**Documentation for Publishing a Website Using GitHub Pages**

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**1. Introduction**

This document covers the steps and aspects undertaken to connect a website and make it publicly available, in case of unavailability of domain servers.

**2. Prerequisites**

List the tools and accounts needed:

* A GitHub account.
* Basic understanding of Git and GitHub
* A sample website project

**3. Step-by-Step Guide**

**A. Creating a GitHub Repository**

1. **Log into GitHub**: Open [GitHub](https://github.com/) and log into your account.
2. **Create a New Repository**:
   * Click on the **+** icon at the top right and select **New repository**.
   * Name your repository (e.g., **my-website**).
   * Choose the repository's visibility (public or private).
   * Initialize the repository with a README file (optional).
   * Click **Create repository**.

**B. Uploading Website Files**

1. **Clone the Repository** (if using Git):

sh

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git clone <https://github.com/your-username/my-website.git>

1. **Add Your Website Files**:
   * Copy your website files (HTML, CSS, JS, images, etc.) into the cloned repository folder.
   * You can directly also upload / add an existing file to the github repository folder.
2. **Commit and Push Changes**:

* sh

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cd my-website git add . git commit -m "Initial commit" git push origin main

* In case you are unfamiliar with Git, you can commit changes directly on GitHub.

**C. Enabling GitHub Pages**

1. **Go to Repository Settings**:
   * Navigate to the repository on GitHub.
   * Click on **Settings**.
2. **Enable GitHub Pages**:
   * Scroll down to the **GitHub Pages** section.
   * Under **Source**, select the branch (e.g., **main**) and folder (e.g., **/root**).
   * Click **Save**.
   * GitHub will provide a URL where your website is now live.

**4. Verification**

* **Access Your Website**:
  + Open the provided GitHub Pages URL in a browser to ensure the site is live.
  + If using a custom domain, ensure it correctly redirects to your GitHub Pages site.

**5. Troubleshooting**

* **Common Issues**:
  + Changes not appearing: Ensure you have committed and pushed all changes.
  + Custom domain not working: Double-check DNS settings.
  + 404 errors: Verify file paths and GitHub Pages settings.

**6. Conclusion**

Publishing a website with GitHub Pages is easy and effective. You create a repository on GitHub, upload your website files, enable GitHub Pages in the settings, and your site is live. You can also set up a custom domain if you want.

**Benefits of GitHub Pages:**

* Free Hosting: No cost to host your static website.
* Easy Updates: Changes you make are automatically shown on your site.
* Custom Domain: You can use your own web address.
* Reliable and Fast: Uses GitHub's infrastructure for good performance.
* Using GitHub Pages is a great way to host your website for free, with simple updates and reliable performance.

**7. References**

* [GitHub Pages Documentation](https://docs.github.com/en/pages)
* [GitHub Repository Creation](https://docs.github.com/en/get-started/quickstart/create-a-repo)