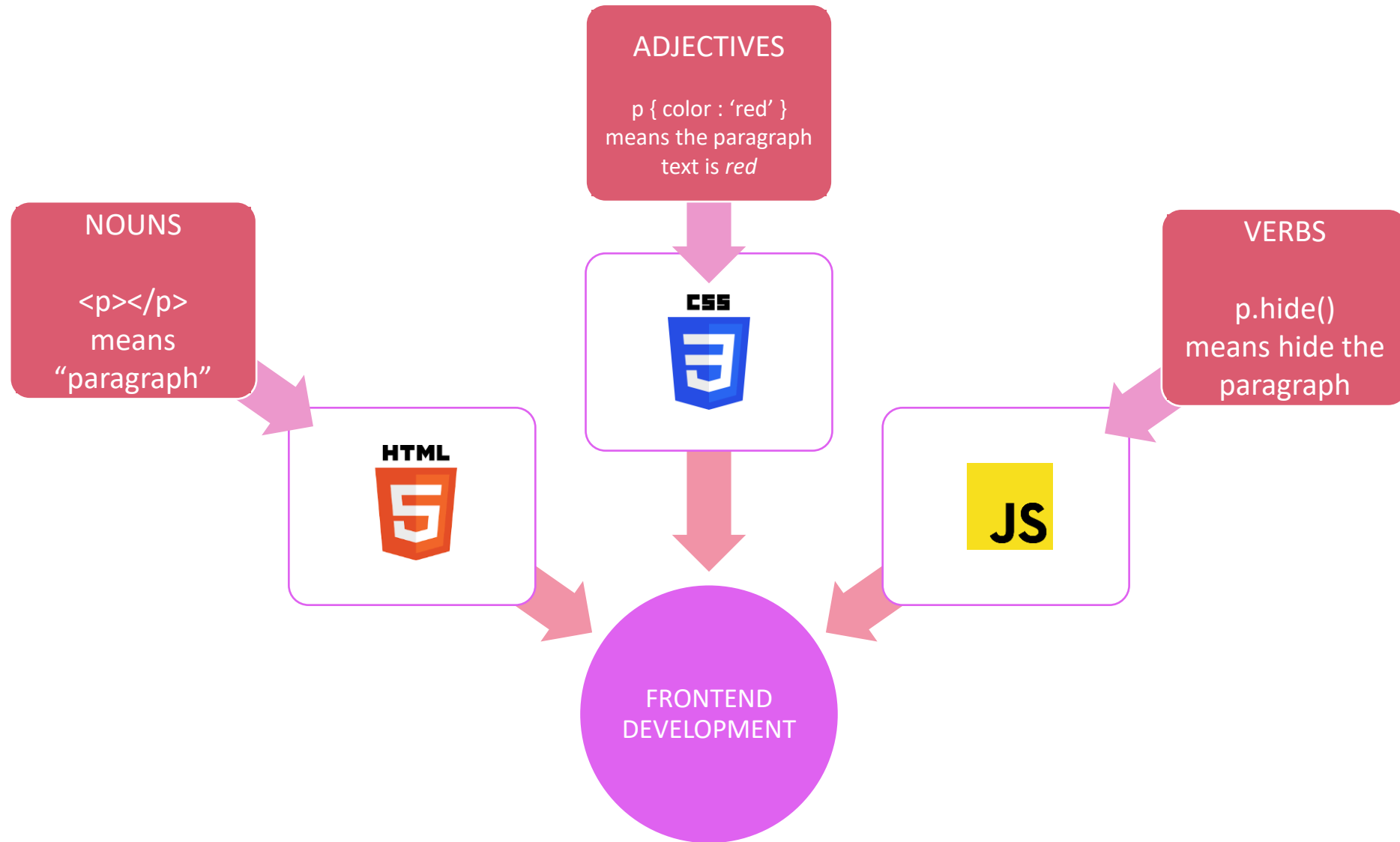
FRONTEND VS BACKEND DEVELOPMENT



FRONTEND VS BACKEND DEVELOPMENT



THE 3 LANGUAGES OF FRONT-END



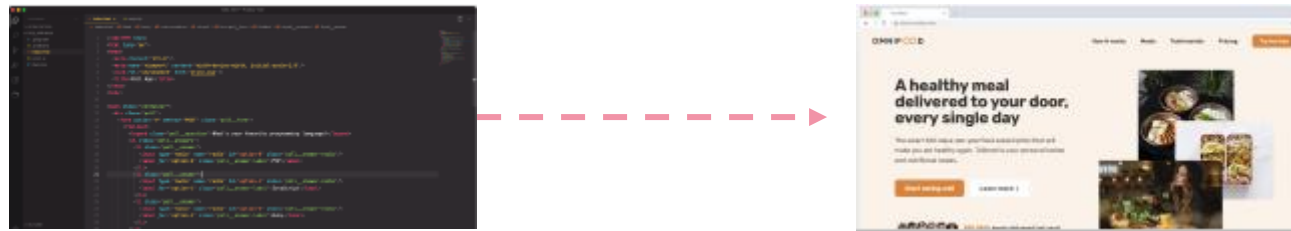
INTRODUCTION TO HTML

HyperText Markup Language

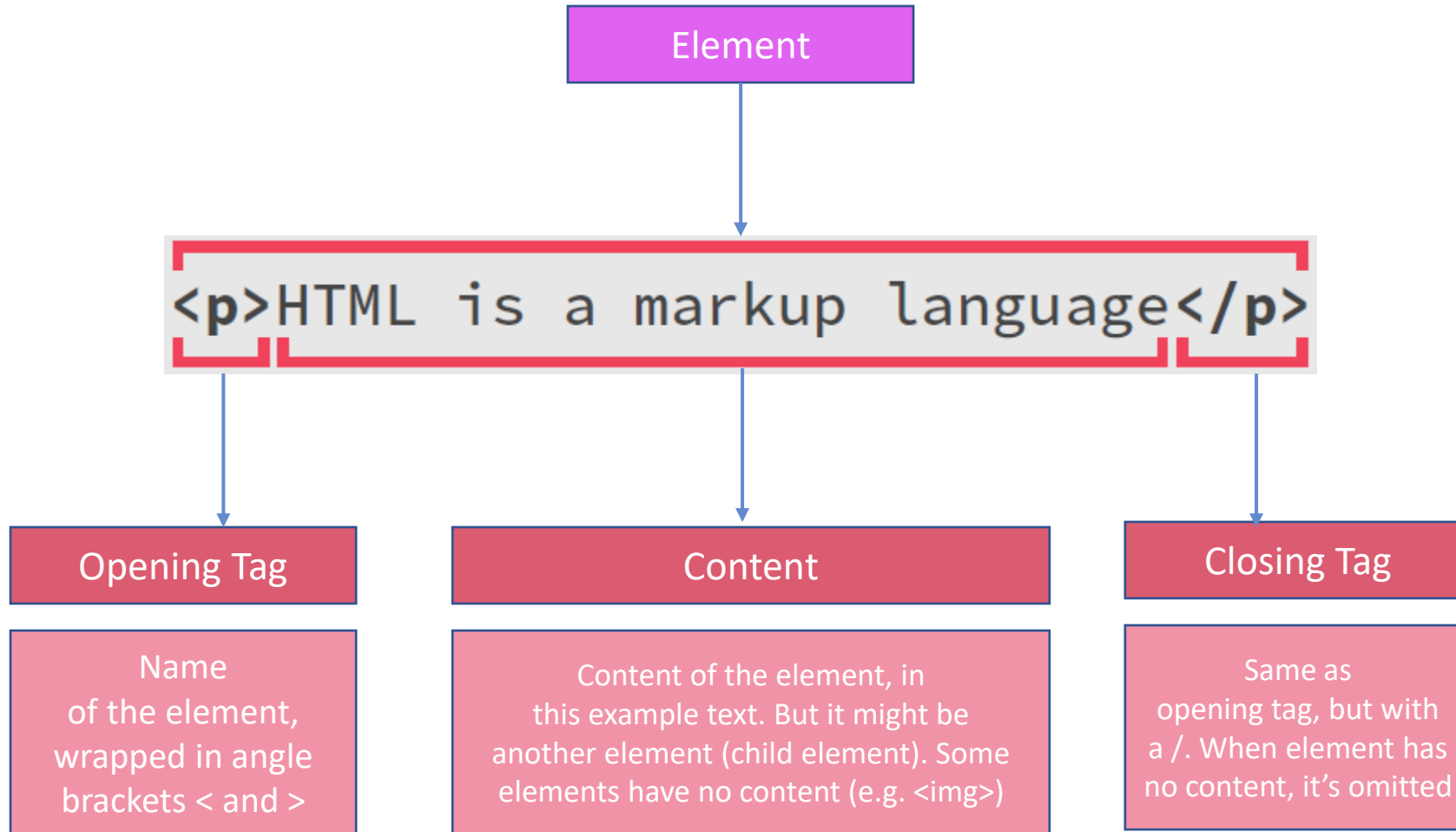
HTML is a markup language that web developers use to structure and describe the content of a webpage (not a programming language)

HTML consists of elements that describe different types of content: paragraphs, links, headings, images, video, etc.

Web browsers understand HTML and render HTML code as websites



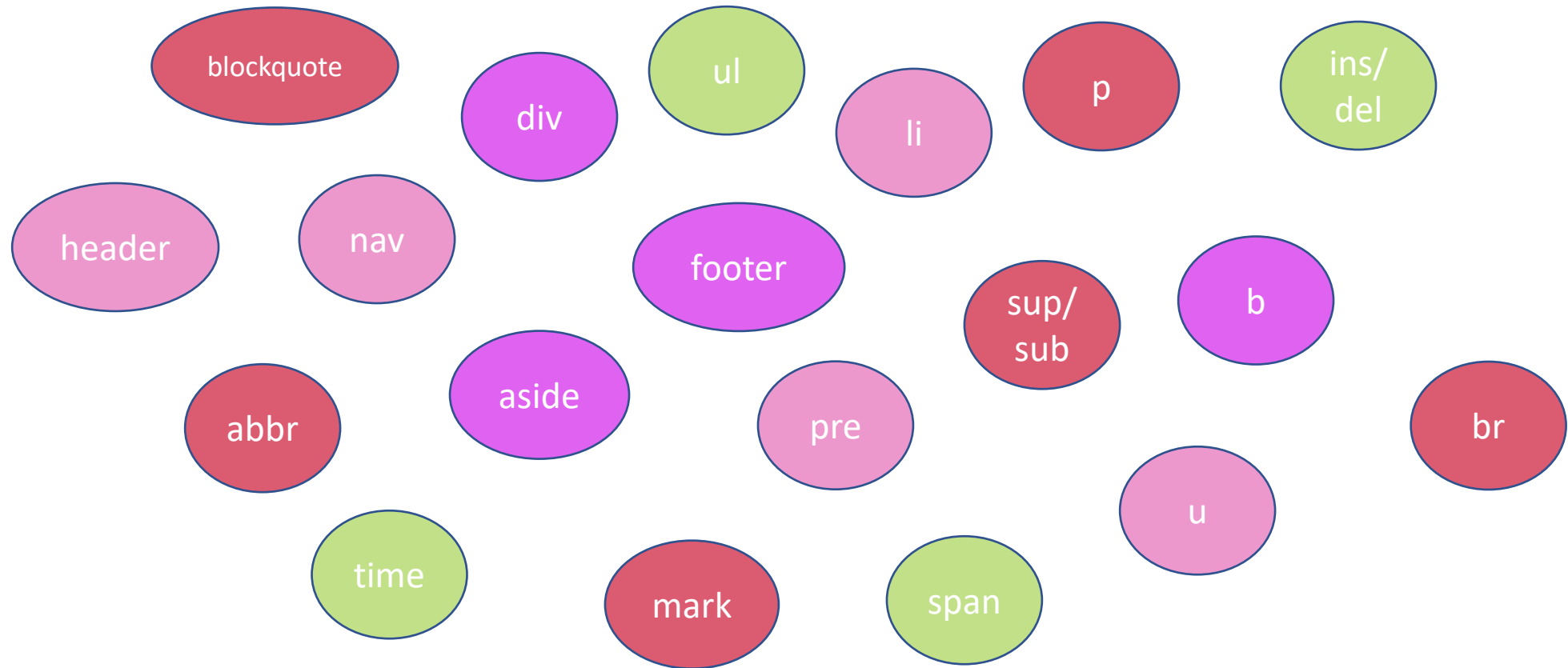
ANATOMY OF AN HTML ELEMENT



HTML Elements

title	specifies the label that appears in the browser window's <i>title bar</i> .
meta	Provide information about the web page.
style	Writing internal stylesheet for your page.
script	Adding actions to your app by including JavaScript.
body	Includes various other elements to display data on webpage

Elements To Watch For...



CHARACTER REFERENCES

Display a character that would otherwise be difficult to display.

Character	Character Reference	Description
<	<	less than
>	>	greater than
≤	≤	less than or equal
½	½	one-half
¼	¼	one-fourth
&	&	ampersand
"	"	quote
'	'	apostrophe
space	 	nonbreaking space
←	← ←	left arrow
•	·	bullet
✓	✓	check mark
©	©	copyright

THE TRIBUTE PAGE

You must include the following parts in your completed project:

- You must include a title or heading on the tribute page.
- You should include an image on the tribute page.
- Your included image must have a caption.
- You should include a timeline of the life of the tribute in the form of a list

The Input (Form Input) Element

Accepting The User Inputs

<input> Elements

The <input> HTML element is used to create interactive controls for web-based forms in order to accept data from the user

Type	Description
button	A push button with no default behavior displaying the value of the value attribute, empty by default
checkbox	A check box allowing single values to be selected/deselected
color	A control for specifying a color; opening a color picker when active in supporting browsers
date	A control for entering a date (year, month, and day, with no time)
email	A field for editing an email address
file	A control that lets the user select a file
number	A control for entering a number
password	A single-line text field whose value is obscured

More On <input> Elements

Type	Description
radio	A radio button, allowing a single value to be selected out of multiple choices with the same name value
range	A control for entering a number whose exact value is not important
search	A single-line text field for entering search strings
submit	A button that submits the form
tel	A control for entering a telephone number
text	The default value. A single-line text field
time	A control for entering a time value with no time zone
url	A field for entering a URL

CSS

Let's make it better looking

INTRODUCTION TO CSS

Cascading Style Sheets

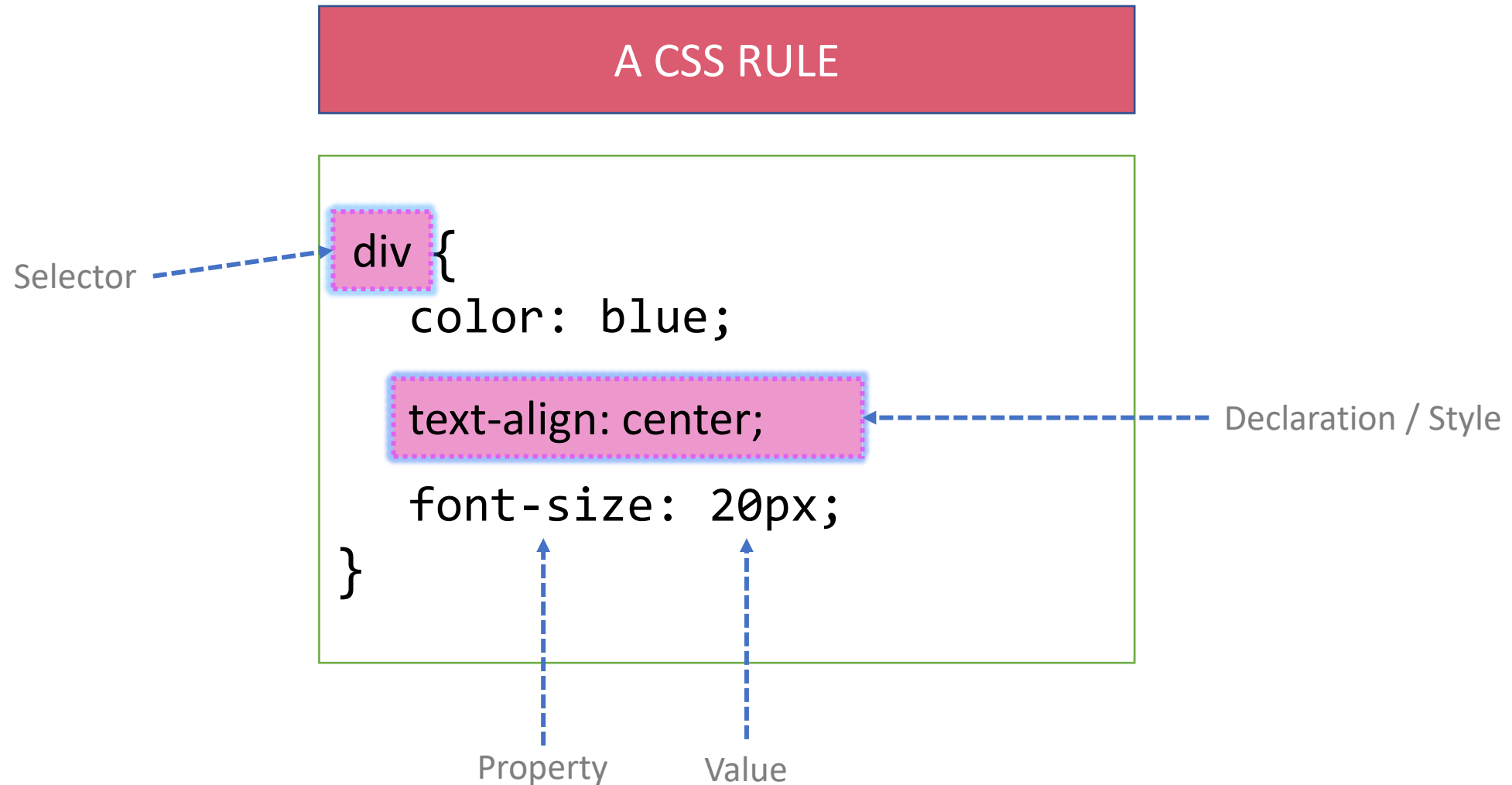
CSS describes the visual style and presentation of the content written in HTML

CSS consists of countless properties that developers use to format the content: properties about font, text, spacing, layout, etc.

Web browsers understand HTML and render HTML code as websites



HOW WE SELECT AND STYLE ELEMENTS



CSS SELECTORS

Selector Type	Syntax	Description	Example
Universal	*	Selects all elements	* will match all the elements
Type	elementName	Selects all elements that have the given node name	input will match any <input> element.
Class	.classname	Selects all elements that have the given class attribute	.index will match any element that has a class of "index"
ID	#id	Selects an element based on the value of its id attribute	#toc will match the element that has the ID "toc"
Attribute	[attr]	Selects all elements that have the given attribute	[autoplay] will match all elements that have the autoplay attribute

MORE CSS SELECTORS

Selector Type	Syntax	Description	Example
Grouping Selector List	,	The , selector is a grouping method that selects all the matching nodes	div, span will match both and <div> elements
Descendant combinator	" "	The " " (space) combinator selects nodes that are descendants of the first element	div span will match all elements that are inside a <div> element
Child combinator	>	The > combinator selects nodes that are direct children of the first element	ul > li will match all elements that are nested directly inside a element.
General sibling combinator	~	The ~ combinator selects siblings. This means that the second element follows the first (though not necessarily immediately), and both share the same parent	p ~ span will match all elements that follow a <p>, immediately or not.
Adjacent sibling combinator	+	The + combinator matches the second element only if it immediately follows the first element	h2 + p will match all <p> elements that immediately follow an <h2> element

MORE CSS SELECTORS

Selector Type	Syntax	Description	Example
Pseudo classes	:	The : pseudo allow the selection of elements based on state information that is not contained in the document tree	a:visited will match all <a> elements that have been visited by the user
Pseudo elements	::	The :: pseudo represent entities that are not included in HTML	p::first-line will match the first line of all <p> elements

Task

THE GOOD VIBES FORM

Forms are always an essential part of any project and you will be working with a lot of forms in most of the applications so why not practice it earlier and test your knowledge.

Once you get familiar with the input field or basic tags in HTML to create a form make a project using all those tags. How to use a text field, checkbox, radio button, date, and other important elements in a single form.

You will be learning how to give a proper structure to a webpage while creating a form. Knowledge of HTML/HTML5 is good enough but you can use a bit of CSS to make this project look better

REFERENCES

READING MATERIAL

- <https://developer.mozilla.org/en-US/docs/Web/HTML>
- <https://html.com>
- https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps

VIDEO LINKS

- <https://www.youtube.com/playlist?list=PLWPirh4EWFpH2Pj1IQ4wMfPgDEjiDrTGA>
- https://www.youtube.com/playlist?list=PLu0W_9lI9agiCUZYRsvtGTXdxkzPyltg
- <https://www.youtube.com/watch?v=1Rs2ND1ryYc&t=2s>