

# Report: Running a Website Using Register, Cloudflare and GitHub

## Introduction

This report outlines the process and considerations for setting up and running a website using Register for domain registration and GitHub for hosting the website's content through GitHub Pages. The combination of these services provides a cost-effective and efficient solution for personal and professional website hosting.

## 1. Domain Registration with Register

### 1.1 Domain Selection and Registration

Register Nepal provides .com.np domain for free of cost to all let's say subscribers or Nepalese.

**Choose a Domain:** Select a domain name that reflects your brand or the purpose of your website.

**Register the Domain:** To register a domain, start by visiting the registrar's website and use their search tool to check if your chosen domain is available. Once you confirm its availability, proceed with the registration process. You will need to provide a cover letter requesting the arrangement of the domain, along with necessary identification documents. As you fill out the registration form, you will be asked to enter primary and secondary server information. You can use random names for these servers, such as `mark.ns.cloudflare.com` and `zuck.ns.cloudflare.com`.

### 1.2 Domain Management

- **DNS Settings:** Configure your domain's DNS settings in the Cloudflare dashboard. For a website hosted on GitHub Pages, you need to set the domain's DNS to point to GitHub's servers. This involves creating CNAME and A records.
  - **CNAME Record:** Add a CNAME record that points to your website(eg: [www.dhirajchaurasiya.com.np](http://www.dhirajchaurasiya.com.np)) provided by Register.
  - **A Records:** Add A records that point to GitHub's IP addresses to ensure your domain resolves correctly to your GitHub Pages site.

## 2. Website Hosting with GitHub

### 2.1 Setting Up GitHub Pages

- **Create a GitHub Repository:** Log in to GitHub and create a new repository for your website. Name the repository as `username.github.io` (replace `username` with your GitHub username) to use GitHub Pages for hosting.
- **Add Website Content:** Upload your website files (HTML, CSS, JavaScript) to the repository. The main file should be named `index.html` as this will be the entry point of your site.

### 2.2 Configuring GitHub Pages

- **Enable GitHub Pages:** Go to the repository's settings and scroll to the GitHub Pages section. Set the source branch for GitHub Pages, typically the `main` or `master` branch. If using a specific folder (like `/docs`), select that.
- **Custom Domain:** In the repository settings under GitHub Pages, add your custom domain name (e.g., `www.example.com`). GitHub will generate a `CNAME` file in your repository's root directory with your custom domain

## 3. Troubleshooting

### 3.1 Common Issues

- **Domain Not Resolving:** Ensure that DNS settings are correctly configured in Cloudflare and that the `CNAME` and `A` records are pointing to GitHub's servers. Register need to allow the `.com.np` before adding url to `CNAME`.
- **Site Not Updating:** Verify that changes are correctly pushed to the repository and that the correct branch is set up for GitHub Pages.

### 3.2 Seeking Help

- **Register Support:** Contact Register's support team if you encounter issues with domain management or DNS settings. Review your submitted documents if once you are rejected while applying for the domain.
- **Cloudflare Support:** Contact Cloudflare's support team if you encounter issues with domain management or DNS settings.
- **GitHub Support:** Reach out to GitHub support for issues related to GitHub Pages or repository configurations. Navigate to GitHub Docs for GitHub Pages processes. GitHub Docs provide a proper step by step documentation for any help related with GitHub.

## Conclusion

- Using Register and GitHub along with Cloudflare together offers a streamlined approach to website hosting. Register provides reliable domain registration of .com.np domain and DNS management, while GitHub Pages offers a free and efficient way to host static websites and Cloudflare offers free https service for your website. By following the steps outlined in this report, users can effectively set up, manage, and maintain their own websites with minimal cost and effort.