



WEB DEVELOPMENT

During these classes students will explore different websites to understand the elements and design of websites. They will then create their own website using HTML commands and style it using CSS. They will make their website interactive using JavaScript code.

SESSION	CONCEPT	SKILLS
01	Exploring Websites	Exploration, Observation Observe various websites to study website elements and designs , Introduction to HTML.
02	Introduction To CSS, Basic HTML Tags	Logic, Creativity, Decomposition, Generalization Making our first HTML page, Making your own website - First step, Introduction to CSS, Why is the Color scheme so important?
03	CSS Selectors, Hyperlinks	Logic, Creativity, Decomposition, Generalization Element Selector, id Selector, Using HyperLinks, CSS class Selector.
04	CSS Font Properties	Logic, Creativity, Decomposition, Generalization What is font ? Setting the font of the text, Setting the font-size, A look at CSS Zen Garden.
05	Grouping Elements	Logic, Creativity, Decomposition, Generalization The span element, The div element, Making borders.
06	Div And The CSS Box Model	Logic, Creativity, Decomposition, Generalization Setting the Width, Height and Overflow of block elements, CSS Box Model, Managing Images.



07	Floating Elements	<p>Logic, Creativity, Decomposition, Generalization</p> <p>Float property, The shape-outside property, Laying out page elements with float and clear.</p>
08	Positioning Elements	<p>Logic, Creativity, Decomposition, Generalization</p> <p>CSS position property, Stacking elements with z-index, Positioning of nested elements - (parent/child positioning).</p>
09	Lists	<p>Logic, Creativity, Decomposition, Generalization</p> <p>Concepts of Lists , Types : Ordered list and Unordered list</p>
10	Lists And Hyperlinks	<p>Logic, Creativity, Decomposition, Generalization</p> <p>Images as list markers, List of Hyperlinks, Absolute URLs vs Relative URLs.</p>
11	Tables	<p>Logic, Creativity</p> <p>Defining an HTML table, CSS - Styling the table, Coloring the table.</p>
12	Formative Assessment	<p>Assessment Of Learning</p>
13	Web Design	<p>Logic, Creativity</p> <p>Introduction to website designing, Home page remodelling, Project : Redesign your website home page.</p>



14	CSS - Transformations	Logic, Creativity The CSS - hover selector, The translate() method, The scale() method, The rotate() method, The skew() method, Applying multiple transforms to a single element.
15	CSS - 3D Transformations And Transitions	Logic, Creativity translate3d() and translateZ(), Rotation in 3D Space : rotateX(), rotateY() and rotate(Z) , CSS Transitions.
16	CSS Transition With Transform	Logic, Creativity Using transitions with transforms, The transition-timing-function property, The opacity property.
17	CSS Animation - I	Logic, Creativity What is CSS Animation? Changing colors animation, Changing position animation, Delaying an animation, Setting the number of times an animation should run.
18	CSS Animation - II	Logic, Creativity Setting the direction of the animation, Setting the speed of the animation, Setting the element style just before and after the animation.
19	CSS - Text Animation	Logic, Creativity Text Changing Animation Effect, Text Shadow Animation effect, Star Wars Scrolling Text Animation.
20	Buttons	Logic, Creativity Adding a button , Styling a button, Animating a button, Giving it a purpose.

Learning Path For EARLY ACHIEVERS



21	Formative Assessment	Assessment Of Learning
22	The Flexbox Layout Module - I	Logic, Creativity Flexbox basics, Flexbox properties -Container (parent) properties.
23	The Flexbox Layout Module - II	Logic, Creativity Flexbox properties - flex item (child) properties.
24	Flexing The IPL Website And Some More CSS Selectors	Logic, Creativity Aligning content using flexbox, Advanced CSS Selectors.
25	Responsive Web Design - RWD	Logic, Creativity What is Responsive web design or RWD? The box-sizing property, RWD Grid view .
26	RWD Media Queries - I	Logic, Creativity What is a Media Query? Adding a Breakpoint.
27	RWD Media Queries - II	Logic, Creativity Setting breakpoints for different devices, Hiding Elements With Media Queries, Changing Font Size With Media Queries, Making Images responsive.
28	CSS Grid - I	Logic, Creativity, Decomposition, Generalization Making the Grid by setting a Row and Column.
29	CSS Grid - II	Logic, Creativity, Decomposition, Generalization Spanning multiple columns/rows, Making a Web Page Template.
30	Formative Assessment	Assessment Of Learning



31	JavaScript Overview	Logic, Creativity Revisiting Basic programming concepts in JavaScript.
32	DOM Access And Modification - I	Logic, Creativity The DOM Tree, DOM access methods, Adding style classes to elements with JavaScript.
33	DOM Access And Modification - II	Logic, Creativity innerHTML versus textContent, Using JavaScript to create and add elements.
34	Using JavaScript With HTML Forms - I	Logic, Creativity Creating HTML forms - Form Elements, HTML Input Types.
35	Using JavaScript With HTML Forms - II	Logic, Creativity Form Attributes, JavaScript Events, Processing forms with JavaScript.
36	Website Hosting - I	Logic, Creativity What is web hosting? Domain names and DNS, How DNS works.
37	Website Hosting - II	Logic, Creativity Hosting your website through repl.it.
38	Project Website Completion - I	Logic, Creativity, Decomposition, Generalization, Higher Order Thinking These sessions will be dedicated entirely to completing the students project : Personal website.
39	Project Website Completion - II	Logic, Creativity, Decomposition, Generalization, Higher Order Thinking These sessions will be dedicated entirely to completing the students project : Personal website.