

Experiment 09: Create a website folder structure, save the project, and publish it using a free hosting service.

Learning Objective: Student should be able to organize the complete “GadgetGalaxy” project into a logical and maintainable folder structure, use Git for version control, and deploy the entire static website to a public URL using GitHub Pages.

Tools: Notepad, Google Chrome, Git, GitHub, Command Prompt

Theory:

This experiment covers the final two stages of any professional development project: organization and deployment.

1. Project Folder Structure: As a project grows from one file to many, a clean folder structure becomes essential. As M.E. students, you can compare this to modular design in software engineering. We separate files based on their **type and function**. This practice, known as **separation of concerns**, makes the project:

- **Maintainable:** You know exactly where to find a file (e.g., all styles are in the CSS folder).
- **Scalable:** It's easy to add new pages, scripts, or styles without creating a mess.
- **Collaborative:** Team members can work on different parts (e.g., one on JS, one on CSS) without conflict.

2. Version Control (Git) & Hosting (GitHub):

- **Git** is a version control system. It's like a “save” button on steroids. It tracks every change you make to your code, allowing you to revert to previous versions, compare changes, and collaborate with your group without overwriting each other's work.
- **GitHub** is a web-based platform that hosts your Git repositories (project folders). It acts as a central cloud backup for your code and provides collaboration tools.
- **GitHub Pages** is a free service from GitHub that takes the HTML, CSS, and JavaScript files from your repository and hosts them as a live, publicly accessible website. This is perfect for static sites like our “GadgetGalaxy” project.

Result and Discussion:

	ParthRMehtha Move all website files to the root directory ✓	55691c9 · 8 minutes ago	
	Writeups Move all website files to the root directory	8 minutes ago	
	images Move all website files to the root directory	8 minutes ago	
	README.md Initial commit	2 hours ago	
	cart.html Move all website files to the root directory	8 minutes ago	
	checkout.html Move all website files to the root directory	8 minutes ago	
	frames-example.html Move all website files to the root directory	8 minutes ago	
	index.html Move all website files to the root directory	8 minutes ago	
	main.js Move all website files to the root directory	8 minutes ago	
	product-detail.html Move all website files to the root directory	8 minutes ago	
	products.html Move all website files to the root directory	8 minutes ago	
	style.css Move all website files to the root directory	8 minutes ago	
	~\$periment_1.docx Final project commit for GadgetGalaxy	2 hours ago	

The screenshot shows the GadgetGalaxy website. At the top, there's a dark green header bar with the word "GadgetGalaxy" in white. Below it, a white navigation bar has links for "Home", "Products", "Cart", and "Checkout". The main content area has a dark green background. It features a "Featured Products" section with a heading and a short description. Below that is a "Shop by Category" section with a heading and a list of categories: Headphones, Smartwatches, Keyboards, and Drones. At the bottom of the page, there's a dark green footer bar with the copyright notice: "© 2025 GadgetGalaxy. A Project by M.E. Students, Mumbai."

GitHub page displaying files organization structure and live page displaying index.html page.

Learning Outcomes: The student should have the ability to organize a multi-file web project into a logical directory structure, use basic Git commands to initialize a repository and push it to GitHub, and deploy a static website to a public URL using GitHub Pages.

Course Outcomes: Upon completion of the course students will be able to organize, manage, and deploy a complete client-side web application using modern development tools and best practices. Also, students will be able to synthesize all learned concepts to produce a portfolio-worthy, multi-page responsive website in a group setting.

Conclusion:

This experiment successfully bridged the gap between local development and a live, public-facing web application. By organizing the file structure, utilizing version control with Git, and deploying via GitHub Pages, the “GadgetGalaxy” project is now complete. This demonstrates a comprehensive understanding of the entire front-end development workflow, from the first line of HTML to a globally accessible final product.

For Faculty Use

Correction Parameters	Formative Assessment [40%]	Timely completion of Practical [40%]	Attendance / Learning Attitude [20%]	
Marks Obtained				

