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| **SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE** | | | | | **DEPARTMENT OF COMPUTER SCIENCE ENGINEERING** | | | | |
| **Program Name:** B. Tech | | | | **Assignment Type: Lab** | | | **Academic Year:**2025-2026 | | |
| **Course Coordinator Name** | | | | Venkataramana Veeramsetty | | | | | |
| **Instructor(s) Name** | | | | |  | | --- | | Dr. V. Venkataramana (Co-ordinator) | | Dr. T. Sampath Kumar | | Dr. Pramoda Patro | | Dr. Brij Kishor Tiwari | | Dr.J.Ravichander | | Dr. Mohammand Ali Shaik | | Dr. Anirodh Kumar | | Mr. S.Naresh Kumar | | Dr. RAJESH VELPULA | | Mr. Kundhan Kumar | | Ms. Ch.Rajitha | | Mr. M Prakash | | Mr. B.Raju | | Intern 1 (Dharma teja) | | Intern 2 (Sai Prasad) | | Intern 3 (Sowmya) | | NS\_2 ( Mounika) | | | | | | |
| **Course Code** | | | 24CS002PC215 | **Course Title** | | AI Assisted Coding | | | |
| **Year/Sem** | | | II/I | **Regulation** | | R24 | | | |
| **Date and Day**  **of Assignment** | | | Week7 - Monday | **Time(s)** | |  | | | |
| **Duration** | | | 2 Hours | **Applicable to**  **Batches** | |  | | | |
| **AssignmentNumber:14.1**(Present assignment number)/**24**(Total number of assignments) | | | | | | | | | |
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|  | **Q.No.** | **Question** | | | | | | ***Expected Time***  ***to complete*** |  |
|  | 1 | **Lab 14: Web Design Application – AI-Assisted HTML/CSS/JS Generation**  **Lab Objectives**   * Design **functional, visually appealing** web applications using HTML, CSS, and JavaScript with AI assistance. * Apply **responsive, accessible, and interactive design principles** * Create **practical UI components** for real-world web applications. * Use AI to optimize **layout, UX, and performance**.   **Task 1 – Portfolio Website Design**  You are building a personal portfolio website to showcase your work.  **Requirements:**   * Create sections for **About Me**, **Projects**, and **Contact**. * Use AI to:   + Suggest **color palettes** and typography.   + Create a **responsive layout** with Grid/Flexbox.   + Add smooth scrolling navigation.   Prompt:  I’m building a **personal portfolio website** with sections: About Me, Projects, and Contact. Please help me:   1. Suggest a **professional color palette** and **matching typography**. 2. Create a **responsive layout** using **CSS Grid or Flexbox**. 3. Add **smooth scrolling navigation** between sections. 4. Use **semantic HTML structure** and clean CSS. 5. Make it look elegant and mobile-friendly. Finally, show me the full HTML + CSS code.   Output:      **Task 2 – Online Store Product Page**  Design a product display page for an online store.  **Requirements:**   * Display product image, title, price, and "Add to Cart" button. * Use AI to:   + Style with **BEM methodology**.   + Make layout **responsive**.   + Add **hover effects** and **"Add to Cart" alert**.   Prompt:  I need to design an **online store product display page** that shows:   * Product image * Title * Price * “Add to Cart” button Please:  1. Use **BEM methodology** for class naming. 2. Add **responsive layout** using Flexbox or Grid. 3. Include **hover effects** on the product card. 4. Show an **alert message** when “Add to Cart” is clicked. 5. Give me the full HTML, CSS, and JavaScript code.   Output:  **Task 3 – Event Registration Form**  Build an event registration form for a conference.  **Requirements:**   * Collect **name, email, phone number, and session selection**. * Use AI to:   + Add **form validation** with JavaScript.   + Make the form **accessible** with labels and ARIA.   + Style with a **professional look**.   Prompt:  Create an **Event Registration Form** for a conference that collects:   * Name * Email * Phone number * Session selection (dropdown or radio buttons) Please:  1. Add **form validation** using JavaScript (e.g., required fields, valid email). 2. Make the form **accessible** with <label> tags and **ARIA attributes**. 3. Style it with a **clean, professional look** using CSS (Flexbox/Grid). 4. Include both HTML, CSS, and JS code.   Output:    **Task Description #4 (Data – Fetch API & Render List with Loading/Error States)**   * **Task:** Fetch JSON from an API and render items to the DOM with loading and error UI. * **Instructions:**   + Ask AI to write fetch() logic, create DOM nodes safely, and add skeleton/loading text.   Prompt:  I need a web page that:   1. **Fetches JSON data** from an API (like https://jsonplaceholder.typicode.com/users). 2. Renders the data (name, email, etc.) to the DOM dynamically. 3. Shows a **“Loading...” message** while fetching. 4. Displays an **error message** if fetching fails. Please:  * Write **fetch() logic** with error handling. * Create **DOM nodes safely** with JavaScript. * Add a simple and responsive design using CSS. Provide complete HTML, CSS, and JS.   Output:    ✅ Deliverables (For All Tasks)   1. AI-generated prompts for code and test case generation. 2. At least 3 assert test cases for each task. 3. AI-generated initial code and execution screenshots. 4. Analysis of whether code passes all tests. 5. Improved final version with inline comments and explanation. 6. Compiled report (Word/PDF) with prompts, test cases, assertions, code, and output.   Top of Form | | | | | | Week7 - Monday |  |