# Sem. 2

* **Subject Code** : 05FN0207
* **Subject** : Fintech User Interface Design-II

# Course Objectives : Students will be able :

* 1. To impart a thorough understanding of Advance HTML & CSS
  2. To impart a thorough understanding of JavaScript & Bootstrap 5 (Framework)
  3. To design client-side form validation using regular expressions and Bootstrap styling.
  4. To develop a countdown timer for an event with customizable options using JavaScript and Bootstrap styling.
  5. To create responsive, dynamic, and visually appealing web applications, paving the way for a successful career in web development.
* **Prerequisites** : NA

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| --- | --- | --- |
| **Unit No** | **Topics Covered** | **No of lectures**  **required** |
| **1** | Advance HTML & CSS:   * HTML Summary / Outcome of the paper,HTML VS XHTML & Style-Guide, HTML Responsive & Entities * Char sets & Input Types and Input Attributes, Form Attributes & Elements, HTML Forms * CSS Combinator & Pseudo-class & Pseudo-elements || Opacity, Attribute Selector & Counters || CSS The! important Rule * Animations & Transitions * Shadows & Text Effects, 2D & 3D Transforms || CSS Media Query & Flexbox.   JavaScript & Bootstrap 5 (Framework):   * Introduction & Bootstrap 4 vs 5, Flex/Off Canvas/Toast, Content to be Covered * JS Introduction & Versions || Syntax/statement/Variable/Operators * JS Data Type/events || JS Objects, JS Classes * JS Functions, JS Async || JS Await * JS HTML DOM, JS JSON, Introduction of ReactJS/Angular + Revision | **15** |

# Course Outcomes:

* 1. Students can acquire mastery in advanced HTML and CSS by comprehensively understanding HTML structure and outcomes.
  2. Students can leverage CSS features such as combinators, pseudo-classes, and pseudo-elements to enhance styling capabilities.
  3. Students can delve into web development fundamentals, comparing Bootstrap 4 and 5, and exploring components like Flex, Off Canvas, and Toast.
  4. Students can work with JSON data and get introduced to modern JavaScript frameworks like ReactJS and Angular.
  5. Students have the opportunity to enhance their skills in advanced HTML, CSS, and web development fundamentals.

Course Outcomes – Program Outcomes Mapping Table:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PSO1 | PSO2 | PSO3 |
| CO1 | H | H | L | - | - | M | - | L | H | - | L |
| CO2 | H | - | L | - | - | M | - | - | - | M | - |
| CO3 | M | L | L | - | - | M | - | - | L | M | M |
| CO4 | H | - | L | - | - | L | - | - | - | - | - |
| CO5 | H | H | L | - | - | H | - | L | - | - | M |

# Text Book:

# "Web Development and Design Foundations with HTML5" by Terry Felke-Morris, 2020, Pearson

# Reference Books:

1. "Designing Interfaces: Patterns for Effective Interaction Design" by Jenifer Tidwell, 2019, O'Reilly Media
2. "The Elements of User Experience: User-Cantered Design for the Web and Beyond" by Jesse James Garrett, 2010, New Riders
3. "The Design of Everyday Things" by Don Norman, 2013, Basic Books
4. "Responsive Web Design" by Ethan Marcotte, 2014, A Book Apart
5. "HTML and CSS: Design and Build Websites" by Jon Duckett, 2011, Wiley

# Web Reference:

# <https://www.uxnordic.com/?gad_source=1&gclid=EAIaIQobChMIzICgvbbMhgMVk8VMAh27EAcUEAAYASAAEgKEbPD_BwE>

# <https://developer.mozilla.org/en-US/>

# <https://www.w3schools.com/>

# App Reference:

1. Udemy - Build Responsive Real-World Websites with HTML and CSS
2. Coursera - Data Manipulation in JavaScript

# Syllabus Coverage from text /reference book & web/app reference:

|  |  |
| --- | --- |
| Unit | Chapter Numbers |
| 1 | Book 1 – Chapter 1,2,3,6,7,8,14,15 & 16 |

**PRACTICALS**

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| --- | --- | --- |
| **Unit No** | **List of Practical** | **No of Hours Required** |
| **1** | 1. Create a responsive navigation menu using only CSS. 2. Build a CSS grid layout for a blog page. 3. Design and style a form using CSS to improve user experience. 4. Create a dynamic todo list application using JavaScript and Bootstrap. 5. Build a responsive image gallery with filtering and sorting options using Bootstrap and JavaScript. 6. Implement client-side form validation using regular expressions and Bootstrap styling. 7. Implement a modal window that displays dynamic content fetched from an API using JavaScript and Bootstrap. 8. Build a draggable and resizable component using JavaScript libraries like interact.js and Bootstrap. 9. Develop a countdown timer for an event with customizable options using JavaScript and Bootstrap styling. 10. Create a responsive login/signup form with client-side validation and error handling using Bootstrap and JavaScript. | 30 |