



**JEPPIAAR**  
ENGINEERING COLLEGE

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Subject Name: CCS375- Web Technologies**

**Year/ Semester: III/ V**

**Academic Year: 2024–2025**

**Title of Activity:**

Collaborative Web Development and Deployment using GitHub

**Objective of the Innovation:**

To promote collaborative learning and real-world workflow experience in web development using GitHub for version control, collaboration, and deployment of static websites developed with HTML, CSS, and JavaScript.

**CO & PO Mapping**

Develop team collaboration, problem-solving, and independent learning skills	CO5
Design/Development of Solutions	PO3
Individual and Team Work	PO9
Lifelong Learning	PO12

**Brief Description of the Activity:**

As part of the course delivery for CCS375 – Web Technologies, an innovative classroom practice was introduced where students were asked to:

- Develop simple websites using HTML, CSS, and JavaScript
- Use GitHub repositories to collaborate in pairs or small teams
- Perform version control using Git and GitHub (push/pull/commit/merge)
- Deploy their websites using GitHub Pages

The faculty demonstrated all steps using GitHub Classroom and Live Deployment, showcasing a real-world development environment used by professional developers.

**Tool/Innovation Used:**

GitHub – Web-based platform for version control and deployment

- Real-time collaboration on code
- GitHub Pages for free static website hosting
- GitHub Classroom for assignment management
- Issues, commits, and pull requests to simulate teamwork

**Topics Covered Using the Tool:**

- HTML structure and semantic elements
- CSS styling and responsiveness
- JavaScript interactivity (e.g., form validation, event handling)
- Git basics (init, commit, push, pull)
- GitHub workflow: Repositories, branches, pull requests
- GitHub Pages deployment process

**Learning Outcomes Achieved by Students:**

- Gained practical experience in using version control systems
- Understood the basics of collaborative development
- Learned how to publish live websites using GitHub Pages
- Improved teamwork, task division, and real-time coding skills
- Experienced the real-world software development lifecycle

**Impact and Reflections:**

- Students realized the value of Git/GitHub in industry and academic projects
- Shifted from individual coding to real-time collaborative workflow
- Empowered students to showcase live web projects in portfolios
- Increased enthusiasm for open-source contributions

