

Table of Contents

1.0	Tools	2
2.0	Day wise Topics Checklist	3
3.0	Assignment topics	5
4.0	Final Project	5
5.0	Evaluation Matrix	5

1.0 Essential Tools / Resources

- Devtools on Chrome, FF
- Lighthouse, and accessibility extensions
- Eslint, Prettier, extensions
- Code-review tips
- Perf reports
- Design Review
- Accessibility Reviews
- Testing Tools
- Official Documentation
- WCAG
- OSSAP - security

2.0 Day wise Topics Checklist. (Each block is for 4 sessions of 2 hours duration)

Block 1	Block 2	Block 3
<ul style="list-style-type: none"> • Introduction. • Introduction to web development. • Components of web development. • Introduction to web tools: Browsers, dev tool, vscode, extensions. • Intro to HTML. • Version of HTML. • HTML Skeleton (doctype, HTML, Head, title). • Folder structure. • Naming convention. • Create your first HTML file and execute. • Hands-on. • Headings, header footer. 	<ul style="list-style-type: none"> • Div, Span, Section, Article, Aside • Thinking in HTML (pick a design and discuss how the HTML structure should be) • Link • Button • Debugging in browser • Listing (UL, OL, DL) • Creating multiple pages • Table, mark menu small • Hands-on • HTML validation • P-tags • Exploring different layouts • Optimizing layouts • Best practices for HTML • Icons 	<ul style="list-style-type: none"> • Nav • Forms • Image • Figure • Video • Audio • Iframe • SVG • Accessibility intro • Canavs • Geolocation • Drag and Drop • History

Block 4	Block 5	Block 6
<ul style="list-style-type: none"> • Storage • Clipboard • Web worker • Fetch • Service worker • Introduction to CSS • Why CSS • CSS versions • How to include CSS in HTML pages • Creating the CSS files • CSS naming convention • Writing CSS: ID, class, selectors, tags, psudeo class, pseudo elements • Hands-on: Creating first CSS • CSS Font property • CSS text property 	<ul style="list-style-type: none"> • CSS Specificity • CSS selectors • CSS Box property • Margin/Padding • Colors • Background • content • position • creating layouts • optimizing css • Media queries • web testing of responsive design • Visibility • block, inline, vs block-inline 	<ul style="list-style-type: none"> • CSS debugging • Tools to analyze CSS • Optimizing CSS • Introduction to SASS • How to write maintainable CSS • Intro to bootstrap • Installation • Pros and Cons • Demo and Hands-on

Block 7	Block 8
<ul style="list-style-type: none"> • Introduction to JavaScript • Why JS to be used • How to include JS in the code • HTML, CSS, and JS • Introduction to Webpack / package.json / localhost • Setting up VS code with extensions • Naming convention • ES6+ features (Async JS, class, rest and spread, const, let, Objects , Map, etc) • Handson • Debugging • Accessibility , and performance 	<ul style="list-style-type: none"> • Handling form data by JS • Integration HTML, CSS, JS together • Perf issues with JS • JS loading • Modular JS • DOM manipulation with JS • Accessibility and JS
Block 9	Block 10
<ul style="list-style-type: none"> • Introduction to JQuery • How to use JQuery - Demo • Hands-on • Creating application: fetch an API, • Creating application: Manipulate DOM • Performance 	<ul style="list-style-type: none"> • Introduction to Node.JS • Native modules : HTTP, FS, Buffer, Streams, OS, Network • Import, Export • Publishing package

Block 11
<ul style="list-style-type: none"> □ Responsive design □ Project review day □ Recap of Accessibility, perf, code guidelines, and security

3.0 Assignments

- Layout creation (s) using HTML and CSS
- Navigations
- Header
- Listing
- Thumbnails and content

4.0 Final project

- Responsive Food App delivery website
- Responsive Ecommerce website
- Responsive Netflix website

5.0 Evaluation Matrix

Description	Marks (max 100)
<ul style="list-style-type: none">• Class Interaction	10
<ul style="list-style-type: none">• Class Assignment	10
<ul style="list-style-type: none">• Capstone project	70
<ul style="list-style-type: none">• Code Quality (HTML, CSS, JS, etc.)	10