**HTML Roadmap: Beginner to Advanced**

**Section 1: HTML Basics**

**Chapter 1: Introduction to HTML**

* What is HTML?
* Role of HTML in web development
* Structure of an HTML document
* Understanding DOCTYPE and HTML versions

💡 **Project:** Create a simple "Hello World" webpage

**Chapter 2: HTML Elements & Tags**

* Understanding elements and tags
* Common tags: <p>, <h1> to <h6>, <br>, <hr>, <pre>
* HTML comments

💡 **Project:** Create a personal introduction webpage

**Chapter 3: HTML Attributes & Headings**

* What are attributes?
* Global attributes (id, class, title, style)
* Heading tags (h1 to h6) and their importance

💡 **Project:** Design a simple blog post layout

**Chapter 4: HTML Lists (Ordered & Unordered)**

* <ul> (unordered list)
* <ol> (ordered list)
* <li> (list item)
* Nested lists

💡 **Project:** Create a navigation menu using lists

**Chapter 5: HTML Links & Anchor Tags**

* Internal & external links (<a href="">)
* Open links in a new tab (target="\_blank")
* Link attributes (title, rel, download)

💡 **Project:** Create a basic website with multiple pages linked together

**Chapter 6: HTML Images & File Paths**

* <img> tag
* src, alt, width, height attributes
* Absolute vs. relative file paths

💡 **Project:** Create an image gallery

**Chapter 7: HTML Tables**

* Basic table structure (<table>, <tr>, <td>, <th>)
* Table attributes (border, cellpadding, cellspacing)
* Merging cells (colspan, rowspan)

💡 **Project:** Create a pricing table for a website

**Chapter 8: HTML Forms & Inputs**

* <form> and its attributes
* Input types: text, password, email, number, date, checkbox, radio
* Submit and reset buttons

💡 **Project:** Build a basic contact form

🚀 **Section Project:** **Simple Personal Portfolio Website**

**Section 2: HTML Intermediate**

**Chapter 9: HTML Semantic Elements**

* Understanding semantic HTML
* Elements: <header>, <footer>, <section>, <article>, <nav>, <aside>
* Benefits of semantic HTML

💡 **Project:** Redesign a simple webpage using semantic elements

**Chapter 10: HTML Forms (Advanced Concepts)**

* Label and input association (<label> for <input>)
* Grouping inputs (<fieldset>, <legend>)
* Dropdowns (<select>, <option>)
* Textarea (<textarea>)

💡 **Project:** Create a job application form

**Chapter 11: HTML Media (Audio & Video)**

* Embedding audio (<audio> tag)
* Embedding video (<video> tag)
* Adding captions with <track>

💡 **Project:** Create a video streaming page

**Chapter 12: HTML iframes & Embeds**

* Embedding YouTube videos
* Using <iframe> for maps, websites, and other content

💡 **Project:** Create a webpage with embedded maps and videos

**Chapter 13: HTML Metadata & SEO**

* <meta> tags for SEO
* Open Graph meta tags
* Viewport settings

💡 **Project:** Optimize a blog page for SEO

🚀 **Section Project:** **Recipe Website with Multiple Pages**

**Section 3: HTML Advanced**

**Chapter 14: HTML Forms with Validation**

* Required fields
* Pattern validation (pattern attribute)
* Custom error messages

💡 **Project:** Build a signup form with validation

**Chapter 15: HTML5 APIs**

* Drag & Drop API
* Geolocation API
* Web Storage (LocalStorage & SessionStorage)

💡 **Project:** Create a simple note-taking app using LocalStorage

**Chapter 16: HTML5 Canvas & SVG**

* Basics of <canvas>
* Drawing shapes in Canvas
* Using SVG for scalable graphics

💡 **Project:** Create an interactive drawing board

**Chapter 17: Progressive Web Apps (PWAs) Basics**

* What are PWAs?
* Service workers introduction
* Caching strategies

💡 **Project:** Convert a simple website into a PWA

🚀 **Section Project:** **Build a Responsive News Portal**

**Section 4: HTML in Modern Web Development**

**Chapter 18: Integrating HTML with CSS**

* Inline, internal, and external CSS
* Using classes and IDs for styling

💡 **Project:** Build a styled landing page

**Chapter 19: Integrating HTML with JavaScript**

* Adding JavaScript to an HTML document
* Basic DOM manipulation

💡 **Project:** Create an interactive form with validation messages

**Chapter 20: HTML with Bootstrap & Tailwind CSS**

* Introduction to Bootstrap grid system
* Using Tailwind for rapid UI development

💡 **Project:** Create a responsive portfolio using Bootstrap or Tailwind

**Chapter 21: HTML & Accessibility (A11Y)**

* ARIA roles
* Keyboard navigation
* Screen reader compatibility

💡 **Project:** Make an accessible website with proper labels and navigation

🚀 **Final Project:** **Build a Full-Featured Blogging Platform**