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YouTube Video Link

KG Coding

Some Other One shot Video Links:

- Complete HTML
- Complete CSS
- Complete JavaScript
- Complete React and Redux
- One shot University Exam Series

http://www.kgcoding.in/

Our YouTube Channels

KG Coding Android App

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Course Levels

Level 0 Setup & Fundamentals

Level 1 HTML Basics

Level 2 Must-Use HTML Tags

Level 3 Browser Tools

Level 4 HTML and Project Structure

Level 5 List, Tables & Forms

Level Bonus Github Pages & CodeSpace

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Level 0

Setup & Fundamentals

1. IDE or Code Editor
    1. What is IDE
    2. Need of IDE
    3. IDE Selection
    4. Installation and Setup
    5. VsCode Extensions
2. Website Components and Fundamentals
    1. Client Side vs Server Side
    2. FrontEnd / BackEnd / FullStack
    3. Role of Browser
    4. HTML
    5. CSS
    6. JS

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Level 0

Setup & Fundamentals

1. IDE
OR
Code Editor

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1.1 What is IDE

1. IDE stands for Integrated Development Environment.
2. Software suite that consolidates basic tools required for software development.
3. Central hub for coding, finding problems, and testing.
4. Designed to improve developer efficiency.

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1.2 Need of IDE

1. Streamlines development.
2. Increases productivity.
3. Simplifies complex tasks.
4. Offers a unified workspace.
5. IDE Features
    1. Code Autocomplete
    2. Syntax Highlighting
    3. Version Control
    4. Error Checking

MainActivity.kt

```kotlin
@Composable
fun MessageCard(msg: Message) {
    Row(modifier = Modifier.padding(all = 8.dp)) {
        Image(
            painter = painterResource(R.drawable.android_studio_logo),
            contentDescription = "Profile Picture",
            modifier = Modifier
                .size(45.dp)

        )


        Spacer(modifier = Modifier.width(8.dp))
        Column (Modifier
            .background(color = Color.White)) {
            Text(text = msg.author, color = Color.Black)
            Spacer(modifier = Modifier.height(1.dp))
            Text(text = msg.body, color = Color.Black)
        }
    }
}
```

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1.3 IDE Selection

1. Sublime Text
2. Atom
3. VS Code
4. Github CodeSpaces

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1.4 Installation & Setup

1. Search VS Code

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1.5 VsCode Extensions

1. Live Server
2. Prettier

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Level 0

Setup & Fundamentals

2. Website Components And Fundamentals

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2.1 Client Side vs Server Side

	Client Side	Server Side
Execution Location	Executes on user's device.	Executes on a remote machine.
Languages	Primarily JavaScript, HTML, CSS.	PHP, Python, Java, Node.js, etc.
Main Job	Makes clicks and scrolls work	Manages saved information
Access Level	Can't access server data directly	Can read/write files, interact with databases.
Speed	Quicker for UI changes	Slower due to network latency.

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2.2 FrontEnd / BackEnd / FullStack

Client Side / Front-End
Web Development

Server Side
Back-End

M E R N

Full Stack

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2.3 Role of Browser

1. Displays Web Page: Turns HTML code into what you see on screen.
2. User Clicks: Helps you interact with the web page.
3. Updates Content: Allows changes to the page using JavaScript.
4. Loads Files: Gets HTML, images, etc., from the server.

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2.4 HTML

(Hypertext Markup Language)

1. Structure: Sets up the layout.
2. Content: Adds text, images, links.
3. Tags: Uses elements like <p>, <a>.
4. Hierarchy: Organizes elements in a tree.

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2.5 CSS

(Cascading Style Sheets)

1. Style: Sets the look and feel.
2. Colors & Fonts: Customizes text and background.
3. Layout: Controls position and size.
4. Selectors: Targets specific HTML elements.

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2.6 JS

(Java Script)

1. JavaScript has nothing to do with Java
2. Actions: Enables interactivity.
3. Updates: Alters page without reloading.
4. Events: Responds to user actions.
5. Data: Fetches and sends info to server.

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Level 0 Revision

Setup & Fundamentals

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    5. VsCode Extensions
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Level 1

HTML Basics

1. Starting up
    1. First File using Text Editor
    2. File Extension
    3. Opening the project in VsCode
    4. Index.html
2. Basics of HTML
    1. What are Tags
    2. Using Emmet ! to generate code
    3. Basic HTML Page
    4. MDN Documentation
    5. Comments
    6. Case Sensitivity

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Level 1

HTML Basics

1. Starting Up

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1.1 First file using Text Editor

1. Create a folder with name First Project on your Desktop.
2. Open Notepad.
3. Create a file and save it as index.html
4. Copy Sample code
5. Open Browser and Check.

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1.2 File Extension

HTML

1. Most commonly used.
2. Works across all browsers.
3. Widely recognized and supported.
4. Typically saved as .html.

HTM

1. Less commonly used.
2. Originated for compatibility with older systems.
3. Works same as .html.
4. Typically saved as .htm.

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1.3 Opening project in VsCode

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1.4 Importance of index.html

1. Default name of a website's homepage.
2. First page users see when visiting a website
3. Important for SEO (Search Engine Optimization)
4. Provides uniform starting point across servers
5. Serves as fallback when no file is specified in URL

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Level 1

HTML Basics

2. Basics of HTML

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2.1 What are Tags

1. Elements that are used to create a website are called HTML Tags.
2. Tags can contain content or other HTML tags.
3. Define elements like text, images, links

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2.2 Using Emmet ! to generate code

1. Type ! and wait for suggestions.

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2.3 Basic HTML Page

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <title>My First Webpage</title>
    </head>
    <body>
        <h1>Hello World!</h1>
    </body>
</html>
```

Defines the HTML Version

Parent of all HTML tags / Root element

Parent of meta data tags

Title of the web page

Parent of content tags

Heading tag

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2.4 MDN Documentation

1. Visit https://developer.mozilla.org/
2. Official resource for HTML
3. Offers comprehensive guides and tutorials
4. Includes examples for real-world use
5. Updated with latest HTML features
6. Trusted by developers worldwide

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2.5 Comments

1. Used to add notes in HTML code
2. Not displayed on the web page
3. Syntax: <!-- Comment here -->
4. Helpful for code organization
5. Can be multi-line or single-line

Writing comments in HTML

Single-line Comment

```
<!--This is a single line comment in HTML. You cannot see it on a webpage. Click on view-source to see a message I left just for you.-->
```

Multi-line Comment

```
<!-- This is a multi-line comment in HTML.
You cannot see it on a webpage.
If you view-source on the browser you can see the comment there.-->
```

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2.6 Case Sensitivity

1. HTML is case-insensitive for tag names
2. Attribute names are also be case-insensitive
3. Best practice: use lowercase for consistency

<html> = <HTML>
<p> = <P>
<head> = <HEAD>
<body> = <BODY>

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Level 1 Revision

HTML Basics

1. Starting up
    1. First File using Text Editor
    2. File Extension
    3. Opening the project in VsCode
    4. Index.html
2. Basics of HTML
    1. What are Tags
    2. Using Emmet ! to generate code
    3. Basic HTML Page
    4. MDN Documentation
    5. Comments
    6. Case Sensitivity

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Project Level 1

HTML Basics

1. Create a new project with Index.html
2. Generate boilerplate code using Emmet
3. Write “I am learning with Prashant sir”
4. Use comments
5. Also use Case insensitive tags

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Level 2

Must-Use HTML Tags

1. HTML Attributes
    1. What are HTML Attributes
    2. Id Property
2. HTML Tags
    1. Heading Tag
    2. Paragraph Tag
    3.
 <HR> tags
    4. Image Tag
    5. Video Tag
    6. Anchor Tag
    7. Bold / Italic / Underline / Strikethrough
    8. Pre Tag
    9. Big / Small Tag
    10. Superscript / Subscript
3. Character Entity Reference
    1. What are Character Entity References

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Level 2

Must-Use HTML Tags

1. HTML Attributes

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1.1 What are HTML Attributes?

1. Provides additional information about elements
2. Placed within opening tags
3. Common examples: href, src, alt
4. Use name=value format
5. Can be single or multiple per element

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1.2 id property

- Unique Identifier: Each id should be unique within a page.
- Anchoring: Allows for direct links to sections using the #id syntax in URLs.
- CSS & JavaScript: Used for selecting elements for styling or scripting.

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Level 2

Must-Use HTML Tags

2. HTML Tags

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2.1 Heading Tag

1. Defines headings in a document
2. Ranges from <h1> to <h6>
3. <h1> is most important, <h6> is least
4. Important for SEO
5. Helps in structuring content

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2.2 Paragraph Tag

1. Used for defining paragraphs
2. Enclosed within and tags
3. Adds automatic spacing before and after
4. Text wraps to next line inside tag
5. Common in text-heavy content

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2.3
 Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <p>This is the first paragraph
        this is the second line
    </p>
    <p>This is the third line <br>
        this is the fourth line
    </p>
</body>
</html>
```

1.
 adds a line break within text
2.
 is empty, no closing tag needed
3.
 and <br /> are both valid

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2.3 <HR> Tag

1. <hr> creates a horizontal rule or line
2. <hr> also empty, acts as a divider

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2.4 Image Tag

1. Used to embed images
2. Utilizes the src attribute for image URL
3. alt attribute for alternative text
4. Can be resized using width and height
5. Self-closing, doesn't require an end tag

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2.5 Video Tag

index.html > html > body > video

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <video src="padh-lo.MOV" height="330px"
    autoplay controls loop />
</body>
</html>
```

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127.0.0.1:5500/index.html

1. Embeds video files on a page
2. Uses src attribute for video URL
3. Supports multiple formats like MP4, WebM
4. Allows for built-in controls via attributes like autoplay, controls, loop

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2.6 Anchor Tag

index.html > html > body > a

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <a href="https://www.knowledgegate.in/"
    target="_blank"> Knowledge Gate</a>
</body>
</html>
```

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127.0.0.1:5500/index.html

Knowledge Gate

1. Used for creating hyperlinks
2. Requires href attribute for URL
3. Can link to external sites or internal pages
4. Supports target attribute to control link behavior

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2.7 Bold/Italic/Underline/Strikethrough Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <b>Bold</b> <hr>
    <i>Italic</i> <hr>
    <u>Underline</u> <hr>
    <s>Strikethorugh</s>
</body>
</html>
```

1. <b> makes text bold
2. <i> makes text italic
3. <u> underlines text
4. <s> or <strike> applies strikethrough
5. Primarily used for text styling and emphasis

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2.8 Pre Tag

index.html > html > body > pre

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
        first line
        more     spaces
    <pre>
        first line
        more     spaces
    </pre>
</body>
</html>
```

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127.0.0.1:5500/index.html

first line more spaces

```
        first line
        more     spaces
```

1. Preserves text formatting
2. Maintains whitespace and line breaks
3. Useful for displaying code
4. Enclosed within <pre> and </pre> tags

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2.9 Big/Small Tag

index.html > html > body > hr

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <big>This is Big</big> <hr>
    <small>This is Small</small>
</body>
</html>
```

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127.0.0.1:5500/index.html

This is Big

This is Small

1. <big> increases text size
2. <small> decreases text size
3. Less common due to CSS alternatives

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2.10 Superscript/Subscript Tag

```html
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <big>(a + b)2 = a2 + b2 + 2ab</big> <hr>
    <big>(a + b)<sup>2</sup> = a<sup>2</sup> + b<sup>2</sup> + 2ab</big> <hr>

    <big>CH4 + O2 => H20 + CO2</big> <hr>
    <big>CH<sub>4</sub> + O<sub>2</sub> => H<sub>2</sub>0 + CO<sub>2</sub></big> <hr>
</body>
</html>
```

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127.0.0.1:5500/index.html

(a + b)2 = a2 + b2 + 2ab

$(a + b)^2 = a^2 + b^2 + 2ab$

CH4 + O2 => H20 + CO2

$CH_4 + O_2 => H_20 + CO_2$

1. <sup> makes text superscript
2. <sub> makes text subscript
3. Used for mathematical equations, footnotes
4. Does not change font size, just position

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Level 2

Must-Use HTML Tags

3. Character Entity Reference

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3.1 Character Entity Reference

1. Used to display reserved or special characters
2. Syntax often starts with & and ends with ; (e.g., & for &)

		–	–	−	−	°	°	Δ	Δ	α	&al
€	€	—	—	±	±	º	º	Λ	Λ	β	&be
¢	¢	…	…	√	√	ª	ª	Θ	Θ	γ	&ga
£	£	§	§	∞	∞	¹	¹	Ξ	Ξ	δ	&de
¥	¥	¶	¶	∝	∝	²	²	Π	Π	ε	&ep
¤	¤	†	†	×	×	³	³	Σ	Σ	ζ	&ze
ƒ	ƒ	‡	‡	÷	÷	¼	¼	Φ	Φ	η	&et
©	©	¡	¡	~	∼	½	½	Ψ	Ψ	θ	&th
®	®	¿	¿	≈	≈	¾	¾	Ω	Ω	ι	&io
™	™	‰	‰	≅	≅	∴	∴	∇	∇	κ	&ka

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Level 2 Revision

Must-Use HTML Tags

1. HTML Attributes
    1. What are HTML Attributes
    2. Id Property
2. HTML Tags
    1. Heading Tag
    2. Paragraph Tag
    3.
 <HR> tags
    4. Image Tag
    5. Video Tag
    6. Anchor Tag
    7. Bold / Italic / Underline / Strikethrough
    8. Pre Tag
    9. Big / Small Tag
    10. Superscript / Subscript
3. Character Entity Reference
    1. What are Character Entity References

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Project Level 2

Must-Use HTML Tags

1. Create a page with heading, paragraph, line breaks and separators.
2. Use an image with height 300, which is a link to another page.
3. Use bold, italic, underline and strike through in one line.
4. Write third equation of motion using superscript and subscript.

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Level 3

Browser Tools

1. Browser Tools
    1. View Page Source
    2. Inspect Element
    3. HTML without CSS
2. Responsive Design
    1. Different screen size
3. Live Edit Code
    1. Live edit HTML
    2. Live edit CSS
    3. Live edit JS
    4. Changes only happening at client
4. Validating Web pages
    1. Using validator.w3.org

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Level 3

Browser Tools

1. Browser Tools

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1.1 View Page Source

1. Displays raw HTML and CSS
2. Useful for debugging and learning
3. Shows external files like JavaScript links

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1.2 Inspect Element

1. Allows real-time editing of HTML/CSS
2. Useful for debugging and testing
3. Shows element hierarchy and layout
4. Includes console for JavaScript
5. Highlights selected elements on page

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1.3 HTML without CSS

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Level 3

Browser Tools

2. Responsive Design

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2.1 Different Screen Sizes

1. Adapts layout for different screen sizes
2. Flexible layouts
3. Optimizes images and assets
4. Enhances user experience on mobile and desktop

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Level 3

Browser Tools

3. Live Edit Code

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3.1 Live edit HTML

Changed **Subscriber** count

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3.2 Live edit CSS

Changed **Channel Name** color

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3.3 Live edit JS

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3.4 Changes happening at Client

1. Changes made are temporary
2. Affect only the current session
3. Not saved to the server
4. Reset upon page reload
5. Useful for testing, not permanent fixes

Like: If you change the question in your question paper that has no effect on actual exam.

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Level 3

Browser Tools

4. Validating WebPages

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4.1 Using validator.w3.org

1. Ensures HTML adheres to standards
2. Minimizes cross-browser issues
3. Helps in achieving better SEO results
4. Easier to debug and maintain
5. Optimizes performance by reducing parsing errors

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Level 3 Revision

Browser Tools

1. Browser Tools
    1. View Page Source
    2. Inspect Element
    3. HTML without CSS
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    1. Different screen size
3. Live Edit Code
    1. Live edit HTML
    2. Live edit CSS
    3. Live edit JS
    4. Changes only happening at client
4. Validating Web pages
    1. Using validator.w3.org

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Project Level 3

Browser Tools

1. Save Source of Instagram in a file and check the render.
2. Inspect the likes element on the page and read the code to understand.
3. Change number of likes on Your Instagram post
4. Validate the page we created in last project.

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Level 4

HTML and Project Structure

1. Semantic Tags
    1. Semantic / Non-Semantic Tags
2. Body Tags
    1. Header Tag
    2. Main Tag
        1. Section Tag
        2. Article Tag
        3. Aside Tag
    3. Footer Tag
3. Folder Structure
    1. Recommended Folder structure
4. More Tags
    1. Navigation tags
    2. Block / Inline Elements
    3. Div tags
    4. Span Tags

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Level 4

HTML and Project Structure

1. Semantic Tags

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1.1 Semantic/Non-Semantic Tags

Semantic Tags

- Meaningful: Describe content.
- SEO: Good for search engines.
- Accessibility: Useful for screen readers.
- Examples: <header>, <footer>, <article>, <section>, <nav>.

Non-Semantic Tags

- Generic: No specific meaning.
- For Styling: Used for layout.
- No SEO: Not SEO-friendly.
- Examples: , , <i>, <b>.

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Level 4

HTML and Project Structure

2. Body Tags

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2.1 Header Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <header><big>This is the Header</big></header>
</body>
</html>
```

1. Purpose: Used to contain introductory content or navigation links.
2. Semantic: It's a semantic tag, providing meaning to the enclosed content.
3. Location: Commonly found at the top of web pages, but can also appear within <article> or <section> tags.
4. Multiple Instances: Can be used more than once on a page within different sections.

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2.2 Main Tag

1. Purpose: Encloses the primary content of a webpage.
2. Semantic: Adds meaning, indicating the main content area.
3. Unique: Should appear only once per page.
4. Accessibility: Helps screen readers identify key content.
5. Not for Sidebars: Excludes content repeated across multiple pages like site navigation or footer.

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2.2.1 Section Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <main>
        <section>Technologies: HTML/CSS</section>
        <section>Courses: OS/DBMS</section>
        <section>Hobbies: Eating</section>
    </main>
</body>
</html>
```

1. Purpose: Groups related content in a distinct section.
2. Semantic: Adds structure and meaning.
3. Headers: Often used with a heading <h1> to <h6> to indicate section topic.
4. Nested: Can be nested within other <section> or <article> tags.

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2.2.2 Article Tag

```
index.html > html > body > main > article
5   </head>
6   <body>
7       <main>
8           <article>KnowledgeGate YouTube channel is
            a popular educational resource focused on
            computer science and engineering topics.
            It offers tutorials, interview tips, and
            easy-to-understand explanations, making
            it a go-to channel for students and
            professionals alike.</article>
9       </main>
10  </body>
11  </html>
```

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127.0.0.1:5500/index.html

KnowledgeGate YouTube channel is a popular educational resource focused on computer science and engineering topics. It offers tutorials, interview tips, and easy-to-understand explanations, making it a go-to channel for students and professionals alike.

1. Purpose: Encloses content that stands alone, like a blog post or news story.
2. Semantic: Provides contextual meaning.
3. Independence: Content should make sense even if taken out of the page context.
4. Multiple Instances: Can be used multiple times on the same page

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2.2.3 Aside Tag

```html
</head>
<body>
    <main>
      <aside>
        <h3>Recommended Books</h3>
        <ul>
          <li>"Introduction to Algorithms"</li>
          <li>"Learn Python the Hard Way"</li>
        </ul>
      </aside>
    </main>
</body>
</html>
```

1. Purpose: Contains sidebar or supplementary content.
2. Semantic: Indicates content tangentially related to the main content.
3. Not Crucial: Content is not essential to understanding the main content.
4. Examples: Could hold widgets, quotes, or ads.

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2.3 Footer Tag

1. Purpose: For footer content like extra info or links.
2. Semantic: Provides meaning to enclosed content.
3. Location: Typically at the bottom of pages or sections.
4. Content: Includes copyrights, contact info, and social links.
5. Multiple Instances: Can be used more than once on a page.

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Level 4

HTML and Project Structure

3. Folder Structure

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3.1 Recommended Folder Structure

1. Root Directory: Main folder containing all website files.
2. HTML Files: Store main .html files at the root level for easy access.
3. CSS Folder: Create a css/ folder for all Cascading Style Sheets.
4. JS Folder: Use a scripts/ folder for JavaScript files.
5. Images Folder: Store images in an images/ or images/ folder.
6. Assets: Other assets like fonts can go in an assets/ folder.
7. Sub-directories: For multi-page websites, use sub-folders to categorize content.

KNOWLEDGEGATE

Level 4

HTML and Project Structure

4. More Tags

KNOWLEDGEGATE

4.1 Navigation Tags

1. Purpose: Encloses navigation links or menus.
2. Semantic: Signals that the content is meant for navigating the site.
3. Common Content: Usually contains lists <ul>, <ol> of links <a>.
4. Accessibility: Aids screen readers in identifying site navigation.

KNOWLEDGEGATE

4.2 Block / Inline Elements

Block Elements

- New Line: Start on a new line.
- Full Width: Take up all horizontal space.
- Styling: Can have margins and padding.
- Size: Width and height can be set.
- Examples: , <p>, <h1>, <ul>, <li>.

Inline Elements

- Flow: Stay in line with text.
- Width: Just as wide as the content.
- No Break: No new line between elements.
- Limited Styling: Can't set size easily.
- Examples: , <a>, , , <img>.

KNOWLEDGEGATE

4.3 Div Tags

```html
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <div>
        <p> Lorem ipsum dolor sit amet consectetur adipisicing elit. Itaque quae veritatis, repellendus nam adipisci fuga nulla eos nobis.
        </p>
    </div>
</body>
</html>
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Itaque quae veritatis, repellendus nam adipisci fuga nulla eos nobis.

1. Purpose: Acts as a container for other HTML elements.
2. Non-Semantic: Doesn't provide inherent meaning to enclosed content.
3. Styling: Commonly used for layout and styling via CSS.
4. Flexibility: Highly versatile and can be customized using classes or IDs.

KNOWLEDGE GATE

4.4 Span Tags

1. Purpose: Used for inline elements to style or manipulate a portion of text.
2. Non-Semantic: Doesn't add specific meaning to the enclosed text.
3. Styling: Commonly used for changing color, font, or adding effects via CSS.
4. Inline Nature: Doesn't break text flow or create a new block-level element.

KNOWLEDGEGATE

Level 4 Revision

HTML and Project Structure

1. Semantic Tags
    1. Semantic / Non-Semantic Tags
2. Body Tags
    1. Header Tag
    2. Main Tag
        1. Section Tag
        2. Article Tag
        3. Aside Tag
    3. Footer Tag
3. Folder Structure
    1. Recommended Folder structure
4. More Tags
    1. Navigation tags
    2. Block / Inline Elements
    3. Div tags
    4. Span Tags

KNOWLEDGEGATE

Project Level 4

HTML and Project Structure

1. Create a page with header, footer, main(section, article, aside tag).
2. Make sure the project from level 3 has correct folder structure.
3. Create groupings of multiple tags using div.
4. Create navigation to important sections of your page.

[KNOWLEDGEGATE]

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Some Other One shot Video Links:

- Complete HTML
- Complete CSS
- Complete JavaScript
- Complete React and Redux
- One shot University Exam Series

http://www.kgcoding.in/

Our YouTube Channels

KG Coding Android App

KG Coding

Knowledge GATE

KG Placement Prep

Sanchit Socket

KNOWLEDGE GATE

Level 5

List, Tables & Forms

1. List Tag
    1. Ordered Lists
    2. Types of Ordered Lists
    3. Unordered Lists
2. Table Tag
    1. <tr>, <td>, <th> tags
    2. Captions
    3. Col spans
3. Forms
    1. Input tag
    2. Action Attributes
    3. Name and Value Property
    4. Label Tag
    5. Exploring Types
4. iFrame Tag
    1. Using iFrames

KNOWLEDGEGATE

Level 5

List, Tables & Forms

1. List

Tag

KNOWLEDGEGATE

1.1 Ordered Lists

index.html > html > body > ol > li

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <ol>
      <li>Wake up</li>
      <li>Brush teeth</li>
      <li>Take a shower</li>
      <li>Have breakfast</li>
      <li>Go to work</li>
    </ol>
</body>
```

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

1. Wake up
2. Brush teeth
3. Take a shower
4. Have breakfast
5. Go to work

KNOWLEDGE GATE

1. Purpose: Used for creating lists with items that have a specific order.
2. Default: Items are automatically numbered.
3. Nesting: Can be nested within other lists.

1.2 Types of Ordered Lists

Ordered Lists

- Numeric: Default type, (1, 2, 3, ...)
  Attribute: type="1"
- Uppercase Letters: (A, B, C, ...)
  Attribute: type="A"
- Lowercase Letters: (a, b, c, ...)
  Attribute: type="a"
- Uppercase Roman: (I, II, III, ...)
  Attribute: type="I"
- Lowercase Roman: (i, ii, iii, ...)
  Attribute: type="i"

A. Apple
B. Banana
C. Cherry
D. Dragonfruit

a. Apple
b. Banana
c. Cherry
d. Dragonfruit

I. Apple
II. Banana
III. Cherry
IV. Dragonfruit

i. Apple
ii. Banana
iii. Cherry
iv. Dragonfruit

[KNOWLEDGEGATE]

1.3 Unordered Lists

1. Purpose: Used for lists where the order of items doesn't matter.
2. Default: Items are usually bulleted.
3. Nesting: Can be nested within other lists.

KNOWLEDGE GATE

Level 5

List, Tables & Forms

2. Table Tag

KNOWLEDGEGATE

2.1 <tr>, <td>, <th> Tags

1. <tr> Table Row : Used to define a row in an HTML table.
2. <th> Table Header : Used for header cells within a row.
   Text is bold and centered by default.
3. <td> Table Data : This Holds the actual data.

KNOWLEDGE GATE

2.2 Captions

```html
    <title>Learn with KG Coding</title>
</head>
<body>
    <table border="1">
        <caption>Student Information</caption>
        <tr>
            <th>Name</th>
            <th>Age</th>
            <th>Email</th>
        </tr>
        <tr>
            <td>John</td>
            <td>30</td>
            <td>john@email.com</td>
```

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Student Information

Name	Age	Email
John	30	john@email.com
Jane	25	jane@email.com

1. Purpose: Provides a title or description for a table.
2. Placement: Must be inserted immediately after the <table> opening tag.
3. Alignment: Centered above the table by default.
4. Accessibility: Helps screen readers understand the table's purpose.

KNOWLEDGE GATE

2.3 Col Spans

```html
            <th>Email</th>
          </tr>
          <tr>
            <td>John</td>
            <td>30</td>
            <td>john@email.com</td>
          </tr>
          <tr>
            <td colspan="3">This cell spans 3 columns</td>
          </tr>
        </table>
    </body>
    </html>
```

Student Information

Name	Age	Email
John	30	john@email.com
This cell spans 3 columns		

1. Attribute: Uses the colspan attribute in <td> or <th> tags.
2. Purpose: Allows a cell to span multiple columns horizontally.
3. Alignment: Takes the space of the specified number of columns.
4. Layout: Useful for combining cells to create complex table layouts.

KNOWLEDGE GATE

Level 5

List, Tables & Forms

3. Forms

KNOWLEDGEGATE

3.1 Input Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
    </form>
</body>
</html>
```

1. Purpose: Used within a <form> element to collect user input.
2. Self-Closing: The <input> tag is self-closing; doesn't require a closing tag.
3. Attributes: Common attributes are name, value, placeholder, and required.

KNOWLEDGEGATE

3.2 Action attribute

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form action="/submit.php" method="post">
        <input type="text" name="name">
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

1. Purpose: Specifies the URL to which the form data should be sent when submitted.
2. Default: If not specified, the form will be submitted to the current page's URL.
3. Server-Side: Usually points to a server-side script (like PHP, Python, etc.) that processes the form data.

KNOWLEDGEGATE

3.3 Name and Value property

- `name` Property:
  - ID for Data: Identifies form elements when submitting.
  - Unique: Should be unique to each element for clarity.
- `value` Property:
  - Default Data: Sets initial value for input elements.
  - Sent to Server: This is the data sent when form is submitted.

KNOWLEDGEGATE

3.4 Label Tag

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form action="/submit.php" method="post">
        <label for="username">Username:</label>
        <input type="text" id="username" name="username">
    </form>
</body>
</html>
```

- Purpose: Adds a text description to form elements.
- for Attribute: Connects the label to a specific form element using the element's id.
- Accessibility: Makes the form more accessible.
- Readability: Enhances form readability and usability.

KNOWLEDGEGATE

3.5 Input type: Date

index.html > html > body > form > input

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
    </form>
</body>
</html>
```

Ln 8, Col 43 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Text: hello

Password: •••••••

Date: 16/08/2023

KNOWLEDGE GATE

3.5 Input type: File

index.html > html > body

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
        File: <input type="file"><br>
    </form>
</body>
</html>
```

Ln 13, Col 8 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Text: Enter Text

Password:

Date: dd/mm/yyyy

File: Choose file No file chosen

KNOWLEDGE GATE

3.5 Input type: Color

index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Color: <input type="color"><br>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
        File: <input type="file"><br>
    </form>
</body>
</html>
```

Ln 15, Col 8 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Color:
Text:
Passwo
Date:
File:

0 0 0

R G B

KNOWLEDGEGATE

3.5 Input type: Range

index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Color: <input type="color"><br>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
        File: <input type="file"><br>
        Range: <input type="range"><br>
    </form>
</body>
</html>
```

Ln 13, Col 40 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Color:
Text: Enter Text
Password:
Date: dd/mm/yyyy
File: Choose file No file chosen
Range:

KNOWLEDGEGATE

3.5 Input type: Button

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Color: <input type="color"><br>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
        File: <input type="file"><br>
        Range: <input type="range"><br>
        Button: <input type="button" value="Click Me"><br>
    </form>
</body>
</html>
```

Color:
Text: Enter Text
Password:
Date: dd/mm/yyyy
File: Choose file No file chosen
Range:
Button: Click Me

KNOWLEDGE GATE

3.5 Input type: Submit

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        Color: <input type="color"><br>
        Text: <input type="text" placeholder="Enter Text"><br>
        Password: <input type="password"><br>
        Date: <input type="date"><br>
        File: <input type="file"><br>
        Range: <input type="range"><br>
        Button: <input type="button" value="Click Me"><br>
        Submit: <input type="submit" value="Submit"><br>
    </form>
</body>
</html>
```

KNOWLEDGE GATE

3.5 Input type: Radio

index.html > html > body > form > br

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        <label for="male">Male</label>
        <input type="radio" id="male" name="gender"
        value="Male"><br>

        <label for="female">Female</label>
        <input type="radio" id="female" name="gender"
        value="Female"><br>

        <label for="other">Other</label>
        <input type="radio" id="other" name="gender"
        value="Other"><br>
    </form>
</body>
</html>
```

Ln 12, Col 74 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Male
Female
Other

KNOWLEDGEGATE

3.5 Input type: Checkbox

index.html > html > body

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        <label for="apple">Apple</label>
        <input type="checkbox" id="apple" name="fruit"
        value="Apple"><br>

        <label for="banana">Banana</label>
        <input type="checkbox" id="banana" name="fruit"
        value="Banana"><br>

        <label for="cherry">Cherry</label>
        <input type="checkbox" id="cherry" name="fruit"
        value="Cherry"><br>
    </form>
</body>
</html>
```

Ln 6, Col 7 Spaces: 4 UTF-8 LF HTML Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Apple ☑
Banana ☐
Cherry ☐

KNOWLEDGEGATE

3.5 Input type: Select

index.html > html > body > form

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Learn with KG Coding</title>
</head>
<body>
    <form>
        <label for="fruits">Choose a fruit:</label>
        <select id="fruits" name="fruits">
          <option value="apple">Apple</option>
          <option value="banana">Banana</option>
          <option value="cherry">Cherry</option>
        </select>
      </form>
</body>
</html>
```

Ln 14, Col 14 | Spaces: 4 | UTF-8 | LF | HTML | Port : 5500

Knowledge Gate | Learn with KG Coding

127.0.0.1:5500/index.html

Choose a fruit: Apple Banana Cherry

KNOWLEDGE GATE

3.5 Input type: TextArea

1. Purpose: <textarea> is used for multi-line text input in forms.
    1. rows Property: Specifies the visible number of lines in the textarea.
    2. cols Property: Sets the visible width measured in average character widths.
2. Resizable: Some browsers allow users to manually resize the textarea.

KNOWLEDGEGATE

Level 5

List, Tables & Forms

4.iFrame Tag

KNOWLEDGEGATE

4.1 Using iFrames

1. Embedded Content: Allows you to embed another webpage or multimedia content within a webpage.
2. src Attribute: Specifies the URL of the content to be embedded.
3. Dimensions: Width and height can be set using width and height attributes.

KNOWLEDGEGATE

Level 5 Revision

List, Tables & Forms

1. List Tag
    1. Ordered Lists
    2. Types of Ordered Lists
    3. Unordered Lists
2. Table Tag
    1. <tr>, <td>, <th> tags
    2. Captions
    3. Col spans
3. Forms
    1. Input tag
    2. Action Attributes
    3. Name and Value Property
    4. Label Tag
    5. Exploring Types
4. iFrame Tag
    1. Using iFrames

KNOWLEDGEGATE

Project Level 5

List, Tables & Forms

1. Create a page with all type of ordered list and one unordered list.
2. Create a table with headings, captions and a few rows. One of heading should take at least 3 columns.
3. Create a contact me form with relevant details for your resume website.
4. Use iFrame to add this video to your page.

[KNOWLEDGEGATE]

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Level Bonus

Github Pages & CodeSpace

1. Github
    1. What is Version Control
    2. What is Git and GitHub
    3. Account Creation
    4. Creating a Repo
    5. Creating a Codespace
    6. Creating a Github page
    7. Publishing our project
2. FrameWorks
    1. React
    2. Angular
    3. Vue

KNOWLEDGEGATE

Level Bonus

Github Pages & CodeSpace

1. GitHub

KNOWLEDGEGATE

1.1 What is Version Control

1. Definition: A system to track changes in files over time.
2. Types: Centralized (like SVN) and Distributed (like Git).
3. Purpose: Helps in teamwork and fixes mistakes.
4. Snapshots: Each 'commit' saves a file version.
5. Branching: Lets you work on different tasks separately.
6. Merge: Combines changes from different people.
7. Undo: Easy to revert to older file versions.

KNOWLEDGEGATE

1.2 What is Git and GitHub

What is Git?

- Definition: A software tool that tracks changes in code, enabling collaboration and version control.
- Commit: Records a snapshot of file changes.
- Branch: Allows separate paths of development.
- Merge: Combines changes from different branches.

What is GitHub?

- Definition: A web service for hosting and collaborating on Git repositories.
- Fork: Creates a personal copy of another user's repository.
- Pull Request: A way to propose changes to existing code.
- Issues: Used for tracking bugs and feature ideas.

KNOWLEDGEGATE

1.3 Account Creation

KNOWLEDGEGATE

1.4 Creating a Repo

KNOWLEDGEGATE

1.5 Creating a CodeSpace

KnowledgeGateCoding/java_fo

github.com/KnowledgeGateCoding/java_for_beginner

KnowledgeGateCoding / java_for_beginner

Type / to search

Code | Issues | Pull requests | Discussions | Actions | Projects | Wiki | Security | Insights

java_for_beginner Public

Edit Pins | Unwatch 1 | Fork 0 | Star 2

main | 1 branch | 0 tags | Go to file | Add file | Code

omprashantjain Adding Links

LearningJava/src/in/kn... First co

.gitignore First co

README.md Adding

README.md

Complete JAVA

This is a KnowledgeGate initiativ

Link to notes: Link to sample tes

Local | Codespaces

Codespaces

Your workspaces in the cloud

No codespaces

You don't have any codespaces with this repository checked out

Create codespace on main

Learn more about codespaces...

Codespace usage for this repository is paid for by omprashantjain

About

No description, website, or topics provided.

Readme

Activity

2 stars

1 watching

0 forks

Report repository

Releases

No releases published

Create a new release

Packages

No packages published

KNOWLEDGEGATE

1.6 Creating a Github Page

KNOWLEDGEGATE

1.7 Publishing our Project

Pages

github.com/omprashantjain/omprashantjain.github.io/settings/pages

Code | Issues | Pull requests | Actions | Projects | Wiki | Security | Insights | Settings

General

Access
- Collaborators
- Moderation options

Code and automation
- Branches
- Tags
- Rules
- Actions
- Webhooks
- Environments
- Codespaces
- Pages

Security
- Code security and analysis
- Deploy keys
- Secrets and variables

Integrations
- GitHub Apps
- Email notifications

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is live at https://www.prashantjain.me/
Last deployed by github-pages[bot] last year

Visit site

Build and deployment

Source

Deploy from a branch

Branch
Your GitHub Pages site is currently being built from the `main` branch. Learn more about configuring the publishing source for your site.

main | / (root) | Save

Learn how to add a Jekyll theme to your site.

Your site was last deployed to the github-pages environment by the pages build and deployment workflow.

Custom domain

Custom domain
Custom domains allow you to serve your site from a domain other than `omprashantjain.github.io`. Learn more about configuring custom domains.

www.prashantjain.me | Save | Remove

DNS Check in Progress

KNOWLEDGEGATE

Level Bonus

Github Pages & CodeSpace

2. Frameworks

KNOWLEDGEGATE

3.1 ReactJS

1. Definition: A tool for making websites interactive.
2. Components: Reusable pieces for building a webpage.
3. Virtual DOM: Makes websites faster by updating only what's needed.
4. JSX: A special way to write code that looks like HTML.
5. State: Keeps track of changes on the webpage.
6. Props: Shares information between different parts of a webpage.

KNOWLEDGEGATE

3.2 AngularJS

1. Definition: A framework for building web applications, developed by Google.
2. Two-Way Data Binding: Updates both the view and the model simultaneously.
3. Directives: Custom HTML tags for added functionality.
4. Dependency Injection: Automatically manages how parts of the app work together.
5. Controllers: Manages the data for a specific part of the webpage.
6. SPA Support: Good for Single Page Applications where the page doesn't reload.

KNOWLEDGEGATE

3.3 VueJS

1. Definition: A JavaScript framework for creating web interfaces.
2. Components: Small, reusable parts for building a website.
3. Reactivity: Automatically updates the webpage when data changes.
4. Directives: Special tokens in HTML for added functionality.
5. Vuex: Helps manage shared data across the site.
6. Single-File Components: Keeps template, script, and style in one file.

KNOWLEDGEGATE

Level Bonus Revision

Github Pages & CodeSpace

1. Github
    1. What is Version Control
    2. What is Git and GitHub
    3. Account Creation
    4. Creating a Repo
    5. Creating a Codespace
    6. Creating a Github page
    7. Publishing our project
2. FrameWorks
    1. React
    2. Angular
    3. Vue

KNOWLEDGE GATE

Level Bonus Project

Github Pages & CodeSpace

1. Create a Github account if you don't have one.
2. Create a repo for the project you have done till now.
3. Create a Codespace and make changes.
4. Publish it using Github pages.

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Sanchit Socket

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Major Project

Idea

1. Create your Resume or Portfolio website.
2. Create a repo in Github.
3. Publish it on Github pages.
4. Add the link to your resume.
5. Add the link in the comment section.

[KNOWLEDGEGATE]

KG Coding

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- Complete CSS
- Complete JavaScript
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