WEB TECHNOLOGIES

HTML 5

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- HTML5 ~= HTML + CSS3 + JavaScript API
- Future of the web
- It comes with new tags, features and APIs
- HTML5 introduces 28 new elements such as:
  <header>,<footer>,<article>,<nav>,<section>,<time>,<audio>,<video>,<output> etc..
- The main structural elements are as follows:

Element	Description
Article	Defines an article (for example within a section)
Footer	Footer elements contain information about their containing element: who wrote it, copyright, etc.
Header	The page header shown on the page, not the same as <head>
Nav	Collection of links to other pages
Section	A part or chapter in a book, or essentially the content body of the page

HTML 5
Forms – New Input Widgets

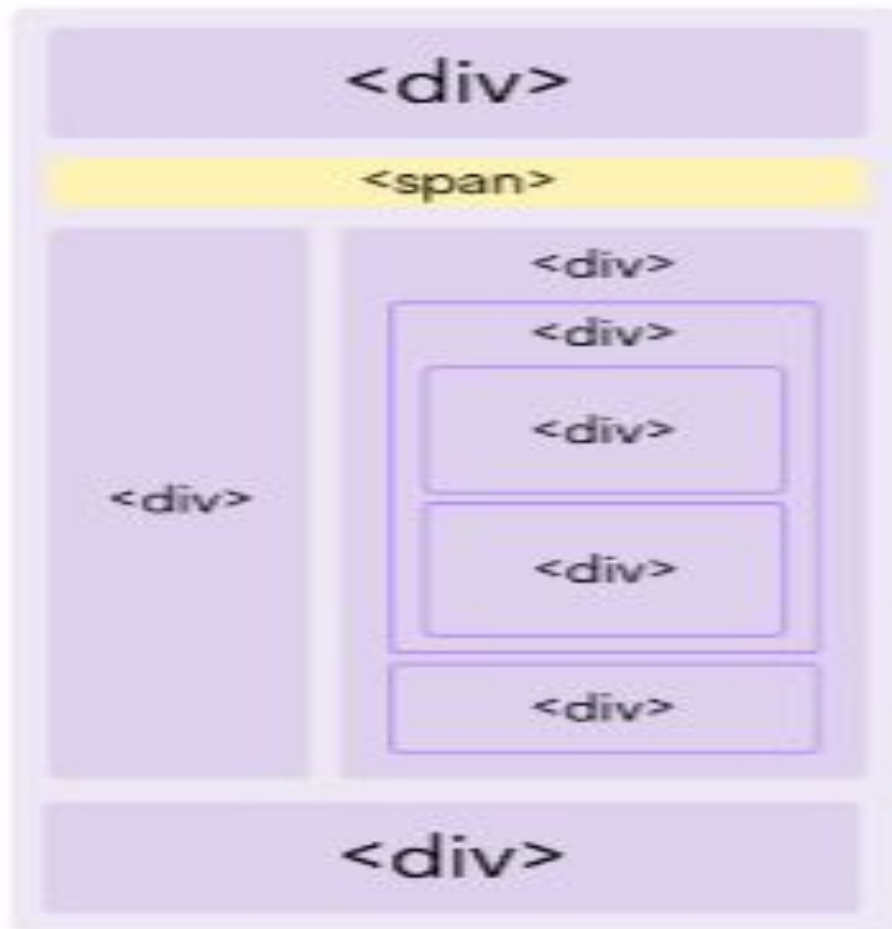- HTML5 specifications introduced new Input types and properties

New Input Types:

- email: email address
- number: spinbox
- range: slider
- url: web addresses
- color: color pickers
- search: search boxes
- date: date
- time: time
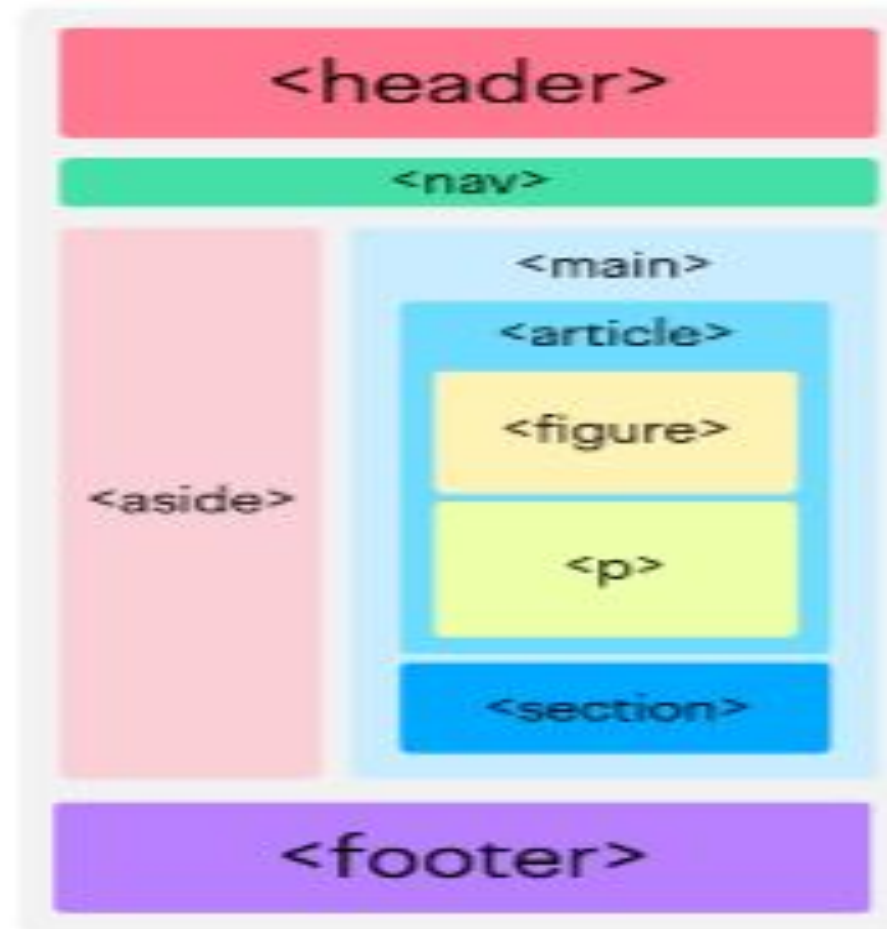- file: input file selection
- Tel: phone no.

New Input properties / Attributes:

Attribute	Description
Min, Max	Accepted min and max values
Multiple	Related to file input type, allows selection of multiple files
Pattern	Specifies a pattern used to validate an input field
Placeholder	A short hint intended to aid the user with data entry
Required	Boolean attribute to indicate that the element is required
Step	Limits allowed values, thus indicating the granularity required

Non-Semantic HTML

Semantic HTML

Feature	Non-Semantic HTML	Semantic HTML
Tags used	`<div>`, `<span>` only	Descriptive tags like `<header>`, `<main>`, `<footer>`
Clarity	Hard to understand	Easy to interpret structure
Accessibility	Poor	Improved for screen readers
SEO	Weak	Strong semantic clues for search engines
Maintainability	Confusing	Organized and easy to update

- In earlier versions of HTML, there were no globally accepted names for structural elements, and each developer used their own. That made it very hard for search engines to index web page content correctly.

- When a browser communicates with the code, it looks for some specific information to help with the display.

- Hence, HTML5 introduced a consistent list of semantic elements to help search engines and developers.

What are HTML5 semantic elements ?

- Creating semantic elements in HTML5 is to give meaning to its traditional design layout.

- It helps browsers quickly and efficiently understand the structure of the layout, and two, it helps web developers to systematically arrange or design web pages and give meaning to each section of the layout.

- The elements are easy to remember, and fits where it needs.

THANK YOU

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